Developments in Marketing Science:
Proceedings of the Academy of Marketing Science

Michael Levy
Dhruv Grewal *Editors*

Proceedings of the 1993 Academy of Marketing Science (AMS) Annual Conference

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Forward

This volume reflects the contents of the program of the 1993 Annual Conference of the Academy of Marketing Science which was held May 26-29, 1993, at the Sheraton Bal Harbour, Miami Beach. The papers contained in this volume are those that were accepted for presentation at the conference through the competitive review process. We have also allowed authors to publish only an abstract in order to enhance the number of competitive papers submitted to the conference.

We feel compelled to express our gratitude to several people without whose help and encouragement the tasks of the conference Chairs and Proceedings Editors would have been much more difficult. We would like to thank Harold Berkman, who, in his role of Executive Vice President and Director of the Academy of Marketing Science, is the heart and soul of AMS. More importantly, for any conference chair he is the person with all the appropriate answers. We would also like to thank Dean Paul Sugrue for his invaluable moral and financial support of this venture. We were also provided many answers to our questions by Bill Darden, Victoria Crittenden, Marcia Levy and Sally Sultan.

The scholarly content of a conference and its proceedings comes from the authors of papers. We thank all of the participants in the 1993 conference. Decisions regarding the content were made by two important groups of people; the track chairs and the competitive paper reviewers. Members of each group are identified on subsequent pages of this volume.

Dealing with the large volume of submissions to the conference was made much easier by the secretarial staff of the Marketing Department of the University of Miami, Maria Romeu and Angela Lane, who helped in the massive mailing effort, program construction, and day-to-day details necessary to put on an AMS conference.

The reader will hopefully notice that the appearance of this volume of *Conference* is a substantial improvement over previous volumes. Final papers were submitted on diskettes for the first time. I would like to thank the authors and their typists for coping with the new system.

Finally, our gratitude goes to our families, Marcia and Eva Levy, and Diana and Lauren Grewal for their patience during the conference preparations.

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Preface

The Academy was founded in 1971, held its first Annual Conference in 1977, and has grown and prospered ever since. The relevancy of the Academy's mission and activities to our chosen target market of the marketing professoriate has been a key factor in attracting the discipline's best and brightest from all over the world.

The Revised Articles of Association of the Academy, approved by the Board of Governors in the Spring of 1984 and by the general membership in the Fall of that year, define the mission of the Academy as follows:

1. Provide leadership in exploring the normative boundaries of marketing, while simultaneously seeking new ways of bringing theory and practice into practicable conjunction.

2. Further the science of marketing throughout the world by promoting the conduct of research and the dissemination of research results.

3. Provide a forum for the study and improvement of marketing as an economic, ethical, and social and political force and process.

4. Furnish, as appropriate and available, material and other resources for the solution of marketing problems which confront particular firms and industries, on the one hand, and society at large on the other.

5. Provide publishing media and facilities for Fellows of the Academy and reviewer assistance on Fellows' scholarly activities.

6. Sponsor one or more annual conferences to enable the Fellows of the Academy to present research results; to learn by listening to other presentations and through interaction with other Fellows and guests; to avail themselves of the placement process; to conduct discussions with book editors; and to exchange other relevant information.

7. Assist Fellows in the better utilization of their professional marketing talents through redirection, reassignment and relocation.

8. Provide educator Fellows with insights and such resources as may be available to aid them in the development of improved teaching methods, materials, devices, and directions.

9. Seek means for establishing student scholarships and professional university chairs in the field of marketing.

10. Offer Fellow of the Academy status to business and institutional executives and organizations.

11. Modify the Academy's purpose and direction as the influence of time and appropriate constructive forces may dictate.

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CONSUMER BEHAVIOR

EXAMINING ATTITUDES AND PURCHASE INTENTIONS OF STUDENTS TOWARDS ENVIRONMENTALLY SAFE PRODUCTS

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Abstract

This pilot study explores the relationships between students' attitudes toward the environment and their willingness to switch to environmentally safe products. Results indicate a weak to moderate (but positive) relationship. The study concludes with implications and directions for future research.

Introduction

An increasing number of Americans are becoming concerned about the environment and reportedly many are trying to do something about it. In a survey conducted for *Parade* Magazine, 93% of the respondents indicated that they are currently "doing something to help the environment." The survey also reported that many (42%) of the respondents felt that the primary responsibility of cleaning the environment should fall upon the general public (Clements 1992). In an effort to do their part, many consumers have altered their own lifestyles and behavior with such acts as recycling their rubbish, cutting down on their own waste and buying environmentally safe products (Clements 1992). This concern and altered behavior has also influenced consumer shopping behavior. Recent information indicates that when shopping, over two-thirds of the consumers at least look for "green labels" at least once in a while" (Schlossberg 1991). Some consumers have also indicated that they have stopped buying certain branded products because they were viewed as environmental polluters (Freeman and Dagnoli 1990). Thus, there is evidence that one's concern for the environment could very likely influence their brand and product choices. In fact, 65% of those in the Parade survey reported that they were currently buying environmentally safe products (Clements 1992).

While these studies may not give precise and/or detailed information on how consumer shopping patterns changed, they do strongly suggest that environmental concerns are influencing the consumer decision process. Therefore, "green marketing" may be a reasonable tactic for a firm trying to gain a competitive advantage.

Types of Green Tactics

Marketers are using a number of tactics to appeal to environmentally conscious consumers. The devices used to establish a "green" image range from altering the product's design and/or ingredients to the introduction of new advertising campaigns (Keegan, Moriarty and Duncan 1992). For example, to make their products appear more environmentally friendly, some companies have started using biodegradable and environmentally safe ingredients in established products while others have introduced new "green" products. In 1988, 178 new green products were introduced to the market, a 230% growth from the 54 introduced in 1984 (Hinds 1989). Some marketers have responded to the green movement by using advertising messages with environmental appeals, and incorporated environmental appeals (Iyer and Banerjee 1992)

The "green" appeal has also carried onto the product's labeling and package design. Consumers are informed that the containers that they buy are not only smaller now, but also made from recycled or recyclable materials. Finally, some firms have begun to use cause-related marketing, tying the sale of their products to the financial support of environmental causes (Varadarajan and Menon 1988).

Competitive Advantage and Social Responsibility

While the tactical marketing responses may vary from firm to firm, the ultimate objective of each approach appears to have at least one factor in common. That is, the company is trying to influence consumer attitudes by portraying the firm as a socially responsible entity concerned and committed to saving the environment. The basic premise underlying this approach appears to be that consumers will form more favorable attitudes and perceptions toward companies that are socially responsible. In turn, this favorable attitude is expected to influence the purchase decision when brand choices are being made.

The portrayal of the firm as being socially active is consistent with the current notion that companies can in fact "do better by doing good" (Stroup and Neubert 1987). Therefore, companies who do some social good are eventually rewarded in the marketplace with higher sales

and profits. The operative concept underlying this premise is that a consumer's favorable attitude toward a socially responsible firm will be reflected in his/her shopping behavior. However, some debate remains as to the actual strength of this relationship. Some have suggested that the relationship is relatively weak with consumers rarely backing up their environmental concerns with corresponding purchase behavior (Schlossberg 1991: Caruba 1991: Karolefski 1991). Others have suggested that environmental concerns can have a tremendous influence in the marketplace (Freeman and Dagnoli 1990; Iyer and Banerjee 1992). While most of the recent research has studied the attitudes of adult females and the population at large (e.g., Karolefski 1990; Mandase 1991 and Caruba 1991), this pilot study focuses on a distinct segment. Namely, it examines the environmental attitudes of an undergraduate student body and their purchase of green products.

Research Questions

While past research has led to some argument as to the relationship between an individual's feelings toward the environment and their purchasing behavior, the present study attempts to examine the relationship between the student's beliefs and concern toward the environment and their willingness to patronize an environmentally active company. Specifically, the following research questions concerning the students' attitudes and anticipated behavior are addressed:

1. Are those students who are concerned about environmental issues or believe that some other parties should address the environment problems be willing to:

    a. accept less product quality and performance in an environmentally friendly brand (EFB)?
    b. pay higher prices for an EFB?
    c. switch from their regular brand to an EFB that is similar in quality, performance and price?

It is possible that students who currently purchase environmentally friendly products are more likely to switch to other products. Therefore we ask:

2. Are students who have purchased any environmentally friendly product in the past be willing to:

    a. sacrifice product quality and performance in an EFB?
    b. pay a higher price for an EFB?
    c. switch to another environmentally friendly brand (EFB)?

One reason that may explain why there has been a lack of consistency between an individual's environmental attitude and their purchase behavior, in past studies, may be that respondents were often asked only to respond to general opinion questions and non-specific buying situations (e.g., Karolefski 1990; Mandase 1991 and Caruba 1991). It may be that responses to specific environmental concerns and buying situations may yield more valid information. For example, would consumers respond favorably to a fast food outlet that was characterized as being "big" on protecting the environment? This question motivated us to gain additional insight on the response of students to a specific buying situation. Hence:

3. Would environmentally concerned students, and current purchasers of environmentally friendly products, be more likely to choose retailers who are characterized as being environmentally friendly?

Variables in the Study

As reflected in the research questions stated above, there are three independent factors and five dependent measures of concern in this study. The independent factors reflect students' beliefs about, and concerns for, the environment as well as their past purchases of environmentally friendly products. The dependent measures examine how students respond to these issues.

Independent Variables:

1. CONCERN - The extent to which the student is concerned about the safety of the environment.
2. BELIEF - The extent to which the student believes that middlemen are responsible for protecting the environment.
3. PURCHASE - The extent to which the student is currently purchasing environmentally friendly products.

Dependent Measures:

1. Accept Less Quality (LESQUAL) -The extent to which the student is willing to accept relatively less quality in an environmentally friendly product (EFP).
2. Accept Less Performance (LESPRFM) - The extent to which the student is willing to accept relatively less performance in an EFP.
3. Pay Higher Price (PAY) - The extent to which the student is willing to pay a relatively higher price for a EFP.
4. Brand Switch (SWITCH) - The extent to which the student is willing to switch from his/her regular brand to an EFP of equal quality, performance and price.
5. Patronization (PATRON) - The extent to which the student is willing to increase their frequency using (visiting) a particular product (fast food restaurant).

As reflected in the research questions, a positive relationship is expected between the dependent measures and independent variables.

Data Collection Methods

A research questionnaire was developed to collect the necessary data. To ensure a uniformity of 1knowledge among the respondents, the questionnaire was prefaced with a description of a "green" product such as; recyclable, biodegradable and environmentally safe products. The questionnaire included a number of multi-item scales designed to measure the appropriate independent and dependent variables. Attitudinal statements measuring the independent variables were presented as five-point Likert questions. These scales ranged from 1 (strongly disagree) to 5 (strongly agree). Five-point Likert scales were also used to calculate the dependent variables. However, in this case the students responded to three different hypothetical scenarios.

Sample

The sample consisted of 200 undergraduate students attending a private college in the Northeast. While the sample may not be representative of the student population at-large, it was chosen for two basic reasons. First, this study is exploratory in nature and a representative group is not necessary. Second, the close proximity of the group was convenient and accessible to the researchers thereby allowing the researchers to maintain budget and time control.

Ten class sessions were randomly selected from an overall listing of over 200 undergraduate courses listed in the Spring 1992 catalog of courses. Every other student was selected from each class, with a maximum of 25 students responding from any one class session. The courses selected ranged from English, Mathematics and Sociology courses to Accounting, Marketing and Management courses. Due to the disqualification of 23 returned questionnaires, the final sample size consisted of 177 students.

Data Analysis

Validation Checks

Principal components factor analysis, with a varimax rotation, was used to ensure that the measures for the independent variables were unique and distinct from each other (Table 1). Items were summed to calculate the attitude (CONCERN and BELIEF) and behavior (PURCHASE) dimensions, with each item loading distinctly on the factors of interest. Cronbach's alpha was then used to check the internal consistency of the scales. Table 2 illustrates that with the exception of the CONCERN factor, the alpha values for all of the measures (independent and dependent) are well above the standard minimum ($\leq$ .70) reliability level (Nunnally 1978). Additionally, the alpha level for the CONCERN factor is not exceedingly low (.56).

Relationships Between Variables

Pearson's Correlation Analysis (PCA) was performed to examine the nature of the relationships between the independent and dependent measures. Table 3 depicts the correlation coefficients, and their related statistical significant levels. The results indicate that the PURCHASE variables is related to all five of the dependent measures (viz., LESQUAL, LESPRFM, PAY, SWITCH and PATRON). The nature of these relationships is positive, and the strength of the relationship is moderate. Furthermore, only two of the PURCHASE relationships (SWITCH and PATRON) are significant at the $p \leq .05$ level. The correlation between PURCHASE and the remaining dependent measures are only significant at the $p \leq .10$ level.

The relationships between the BELIEF variable and the dependent variables of SWITCH, PAY, LESQUAL and LESPRFM, are also positive. These correlations are significant at the $p \leq .05$ level. However, the results do not indicate a significant relationship between BELIEF and PATRON.

Finally, the relationships conducted with the CONCERN variable are statistically significant only with the PATRON measure. No significant correlations are found between the CONCERN factor and the remaining dependent measures.

Discussion of Results

The results obtained from the data analysis suggest a number of tentative observations pertaining to the student's attitudes toward, and purchase of, environmentally friendly products. First, the prospect of a student being merely concerned about the environment does not appear to provide a strong enough stimulus to initiate brand switching. This finding is consistent with previous research (e.g., Karolefski 1990). Also, it does not appear that concerned students would be willing to give up their regular brand in favor of an environmentally safe brand. This was apparent even when there were no differences in price, quality and performance between the two brand choices as reflected by the absence of any significant correlation between the CONCERN and SWITCH variables. However, the students did indicate a willingness to patronize a fast food outlet that had become a "big supporter of the 'green' movement.

Second, students who believed that manufacturers and

retailers were responsible for protecting the environment are more willing to switch from their regular brands to ones that were labeled as being environmentally safe. These students also indicated that they would be willing to pay a relatively higher price and/or accept less quality or performance in an environmentally safe brand.

Third, those students who currently purchase environmentally safe products/brands seem to be only weakly motivated to pay a higher price or sacrifice quality for other environmentally safe brands. Apparently there is little or no motivation to switch brands. The students could be fully satisfied with their current brand and may feel that they are already doing their "bit" to help the environment. However, they did indicate a willingness to switch to an environmentally friendly brand when they did not have to pay a higher price or sacrifice quality and performance.

Finally, the statistically significant and relatively stronger relationships between PATRON and the CONCERN and PURCHASE variables, suggests that the students' behavior toward green products might vary when presented with specific buying situations. This conclusion is drawn because the correlation coefficients of CONCERN and PURCHASE with PATRON are relatively much larger and stronger than the relationship between SWITCH and CONCERN or PURCHASE. The SWITCH variable did not depict a specific product scenario but rather asked general product questions.

Research Implications

The results obtained from this study suggest several important marketing implications and directions for future research. First, marketers of environmentally friendly products may use different tactics to motivate students who are placed in the "concerned" stage as opposed to those who are in the "belief" stage. It is reasonable to assume that an individual must first be concerned about environmental issues before identifying those parties who should be responsible for solving these problems. Aiming different promotional tactics and appeals to those in these two stages would be more effective in stimulating the desired purchase behavior.

Second, there is clear indication that those who believe in protecting the environment are more likely to pay a higher price and/or sacrifice product quality. This may lead marketers to ask how an environmentally friendly brand affects the price elasticity of the product and the acceptable price ranges associated with the price and quality of the product.

Third, students who are currently purchasing environmentally friendly products are more likely to switch brands in favor of another environmentally friendly brand. Consequently, marketers may wish to develop a better understanding for the switching behavior associated this segment and how best to retain their patronage. Future research investigating the effects of green marketing needs to address these questions. The importance and implications of the preliminary findings obtained from this study indicate that a comprehensive research study addressing these issues would be worthwhile.

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Appendix

Scenario Scripts

Scenario I: Very often the production costs to make environmentally friendly products are high. In addition to cost, the quality and performance of the products suffer a bit. Keeping this fact in mind please indicate the extent of your agreement or disagreement with each of the following statements.

1. I am willing to pay a higher price for those brands that are:

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
a. Recyclable	5	4	3	2	1
b. Biodegradable	5	4	3	2	1
c. Environmentally Safe	5	4	3	2	1

2. I am willing to accept relatively lower quality level in a brand that is:

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
a. Recyclable	5	4	3	2	1
b. Biodegradable	5	4	3	2	1
c. Environmentally Safe	5	4	3	2	1

3. I would be willing to accept relatively lower performance level in a brand that is:

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
a. Recyclable	5	4	3	2	1
b. Biodegradable	5	4	3	2	1
c. Environmentally Safe	5	4	3	2	1

Scenario II: Suppose you are very satisfied with the brand you are actually using. At this time, another brand of equal quality, price and performance enters into the market positioned as an environmentally friendly brand.

4. Keeping the above scenario in mind, please indicate your willingness to switch from your regular brand to the new environmentally friendly brand now available. Consider the following product categories:

	Very Unikely				Very Likely
a. Cleaning Products (e.g., detergent)	1	2	3	4	5
b. Paper Products (e.g., napkins)	1	2	3	4	5
c. Household Products (e.g., trash bags)	1	2	3	4	5

Scenario III: Consider two fast food restaurants within the same product category. You generally eat in fast food restaurant 1. Now suppose fast food restaurant 2 becomes a big supporter of green marketing.

5. How frequently would you eat at fast food restaurant 2 if it:

	Not at all				Very Frequently
a. Gives donations to environmental agencies	1	2	3	4	5
b. Creates its own recyclable products	1	2	3	4	5
c. Uses environmentally safe products	1	2	3	4	5

Table 1: Results of Varimax Rotated Principal Components Analysis on the Measures of PURCHASE, CONCERN and BELIEF

Item Description	Factor Loading		
	Factor 1 Purchase	Factor 2 Concern	Factor 3 Belief
I purchase goods just because they are recyclable	.74		
I buy brands from companies with a reputation for being environmentally friendly	.72		
I tend to shop in a supermarket that carries biodegradable shopping bags	.68		
I tend to patronize products of companies that are concerned about the environment	.63		
I frequently purchase products that are biodegradable and environmentally safe	.51		
I utilize recycling bins	.52		
I think companies have a separate Environmental Safety Department		.74	
I am concerned about polluting the environment		.72	
I am aware about our ozone problem		.63	
I feel Suppliers should be responsible for protecting the environment			.94
I feel Wholesalers/Retailers should be responsible for protecting the environment			.93
Eigenvalue	3.54	1.73	1.50
% Variance Explained	25%	12.4%	10.7%

Note: Only factor loadings $\geq .5$ are reported.

Table 2: Reliability Levels of Measures in the Study

Variable	Number of Items	Cronbach's Alpha Value
Independent Variables		
CONCERN	3	0.56
BELIEF	2	0.91
PURCHASE	6	0.74
Dependent Variables		
SWITCH	3	0.93
PAY	3	0.88
LESQUAL	3	0.95
LESPRFM	3	0.99
PATRON	4	0.93

Table 3: Results of Pearson's Correlation Analysis

Dependent Variable	Independent Variable		
	Concern	**Belief**	**Purchase**
SWITCH	0.09	.17**	.16**
PAY	0.04	.17**	.11*
LESQUAL	0.06	.18**	.11*
LESPRFM	0.07	.18**	.13*
PATRON	.27**	.02	.34**

***significant at $p < .01$
**significant at $p < .05$
*significant at $p < .10$

INFLUENCES OF CATEGORY STRUCTURE ON BRAND POSITIONING AND CHOICE

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Abstract

Consumers categorize products to facilitate storage and retrieval of product information. Marketers who understand these processes can develop marketing strategies that may improve the likelihood that their brands are chosen. We integrate two areas of categorization research in marketing: 1) the formation of initial category perceptions as a function of learning goal, and 2) the influence of brand positioning strategies of consumers on category structure when a new brand is discrepant. Hypotheses are presented about the effects of initial category structures on the evaluation of subsequently introduced brands, the effects of category structure on choice, and the influence of brand positioning on the updating of category perceptions. Results indicate four contributions. First, learning goal affects not only category structure, but also consumers' tendencies to subtype or differentiate new brands. Second, consumers tends to make choices from smaller, rather than larger, brand sets. Thus, subtyped brands are more likely to be chosen than differentiated brands. Third, category perceptions (e.g., perceived variability) are influenced by the interaction of learning goal and characteristics of the new brand. Fourth, changes or updates to product categories are contingent upon the nature of the positioning strategy of consumers. These findings suggest that marketers should consider not only the characteristics of the brand to be presented, but also the characteristics of consumers' initial product category perceptions. In addition, subtyping appears to be a desirable outcome of a positioning strategy. Finally, brands that are differentiated, rather than subtyped, may be more vulnerable to competition.

CHILLS AND CHUCKLES: THE EFFECTS OF PROGRAM CONTEXT ON VIEWER RESPONSES TO TELEVISION ADVERTISING

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Consumers do not encounter television advertising in a "vacuum." Rather, television advertising is typically seen in a programming context where it competes with program material for the viewer's limited attentional capacity. Programming contexts, the environments within which commercials are embedded, vary enormously: news programs, comedies, dramas, soap operas, music television, educational programming and so on. It is plausible to assume that the content and impact of the programming environment influences whether and how embedded advertising messages are processed. The research reported in this paper is concerned with the emotional impact of program context and its effects on viewer responses to commercials presented in that viewing context. If a program environment influences the effectiveness of commercials, then it should be taken into account in media selection and also in creative and placement strategies so as to increase commercial effectiveness.

Most previous work concerning the effects of program context falls into three distinct areas. Some researchers have considered the viewers' the degree of viewers' cognitive involvement with and attitudes toward the program and its effects on ad processing. A second stream of research has examined the effects of program-induced arousal on responses to embedded advertising. Finally, some studies have examined the emotional impact of television programming and its effects on viewer responses to advertising.

Program Attitudes and Involvement

Several researchers have examined the relationship between on-air recall scores for commercials and consumer attitudes toward the program carrying the commercial (e.g., Carter 1990). For example, Clancy and Kweskin (1971) found that consumers who claim that a program is "very good" or their "favorite" are more likely to recall embedded commercials than are consumers who feel that the program is only "fair" or "poor." The data show that the more favorably consumers feel toward a television program, the more likely they are to remember television commercials carried by that program. These findings suggest that consumer attitudes toward television programs have important consequences for the penetration of advertising. It would seem logical, then, for an advertiser to place ads on shows with the highest Nielsen ratings, regardless of content. This strategy, however, turns out to be inappropriate in light of evidence that suggests an inverse relationship between the intensity of viewers' emotional involvement with the program and how well they can recall ads carried by it.

Bryant and Comisky (1978) hypothesized that recall of a message presented within television programming should be inversely related to the degree of viewer involvement with the program presented immediately prior to and subsequent to the ad message. And, the findings show that ad recall is poorer if it is embedded in the context of highly involving program material. Viewer attitudes toward the program material in which the ad message is presented also influenced recall. More positive attitudes toward the program resulted in better recall.

In a similar study, Soldow and Principe (1981) found poorer recall of brand and sales messages when ads were embedded in the context of highly involving program material. In addition, attitudes toward the products advertised and purchase intentions were influenced by program context. Viewers reported lower intentions to purchase and more negative attitudes when the commercials had been seen in the context of highly involving program material.

However, in the cases of both the Bryant and Comisky (1978) and Soldow and Principe (1981) studies, involvement levels were manipulated through the selection of program material, and serious confounds exist which render ambiguous any interpretation of their findings. Bryant and Comisky (1978) placed their ads either immediately prior to or following the climax of an action program. Soldow and Principe (1981) used an action drama versus a sitcom in their manipulation of involvement. In the former, involvement was confounded with arousal and in the latter involvement was confounded with affective valence of the program. Both are relevant to how programming context may influence viewer responses to embedded ad messages.

Program-Induced Arousal

The roots of all studies investigating the effects of program-induced arousal on embedded commercial material can be found in Zillmann's work on excitation transfer (e.g., Tannenbaum and Zillmann 1975). From the analysis of the latency and decay gradients of physiological excitation, Zillmann noted that essential elements of an excitatory response decay relatively slowly, and that cognitive adjustment to novel stimulation often precedes excitational adjustment. On the assumption that the interoception of undecayed excitation is rather nonspecific, Zillmann proposed that residual excitation can combine with the excitation produced by a subsequent, unrelated stimulus, and thereby augment the response to the second stimulus. Such augmentation due to residual excitation was termed an excitation-transfer effect (cf. Tannenbaum and Zillmann 1975).

Excitation has been shown to transfer from various excitatory experiences ranging from physical exercise to vicariously induced arousal (e.g., Sanbonmatsu and Kardes 1988; Zillmann 1971). Excitation-transfer effects have been shown to increase the appreciation of popular music heard after exposure to films differing in excitatory potential (Cantor and Zillmann 1973). Transferred excitation has also been found to intensify responses to an erotic film (Cantor, Zillmann and Bryant 1975) and to enhance humor appreciation (Cantor, Bryant and Zillmann 1974).

The effects of transferred arousal extend to cognitive processing as well. As Zillmann notes, transferred excitation tends to exert a distracting effect on subsequent stimuli -- especially those of less excitatory potential (cf. Zillmann 1975). This is consistent with other research showing that "high-priority" events such as the presentation of affectively-laden or arousing material can make processing of subsequent material more difficult (e.g., Erdelyi 1974; Tulving 1968;1978; Winograd 1977). Such high-priority events tend to exert an "amnestic" effect (cf. Tulving 1968) on subsequent material and reduce recall ability. Some have argued from a division of attention point of view that subjects in these studies must divide attention between the high-priority stimulus and the subsequent event (e.g., Moray 1970). Thus, we would expect that a highly arousing program would demand more attention (processing resources) and thus would exert an "amnestic" effect on recall of embedded advertising.

In one application of the excitation transfer model, Greene (1979) investigated the effects of program-generated arousal and commercial placement on attitudes toward and recall of commercial messages accompanying television programs. The study contrasted high and low levels of program-induced arousal and commercial placement before or after the arousing program segments. Although the results were generally inconclusive, they suggest that viewers exposed to commercials following highly arousing program segments have the poorest recall of advertising messages. A similar study examined high- and low-arousal program contexts, where the program-induced arousal derived from the violent content of the programming (Slomovits 1979). In this case, the high-arousal context did not result in poorer ad recall.

Program-Induced Emotions

The intensity of emotional experience during encoding influences how well stimuli are recalled (Dutta and Kanugo 1975). Extending this to the experience of watching TV, we should expect that when the program produces an emotional experience, it is likely to have a greater overall impact than the commercials on viewers' emotional states. The attention of such viewers will be drawn toward the program and away from the embedded ads, resulting in reduced ad recall (Pavelchak et.al. 1988). Recent evidence suggests that the quality of emotion may influence recall through its effects on attention (Englis 1990). Emotions such as fear and anger should focus attention on the environmental source of the emotion, whereas emotions such as sadness and happiness should focus attention to a greater extent on "internal" stimuli.

Barnes (1979) investigated the effects of emotionally arousing television film segments on attitudes toward and memory of commercial messages embedded within the film segments. Subjects were randomly exposed to one of four film-viewing conditions: (1) high-arousal, humorous film segments; (2) low-arousal, humorous film segments; (3) high-arousal, violent film segments; (4) low-arousal, violent film segments. The commercials and their order were held constant for the four film programs. Both level of arousal and hedonic tone had significant effects on the memory of the commercial messages. Subjects who viewed highly arousing films displayed significantly poorer recall of the product and brand names. In addition, viewers of humorous films subsequently displayed more favorable attitudes toward the products than subjects who viewed the violent films.

Similar results were obtained by Goldberg and Gorn (1987) who also found that recall of product information was better for ads seen in the context of "happy" as compared with "sad" programming. One final study (Kamins, Marks and Skinner 1991) found that the affect induced by program context influenced responses to ads only when the emotion induced by the ads was consistent. In this study

the effects of happy and sad programs on liking for the ads and purchase intentions were obtained only when ad- and program-induced emotions matched.

Hypotheses

It is clear from the foregoing review that studies of program context need to take into account the emotional content as well as the arousal/attentional effects of television programming. In the present study comedies are contrasted with horror programs. Although the emotions elicited by these programs are qualitatively distinct and are associated with different levels of arousal, the shows are equivalent in their attention-getting power. The following hypotheses were tested:

H_1: Program content has an effect on the emotions experienced by viewers. Comedy programs should elicit positive emotions such happiness and joy; horror programs should elicit negative emotions such as fear and anxiety.

H_2: Program content should influence product attitudes. Comedy programs should contribute to a positive shift in attitudes toward the products advertised, while horror programs should result in a negative attitude change.

H_3: Program content should influence viewer ability to recall the ads embedded in the program if arousal is a mediator of recall. So, ads seen in the context of a horror program (high arousal) would be better recalled than those seen in the context of a comedy (low arousal). But, if the influence of arousal on recall is through an attentional mechanism, then no difference between program types should be obtained.

Method

Stimulus Preparation. The premise of this research is that viewer responses to advertisements are altered as a function of the nature of the television program in which the ads are shown. Situation comedies and horror shows (four hours of each genre) were pretested using emotional response measures developed in earlier studies (e.g. Englis, 1990; McHugo, Smith and Lanzetta 1982). The quality of emotions elicited by the comedies was more positive and less negative than for the horror programs. In addition, the comedies were less arousing than the horror shows, but viewers were equally attentive to and interested in each of the programs selected. Two hour-long programs of each genre were selected; these programs elicited distinct patterns of emotion in viewers. The shows were edited so that each contained the same ad line-up. Four flights of ads were edited into the programs -- each flight contained three ads for three different products, and different ads were shown in each flight. Different ads for the same three products were shown during the four ad breaks (a service, and a high- and low-involvement product). The products were pretested for their relevance to the subject population (college students) and because pretest attitude data showed "neutral" initial attitudes toward these products ($-.50 < M's < .50$; range -3 to +3). Both the television programs and the embedded commercials were selected from previously taped material and were not shown on broadcast television during the course of the study. Separate groups of viewers were shown one of the television shows in a naturalistic viewing setting.

Sample. Forty-four undergraduate business students served as subjects for this study and received course credit for participation.

Pre-exposure. Prior to exposing subjects to experimental conditions, a questionnaire was used to measure demographic information (age, gender, and family income). The pre-exposure questionnaire also measured involvement with the medium of television (Zaichowsky 1985), television viewing habits, and reliance on media as sources of consumption information. Finally, this instrument measured pre-exposure product attitudes for the three target products, for two other competing products in each category, and for three irrelevant products (total of 12) (a seven-point, global attitude scale was used -- unfavorable (-3) to neutral (0) to favorable (+3)).

Exposure. Participants were randomly exposed to one of the experimental conditions; viewing groups ranged in size from three to seven. Participants were instructed to view the 60-minute program and told that they will have to return the following day (24 hours later) and answer some questions relating to its content (emphasis placed on the content of the program itself, not the commercials embedded in it).

Post-Exposure. The post-exposure questionnaire was composed of three parts, and was administered 24-hr after program exposure. The first asked the subjects to characterize their general attitude toward each of twelve products (same products as in the pre-exposure questionnaire). The second part of the questionnaire asked the subjects to report their emotional reaction to viewing the program. Emotional responses were measured using a modified version of Izard's differential emotions scales (Izard 1977; also Englis 1990; McHugo, Smith and Lanzetta 1982). These were measured on seven-point, mono-polar scales ranging from "not at all (0) to "very strongly"(6) for each emotion triad (see Englis 1990 for additional detail). The third section asked them to recall the brand and product depicted in the ads, and to write

down as much information about the ad as they can remember. The recall protocol was scored as the total number of "facts" recalled from all ads shown. Participants were fully debriefed at the end of the second session.

Results

Sample Characteristics. Forty-one percent of the sample was male, and the average age was 21.5 years. The respondents watch an average of 11.8 hours of television per week, and their mean level of involvement in television was 51.79, median 53.0 (range = 7 -- 70). The sample was divided into heavy and light viewing groups using a median split based on a compositive score of viewing time and involvement measures.

Emotional Responses to Program Context. Although the television programs used in this study had been pretested for emotional impact, measures of viewers' emotional reactions were also taken following exposure to the entire 60-minute program. The MANOVA model included viewing group (heavy/light) and program context (humor/horror) as between-subjects factors and the eleven emotional response scales as dependent variables.

A significant difference was obtained between program contexts (MANOVA (Wilk's lambda) $F(11,31) = 3.93$, $p < .002$); there was no significant effect for involvement. The comedy programs elicited higher levels of happiness-joy-delight ($M = 3.48$ vs. 2.59, $F(1,41) = 6.57$, $p < .02$) and relaxation-calmness-comfort ($M = 4.48$ vs. 3.36, $F(1,41) = 8.32$, $p < .007$) than did the horror programs. The horror programs evoked more intense feelings of being frightened-scared-afraid ($M = 1.82$ vs. 0.13, $F(1,41) = 21.24$, $p < .0001$) and tense-anxious-nervous ($M = 2.91$ vs. 1.13, $F(1,41) = 12.56$, $p < .001$).

There was a marginal interaction between program context and viewing group for scared-frightened-afraid. Heavy viewers were more frightened by the horror programs ($M = 2.44$) than were light viewers ($M = 1.33$, $p < .05$); there was no difference for the comedies. In addition, the horror programs were associated with higher levels of anger-hostility-feeling mad ($M = 1.09$ vs. 0.44, $F(1,41) = 5.17$, $p < .03$) and sadness-feeling blue-unhappiness ($M = 0.30$ vs. 0.91, $F(1,41) = 7.0$, $p < .008$). Feelings of being repulsed-disgusted-turned off, scornful-disdainful-contemptuous, puzzled-bewildered-confused, and shy-embarrassed-Ashamed were not different between the two program context groups.

In view of the possible link between affect and attention, it is also important to note that feeling interested-attentive-concentrating did not differentiate program types. On the basis of these self-report emotional responses the program contexts clearly elicited differential qualities of emotional experience in the viewers.

Product Attitudes. An ANOVA model that included program context and viewing group (light/heavy) was used in separate analyses of pre- and post-exposure product attitudes. As expected, there were no differences in any of the product attitude measures prior to program exposure. Following exposure, there was a significant interaction between program context and viewing group on attitudes toward the advertised products ($F(1,41) = 6.82$, $p < .02$). There was no difference in product attitudes among light television viewers. However, among heavy viewers, product attitudes were significantly more positive if the products had been advertised in the context of comedies ($M = .78$) than if they had been advertised in the horror programs ($M = -0.33$, $p < .01$).

Within program type, heavy viewers were more positive toward the products advertised in the comedy programs ($M = 0.78$) than were light viewers ($M = 0.1$, $p < .09$). Heavy viewers were more negative toward products advertised in the context of horror programs ($M = -0.33$) than were light viewers ($M = 0.47$, $p < 0.06$). As expected, there were no differences in post-exposure attitudes toward any of the irrelevant products.

Ad Recall. Twenty-four hours following exposure, participants were asked to remember as much information about the advertisements they had seen. There were no significant effects for either program context or viewing group. The interaction between program context and viewing group only approached significance ($.10 < p < .15$). Light television viewers recalled marginally more product information from ads seen in the context of comedies ($M = 7.860$ than from ads seen in the context of horror programs ($M = 5.46$, $p < .09$).

Discussion

The evidence from this study clearly shows that television programming can affect the emotional experiences of viewers. The quality of emotion instigated by comedies is clearly differentiated from that instigated by horror programs. As expected, viewers feel happier and more relaxed when they view comedies and feel more frightened, tense, saddened, and angered when they view horror shows. Since previous research suggests that emotional arousal can influence attention, it is important to note that there were no differences between program types in self-reported attentiveness. In several earlier studies that examined the emotional impact of program context, no measures of

attention were taken and so it is not possible to determine whether or not the emotional impact of the program contexts studied influenced ad recall through an attention- or emotion-based mechanism.

The most important finding of the present study was that the affective valence of program context influenced viewer attitudes toward the products advertised. Moreover, this effect was more pronounced for heavy viewers. Since heavy television viewers experienced higher levels of fear in response to the horror programs than did light viewers, it may be that this single emotional response dimension accounted for the attitudinal difference obtained. Clearly, further research is needed to determine when and how emotion is relevant to the formations and change of consumer attitudes.

The effects of program context on product attitudes were not mediated by ad recall. There was no effect of program context on viewer recall of product information. Since there were no difference in levels of attentiveness, this result suggests that previous studies noting an effect of program-induced emotions on viewer ad recall (e.g., Goldberg and Gorn 1987) may indeed have been mediated by the impact of emotional arousal on attention. And, the effects of arousal noted in previous research (Greene 1979; Slomovits 1979) may have been due to an attentional mechanism and not to arousal per se. Further research is needed to tease apart these alternative explanations and the inconsistent recall data of previous research.

Taken as a whole, the data suggest that consumer emotions are important mediators of their responses to marketing communications. The emotions need not be induced by advertising, but may carry over from the programming context in which the advertising is seen. The next stage of this research effort should aim to provide a more precise understanding of the nature of consumer emotional experiences and of the relationships between these emotions and cognitive responses and attitudes.

The subjective experiences reflected in the verbal reports measured in this study may well indicate meaningful changes in the emotional and motivational states of consumers. Alternative-ly, these self-reports may be wholly cognitive events that reflect an appraisal of the stimulus and perhaps the consumer's recall of subjective "feelings" consistent with such appraisal. These latter responses may include some of the cognitive components of emotions, but not the physiological changes that normally accompany emotional experience. In addition, there are cases where a discordance occurs between verbal and psychophysiological measures of emotions (e.g., McHugo et al., 1985). Both measurement domains are needed to specify which response system more closely reflects variations in other consumer behaviors and cognitions.

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Appendix

The following is a brief synopsis of the television programs employed in this study:

Horror (1-hr program) Two students conspire to curse a teacher with a spell which they discovered by playing a heavy metal album backwards. The spell is supposed to plague the teacher with uncontrollable hiccups, but instead it kills him. In an effort to undo the deed, the two students attempt to bring him back with the "spell of resurrection." However, due to a flaw in the procedure, the teacher's head and body come back to life as separate entities.

Horror (1/2-hr program) A well-to-do entrepreneur becomes a landlord of an apartment building in the blighted area as part of a tax scheme. Due to the unlivable conditions of the property, a tenant seriously injures himself. The landlord promises to make repairs but later reneges on his word. For this he is cursed with a tattoo of a snake on his body which later comes to life and threatens to strike. Keeping his word to the tenants is the only way the landlord is able to evade its deadly strike. What will he do.?

Horror (1/2 -hr program) A judge suspects his wife of infidelity and constructs a device that will set the house aflame. The judge is gaged and tied up by two thugs who rob the house. He is left to watch helplessly as his "bomb" ticks away. His agony is vividly portrayed. The judge is saved at the last second by a faulty fuse. When finally attended to, it is discovered that he had lost sanity. We then discover that his suspicion of his wife was unfounded.

Comedy (1/2-hr program) This program is a classic sitcom; three generations of women live together in the same house. The main character is an English teacher who conducts seminars at home. She is involved in encouraging a student to submit a paper for publication. Another scene involves a discourse with her daughter about whether the family dog should have the puppies at home or

in the veterinarian's office. The paper is delivered and the puppies are born in the closet.

Comedy (1/2-hr program) A sitcom about a police officer who will resort to any means in dealing with criminals. His best friend is his gun: he often talks to it. The main character and a female partner are charged with finding the kidnappers of the mayor's daughter. Halfway through, our star detective is suspended from the force. But, he disobeys orders and plays a vital part in apprehending the kidnappers.

Comedy (1-hr program) A farcical "detective-comedy." A husband accidentally kills his wife and secretly buries the body. He is then terrorized by telephone calls from his "dead" wife. He hires two detectives of questionable competence. The detectives engage in various humorous exchanges while attempting to solve the mystery.

EXPLORING THE RELATIONS BETWEEN CONSUMER PERCEPTIONS OF MARKETING, MATERIALISM AND LIFE SATISFACTION

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Clearly, many marketing efforts are meant to portray a "good life" that is attainable through the acquisition and ownership of advertised goods (Belk and Pollay 1985). However, there is evidence that materialism is connected with feelings of unhappiness (Belk 1985) and dissatisfaction with life (Richins 1987). This evidence seems to suggest that marketing promotes materialism, but that materialism can lead to dissatisfaction with life.

Most research in this realm focuses on macro issues, using "objective" variables such as GNP, income, and personal savings rate to proxy for satisfaction with life. Very little attention is devoted to individual-level investigations which analyze subjective reports about marketing, materialism, or quality of life (Leelakulthanit, Day and Walters 1991). An individual-level approach moves away from economic measures which may reflect the nature of the economy, but probably do not reflect consumers' actual opinions. Rather than assume that GNP is a reflection of life satisfaction, or that television viewership represents a positive predisposition toward marketing, or that societal wealth is a proxy for materialism, we ask consumers how satisfied they are with life, what they think about advertising and marketing, and to report on items that represent materialism.

Although the question of the relation between marketing, materialism and life satisfaction is one of some importance (Belk 1984a), little research addresses it. The work that does exist is reviewed here for evidence of linkages among marketing, materialism, and life satisfaction, and models developed from that review are tested.

Before proceeding, it is necessary to note a caveat. The data used in this investigation were collected for a purpose other than this particular stream of research. The measures are only the closest approximations that could be found for the concepts; therefore, the study is considered purely exploratory.

Theoretical Relations Among Marketing, Materialism and Life Satisfaction

Support for the conjecture that marketing, materialism and life satisfaction are related can be found in the classical liberal world view espoused by Adam Smith. Classical liberalists believed that promotion of goods, rational self-interest, and the good of society were integrally related components in a system designed to produce the greatest good for the greatest number (Rotzoll, Haefner and Sandage 1976). This theory suggests that a positive inclination toward marketing can result in a satisfactory life when a profit motive prevails.

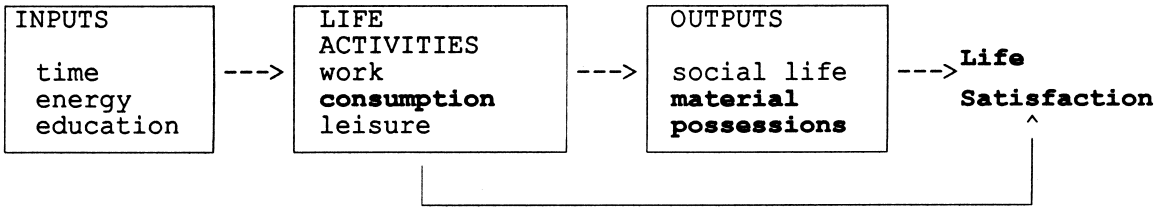
Further support for a connection between the three variables comes from Arndt's (1978) model of consumer satisfaction and the quality of life. An abbreviated version of his model is depicted in Figure 1. Arndt describes the manner in which a variety of consumer activities, including consumption, can result in overall life satisfaction. Inputs such as time, energy, and education are converted into outputs such as material possessions and social life through different life activities such as work, leisure, or consumption. Satisfaction results either from the outputs, or from the life activities. Consumption activities, for example, can directly influence life satisfaction without going through the "output" stage (i.e., acquiring material possessions).

Marketing and Materialism

Although an abundance of conceptual research on the topic of materialism exists at the macro level (Belk 1984b), the role of materialism at the individual level has seldom been investigated. Exceptions include a study by Richins' (1987) that reports a positive relation between television exposure and materialistic values, and a study by Ellison and Cole (1982) that reports a high positive correlation between heavy sports programming viewership and materialism.

Figure 1.

AN ABBREVIATED VERSION OF ARNDT'S MODEL
OF CONSUMER SATISFACTION WITH LIFE



Materialism and Life Satisfaction

Religious/philosophical views suggest that when consumption of material goods becomes the primary source of life satisfaction, disappointment follows (Belk 1984a). Empirically, Belk (1984b) found a negative relation between materialism and happiness in life. Richins (1987) reports a negative relation between personal material values and material well-being. Leelakulthanit et al. (1991), however, report a positive relation. They concluded that satisfaction with material possessions had a positive, statistically significant effect on life satisfaction on a sample of Bangkok, Thailand residents.

Marketing and Life Satisfaction

In addition to Arndt's (1978) conceptual argument that life activities can be an intrinsic part of life satisfaction, evidence for relations between marketing and overall life satisfaction comes from macro-level studies that use economic indicators such as GNP to indicate the effect of marketing. These studies make the assumption that rapid growth of GNP leads to consumer satisfaction through better nutrition, education, housing and more leisure time (Katona 1975). However, as Katona (1975, p. 379) notes, "increase in GNP [is] far from identical with the greater happiness ... of the people," and measures of GNP exclude important social indicators such as "the attitudes and expectations of consumers and businessmen" (p. 380).

Model Development

Because the linkages discussed above offer mixed evidence for relations among perceptions of marketing, materialism, and life satisfaction, two models were developed. Model 1 incorporates a marketing --> materialism --> life satisfaction path, as well as a marketing --> life satisfaction path.

Model 2 switches the direction of the path between marketing and materialism.

Method

Survey and Sample

Market Facts, Inc. administered 1000 mail questionnaires to a nationally representative sample of United States consumers, of which 667 were returned and 606 were usable for this analysis. The study used only a subsection of the items asked on the questionnaire, which was developed as part of a market research project for several well-known U.S. companies.

Measures

All measures except the satisfaction measures were multi-item, seven-point scales similar to the semantic differential scale.

Perceptions of Marketing. Consumer views toward marketing-related activities are represented by their trust in marketing information sources. One three-item scale measures trust in advertising (television, radio and magazine ads), and one two-item scale measures trust in personal selling (store and company). An intentional emphasis was placed on individual evaluations of marketing in an effort to move away from the assumption that mere exposure to marketing media causes a consumer to be materialistic or satisfied with life.

Materialism. Materialism is defined as the importance that consumers attach to material possessiveness and wealth, and to social approval for purchases. This definition reflects the three subscales (nongenerosity, envy of others, and a high importance placed on material possessions and wealth) used by Belk (1985) to operationalize materialism.

An attempt was made to select scale items from the survey that were consistent with Belk's materialism subscales (1985), but we were unsuccessful at generating a nongenerosity scale. Materialism includes one five-item social envy scale (alpha=.66), and one five-item material/wealth

importance scale (alpha=.57). Cronback alphas are on par with alphas for Belk's (1984a) envy (.57) and possessiveness (.64) subscales.

Life Satisfaction. This construct was measured with two single-item, agree/disagree statements reflecting an individual's happiness and satisfaction in life. These were based on research indicating that people are able to give global assessments of life satisfaction (Andrews and Withey 1976).

Results

Parameter estimates, reliabilities and fit statistics for Model 1 are provided in Tables 1 and 2. Positive coefficients emerged for the marketing --> materialism, and marketing --> life satisfaction paths. A negative coefficient emerged for materialism --> life satisfaction. High T values indicate that relations are statistically different from zero and that the indicator variables are reflective of their constructs.

Item reliabilities are good for most of the six indicator variables, and the constructs showed good composite reliability. The model fits the data well, as demonstrated by a low root mean residual, low chi-squared statistic, and high goodness-of-fit indices.

To further assess the fit of Model 1, it was compared with a variety of models nested within the orignal. If there is no significant difference in fit between Model 1 and the alternatives, there is little reason to be lieve in the relations specified in Model 1. Alternative models included a hierarchical model in which the marketing --> life satisfaction path was dropped, a baseline model in which a single latent construct reflected all indicator variables, and a null model in which the three latent constructs were unrelated. As Table 2 shows, none of the alternative models fit the data as well as Model 1. Model 2, which reversed the direction of the market

Table 1

PARAMETER ESTIMATES (MODEL 1)

Model Parameter	Symbol	ML Estimate[ab]	T	Reliabilities
Tradv-MKTG	γ_{11}	1.00b		.486
Trsalp-MKTG	γ_{21}	1.229 (0.167)	7.377	.618
Envy-MATL	γ_{11}	1.00b		.963
Possess-MATL	γ_{21}	0.574 (0.107)	5.360	.342
Happy-SAT	γ_{32}	1.00b		.852
Lifesat-SAT	γ_{42}	0.798 (0.176)	4.543	.543
MKTG-MATL	γ_{11}	0.467 (0.070)	6.628	
MKTG-SAT	γ_{21}	0.393 (0.099)	3.987	
MATL-SAT	β_{21}	-0.158 (0.068)	-2.324	
Unique Error-TrAdv	$\Theta_{\delta 1}$	0.678 (0.091)	7.410	
Unique Error-TrSalP	$\Theta_{\delta 2}$	0.598 (0.130)	4.612	
Unique Error-Envy	$\Theta_{\varepsilon 1}$	0.045 (0.210)	0.214	
Unique Error-Possess	$\Theta_{\varepsilon 2}$	0.747 (0.081)	9.172	
Unique Error-Happy	$\Theta_{\varepsilon 3}$	0.319 (0.398)	0.802	
Unique Error-Lifesat	$\Theta_{\varepsilon 4}$	0.984 (0.259)	3.793	
Error MKTG	ϕ_1	0.641 (0.105)	6.087	.714
Error MATL	ψ_2	1.039 (0.219)	4.745	.787
Error SAT	ψ_3	1.744 (0.409)	4.264	.820

a maximum likelihood estimates (standard errors in parentheses)
b parameter fixed to equal one (to set metric for the model)

Table 2

FIT STATISTICS FOR ALTERNATIVE MODELS

Model	df	χ^2	p	g.f.i.	a.g.f.i.	r.m.r.
Main Model 1	6	3.64	.726	.998	.993	.017
Hierarchical Model	7	21.04	.004	.989	.966	.098
Baseline Model	9	574.98	.000	.789	.507	.362
Null Model	3	907.54	.000	.693	.285	.420

ing-materialism relation, provided a fit that was virtually identical to that of Model 1. The only differences were a somewhat lower coefficient between materialism and marketing (γ = .253) and higher prediction error for materialism (ϕ=1.18).

Discussion of Results

While our literature review offers better support for Model 1, neither model outperforms the other. The relation between marketing, materialism and life satisfaction is complex. Both models indicate a negative direct effect for materialism on life satisfaction, and a positive direct effect for marketing trust on life satisfaction. Comparison of the models suggests a recipricol relation between marketing and materialism; increases in trust of marketing beget materialism, which begets further trust in marketing, and so on. Unfortunately, a mathematically identified model including a recipricol effect between marketing and materialism could not be generated without making undue assumptions about the independence of the indicator variables. Therefore, it is unclear whether materialism mediates the effect of marketing trust on life satisfaction, as suggested by model 1, or whether marketing trust mediates the effect of materialism on life satisfaction, as suggested by model 2.

Although we must recognize limitations due to the post hoc nature of the study, and the possibility that significance in the path coefficients is due to the large sample size, the suggestion of a connection between marketing, materialism and life satisfaction is there. Furthermore, the results imply that the relation between marketing and materialism is difficult to separate, even though each may have a separate and opposite effect on life satisfaction.

Further investigation of the nature of these relations is important, especially considering the apparent lack of empirical studies addressing them. There is a need for more studies examining these relations at the individual rather than market level, and simultaneously, rather than one-at-a-time. It is hoped that this study has stimulated future research that addresses these shortcomings in the literature and increases our understanding of the nature of the realtions among marketing, materialism and life satisfaction.

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A REEXAMINATION OF SOME BLACK/WHITE CONSUMPTION DIFFERENCES

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Abstract

Past research focusing on the consumption patterns of black and white consumers has often reported distinct differences in their purchase behavior. Many of these studies, however, did not take into account demographic differences among their subjects. Moreover, the intervening years since most of these studies were conducted have witnessed many changes in the American scene that may have altered black buying behavior. This study empirically tests five hypotheses derived from previous studies using data from 68 white and 27 black adult consumers. Although the black and white consumers in the study differed in age, income, and marital status, the results indicate no differences in buying patterns due to race alone.

Introduction

One research stream in consumer behavior focuses on the black consumer, stressing unique features of this market segment. Several studies over the years have described how black consumer behavior differs from that of other consumers, usually mainstream whites. Much of this information has been presented in consumer behavior texts that summarize these black/white differences (Engel and Blackwell 1982, pp. 89-91; Loudon and Della Bitta 1988, pp. 202-204). As Engel, Blackwell, and Miniard (1990, p. 94) point out, however, many of the generalizations about black consumers "are based upon early research that may not be true today." Generational changes and changing socioeconomic circumstances may have rendered the findings of previous studies obsolete as behaviors of both market segments may have changed. Moreover, many studies of black consumers placed more emphasis on race than on other variables such as income, education, and age, so that the effects of these factors on buyer behavior were not taken into account in the conclusions of the studies (Goldsmith, White, and Stith 1987). The purpose of the present study is simply to reexamine five of the generalizations from older studies and discuss the implications of the findings.

Background and Hypotheses

Past studies focusing on the buying behavior of minorities often found that black consumers exhibited purchasing patterns different from white consumers. Five areas of black/white consumption behaviors that have been empirically studied in past literature are investigated in this research. These areas include spending for new fashions, difficulty in shopping, amount of non-store shopping, use of credit, and ownership of credit cards. Directional hypotheses are proposed where appropriate to reflect past findings.

Many early studies of black/white consumption differences focused on consumer spending for new clothing fashions. For example, research by Portis (1966) indicated that black consumers have a greater interest in fashion than their white counterparts. Also, Dalrymple, Robertson, and Yoshino (1971) found that both low and high income black consumers owned more new clothing items than did white consumers, though the differences were not significant. Similarly, several early studies suggest that black consumers tend to spend more on clothing than white consumers (Alexis 1962; Bauer and Cunningham 1970; Stafford, Cox, and Higgenbotham 1968). Consequently, the first hypothesis is:

H1: Black consumers spend more for new fashion items than do white consumers.

In another examination of black/white consumption differences, research suggests that black consumers may differ from white consumers in their reported degree of shopping difficulty. According to Bauer, Cunningham, and Wortzel (1965), black women report greater difficulty in making buying decisions than white women. This greater level of difficulty may have some relation to the amount of product information available to each group of consumers. For example, research by Sexton (1974) suggests that black consumers tend to "shop around" less than their white counterparts. Similarly, Dalrymple et al. (1971) found that white and Japanese-American consumers seek out more information than black consumers before making a purchase decision. This leads to the second hypothesis:

H2: Black consumers report more difficulty in making purchase decisions than white consumers.

According to Dalrymple et al. (1971), black consumers tend to express a low preference for discount stores.

Instead, black consumers appear to be much more interested in shopping at medium and high priced stores. Dalrymple et al. (1971) conclude that black store preferences differ from those of white and Japanese-American consumers. Similarly, research indicates that black consumers tend to shop less frequently by mail or by phone than do white consumers (Cox, Higgenbotham, and Stafford 1972; Feldman and Star 1968). Consequently, the third hypothesis is suggested:

H3: Black consumers tend to engage in less non-store shopping than do white consumers.

In examining possible black/white consumer credit differences, Dalrymple et al. (1971) found that for low income consumers, there were no differences between blacks, whites, and Japanese-Americans in their interest in credit. In addition, Feldman and Star (1971) and Hirschman (1980) found no statistically significant difference between black and white ownership of credit cards when the effects of income were taken into account. Thus, only when socioeconomic differences are controlled were no differences found between black and white consumers. Based on these studies the last two null hypotheses are suggested:

H4: There is no difference between black and white consumers in their use of credit cards.

H5: There is no difference between black and white consumers in their ownership of credit cards.

Method

Questionnaire

Three graduate students personally distributed 180 copies of the questionnaire to homes in black and white neighborhoods that were thought to be comparable socioeconomically. One-hundred and two (57%) completed questionnaires were recovered.

The demographic section of the questionnaire asked respondents to indicate their gender, marital status, age, race, income, and education. Family income from all sources before taxes was measured by an 8-catagory classification ranging from (1) "less than $10,000" to (8) "over $70,000." Education was measured by a 10-catagory classification ranging from (1) "no formal education" to (10) "a graduate degree".

Spending for new fashions was measured by a single item asking for an estimate of "how much you spend on new fashions each month." The nine-catagory response format ranged from "under $25.00" to "$200 and over."

Shopping difficulty was measured by asking how much difficulty the respondent had in "making a buying decision" in four situations: for convenience goods, durable goods, unsought goods (e.g., insurance, burial plots), and specialty goods. A 9-point response format was used where 1 = "no difficulty" and 9 = "great deal of difficulty."

We measured shopping behavior with four questions asking respondents to record howany times they had purchased something since January 1 by telephone, by mail, at a discount store, and at a department store. The survey was conducted in March, so that we were asking respondents to remember the specific number of times they had bought something by each mode over a definite time period. We measured purchasing behavior this way to obtain a ratio scale estimate of actual purchase behavior that we thought would be more valid and precise than having then respond with a rating scale, such as "never," "seldom," or "frequently." To minimize memory distortions such as telescoping, we gave them the specific time period, one that would be meaningful to them and limit the recall effort to approximately three months. To measure use of credit, respondents were asked "How often do you use any form of credit when you buy?" and given a 7-point scale ranging from (1) "Don't Use Credit to (7) "Almost Every Time." To measure the number of credit cards owned, a list of six major credit cards (Visa, Mastercharge, American Express, Diners Club, Discover, and Carte Blanche) was given, and respondents were asked to indicate the number of each type of card they possessed. They were also asked to note the number of cards they had for local department stores, gas stations, and other types of credit cards. The sum of these seven items served as a measure of the number of cards each respondent possessed. The Pearson correlation between number of credit cards and use of credit was .46 ($n = 95, p < .001$), indicating a positive relationship, as one might expect.

Analysis and Results

Of the one hundred and two respondents, ninety-five indicated their race, so that the comparisons are made between 68 white and 27 black consumers. Gender was evenly balanced between blacks and whites, and all income categories on the scale were represented. More whites were married than blacks ($\chi^2 = 16.9$, $p < .001$). Ages ranged from 18 to 87, with a mean of 43.5 years (SD = 16.5). As Table 2 shows, black consumers in our study tended to be younger and also to have lower incomes than the whites, as might be expected in light of the fact that census data shows this to be the case (Loudon and Della Bitta 1988, p. 200). Our sample shows educational parity, however, probably reflecting the presence of a predominately black university in town.

A MANOVA was performed comparing the two groups for mean differences in eleven dependent variables: (1) new fashion spending, (2) self-reported difficulty in making buying decisions for the four types of products, (3) self-reported amount of shopping by telephone, mail, discount store, and department store, (4) use of credit, and (5) ownership of credit cards. There was no statistically significant difference ($p > .05$) between blacks and whites in this analysis. In addition, t-tests were performed for each variable, and the results of this analysis appear in Table 1.

Table 1

T-Tests of Mean Differences in Demographics and Dependent Variables

All		Blacks		Whites			
Mean	SD	Mean	SD	Mean	SD	t[a]	p
Demographics							
Age							
43.0	16.5	32.8	10.3	47.0	16.8	4.8	.000
Education							
8.0	1.8	8.6	1.4	7.8	2.0	-1.7	.087
Income							
4.9	2.0	4.2	2.3	5.2	1.9	2.2	.033
Dependent Variables							
Use of Credit							
3.9	1.9	3.7	1.7	4.0	1.9	.7	.458
Credit Cards							
5.1	4.0	5.3	3.9	5.0	4.0	-.3	.801
Spending							
2.6	2.0	3.1	2.2	2.4	1.9	-1.6	.107
Convenience Goods							
1.6	1.5	1.9	2.0	1.6	1.3	-.7	.485
Durable Goods							
4.8	2.6	4.7	2.7	4.8	2.6	.2	.881
Unsought Goods							
4.9	2.9	4.7	2.5	5.0	3.0	.4	.714
Specialty Goods							
5.3	2.8	5.6	2.8	5.2	2.7	-.6	.524
Phone Shopping							
.7	2.3	.5	1.9	.8	2.4	.6	.583
Mail Shopping							
.5	.8	.5	.8	.5	.8	-.2	.860
Discount Store							
3.8	5.0	2.8	3.5	4.3	5.4	1.6	.120
Department Store							
3.6	4.7	3.2	4.3	3.8	4.8	.5	.589

[a] All one-tailed tests.

The results show that our sample of black consumers did not spend significantly more on fashions than white consumers. Thus, H1 is rejected. The data revealed no significant difference in reported difficulty in making purchase decisions between black and white consumers. Thus, H2 is rejected. Black and white consumers did not differ in the amount of non-store shopping. Thus, H3 is rejected. Finally, there was no statistical difference between black and white consumers in their use of credit cards or in ownership of credit cards. Thus, H4 and H5 were supported. Overall, as can be seen in the Tables, although there were statistically significant differences in marital status, age, and income, with fewer married blacks reporting younger age and lower incomes than whites, none of the dependent variables exhibited a statistically significant difference in mean scores.

Discussion

The purpose of the present study was to reexamine five differences in consumer behavior between black and white consumers reported by previous studies. We were unable to replicate the previous findings showing differences in new fashion spending, shopping difficulty, or non-store shopping between the two market segments, and we confirmed no differences in credit usage or credit card ownership.

These findings are limited to the consumer behaviors studied and cannot be generalized to other behaviors. Like the studies that have preceded this one, the selection of the sample and its relatively small size may have had an impact on the results. In addition, the findings may be limited to the measures used. Additional studies should employ multiple measures of the variables where feasible in order to avoid mono-operation bias. Of greater interest, however, are larger issues in studying black buying behavior.

The interest for both marketers and consumer researchers is in how race or ethnic identity influence consumer behavior. Marketers need accurate information on how blacks differ from whites, but researchers should go beyond blindly looking for differences and try to understand the nature of the differences that are there. At least three types of differences can be discerned.

First, blacks may have genuinely unique needs and wants that stem from ethnic characteristics. Examples of these product-markets are cosmetics or clothing in which companies cater to the special needs of blacks (Mallory 1992; Schwadel 1991). An example where this principal led to an embarrassing market failure is the *Uptown* brand of cigarettes. There is no underlying ethnic reason for a special "black" cigarette, but it was developed and targeted as one (Quinn 1990; Schiffman 1990).

Second, no one disputes the fact that consumer behavior of aggregate groups of black consumers may differ from other

consumers. That is, a representative sample of black consumers may objectively buy more or less of some product than white consumers (Manges 1989), but closer analysis may show that demographic differences account for this difference. For example, a sample of blacks may buy more disposable diapers than whites, but that may simply be because the sample contains more younger families with children. This does not mean that diaper companies should not target these potential users, but only that the driving principal is demographic and not ethnic (see Yovovich 1982). Similar demographics may lead to similar behavior, and consequently, generalizations about ethnic differences may be correct, but need to be qualified and understood as well. For instance, although black consumers may appear to have less product information than their white counterparts, a study by Zikmund (1977) indicates that black shopping behavior is strongly influenced by demographic factors such as automobile availability. Consequently, it is likely that consumers of equal socioeconomic status may have similar access to product information and hence report similar shopping difficulty. For many practical marketing purposes, ethnic differences are real and valuable, especially when they help marketers meet the specific needs and wants of target segments.

The third type of difference appears even when socioeconomic and demographic differences are held constant, either by sampling or by statistical techniques. It appears that the more socioeconomic and demographic characteristics of blacks and whites become similar, the more they tend to think, act, and buy alike (see Washington Post for a review). Nevertheless, middle-class blacks may identify with the black community with its unique values and attitudes; and consequently, their buying behavior may differ from that of middle-class whites (Williams 1992). This final difference might best be termed "ethnic identity," which encompasses differences in values and attitudes (Goldsmith et al. 1987). These differences may be as important to marketers as the first two differences discussed, as they try to appeal to blacks with unique promotional messages (Tracy 1985). These differences, while valuable to marketers, are also more intriguing to consumer researchers interested in the effects of more abstract constructs such as values and culture on consumer behavior.

The chief conclusion we draw from our study is that where differences between black and white consumers are reported, researchers should be careful to examine the effects of socioeconomic differences between blacks and whites as these may account for any differences observed. We recommend that additional studies of this topic be conducted to update the information in this area and to address more scientifically the issue of race in consumer behavior. While we recognize that the black market segment may exhibit some unique characteristics, we suggest that these may be due more to socioeconomic differences and not to racial differences per se.

References Available Upon Request

A MODEL OF THE INFLUENCES THAT LEAD TO CONSUMERS' HELPING BEHAVIOR

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Consumers' contributions to the betterment of their society can be viewed as helping behavior. Yet the process that motivates consumers to engage in helping behavior has been little studied within the framework of consumer behavior. This paper presents a model of this system of influences on helping. This model, which reflects recent findings from both behavioral science research and research involving marketing systems, provides a foundation for consumer research into the helping behavior that occurs in a wide variety of consumption-related areas where assistance is desirable or necessary. The model assumes the necessary conditions for helping are (1) a helping situation that involves (2) a victim or recipient of help, and (3) a potential helper.

The model proposes numerous hypothesized links among eight constructs posited to precede Helping, as well as links to Helping itself. In the model, Situation Characteristics is the perception of the set of circumstances that stimulates arousal within the potential helper. Helper Characteristics subsumes a variety of commonly-used individual characteristics, including demographics, personality, ability, competence, knowledge, other-orientation, self-esteem, personal norms, empathic concern, egoism, and altruism. Recipient Characteristics is the helper's perception of the recipient, including the recipient's ability, effort provided, deservingness, role in creating the problem, and demographics. Group Characteristics reflect whether the helper and recipient belong to the same (membership or reference) group, and if so, the nature of their interdependence. Equity State reflects the extent to which an objective observer of the situation would conclude all pertinent parties are receiving gains that are proportionate to their contributions. The helper's Psychological State subsumes cognitive, self-directed affective, and other-directed affective components. Responsibility is the acceptance or rejection of an obligation to help; responsibility may be internalized or externalized. Benefits/Costs represents the helper's trade-off of the gains and losses for the parties involved from both helping and not helping. Helping finds a wide range of manifestations, ranging from ascriptions of deservingness of help to actual physical assistance.

To help interpret the conceptual model, the paper refers the abstract constructs of the model to concrete issues in consumer research. For example: Thoughtful disposal to protect and improve the human environment. Why do some individuals assist their society with such programs as recycling paper and metals, reducing the volume of trash produced, using biodegradable products, and avoiding harmful chemicals? Why do others ignore these programs? What can be done to encourage a greater number of individuals to participate?

Cooperation with pleas from the textile industry to "Buy American" clothing products. Which consumers internalize responsibility and buy American products to help American workers? Which consumers externalize responsibility to other parties such as retailers, manufacturers, and government? How do equity considerations and benefit/cost trade-offs influence their helping decisions? How do similarity, we-ness, and common fate affect helping?

Helpfulness in salesclerks. What are the characteristics of salesclerks who are perceived by consumers as particularly helpful? Does this perception depend on the characteristics of the consumer as well as the salesclerk? How do consumers' psychological states affect their acceptance of salesclerks as noticeably helpful? Does it depend on the sales situation?

Cooperation with marketing research studies. Which consumers assist marketing researchers by cooperating with their studies? Which constructs in the model explain helping? What characteristics of the appeal for cooperation (the situation) elicit greater helping? Is responsibility an operant construct? Does similarity between researcher and consumer affect cooperation? Does the mood of the consumer affect cooperation? What benefits and costs emerge as determinants of cooperation?

Consumers' participation in distribution tasks. Which individuals and households are more likely to assume a part in the functions of distribution, thus assisting the commercial channels? What do consumers consider "their" tasks and which the tasks of the business logistics system? What inducements must be offered to motivate individuals and households to perform distribution tasks? Do the inducements depend on the circumstances?

SOCIAL COMPARISON, SELF-ESTEEM AND WOMEN'S SATISFACTION WITH APPEARANCE: A MACROMARKETING ISSUE

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Abstract

A study of the relationship between women's self-esteem, satisfaction with appearance and age was conducted, which challenged current popular notions concerning the role of marketing in creating appearance dissatisfaction in older women. The older subjects exhibited lower self-esteem, but were more satisfied with their appearance, while younger subjects had higher self-esteem but lower appearance satisfaction.

Background

A plethora of popular books currently focus on the negative impact of society's ideal of the young and attractive female (Barthel 1988; Freedman 1986; Wolf 1991). Inherent in these works is the assumption that women are bombarded with images of society's ideal woman, react negatively to their own physical appearance by comparison, and suffer from loss of self-esteem. Older women especially are touted as being victimized in this manner.

A relationship between appearance dissatisfaction and a diminishing self-esteem appears plausible. Beauty and youth are *de rigueur* for the female model (Barthel 1988; Mazis, Ringold, Perry and Denman 1992). Social comparison of the self with the idealized female in advertisements has been related to dissatisfaction with the self (Richins 1991). And, older women do exhibit lower self-esteem than younger women (Hendricks and Hendricks, 1977).

Regardless of the implied relationship between appearance dissatisfaction and self-esteem, it has not been researched fully. Marketers should be interested in further investigating the implied relationship, as they are criticized for upholding the stereotyped image of the young/beautiful female.

Self-Esteem and Symbolic Consumption

Sirgy (1983, 287) maintained that, "From a self-esteem perspective, the consumer will be motivated to purchase a positively valued product to maintain a positive self-image...or to enhance herself by approaching an ideal image." The consumer will attempt to avoid purchasing a negatively valued product to avoid loss of self. Just as the individual may enhance the self through the consumption of goods which have high social value, so too can s/he lose self upon the loss of such possessions (Belk 1988).

Age and Symbolic Consumption

Belk (1988) and McCracken (1986) emphasized that the meaning of and use of possessions as symbols of the self shift as one ages. Adolescents and young adults utilize possessions to define the self. In the middle years possessions are used as symbols of status and social power. For older consumers, possessions serve to remind them of the past and of their immortality through their children, through a belief in life after death, through creative efforts (writing, painting, etc.), through identification with nature, and through "experiential transcendence" (Belk 1988, 148).

Social Influence

Bearden, Netemeyer and Teel (1989, 414) defined interpersonal influence as the "need to identify or enhance one's image with significant others through the acquisition and use of products and brands, the willingness to conform to the expectations of others regarding purchase decisions, and/or the tendency to learn about products and services by observing others and/or seeking information form others."

Appearance as a Symbol of the Self

Hirschman (1980, 4) stated that, "The symbolic meaning associated with the product may greatly affect its adoption and use." Included in her list of products highly likely to be used for their symbolic meanings were those associated with personal appearance (apparel and hair styles). Belk (1988) included the physical body among the major categories associated with the extended self. Thus, the body and its accoutrements, as well as other persons,

[1]The researcher acknowledges Zelda Gilbert of Woodbury University for her assistance with the research and the three anonymous reviewers for their invaluable suggestions in the preparation of the final manuscript.

places, and things to which one feels attached, serve as symbols of the self.

Purpose

The purpose of the study was to explore the impact of social comparison of physical appearance on the self-esteem of adult women. It was hypothesized that, (1) a relationship between self-esteem and appearance satisfaction would be found, (2) older subjects would exhibit less satisfaction with their physical appearance than younger subjects, and (3) older subjects would have lower self-esteem than the younger subjects.

Methodology

Research Instrument

To develop a measure of appearance satisfaction, a list of thirty-nine statements, each concerning a single concept about appearance, was compiled. The statements were based on published comments made by women during interviews, statements made during client/counselor sessions (Freedman 1986), attitudes and comments reported in previous research (Sanford and Donovan 1984), and statements made by women during informal conversations with the researcher. The statements were balanced so that 50 percent presented a positive attitude and 50 percent presented a negative attitude.

The statements were rated on a five-point scale, with 1 = "does not describe you well at all" to 5 = "describes you extremely well." Subjects were a convenience sample of 121 females in Southern California, they ranged in age from 21 to 78 years, with a mean age of 40.

The ratings were factor analyzed using a principal components analysis with a varimax rotation. Four statements concerning women's satisfaction with appearance emerged as the strongest of five factors (α=.78) (Table 1).

Self-esteem was measured on the Sa (self-acceptance) portion of the California Psychological Inventory (Gough 1956). It was chosen because it measures not only sense of personal worth but self-acceptance and capacity for independent thinking and action as well. The thirty-two item measure has a published test-retest reliability of .71 for females.

Age categories were chosen carefully so as to group women together who were at similar stages in the life-cycle and, therefore, would display similar consumption behavior.

STATEMENT LOADINGS IN SATISFACTION/DISSATISFACTION

FACTOR

	Statement Loading
I usually feel that others are better dressed than I.	.73939
Generally I am pleased with my appearance.	-.72542
I like other women's clothing better than mine.	.67964
People would think I was more attractive if I wore a larger/smaller size.	.59783

1

Women who are 21 to 36 years-of-age are establishing families, careers, and their personal identities. Women in the second category (37 to 52) constitute a major media market and would be expected to consume products which have high symbolic meanings. Women in the 53 to 65 years-of-age category are established in their careers and/or have raised their families. They are well past the influence of the powerful baby-boom generation in terms of values and consumption patterns. Women over 65 would be expected to use products to symbolize their relationship with others and to the past, and to extend themselves into immorality through artwork, etc. (American Demographics 1990, Belk 1988).

The questionnaire was administered by mail. The mailing included a self-addressed, self-stamped envelope.

Sample

A nonprobabilty, convenience sample consisted of 1330 females from across the United States. The subjects were solicited primarily through the alumni association of a small private university. Others were contacted via colleagues at other universities.

Data Analysis

Reliability was analyzed using Chronbach's alpha. Pearson product moment correlations were computed between scores on the self-esteem and satisfaction measures, and between age and scores on the two dependent measures. A MANOVA was performed to determine the difference among the four age categories on the self-esteem and satisfaction measure. One-way ANOVA's were utilized to further analyze the differences among the age categories.

The Scheffe's test was used to determine the strength of range differences among the age groups.

Findings

A total of 486 questionnaires were returned, representing a thirty-seven percent response rate. Fifteen questionnaires were deemed unusable. Thus, 471 subjects comprised the final sample.

The sample was composed of women from five regions of the United States. Although a majority of the subjects were from the West and Southwest, no differences were found between these subjects' scores and those from the Midwest, Southeast and Northeast.

Thirty-one percent of the subjects were between 21 and 36 years old. Forty percent were between 37 and 52. Fifteen percent were between 53 and 65. Fourteen percent were over 65.

Ratings on the appearance satisfaction measure were summed. Possible scores ranged from 4 (satisfied) to 20 (dissatisfied). Subjects' scores ranged from 6 to 18 (x=10.9) Chronbach's α was similar to that produced during the development of the measure (α=.77).

The self-esteem measure was scored according to the California Psychological Inventory Manual (1956). Possible scores ranged from 0 to 32. The subjects' scores ranged from 8 to 30 (x=20.44).

The younger subjects were less satisfied with their appearance than were the older subjects. Conversely, the younger subjects scored higher on the self-esteem measure than the older subjects (Table 2).

SUBJECTS' RATINGS ON DEPENDENT MEASURES BY AGE

Age Category	SelfEsteem(x)	Satisfaction w/ Appearance (x)
21-36	20.66*	9.93**
37-52	20.93	10.07
53-65	20.39	8.86
66+	18.60	8.39

* high score indicates higher self-esteem
** high score indicates lower satisfaction

2

No overall correlation was found between appearance satisfaction and self-esteem (r=1.07). As differences were observed between younger and older subjects' mean scores on both dependent measures, the subjects were divided into two large age categories (21-52 and 53+). Correlations were again computed. A weak correlation (r=-.11, p<.05) was found for the younger age group. No correlation (r=-.07) was found between self-esteem and satisfaction with the appearance for the older subjects.

Dissatisfaction with appearance was negatively correlated with age (r=-.13, p<.02). Appearance satisfaction increased as age increased and vice-versa.

A negative correlation (r=-.14, p<.01) was found between age and self-esteem. As age increased, self-esteem decreased.

The MANOVA revealed highly significant differences among the four age groups on the appearance satisfaction measure (F=5.90, p<.001). A one-way ANOVA confirmed that the age groups were significantly different on this measure (Table 3). The Scheffe test revealed that the pair of younger age groups (ages 21-36 and 37-52) were significantly (p<.05) different from the older age groups (ages 53-65 and 66+). The 37-52 year-olds were significantly different from the other three groups (p<.01).

ONE-WAY ANOVA OF AGE CATEGORIES ON MEASURE OF SATISFACTION WITH APPEARANCE

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob
Between Groups	3	181.27	60.42	5.90	.0006
Within Groups	441	4513.79	10.24		
Total	444	4695.06			

3

A MANOVA indicated differences among the four age groups on the self-esteem measure (F=7.18, p<.000). A one-way ANOVA confirmed that subjects in the younger age groups were significantly less satisfied with their appearance than were subjects in the older age groups. The middle-aged subjects (37-52) were the least satisfied of all (Table 4). Appearance satisfaction increased for the 53-65 year-old subjects, and the 66+ subjects were the most satisfied of all (Table 4).

The Scheffe test indicated that subjects in the younger age groups were significantly different from those in the older two groups (p<.01) on the self-esteem measure. Self-esteem rose slightly, although not significantly, from the

ONE-WAY ANOVA OF AGE CATEGORIES ON MEASURE OF SELF-ESTEEM

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob
Between Groups	3	258.66	86.22	7.18	.0001
Within Groups	441	5298.63	12.02		
Total	444	5557.29			

4

youngest age group to the next higher age group and then decreased significantly. Subjects in the oldest age category displayed the lowest self-esteem.

Discussion

The hypothesized relationship between self-esteem and appearance satisfaction was supported only partially. Self-esteem was related to appearance satisfaction for the younger subjects only.

The hypothesis that older subjects would be less satisfied with their appearance than the younger subjects was not supported. The finding may (1) have been due to a cohort effect, or (2) have indicated that as women age the meaning they attach to appearance changes.

A cohort effect is plausible. McDowell (1992) indicated that the cultural preoccupation with youth did not begin until the 1960's. Women who are currently over 53 would have been past primary socialization by that decade. It appears that the current cultural emphasis on youth and beauty may not and may never have played a pivotal role in the older subjects' self-development.

The youngest subjects (21-36) have lived their lives at a time when the attractive, young female has been the cultural ideal. Perhaps the cultural emphasis on physical attractiveness does affect their self-esteem as they compare themselves with society's norm.

Interestingly, the middle aged subjects (37-53) had the highest self-esteem but the lowest satisfaction with appearance. These subject were among those whose scores indicated a weak relationship between satisfaction and self-esteem. This age group contains the cutting edge of the baby boomers, those who helped transform society's cultural ideal of femaleness into one of eternal youth and beauty (McDowell, 1991). Perhaps as this generation ages, the loss of these symbols of the self plays havoc with otherwise strong self-esteems. Belk (1988) indicated that loss of possessions which are symbolic of the self can lead to a loss of self-esteem.

If a cohort effect was not in evidence, the findings may indicate fluctuations during stages in the adult female's life-cycle. Perhaps as women age, the meanings they attach to their appearance change. Change in the meanings of symbols of the self are documented in consumer behavior literature (McCracken 1986; Belk 1988).

The hypothesized relationship between age and self-esteem was supported. Older subjects exhibited lower self-esteem than the younger subjects. However, the older subjects' lower self esteem did not relate to their level of satisfaction. This finding counters the current popular beliefs that appearance dissatisfaction leads to lowered self-esteem in older women.

Conclusion

The relationship between self-esteem and satisfaction with appearance is convoluted and may be associated with either life-cycle and/or cohort behavior. It appears that older women's self-esteem may not be damaged by or related to appearance satisfaction. While younger women's may be.

Marketers need to explore further the factors underlying basic differences in self-perception and self-assessment of women of various ages. Research findings regarding young adult females may not accurately reflect the entire female market. Generational and life-cycle differences may create more differences among women than is recognized currently. This is not a call for further market segmentation by age, but a suggestion that further refinement of information regarding existing targets might prove beneficial.

Advertisers would be well served to continue efforts to assess the effects of messages they send to women consumers (Whipple and Courtney 1985). If the current generation of older women are little influenced by society's standard of female attractiveness and/or are satisfied with their appearance, then advertisements which portray women consumers as young and attractive and tout products to enhance youthful appearance may be less effective for this group (Ford, LaTour and Lundstrom 1991).

Perhaps of greatest concern is the issue of social responsibility. It is true that marketers do not create society's standards of beauty, but they are purveyors of these ideals. While the older subjects did not appear to be negatively affected by poor social comparisons, the younger subjects were. It may be that social critics are correct in targeting the advertising and fashion industries as indirectly doing an

injustice to young and middle-aged women by upholding a standard of beauty which is beyond attainment by most women. If so, the ethical implications at the macromarketing level are worthy of further exploration.

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WHO DO WE ASK AND WHEN?
A PILOT STUDY ABOUT RESEARCH IN FAMILY DECISION MAKING

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ABSTRACT

This paper presents the results of an exploratory study on the equivalence of collection procedures when gathering measures of relative influence in family decision making. The primary objective is to compare the results of an average of individual responses to the consensus response of a family making a decision. The results indicate that family members can be canvassed individually for their perception of the family influence structure, and the resultant judgments averaged to yield a reasonably accurate representation.

A comparison of the self-reported influence measures of individuals within the family unit was found to be unsatisfactory in terms of using them to predict family purchase choice. Children were always rated as having lower influence than their parents, but on several occasions their influence was apparent when the family was asked to make a joint decision. The number of children in the family, the age of the parents and the occupational status of the mother were all found to have some impact upon children's influence.

INTRODUCTION

It has long been recognised that many important family purchase decisions are made not by an individual but are instead made jointly by two or more members of the family. Researchers have yet to resolve the problem of how to obtain accurate information about the relative influence of family members in these purchase decisions. A critical issue which needs to be examined is that of who should be interviewed. In fact, there are a number of questions that need to be addressed before the dynamics of family decision making can be fully understood. For instance, do the responses of one spouse accurately reflect the perceived influence behaviour of other household members? Should children be included in the interview? Can the influence ratings of individual members be averaged to determine the ratings of the group, or should the members be interviewed as a group in order to obtain a consensus decision? These questions form the basis of the preliminary study reported here.

RESEARCH BACKGROUND

Research has provided considerable evidence that the responses of husbands and wives are similar when compared on an aggregate basis but quite dissimilar on a within-family basis (Davis 1971). Consensus has been recorded between the responses of husbands and wives to a variety of questions regarding family decisions (Granbois & Willett 1970; Wilkes 1975; Filiatrault & Ritchie 1980). On the other hand, contrasting reports have found significant differences between husbands' and wives' responses within the family decision situation (Ferber 1955; Morgan 1985). There seems no reason that these studies should differ so strongly in their results, other than that there is no evidence that common methodologies have been used. For instance, Davis (1971) interviewed his respondents separately using a five-point Likert-type scale to measure influence; Filiatrault and Ritchie also interviewed their respondents separately, but used a 100-point constant sum scale to estimate the influence of husband, wife and children. The responses from both spouses were used as proxies for children's influences. Szybillo, Sosanie and Tenenbein (1977) included the influence of children in their investigation of the selection decision for a type of restaurant; Davis (1971) did not include children in the family decision for automobiles and furniture purchases. The conclusion reached by Ferber thirty-five years ago supports these latter results:

> "The method by which these studies have been carried out - by soliciting the opinion of one family member regarding the purchasing influence possessed by himself (sic) and by other members of the family - and the scarcity of any rigorous tests of the validity of this method provides sufficient basis for receiving such studies with scepticism" (Ferber 1955, p225).

Davis drew the same basic conclusion more recently:

> "To rely only on wives' responses would be both incomplete and possibly misleading. Hence, the similarity between husbands' and wives' responses when viewed in aggregate terms is clearly not

present on an within-family comparison" (s 1970, p175).

Self reports have also been criticised for yielding poor congruence. Spiro (1983) found only 6% of her respondents reported similar perceptions of influence strategies used in the family decision making process. Thus, if the objective is to find the relative influence of husbands and wives in purchase decisions, then interviewing one spouse is probably not sufficient. Whether both spouses can be interviewed separately and their responses combined in some way, or whether they should be asked to provide a common rating of influence is not clear.

Past research has pointed out that there is a higher level of agreement between spouses when the questions asked are more specific. Davis' (1971) research on automobile and furniture decision processes, using specific decision questions, obtained correlations of .66 and .61 respectively between spouses' responses. Munsinger, Weber and Hansen (1975) found agreement levels of 62.2% between spouses when asked perceptions of dominance in decisions about specific elements in housing.

In contrast, when using a global measure of influence ("Who makes important decisions in your family?"), Davis (1971), and later Wilkes (1975), both found a low correlation between spouses' responses. These authors also found very little correlation between spouses' responses using the Blood and Wolfe index (1960), which contains eight general questions about influence in different situations. Davis (1971) found a correlation of only 0.37 when couples were asked to indicate who usually makes important decisions.

The family decision can be considered at an even more specific level by considering the stage of the decision process. But Troutman and Shanteau (1989) note that several studies have measured influence at different stages and still failed to reconcile spouses' views (Davis and Rigaux 1974; Filiatrault and Ritchie 1980).

Until recently, researchers have not paid much attention to the influence of children in purchase decisions. The majority of recent studies have taken a socialisation perspective and examined how children's purchase decisions are influenced by parents through consumer learning (eg. Szybillo, Sosanie and Tenenbein 1977; Churchill and Moschis 1979). Very few have looked at the extent of the direct influence children have on purchase decisions. An exception is provided by Foxman, Tansuhaj and Ekstrom (1989), who used triads of father, mother and adolescent child in their sample to determine the perception of children's influence. Using their multiinfluence/multirater matrix, they assessed the divergence in influence ratings between members. They found that all members in the triad rated children as having major influence in purchase decisions for products for children's own use, such as clothes, records, bicycles and magazines; influence was relatively insignificant for products such as groceries, furniture, home computers and cable TV. Parents perceive themselves as having more influence than their children. Also, the perceptions of the parents were much closer to each other than were either parents perceptions with those of their children.

RESEARCH OBJECTIVES

The primary objective of this research was to investigate the declared influence structure of individual family members for a specific decision, and to compare them to those of the family acting as a decision unit. Ideally, this actual decision should be a real purchase that involves financial risk and commitment; but this poses severe design problems concerning cognitive dissonance if the study is conducted *post hoc*, and implementation difficulties if actual processes for a series of supposedly identical family decisions are studied. The scenario approach used here seems to offer a reasonable compromise.

Hypotheses Development

Research into family decision structures would be facilitated if it was not necessary to interview all family members together. Hence Hypothesis 1 considers whether measures of individual family members' influence differ when the ratings are collected individually and then averaged, to when the ratings are agreed upon by the family in an open consensus situation. Although there is contradictory evidence in the literature, it does seem possible that spouses may exaggerate their own influence when asked in private, or defer unduly when asked in open discussion.

H1. An influence rating for a family member calculated from the average of the ratings accorded by each individual in the family, will not be significantly different from a consensus rating of influence solicited from the family unit.

There are many possible reasons why any family member might over or under-represent their own influence. Although the "why" is beyond the scope of this work, it is possible to test if this is the case, by comparing the self-declared influence of each member to the view of that member's influence expressed by the other family members.

H2. Self declared influence of any family member will not be significantly different from the mean view of their influence expressed by the other family members.

Asking the family to make a joint decision, after having elicited their perceived relative influence, offers a chance to validate the declared perception structure of the family. It is to be expected that, if children are stated to have a universally lower influence than their parents, that in no case will the children get their way.

H3. The declared influence structure of the family will be reflected in the family choice.

Finally, the issue of whether or not to add the children to the decision-team has not been widely addressed in the literature. A notable exception is the work quoted above, Foxman, Tansuhaj and Ekstrom (1989). Even in this instance, however, the influence of (American) children in decisions about products used by all members of the family (as opposed to products used only by the children themselves) was very small. This study seeks to find if the same is true in a non-USA country, New Zealand.

H4. In a significant proportion of families, children's preferences will have an impact on family choice at the expense of either or both parents.

To test this latter hypothesis, a brief empirical investigation was carried out to find the number of occasions when children do demonstrate their influence on a family decision. It is not expected that children will always overrule their parents, merely that parents' preferences may not predominate in all family decisions. Even a low level of children's influence will provide justification for further research.

RESEARCH DESIGN

Sample Selection

In order to minimize the bias caused by the lack of randomness in the sample, a quota was drawn from a single, closely defined portion of the New Zealand population. New Zealand has a very large middle class in comparison to many other Western nations and the larger proportion of the population is of European descent. Thus, the sample consists of fifty middle class, European New Zealand-born families with a child/children between the ages of 12 to 19. Adolescents were chosen because they are more likely to be active in the purchase decisions than younger children (Foxman, Tansuhaj and Ekstrom 1989). Thus, in so far as the families were all drawn from the same sample frame, they are henceforth assumed to be comparable.

Product Selection

In order to control various external variables, such as price and external circumstances leading to purchase, a scenario approach was chosen. The scenario chosen was that of the family having won a competition which entitled them to take a two-week package holiday, fully paid, to one of six destinations. The purpose of suggesting that the holiday is pre-paid is to remove any financial bias that may influence a parent's response. This is a realistic situation as such competitions are common. The product chosen was one which required extensive problem solving and was supported by previous research to involve joint decision making between husbands, wives and children (Davis and Rigaux 1974; Filiatrault & Ritchie 1980).

Procedure

First, a questionnaire was designed. The introductory letter was on University stationery. The scenario was drawn and a number of destinations were presented.

The large majority of questionnaires were personally administered by the principal author. For the group who were asked to complete the exercise individually, the researcher ensured that there was no collaboration among members until the family destination choice was to be made. For the other group of families, the contrary was true, and they were encouraged to discuss the influence ratings and destination choice before coming to their consensus decision. There were a small number of families who asked to be left to fill the questionnaire alone; in these instances specific instructions were left with the mother of the household about how to administer the questionnaire. No difficulties were encountered.

The first task for respondents was to individually state their destination preference. Where there was more than one child in the family their responses were combined. Next, in Version 1, each individual stated their perception of each family member's influence (regarding the family choice of holiday venue) on a 10-point constant sum scale. Specifically, the wording on the questionnaire stated "Divide 10 points between you and your family members to indicate the level of influence each member would have concerning where you should have your holiday". Version 2 sought the same influence ratings, but only once, as a family consensus decision rather than on an individual basis. The influence rating section of the questionnaire was followed by a group decision of destination preference.

Twenty-five families answered the first version of the questionnaire where each member rated the relative influence of all members in the family using a 10-point constant-sum scale. The other twenty-five families answered the second version where the rating of relative influence of each family member was jointly calculated. All questionnaires were completed in the respondents' homes.

RESULTS

Hypothesis 1

The purpose of testing the first hypothesis was to determine if there were any significant differences between individuals' influence ratings derived either jointly or individually. The T-test performed supported the hypothesis that there is no significant difference between the means of the two groups for the influence ratings (Father's influence $t = .47$, $p = .64$; Mother's influence $t = 1.16$, $p = .25$; Children's influence $t = .51$, $p = .61$). Hence, it appears (within the sampling limitations of the research) that either technique to assess influence can be used.

Hypothesis 2

Hypothesis 2 was designed to test if the self declared influence of each family member is significantly different from the views the other family members have of the individual's influence. To test the hypothesis, the mean ratings of the views of the other two members were averaged (children were treated as a single entity), and compared by t-test to those of the individual concerned. In no instance was a significant difference identified; indeed, the influence of both father and children correlated strongly with perceptions of the other group members (.72, $p > .001$; .64, $p > .001$ respectively). Mothers' perception of their influence was less congruent to that of the other family members (although still not statistically different), this is reflected in a lower correlation (.46, $p = .001$). This is in contrast with Foxman *et al* (1989), who found the views of the parents more congruent than the views of either parent and the children.

Hypothesis 3

This hypothesis was concerned with the extent to which the declared influence structure was reflected in the family decision. In this instance, the decision was about which holiday destination was ultimately chosen by the family. In no case were children perceived by family members to have more influence than their parents, so it is only necessary to show that children actually did have an influence on the family's final choice for the hypothesis to be disproved.

In 33 of the family decisions there was conflict among the participants. In these situations, when individual preferences are matched with the family's joint destination choice, the direct influence of the individual is revealed.

Of the 33 relevant family decisions, fathers dominated 7, mothers 5, and mothers and fathers a further 7 between them. Thus for 19 (57.5%) of the cases, children appeared to have no influence whatsoever. However, in 3 specific instances the preferences of both mother and father were overruled by a child, and in a further 11 the children formed a coalition with one or the other parent and got their way. Thus for 14 (42.5%) situations, children had a direct influence in the family decision that is not reflected in the declared influence structure. Thus the hypothesis is disproved.

Hypothesis 4

As discussed above, children can quite clearly be shown to have an influence in this decision situation. Thus the major part of Hypothesis 4 is supported, that is, that children's preference will have an impact on family choice at the expense of either or both parents. In a purely exploratory mode, these few relevant cases (33) can yield further information.

Family Characteristics	Frequency of children's influence
Family size	
Larger	27%
Smaller	52%
Age of parents	
Older	31%
Younger	53%
Wive's employment	
Yes	48%
No	33%

Table. Situations in which children demonstrated influence

Data on three further items were collected; the number of children in the family, the age of the parents and the working status of the mother. All these factors have been mooted in the literature as having an impact upon children's

influence (Jenkins 1979; Nelson 1979; Mehrotra and Torges 1977), the findings related to them are shown in the Table and discussed below.

One data set was incomplete, hence the base is reduced to 32 family cases. Of the 32 cases, 11 families had 3 or more children, the other 21 had two or less. Although subject to the tyranny of small numbers, it is noteworthy that in 52% of the smaller families, children had influence; but children only had direct influence in 27% of the larger families. Other research has been ambivalent, Nelson (1979) found a relationship, but Ward and Wackman (1972) found none. The present finding does have face validity in that one would expect parents to be more indulgent when they have fewer children.

19 families had a male parent under the age of 44, 13 had an older male parent. It appears that younger parents are more democratic than older. 53% of the former as against 31% of the latter accorded their children influence. This finding also has face validity.

With regard to the employment status of the mothers in the sample, 9 only stated that they were housepersons, 23 held paid positions in the workforce. 33% of the former as against 48% of the latter accorded influence to their children. Once again, this finding is consistent with the body of knowledge (Mehrotra and Torges 1977).

DISCUSSION AND CONCLUSIONS

Some conclusions can be drawn from this study, but it is not possible to generalize too widely. The small sample has been taken from the middle classes and the decision topic selected here is a classical joint decision where children might be expected to have an appreciable influence.

The results first suggest that it may not be necessary to interview all family members at one time. This is a convenient finding to researchers who need to investigate family influence structures. It is also comforting to students evaluating many of the studies reported in the literature, because it is often unclear what interview procedure has been used.

However, it seems that both parents and children should be interviewed if a reasonably accurate representation of the family's preference is desired, because for this product category at least, children do appear to have an important influence. This raises a question about the many studies that have interviewed only one spouse, and those that have ignored children's influence.

Of even more concern is the finding that the declared perception of individuals' influence is not necessarily reflected in the actual decisions made by the family. This is of major concern to practitioners and academics alike, and does strongly call for further investigation. The possibility of the occurrence of a demand bias reinforces this finding, and creates a stronger imperative for further research into more valid measurement scales for influence to be developed.

The subsidiary findings, about the number of children, age of parents and working status of mothers, are all supportive of what literature there is. There is also room here for further, more rigorous research.

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THE SUSCEPTIBILITY OF TEENS TO INTERPERSONAL INFLUENCES WHEN SHOPPING FOR LEISURE PRODUCTS

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Abstract

This paper investigates recently validated normative versus informative interpersonal influence scales in relation to teen shopping for leisure products. Three major influence sources - parents, peers, and the media - were considered, each under ordinary versus special shopping contexts. The normative/informative typology was generally verified. Parent informative influences significantly exceeded parent normative and peer influences. Media informative influence emerged as the next highest influence. Parental normative and informative influences during special leisure shopping significantly exceeded those under ordinary leisure shopping.

The Susceptibility of Teens to Interpersonal Influences When Shopping for Leisure Products

Despite the surge in teen spending and heightened attention of marketers (Hall 1987), teen shopping behavior has not attracted the attention of consumer and market researchers. This exploratory research studies the susceptibility of teens to interpersonal influences when shopping for leisure products. Interpersonal influences are studied in relation to the normative/informative typology recently validated by Bearden, Netemeyer, and Teel (1989), and revalidated by Mascarenhas and Higby (1993).

Teen shopping for leisure items can include a wide assortment of products (Guber 1987), some more socially expressive than others (Saunders, Samli and Tozier 1973). In this connection, two shopping contexts for leisure products were distinguished: "ordinary" versus "special" leisure products. Ordinary leisure products included those which teens would consider less expensive and for more frequent use such as video rentals, movies, or eating in fast food restaurants. Special leisure products would include big-ticket and less frequently purchased items such as vacations, "sit down" restaurants, skis, bikes, and stereos. Assuming each shopping context would require a different level of influence, the susceptibility of teens to interpersonal influences was studied in relation to shopping ordinary versus special leisure products.

Consumer behavior researchers have studied interpersonal influences primarily in the context of consumer socialization. Consumer socialization is defined as "the process by which young people acquire skills, knowledge, and attitudes relevant to their functioning in the marketplace" (Ward 1980, p. 380).

Consumer socialization research has identified three major sources of adolescent influences: parents (or guardian), peers (siblings, friends at school or workplace), and the media (newspapers, TV, radio, and magazines). These influences have been studied singly or in pairs (e.g., Moore and Moschis 1981), but not all three together. This study considers all three sources or agents together in the context of shopping for leisure products.

Theoretical Background: Susceptibility to Interpersonal Influences

Susceptibility to interpersonal influence is a general trait that varies across persons, situations and influence sources. In general, persons inclined to receive influence in one situation tend to be influenced in a range of other social situations. Persons who conform to one influence source on one issue will likely conform to other sources on other issues (McGuire 1968).

Sociologists distinguish between normative and informative influences. Normative influence is "value-expressive" if influence is received for enhancing one's self image or self-concept in relation to significant others; it is "utilitarian" when one conforms to the expectations of others to achieve rewards or avoid punishment (Bearden, Netemeyer, and Teel 1989). Informational influence may be sought either by seeking information directly from knowledgeable people or indirectly making inferences while observing their behavior.

Susceptibility to interpersonal influence (SII) is presumably a tri-dimensional construct: informational, value- expressive, and utilitarian (Burnkrant and Cousineau 1975). However, Bearden, Netemeyer, and Teel (1989) found that the last two dimensions were quite similar and thus included them under the "normative" dimension. The value-expressive and utilitarian aspects of SII are not really

different dimensions, but just two different reasons for compliance with expectations of others: the value- expressive influence operates through the process of identification, which occurs when one receives values or opinions of others as promoting one's self-enhancement, and the utilitarian influence seeks compliance for achieving rewards and avoiding punishments, which is another way of seeking self enhancement. Mascarenhas and Higby (1993) verified this bi-dimensional structure of SII in relation to influences teens receive during apparel shopping. This research revalidates the teen apparel study in relation to teen shopping for leisure products.

Influences are basically interpersonal communications that are transmitted either verbally (e.g., information/opinion giving/seeking/sharing) or non-verbally (e.g., audio-visually as in media exposure, behaviorally as in overt acts) (Gatignon and Robertson 1985). Influences are also characterized as controlling (e.g., coercive, manipulative, persuasive) versus non-controlling (informative, value-expressive and utilitarian) (Burnkrant and Cousineau 1975). Given the context of teen shopping for leisure products studied here, the focus of attention is on verbal and non-verbal, non-controlling interpersonal influences.

Hypotheses Formulation

The greatest and earliest source of consumer socialization is through interpersonal communication in a family context (Churchill and Moschis 1978). Research suggests that guiding communications of parents help adolescents to learn rational consumer behaviors such as money management, comparative shopping, and assessing price-quality relationships (Ward, Wackman, and Wartella 1977). Most family influences persist well into adulthood becoming part of one's personality (Ward, Wackman, and Wartella 1977). Further, source credibility and consistency of influence have been found to be critical under both informative and normative influences (Mahajan, Muller, and Kerin 1984). If parents are considered credible and consistent, then their influence should be strong enough to surpass peer and media influences in the purchase of special leisure products.

This stream of literature seems to suggest that parental influences will be significant in teen shopping. However, trade literature (Hall 1987; Zollo 1989) on teen market behavior indicates that teens of today are relatively independent and mature compared to teens a decade ago, which would suggest that teens will be more open for informative than normative influences, whether the influence source is parents, peers or the media. One could test the following hypothesis:

Hypothesis 1: Parental informative influences will dominate all other influences teen receive during shopping for leisure products.

Given the nature of "special" leisure products, which as defined in this research are products which are bought less frequently but more expensive and socially visible leisure items than "ordinary" leisure products, one would hypothesize that teens would receive more influence from their parents while shopping for "special" than for "ordinary" leisure products. Higher parent influences for special products are expected, especially if parents finance most of these leisure product purchases. A second testable hypothesis is:

Hypotheses 2: Teens will receive more parental informative and normative influences while shopping for special than ordinary leisure products.

The role of the media in teen consumer behavior is well documented (McNeal 1987; Moore and Moschis 1981). However, given increasing independence and maturity of teens today one would hypothesize that they would be open to receive more informative than normative influence from the media. This suggests a third hypothesis:

Hypotheses 3: With the exception of parental informative influences, media informative influences will dominate all other influences teen receive during shopping for leisure products.

The Teen Interpersonal Leisure Influence (TILI) Scales: Development and Validation

Leisure is normally understood as a portion of one's time free of formal (job-specific) and informal (home-related) work (Kelly 1978). Studies relating to socialization of leisure roles are very scarce as leisure is difficult to define, especially when it relates to family and teenager leisure. Early family influences condition one's leisure time activities (Kelly 1978). Valued leisure activities often involve family members. Most leisure is activity-related with three sets of activities characterizing it (Zuzanek 1978):

a) actor activities such as fitness exercises, games, athletics, entertaining at home, dining at restaurants, gardening, crafts, vacationing, hobbies, and the practice of fine arts;
b) spectator activities such as sports events, movies, theatre, culture events, watching home videos and TVs, listening to CDs;
c) symbolic activities such as participating in religious events, political campaigns, voluntary associations and professional affiliations.

This research focuses on leisure products related to "actor" and "spectator" activities. Shopping for leisure products could itself be a major leisure activity among teens; but this study does not consider this aspect of shopping. It

investigates the influences teens report when shopping for leisure products.

In order to assess the impact of the three sources of influences (media, parents, and peers), and the two influence types (informative and normative), six TILI scales were developed. The Bearden, Netemeyer, and Teel (1989) interpersonal influence scale as well as teen apprel shopping related scales (Mascarenhas and Higby 1993) were closely followed with some extensions and modifications to reflect teen leisure shopping. The original instrument used in Mascarenhas and Higby (1993) included 36 items, six items per scale, and 12 of these statements were from Bearden, Netemeyer, and Teel (1989). Scale statements included in the TILI instrument typically describe influences originating from parents, peers, and the media that are both normative and informative, and describe shopping for leisure products in relation to brand or store choice. Scale items were first tested on teens before being included in the initial TILI instrument.

Convenience samples of teen-age students from two comparable high schools were chosen to validate the TILI scales. One sample consisted of 134 students from a private school in suburban Philadelphia; the other consisted of 100 students from a public school in suburban Detroit. All students ranged in age from 14 to 18 years. A brief explanation of the research objectives and key terms preceded test administration in class. Students responded to each of the 36 items first in the context of "ordinary" and then in the context of "special" leisure products. A 5-point agreement-disagreement Likert scale was used for measuring responses to interpersonal influence statements. Relevant demographic items were also included in the questionnaire.

Given the hypothesized underlying dimensions (three influence sources versus two influence types) in the data, a confirmatory factor analysis for theory testing would have been most appropriate. The computer software for this analysis was not available. However, since this research is a revalidation of an existing scale (Mascarenhas and Higby 1993), a principal component factor analysis was executed to study the loadings pattern on scale items. As expected, six factors resulted discriminating three influence sources (parents, peers, and media) and two influence types (normative versus informative) under both special and ordinary shopping contexts. This result revalidates the normative/informative typology of Bearden, Netemeyer, and Teel (1989), as well as the Mascarenhas and Higby (1993) interpersonal influence susceptibility scales in relation to teen shopping of leisure products. Principal component varimax rotated loadings on the 24 scale items closely matched those in Mascarenhas and Higby (1993), except that parent normative and informative influences tended to load on the same factor under both ordinary and special shopping contexts. Parental informative and normative influences in teen shopping of leisure products may be construed by teens as quite similar. This phenomenon may be due to the nature of leisure products themselves than with influence types. Thus, leisure products are mostly services, with intangible and undefined attributes, where informational features may be intricately woven with normative features. For instance, parental advice on movies or cable TV programs, may have both informative and normative elements blended together. More research is needed to explore this anomaly further. Meanwhile, parental informative scale items will be treated separately from the normative items in subsequent analysis. Table 1 presents scale items means and standard deviations under ordinary and special leisure product shopping contexts.

Table 2 reports Cronbach alphas for each of the six TILI scales for each school. Apart from peer informative scale for ordinary leisure shopping and parent normative scale for both ordinary and special leisure products shopping, all other alphas are sufficiently high for exploratory research and scale development (Nunnally 1978). Using Kolmogorov- Smirnov tests the two school samples were found to be statistically equivalent (alpha <0.10) on each of the six TILI scales under both ordinary and special leisure product contexts. Given that the two samples are equivalent and therefore serve as replications, the alphas partially support convergent validity of the TILI scales.

Major Findings and Discussion

Judged by difference-of-two-means t values reported in Table 1, all parent-related scale item means are significantly ($p < 0.01$) higher for special compared to ordinary leisure products. Table 3 presents averaged sums across each of the six TILI scales, together with corresponding standard deviations. Parent influence over teens for special leisure product shopping is significantly higher than for ordinary leisure product shopping, under both informative ($t = 5.83$, $p < 0.001$), and normative ($t = 7.32$, $p < 0.001$) influence types. Hypothesis 2 is verified. Table 4 compares the means of interpersonal influence scales across influence sources and influence types. As judged from the first five rows of Table 4, parent informative influence is significantly higher ($p < 0.001$) than all other normative and informative influences under both ordinary and special shopping contexts, the one exception being media informative influence under ordinary shopping. Hypothesis 1 is partly verified. Media informative influence competes with that of parents for ordinary lesiure products.

As one notices in the next four rows in Table 4, apart from parent informative influence, media informative influence dominates all other influences, which verifies Hypothesis 3. This finding has media marketing implications: it suggests the strong role media has on teens in shopping for leisure products.

Limitations and Concluding Remarks

This exploratory research on teen interpersonal influence-susceptibility during teen shopping for leisure products considered three sources of influences (peers, parents, and the media) together, under the recently explored normative/informative influence type dichotomies, and in the context of ordinary versus special product situations. Major findings of this research include: a) teens receive more parental normative and informative influences while shopping for "special" than "ordinary" leisure products; b) parent informative influences dominate almost all other influences on teens while shopping for leisure products; c) media informative is the next dominant influence on teens.

The findings of this exploratory research should be interpreted within the limiting context of sample size (N=234), sample space (two suburban schools from two large states), and time (the data were collected in 1990). More research across larger and representative teen groups would be needed to causally explain these findings.

Three particular areas of future research can supplement these research findings. The first area could relate teen purchase-use involvement in leisure products/services to the level and nature of teen interpersonal influences for leisure product shopping situations as well as study the direction of causality. Susceptibility to interpersonal influences can be proportional to one's involvement with the items that one plans to purchase; the level of influences received could also vary with the stage of the purchase process. The second research area can relate interpersonal influences of leisure products to the socialization process of teens. Given the type and level of interpersonal leisure influences investigated in this paper, one could investigate the socialization process by which these influences are received and used for leisure product shopping.

A third research area could investigate the determinants of interpersonal influences and socialization, such as gender, age, birth-order, earned incomes. Given the exploratory nature of this research, this paper does not address these factors. Parental influences were found to decrease with adolescent age (Mascarenhas and Higby 1993).

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Table 1
TILI SCALES: ITEM MEANS AND STANDARD DEVIATIONS

Leisure Shopping Statement	Ordinary Mean	Ordinary SD	Special Mean	Special SD	p*
Peer-Normative					
I rarely purchase the latest products until I am sure my peers approve of them.	2.47	1.33	2.33	1.27	
It is important that my peers approve of the store where I buy.	1.80	1.10	1.81	1.05	
Am very loyal to stores my peers shop.	2.56	1.20	2.51	1.14	
If I want to be like my peers, I always buy the brands they buy.	2.05	1.19	1.95	1.17	
I work long hours and save to afford the things my friends buy.	2.27	1.27	2.28	1.26	
I achieve a sense of belonging by buying the same brands my peers buy.	1.74	1.11	1.88	1.15	
My peers very much influence the choice of my shopping friends.	1.71	1.15	1.72	1.12	
Peer-Normative					
I regularly ask my friends regarding the latest fads and fashions.	2.71	1.33	2.56	1.28	
I always talk to friends about prices and quality before I buy.	2.61	1.29	2.73	1.31	
To make sure I buy the right product, I often watch my friends buy.	2.15	1.21	2.08	1.17	
My siblings always talk to me about the ads before I buy anything	1.89	1.17	2.34	1.34	.01
Parent-Normative					
I always follow my parents' decisions by buying the same products and brands.	1.85	1.01	2.39	1.32	.01
My parents accompany me when I purchase.	2.09	1.22	2.78	1.46	.01
What, where, and which products I buy are very much determined by my parents.	2.96	1.07	2.41	1.34	.01
I always shop with my parents.	1.89	1.08	2.71	1.44	.01
My parents decide all shopping needs.	1.66	1.10	2.01	1.23	.01
Parent-Informative					
I never buy any new product until my parents and I have discussed it.	2.08	1.24	2.72	1.50	.01
When I do not understand prices and quality I consult my parents.	3.39	1.33	3.73	1.29	.01
I often discuss buying plans with my parents.	2.69	1.28	3.34	1.37	.01
Media-Normative					
I buy only those products/brands that are advertised on TV, radio & teen magazines.	2.20	1.22	2.22	1.25	
Radio and TV ads determine my loyalties.	2.38	1.23	2.36	1.23	
I continue buying the same brands as long as my favorite rock stars endorse them.	1.53	1.01	1.55	1.07	
Media-Informative					
I always consult the media to determine the best buys.	2.74	1.42	2.94	1.47	
I always look at ads before I buy.	2.60	1.39	2.90	1.45	

* Significance of the difference of ordinary vs. special means test.

Table 2
Convergent Validity:
Cronbach's Standardized Alphas

Multi-Group →	Public School [n=100]		Private School [n=134]		Both Schools [n=234]	
Shopping Context →	Ord.	Spl.	Ord.	Spl.	Ord.	Spl.
TILI Scale:						
Peer Normative	.678	.668	.696	.663	.688	.667
Peer Informative	.460	.340	.518	.517	.505	.477
Parent Normative	.553	.689	.727	.765	.660	.737
Parent Informative	.628	.620	.500	.668	.559	.657
Media Normative	.452	.451	.441	.478	.445	.462
Media Informative	.533	.447	.559	.547	.569	.531

Table 3
Ordinary Versus Special Occasion Leisure Shopping

TILI Scale Mean	Ordinary SD	Ordinary Mean	Special SD	Special t*	Significance p	
Peer Normative	2.08	0.70	2.07	0.67	0.158	N.S.
Peer Informative	2.37	0.77	2.43	0.80	-0.785	N.S.
Parent Normative	1.89	0.72	2.46	0.95	-7.315	<0.001
Parent Informative	2.72	0.93	3.26	1.07	-5.827	<0.001
Media Normative	2.03	0.80	2.04	0.83	-0.133	N.S.
Media Informative	2.67	1.18	2.92	1.20	-2.272	N.S.

Table 4
Inter-Source Comparisons of Leisure Shopping Influences

TILI Scales Compared:	Ordinary t*	Ordinary p	Special t*	Special p
Parent Informative/Parent Normative	10.975	<.001	8.553	<.001
Parent Informative/Peer Informative	4.434	<.001	9.503	<.001
Parent Informative/Peer Normative	8.411	<.001	14.419	<.001
Parent Informative/Media Informative	0.553	N.S.	3.235	<.001
Parent Informative/Media Normative	8.604	<.001	13.781	<.001
Media Informative/Media Normative	6.867	<.001	9.226	<.001
Media Informative/Peer Informative	3.257	<.001	5.197	<.001
Media Informative/Peer Normative	6.578	<.001	9.461	<.001
Media Informative/Parent Normative	8.632	<.001	4.598	<.001
Peer Informative/Peer Normative	4.263	<.001	5.277	<.001
Peer Informative/Parent Normative	6.965	<.001	-0.370	N.S.
Peer Informative/Media Normative	4.684	<.001	5.175	<.001
Media Normative/Peer Normative	-0.720	N.S.	-0.430	N.S.
Media Normative/Parent Normative	1.990	N.S.	-5.093	<.001
Peer Normative/Parent Normative	2.894	<.001	-5.132	<.001

* Two-tailed difference-of-two-means t tests.

AWARENESS OF ORGAN DONATION, PROSPECTIVE BEHAVIOR AND REASONS WHY THEY DO OR DO NOT DONATE BY ETHNICITY

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Abstract

The purpose of this study was to investigate ethnic differences in: 1) awareness of organ donation, 2) prospective behavior and 3) reasons for/for not donating organs upon death. A total of 852 Mexican-Americans and Whites were sampled from two different locations in the U.S. Subjects were asked questions about their awareness and knowledge of organ donation, if they had signed an organ donation card or talked to their family about it, and their reasons why or why they would not donate organs. Several significant differences were found between the ethnic groups. In both locations, Mexican-Americans were less knowledgeable about an organ donor card. Differences in the results between El Paso and San Marcos locations were explained by different levels of income in the Mexican-American samples.

Although organ donation has been researched by many marketing and consumer behavior researchers, (Belk, in press; Harris & Shanteau, in press; McIntyre et al, 1987; Prottas, 1983, 1985; Shanteau & Skowronski, in press); Thukral & Cummins, 1986; most of this research has been conducted on White samples. Most Americans know something about organ transplants: The Gallup Poll (1983) found that 93% of a nationally represented sample had read or heard something on this topic. Many other studies found similar findings with percentages ranging from 94% (Manninen & Evans, 1985) to 99% (McIntyre, et al 1987).

Many Americans have said that they would be willing to donate their organs upon death; percentages vary from 70% (Gallup Poll, 1983) to 80-90% (Thukral & Cummins, 1986). Even though so many said they would donate, only 10-20% of Americans actually have signed donor cards (Manninen & Evans, 1985; Thukral & Cummins, 1986).

The discrepancy between people's intentions to donate upon death and their actual behavior may be due to various reasons. The Gallup Poll (1983) found that 20% of the people they samples stated that a very important reason for not donating was that they had not thought about it. Another very important reason was that they did not like the idea of being cut after they died. Only 7% of the sample stated that organ donation was against their religion or that it was complicated to give permission.

Prottas (1983) found that the most commonly expressed fear of donating organs was that agreeing to become a donor would negatively affect the treatment one receives in a hospital. McIntyre et al (1987) also found that the most important reason was fear that a doctor would declare death prematurely for the sole purpose of obtaining organs. It is important to realize what fears people have concerning organ donation so that these fears can be directly addressed.

All of the studies above used White Americans in their research. However, ethnic background may be a major demographic variable related to organ donation. Most studies have investigated the differences between Whites and Blacks in their willingness to donate organs. These studies found that Blacks are less likely than Whites to be card signers, to have favorable attitudes toward organ donation and to actually donate organs (Callender, Bayton, Yeager & Clark, 1982; Cleveland, 1975; Gallup, 1983; Manninen & Evans, 1985; Prottas, 1983).

Cleveland (1975) reported a 20% level of support for organ donation among Blacks in comparison to 67% support overall. Miller (1987) stated that lack of knowledge about transplantation, distrust of medical personnel, and religious or cultural beliefs were factors contributing to a low donation rate among blacks.

Hispanics as an ethnic group have virtually been ignored in organ donor research. This has been an oversight because Hispanics are expected to be the largest ethnic minority in the U.S. (O'Guinn & Meyer, 1983; Petto, 1983; Saegert & Hoover, 1985). Only two studies on Hispanics were done recently on organ donation. Johnson, et al (1988) found that 100% of a random sample of Mexican-Americans in San Antonio were aware of transplantation and they were as willing to donate their organs as Whites were. Perez, Matas & Tellis (1988) found that family refusal rates to donate organs were significantly higher in Black (45%) and various Hispanic samples (43%) compared to Whites (17%). These studies were conducted on small samples of Hispanics and they were limited in what they investigated.

The current study was conducted to increase understanding of Mexican-Americans attitudes toward organ donation. In particular, two samples of Mexican-Americans (M.A.s) from two different locations were compared to Whites on their awareness and knowledge of organ donations, their prospective organ donor behavior and their reasons for or for not donating organs upon death.

Method

Subjects

In El Paso, there were 165 Mexican-American students (66 males and 99 females) and 169 White students (80 males and 89 females) involved. In San Marcos, there were 368 White students (175 females and 193 males) and 150 Mexican-American students (78 females and 72 males) involved.

Students were chosen as the sample of choice for two reasons: 1) Students are in an age range where accidents occur more frequently and their bodies are usually in good health. This would make them prime candidates for organ donation since most organ donors are young people who are involved in accidents in which their injuries involve brain death. 2) Students are more formally educated than the general population. It has been shown in the literature that the more educated people are, the more likely they are to donate organs (Gallup, 1983; Manninen & Evans, 1985). It would be wise for consumer researchers to target groups that would be most likely to donate; therefore, college students are in ideal sample.

Materials

An organ donor survey was used which included several sections. The first section focused on general background questions on organ donation (e.g. if the subjects heard about organ donation, if they knew what an organ donor card was, if they signed a card or talked to their family about organ donation. They were also asked to respond on a 7-point scale if they believed that thousands of people were waiting for organs and if they thought an organ donor had the potential to save many lives).

The second section concerned specific reasons why people would donate or would not donate organs. Based on the literature and two previous studies, subjects were given reasons why people might or might not donate organs. Subjects were asked to rate these reasons on a 7-point scale of importance. The last section of the survey consisted of demographic questions including ethnic background and annual income of subjects and their parents.

Procedure

Subjects were given the questionnaire in groups of 20-40 people in designated classrooms. They were told that the survey was on organ donation and their answers would be used to increase understanding of the topic. The researcher and a Spanish-speaking research assistant were available to answer any questions the subjects might have. Approximately 20 surveys were discarded in the El Paso sample and 12 surveys were discarded in the San Marcos sample because the subjects were from Asian, Black, or "other" backgrounds, or were not completed.

Results and Discussion

There were several significant differences between the groups in the El Paso and the San Marcos samples. In El Paso, there was a significant difference between Whites (92.3%) and M.A.s (83.6%) on knowledge of organ donor cards: chi square (1, $N = 334$) = 5.2, $p = .02$. Second, when students were asked if they signed the back of their drivers license or a donor card, 34.3% of Whites stated they had signed, while only 18.4% of M.A.s had: chi square (3, $N = 334$) = 16.2, $p = .001$. Third, regarding discussing organ donation with their family, 43.7% of Whites and only 26.1% of M.A.s discussed the possibility of organ donation with their family: chi square (1, $N = 334$) = 10.6, $p = .001$. Fourth, regarding the question about thousands of people waiting for organs, an ANOVA was performed on the rating by ethnicity. There was a significant difference between M.A.s (M=5.9) and Whites (M=6.3): F (1, 332) = 8.23, $p = .004$. Whites were more likely to believe this statement. Fifth, concerning the statement whether an organ donor has the potential to save many lives, there was also a significant difference between M.A.s (M=5.7) and Whites (M=6.2): F (1, 332)= 11,09, p=.001. Whites were more likely to agree with this statement.

There may be two major reasons why differences between M.A.s and Whites occur in regard to knowledge about organ donation and prospective behavior. First, M.A.s may not be exposed to the same information in the media that Whites are exposed to. For example, M.A.s may watch or listen to different programs than Whites or may concentrate on media that do not emphasize organ donation. For example, researchers have shown that many M.A.s listen to Spanish-language radio, read Spanish magazines/ newspapers and watch Spanish-language T.V. more often than the main stream media (Berling-Manuel, 1986). Second, the differences may be due to selective attention on the part of M.A.s. They may be exposed to the same information as Whites but may choose not to attend to this information because it does not meet their needs (Mowen, 1987).

There was also a significant difference between the groups on their reasons for not donating organs. A MANOVA was conducted on all the reasons by ethnicity and the overall F was significant: F (1,322)=2.0, p=.019. For all reasons, the means for M.A.s were equal to or greater than the means for Whites indicating a higher level of agreement for not donating organs.

The pattern of reasons for not donating was similar for M.A.s and Whites (See Table 1) in that their most important reason was "fear that a doctor would declare death prematurely for the sole purpose of obtaining my organs," and the least important reason was that "no one has ever helped me, so why should I help others?". However, the groups were dissimilar aside from their most and least important reasons. For example, M.A.s stated "hope of a miracle that would cure my illness" as being the second most important reason (out of 14 reasons) for not donating (M=3.4), while Whites rated it as their seventh most

important reason for not donating (M=2.8). This higher rating for M.A.s may be true because of their religious background. M.A.s are more likely than Whites to believe that illness (and health) are due mainly to God's will (Kiev, 1968). Therefore, they are more likely to believe in miracles. Other significant differences between M.A.s and Whites included: "there is no real need for organs" and "it is complicated to give permission". These reasons may be rated higher by M.A.s because they are not aware of how easy it is for a person to become an organ donor. There may be miscommunication problems or a lack of information in English/Spanish which could explain the procedure. As stated above, perhaps M.A.s listen to different media or programs compared to Whites or do not attend to this information.

There was also a significant difference between the groups in their reasons for donating organs. The overall F (1,327)=1.9, p=.046. For all reasons, the White means were equal to or higher than the M.A. means indicating a higher level of agreement for donating organs. The overall pattern was very similar between the groups (See Table 2). The least important reason for donating was "out of a sense of guilt", and the most important reason for donating was "to help others" (although there was a significant difference between the groups on their level of agreement). This difference may occur because Whites believe there is a need for organs and that they can make a difference by donating their organs. There also was a significant difference on "to be remembered as a good and caring person", although this was not an important reason for either group (it was rated less important than 4 (the neutral point) for both groups).

In San Marcos, there also were several differences between Whites and M.A.s. First, there was a significant difference between Whites (99.7%) and M.A.s (97.3%) on their awareness of organ donation: chi square (1, N= 518)= 4.1, p=.04. Second, concerning organ donor cards, 76.7% of M.A.s knew what they were, while 87.2% of Whites were aware: chi square (1, N= 517)= 8.1, p=.004. These differences may occur for the same reasons mentioned previously.

Finally, there were significant differences between the groups on reasons for donating: F (1, 515)= 2.5, p=.008. Although the pattern of M.A.s and Anglos was very similar, there were three significant differences between the groups: "to help the cause of science", "so that something positive can come out of the needless death", and "organs will not do anyone any good in the grave." In all cases, the White mean was higher than the M.A. mean indicating greater agreement for donating.

Conclusion

Although there were many significant differences in El Paso and in San Marcos, the only significant difference that generalized across both samples is subject's knowledge about the organ donor card. In both samples, M.A.s are less likely to know what an organ donor card is compared to Whites.

It is surprising that there is only one significant difference that could be generalized across the samples. In order to determine why this happened, post-hoc analyses were done. A major factor that influenced the different results was level of income. In San Marcos the income levels of both groups were high and very similar; whereas in El Paso, there was a large discrepancy between the income levels of M.A.s and Whites (M.A.s had a much lower income). Since previous research has shown that higher socio-economic level is highly correlated with willingness to donate (Gallup, 1983; Prottas & Batten, 1986), there would be fewer significant differences between the groups in San Marcos. Acculturation level was also explored but there were no significant differences found between Hispanics in El Paso and San Marcos.

This study has been helpful in investigating why M.A. and White students are/are not willing to donate organs. This information could be used in future research to determine whether ads that directly addressed these concerns would be more successful than ads that do not.

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Table 1: Mean Ratings, Order, and Significance of M.A. and White Reasons for Not Donating

	Means and Order of Importance ( )		
Reasons	M.A.s	Anglos	Sig.
Doctor would declare death.	4.2 (14)	3.8 (14)	NS
Hope of a miracle.	3.4 (13)	2.77 (8)	.004
I'd rather leave my organs in my body.	3.3 (12)	2.96 (10)	NS
My family would object.	3.2 (11)	2.8 (9)	NS
Organs will be used for medical research.	3.11 (10)	2.76 (7)	NS
Spiritual reasons.	3.10 (9)	3.4 (13)	NS
Organs will be discarded.	3.10 (9)	2.98 (11)	NS
Desire not to think about death.	3.06 (7)	2.98 (11)	NS
Complicated to give permission.	2.9 (6)	2.2 (5)	.001
No real need for organs.	2.7 (5)	2.1 (4)	.006
Disfiguring body.	2.67 (4)	2.5 (6)	NS
Organs placed in an undesirable person.	2.1 (3)	1.8 (2)	.057
Need my organs after death.	1.9 (2)	1.9 (3)	NS
No one has helped me.	1.5 (1)	1.3 (1)	NS

Notes. Highest possible mean=7. Order of importance was determined by ranking the means for MAs and Whites separately; a higher rank indicates more importance. Sample size=322.

Table 2: Mean Ratings, Order, and Significance of M.A. and White Reasons for Donating

	Means and Order of Importance ( )		
Reasons	M.A.s	Anglos	Sig.
To help others.	6.1 (9)	6.5 (9)	.001
Organs will not do anyone any good in grave.	5.2 (8)	5.4 (8)	NS
Something positive can come out of death.	4.7 (7)	4.9 (7)	NS
Help the cause of science.	4.2 (6)	4.6 (6)	NS
Spiritual reasons.	3.4 (5)	3.7 (5)	NS
To increase self-worth.	3.2 (4)	3.2 (3)	NS
To be remembered as a good and caring person.	3.1 (3)	3.5 (4)	.035
To insure immortality.	2.5 (2)	2.8 (2)	NS
Out of a sense of guilt.	1.9 (1)	1.9 (1)	NS

Notes. Highest possible mean=7. Order of importance was determined by ranking the means for MAs and Whites separately; a higher rank indicates more importance. Sample size=327.

COGNITIVE STYLE AND CONSUMER ETHNOCENTRICISM

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Abstract

The greater availability to consumers of foreign goods resulting from the recent globalization of business has increased the need for measures to assess consumer attitudes and preferences for domestic and foreign products. Consumer ethnocentricism was proposed as a construct that may partially explain why consumers evaluate domestic products more favorably than foreign products. The CETSCALE was developed to measure the ethnocentricism construct and has been shown to be valid and reliable. However, its developers pointed out a need to determine whether consumer ethnocentric tendencies operate uniformly across all consumers or whether certain population segments reveal greater ethnocentric tendencies than others. The present study tested whether ethnocentricism varied across cognitive styles.

Introduction

Country of origin can influence consumer perceptions of product quality, and therefore, consumer decision making and product choices (e.g., Reierson 1967; Bilkey and Ness 1982; Ettenson et. al. 1988). This produces a need for measures with which marketers can assess consumer attitudes toward foreign as well as domestic products. Consumer ethnocentricism was proposed as a measure which may partially explain why consumers evaluate domestic products more favorably than foreign products.

Shimp and Sharma (1987) developed CETSCALE to address the need to measure consumer ethnocentricism as a construct specifically suitable to the study of consumer behavior. In another vein, Gould (1991) examined the possible impacts of Jungian cognitive style on consumer behavior and concluded that cognitive style could provide valuable insights into consumer information processing and decision making processes. Previous research has established that cognitive style can influence individual's behavior. For example, people with different cognitive style prefer different ways of handling conflicts and different problem solving approaches (e.g. Killman and Thomas 1975; Hellriegel and Slocum 1975; McIntyre and Meloche 1993; McIntyre and Mokwa 1993). Previous research has not emphasized the impact of cognitive style on consumption-related attitudes and behavior. Consumer ethnocentricism offers a fertile ground in which to explore Gould's contention that cognitive style could help to explain individual differences in consumption-related attitudes and behavior. Therefore, the objective of this study is to examine possible effects of cognitive style on consumer ethnocentricism.

Methodology

Respondents were drawn from students enrolled in introductory marketing courses at a comprehensive university in the Southeast in the Spring of 1992. Of the 168 completed questionnaires, 162 were usable.

Respondents completed CETSCALE (Shimp and Sharma 1987) to determine their ethnocentricism. They also completed the sensing-intuiting and thinking-feeling portion of the Myers-Briggs Type Indicator (Myers and McCaulley 1985) to determine their cognitive style.

Results

The data was analyzed using analysis of variance and series of contrasts. Results revealed that (1) the cognitive styles will vary in their scores of ethnocentricism; (2) both STs (sensory-thinkers) and SFs (sensory-feelers) scored higher on ethnocentricism than either NTs (intuitive-thinkers) or NFs (intuitive-feelers); (3) STs scored highest in ethnocentricism and SFs second highest; (4) NTs scored lowest on ethnocentricism; (5) STs scored significantly higher on ethnocentricism than either NTs or NFs; and (6) SFs scored significantly higher on ethnocentricism than NTs.

REFERENCES AVAILABLE UPON REQUEST TO THE AUTHOR

THE EFFECTS OF TELEVISION ADVERTISING AND PRODUCT CLASS INVOLVEMENT ON ATTRIBUTION PROCESSES AND LEVEL OF ATTRIBUTE CONFIDENCE

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Introduction

This paper addresses those effects that television advertising and involvement might have on attribution processes and confidence. Involvement has been used explain the impact of advertising messages on a variety of consumer cognitive and affective responses (Laczniak, Meuhling and Grossbart 1989). An information processing rationale would also suggest a variety of situational factors at the time of measurement that could affect the attribution process and, therefore, the resultant effects on attribute confidence. (Gill, Grossbart and Laczniak 1988).

Laczniak et al. (1989) reviewed studies of involvement and suggest that it is necessary to clearly define the type of involvement before assessing its effects. In their study, they used a manipulation of "message involvement" which they distinguished from "product class involvement." Their objective was to ascertain the effects of "message involvement" on message processing unconfounded by "product class involvement," which they randomly distributed across message involvement levels and then entered as a covariate. This subject-centered measurement is entirely appropriate when your goal is to ascertain the specific effects of "message involvement" on message processing unconfounded by "product class involvement."

This study differs from the Laczniak et al. (1989) approach in the method of manipulating the involvement factor. This study uses message involvement as a covariate and checks to see that it is randomly distributed across product class involvement levels. Product class involvement, itself, must be the factor that naturally produces such different levels of processing a message or the associational learning effects could be unproductive. This is stimulus-centered measurement and assumes, of course, that it is of primary importance to get consumers to make the appropriate associations to the product (or brand), not to the ad or to other stimuli in it.

In a study that presupposed this naturally occurring involvement, Meuhling and Laczniak (1988), used an ex post facto determination of existing involvement toward print advertisements by measuring its effect on cognitive responses. Without manipulating involvement, they used the total number of message-related thoughts to define high message involvement. Student self-reports of involvement with the advertisement, with the product class, and about the perceived relevance of the advertisement seemed to confirm the involvement partition. This suggests that such stimulus-centered naturally occurring involvement does indeed exist. They found that beliefs about product attributes had an immediate and enduring (one week) impact on brand attitudes for the high-involvement groups, but not for the low-involvement groups.

This study is interested in these naturally occurring involvement effects and seeks to address both questions raised by the Laczniak et al. (1989) and Meuhling and Laczniak (1988) studies: 1.) does product class involvement really alter processing of advertisements regardless of the message processing involvement elicited by the ad?; and 2.) does this differential cognitive processing under such involvement produce different cognitive effects? The existence of attribution processes associated with product class involvement would answer question #1 and differing levels of attribute confidence for high and low involving products would answer #2. Advertisers are not likely to be interested in involvement effects unless they can be shown to produce effects on the attributions, such as attribute confidence, that consumers make to their product. The existence of advertising effects is the subject of our first hypothesis:

> *Hypothesis I: There will be significant differences in attribute confidence levels between subjects exposed to television advertisements and those who do not see the ads.*

We also need to determine whether or not attribution processes attended any differences we might observe in the results of advertising impact. A simple and quite useful check on the presence of attribution processes was provided by Zuckerman and Mann (1979). They explored the effect of attributions on estimates of consensus, consisten-

cy, and distinctiveness, a reversal of Kelley's (1967, 1973) relationship. They used estimates of generalizability across persons (consensus), objects (distinctiveness) and circumstances (consistency) as the reverse operationalization of Kelley's principles. The generalizability measures proved to be every bit as predictive of attribution results as Kelley's (1973) versions.

Generalizability

Zuckerman and Mann's (1979) rationale suggests that for an effect to be attributed to a person, for example, the effect must not be generalizable across all people (low consensus). However, the effect should be present whenever the person is present, regardless of the object (low distinctiveness) or the circumstances (high consistency). In short, low generalizability of the effect over persons with high generalizability over objects and circumstances would lead to a person attribution. Similarly, if an effect is to be attributed to an object, then the effect should not be generalizable over all objects and should be generalizable over persons and circumstances. Therefore, having low generalizability on one of the three dimensions and high generalizability on the other two is the basis for the assignment of cause.

A measure of generalizability over persons, products, and circumstances for the product attribute each subject is most confident about would help provide support for the hypothesized attribution processes under high involvement and their absence under low involvement. Correlation analysis between the generalizability scores and the confidence score for the attribute the subject is most confident about should indicate strong correlations for the high involvement products and weak correlations for the low involvement products. This is the procedure that was used in this study, suggesting the following research hypothesis:

Hypothesis II: There will be strong correlations between generalizability and attribute confidence for high involving products but not for low-involving products.

Attribution Effects

Attribute confidence, is probably a function of the attributional schema (Kelley 1973) evoked at the time of evaluation. The effects of naturally occurring involvement are expected to manifest primarily as the trigger for the attribution processes themselves. High involvement should be necessary to evoke the attribution processes since very little cognitive effort is found in low involving situations(Laczniak et al.1989). This study considers the effects of naturally occurring involvement on group differences as they manifest themselves through the attribution or mere exposure processes evoked.

The particular attribute a subject is most confident about and the level of that confidence, since they are apt to be derivative of the current attributional environment, could vary significantly with exposure to persuasive communications. The effects of exposures to commercials on confidence can be predicted, if attribution processes are operative, by using sequential applications of the Bayesian formula,

$$P(A_i/Ad) = \frac{P(A_i)\cdot P(Ad/A_i)}{P(A_i)\cdot P(Ad/A_i)+[1-P(A_i)][1-P(Ad/A_i)]}$$

where $P(A_i/Ad)$ is a person's subjective belief that a product has a particular attribute i after exposure to an advertisement; $P(Ad/A_i)$ is a person's subjective belief that if a product had a particular attribute i they could know it from seeing an advertisement; and $P(A_i)$ is a person's subjective belief that a product has a particular attribute i. If the attribution process is involved, the confidence scores of a control group not exposed to advertisements transformed by the Bayesian formula should not be significantly different from the confidence scores of those who saw the ads. Otherwise there should be differences in confidence between the two groups, suggesting the following research hypothesis:

Hypothesis III: Bayesian transformation of the attribute confidence scores of those not exposed to advertisements will eliminate the differences from the untransformed scores of those who were exposed to the ads for the high involvement products but not for the low involvement products.

If attribution processes are necessary to produce differences in confidence, then for the low involvement cases there should not be any differences between the confidence scores of those exposed to advertisements and those who were not exposed. However, if differences are found, the effects of mere exposure under the same conditions could be modeled by a simple independence process using the formula,

$$P(An_i) = 1-(1-P(A0_i))^n$$

where $P(A0_i)$ is a person's subjective belief that a product has a particular attribute i with no exposure to an advertisement and $P(An_i)$ is a person's subjective belief that a

product has a particular attribute i after n exposures to an advertisement. If attribution processes are not involved, and if there are differences found, then the confidence scores of a control group not exposed to advertisements transformed by the independence formula should not be significantly different from the confidence scores of those who saw the ads. Otherwise there should be no differences in confidence between the two groups, suggesting:

Hypothesis IV: Independence transformation of the attribute confidence scores of those not exposed to advertisements will eliminate any differences from the scores of those who were exposed to the ads for the low involvement products but not for the high involvement products.

Involvement Effects

Unfortunately, the level of confidence (high or low) is difficult to predict on the basis of involvement main effects. It is easy to imagine a low involving product about which one could have either very high or very low confidence that it possesses certain attributes. Similarly, it would not be difficult to find high involving products about which the same ambiguity would apply. Therefore, these potential differences could inflate the error term enough to preclude any main effect of involvement.

Research suggests, however, that the mode of presentation can affect the type of information processing that occurs during message exposure (Mitchell 1986). In the Meuhling and Laczniak (1988) study, the use of a print advertisement virtually ensured a certain minimal level of involvement because print is a much higher involvement mode of processing. Text processing is a high-involving left-brain activity, whereas picture processing is a low-involving right-brain activity (Geshwind 1979; Ornstein et al. 1979; Hansen 1981).

The interaction effects of presentation mode and involvement, therefore, provide a less ambiguous arena for predicting involvement effects on confidence because they produce potential cross-modal processing. For the high involvement products evoking a dominant left-brain processing, we would expect the confidence to be higher (augmented) in the text treatment and lower (inhibited) in the visual treatment. Conversely, for the low involvement products evoking a dominant right-brain processing, we would expect the confidence to be lower (inhibited) in the text treatment and higher (augmented) in the visual treatment. Thus, the research hypothesis:

Hypothesis V: There will be significant interaction effects between involvement and mode of presentation.

The overall level of attribute confidence for the attribute the subjects were most confident about is assessed by various covariates primarily to determine its volatility, not its specific direction. The expectations are that the confidence scores will vary significantly dependent upon a variety of information processing considerations:

Hypothesis VI: There will be significant differences in attribute confidence that will covary with various measures of message involvement, affect, purchase intentions, enjoyment of television and product usage.

DEPENDENT VARIABLE

Attribute Confidence

We are interested in any differences that might exist in the overall magnitude of attribute confidence within product classes across different levels of naturally occurring involvement for those classes. Therefore, we chose to use the attribute that each individual is **MOST** confident about, otherwise we could confound the results by differences among specific attributes. In other words, since our focus is on levels of confidence, we want to use the highest level of confidence expressed by each subject for each product regardless which attribute is involved.

Attribute confidence is measured as the amount of certainty expressed from zero (0) to one hundred (100) percent for the product attribute the subject's are most confident about for each product. The overall measure is averaged over two products in each product involvement class.

INDEPENDENT VARIABLES

The expected situational volatility of the attribute confidence measure is assessed using partitions for Involvement, Mode of presentation, Day of measurement, and covariates for message involvement, purchase intentions, product usage, affect, television enjoyment, brand preference, reading enjoyment, typical time spent reading, and the typical time spent watching television. The covariates are all measured with single item Likert scales to keep the measurement instrument from becoming unwieldy.

Involvement Manipulation

The involvement partition in this study was produced by identifying classes of products that differ in the level of information processing involvement they typically evoke. This is a stimulus-based measure, not a subject-based one, such as Zaichowsky (1985). Product class involvement, was measured and validated using multiple measures developed by Merenski (Merenski, Lewis, & Sekely 1993). Product categories selected by this classification scheme serve as the involvement factor in the study. A manipulation check for the actual products used confirmed the pretest partitioning.

Mode of Presentation

The study was also designed to control the verbal and nonverbal characteristics of the advertisements so that they might better correspond to the theoretical differences in information processing associated with high and low involvement products. The mode of presentation of the television advertisements in this study follow Hansen's (1981, p. 35) suggestion and should:

> *. . .make it possible to study differential effects of picture-dominated and verbal-dominated messages, with variations in involvement, as well as other message-related variables.*

Inasmuch as the time between exposure and the measures was also likely to have an impact, a partition using Same-Day versus Day-After measurements was controlled but did not achieve significance in this study. Consequently, the Day treatment will be ignored in reporting these results.

The presentation manipulation required the test commercials to be designed to be matched on all except the visual dimension. Visual processing can be dichotomized according to stimulus material-- pictures versus text--and any differences in the effects can be attributed to the differences in this visual domain. The procedure adopted for this study was to vary only the visual content of the television commercials for each product. The audio tracks of the video tapes were identical.

Each of the test commercials was taped in two versions: (1.) a standard television commercial including all the visual elements-- actors, background scenes, product cameos--and a complete soundtrack with music and voice-over announcer; and (2.) the same commercial except that the visual elements were replaced with the printed text of the script being read by the voice-over announcer--the soundtrack was identical to the first version. All the commercials used in the study were taped off the air and, therefore, are of the usual production quality for their product class. This served to establish the mode of presentation treatment in the study.

Research Design

The objective of this research was to empirically test the above hypotheses while controlling for levels of product class involvement, mode of presentation (pictures and text), and day of measurement. Figure 1 presents the Presentation x Involvement x Day (2x2x2) factorial design for the experiment.

Figure 1

FACTORIAL DESIGN

	Pictorial Presentation	Textual Presentation	Control Group
High Involvement Product Class	18 (8 Day-After) (10 Same Day)	17 (10 Day-After) (7 Same Day)	10
Low Involvement Product Class	20 (9 Day-After) (11 Same Day)	19 (10 Day-After) (9 Same Day)	10
Totals	38	36	20

Procedure and Stimulus Materials

Four commercials, one for each of the selected product categories, were acquired for use in the experiment with the aid of a local television station. The experimental subjects were told that the local television station wanted to evaluate the performance and personalities of the newscasters based on a videotape of their broadcast. This videotape served as the vehicle within which the test commercials were imbedded.

Four tapes of the newscast with commercials were created. The two high-involvement treatment tapes contained four insertions each of two 30-second target commercials for products in the product class determined to be high-involving during pretest. The two low-involvement treatment tapes contained four insertions each of two 30-second commercials for products determined to be low-involving.

Two commercials for each product class were used in the treatments to enable an "averaging out" of any differences in the specific products or commercials used in the four tapes and to obtain the distributional properties of

averages for analytical purposes. Tape #1 contained only the high involvement test commercials in standard (pictorial) format. Tape #2 contained only the text versions of the high involvement test commercials. Tape #3 contained only the low involvement test commercials in standard format and tape #4 contained only the text versions of the low involvement test commercials.

The context and commercial clutter environments were selected to help disguise the test commercials and to reduce any offsetting tendencies that might have masked the product-class effects. The context (newscast) was selected to be relatively neutral (i.e., neither high nor low involving). Any increased salience-effect from the text format was mitigated by the clear and obvious sponsorship of the study by the local television station and the strong face validity this lent to the cover story -- that the task was to evaluate the performance of the news personalities at the station. During the formal debriefing several subjects admitted that they had wondered about the unusual text format for some of the commercials, but generally believed they were some sort of "space-fillers" for real commercials that would normally be there.

The experiment was conducted over a two-day period in a classroom of a local school building to reduce the non-response factor that a trip across town might have engendered on the second day. The Day-after (DA) groups were shown the videotapes one day earlier than the other groups. They were scheduled in groups of ten at two-hour intervals, shown the videotape, and asked to return the next day at the same time. The following day the matching Same-day groups (SD) arrived one hour earlier than the DA subjects in groups of ten at two-hour intervals, were shown the videotapes, and then sent into another room where their counterparts from the previous day (DA) also were assembled. The matched DA and SD groups completed the data collection instruments together.

Subjects

The sample consisted of 94 women recruited through a community group and provided with remuneration for their participation. The participants ranged in age from 17 to 55 years with the majority between 25 and 45 years of age. The household incomes ranged from $15,000 to $75,000 per year with the majority in the $25,000 to $50,000 range. The occupations were decidedly skewed toward the "white collar" variety. The majority of respondents (90%) claimed to enjoy reading more than watching television (57%), but their self-reports of typical time spent doing each indicates that they spend more time doing the less enjoyable activity. Twenty-six percent (26%) of the respondents claimed to spend two or more hours each day reading, while seventy percent (70%) claimed two or more hours watching television.

Data Analysis Procedures

The basic data analysis was accomplished using standardized analysis techniques in the SPSS and Biomedical computer packages. The primary analyses on Hypotheses I, II, III, IV, V, and VI were accomplished using analysis of variance and covariance for non-orthogonal designs employing Type IV sums of squares. The generalizability measures and the measures of Ad Involvement, Purchase Intentions, Affect, Usage, and Television Enjoyment were entered as covariates into the analyses of attribute confidence. The control group was entered as a zero level of the presentation factor in an analysis of variance for the attribute attribute confidence measure. The error terms were tested for homogeneity of variance prior to pooling ($F= 1.24, df =74/20, p=.3013$).

Verification of the involvement manipulation was achieved by administering the same instrument used to select the product categories. No change in the classification of product categories was observed.

The presentation manipulation affords little cause for concern on the validity of the partition. It was limited to the visual dimension and was unambiguously dichotomized (pictures and text). The unusual nature of the textual presentation was an artifact that may have been ameliorated by a recent trend toward textual formats in some commercials and public service announcements. In any case, the sophisticated nature of the experiment make it unlikely that subject responses were affected by anticipation of what was expected of them.

Results

Hypothesis I was supported, but in an unexpected way. The attribute confidence levels overall were higher in the groups that did not see any of the advertisements. The significantly higher confidence scores for the control group over both presentation treatments begs for explanation using an information processing rationale. The subjects exposed to promotional messages about the products' attributes (especially for the unfamiliar high involvement product) should have expressed higher confidence (not lower as was found) if logic and rational processes were at work. However, as Tybout, Calder, and Sternthal (1981) found, the logical approach was inferior to cue retrieval and storage strategies in human information processing.

In the Tybout, et al. (1981) study, the McDonald's worm rumor effect was most effectively countered by "priming" the subjects with other associations about McDonald outlets (asking them questions about their local McDonalds) prior to measurement of their attitude (beliefs). Analogously in our study, all the experimental subjects filled out several questions on the specific advertisements they had seen before answering the attribution questions about the products. The control group did not have any questions on advertisements preceding their attribution measures. Since low confidence (poor credibility) is associated with advertisements and advertising in general (Andrews 1989), this may have "primed" the subjects in the presentation treatments to produce lower average confidence scores.

Hypothesis II was supported. Evidence for the effects of current (initial processing) attribution processes was found in the correlations of attribute confidence to the three measures of generalizability, i.e. Distinctiveness ($r=.18, p<.05$), Consensus ($r=.28, p=<.01$) and Consistency ($r=.34, p<.01$). In the analysis of variance, confidence covaried significantly with two of the three generalizability estimates, i.e., Distinctiveness ($F=4.35, p < .01$) and Consistency ($F=7.16, p < .01$), whereas Consensus was not a significant factor.

Hypothesis III was supported. An encouraging indication of the Bayesian model's possibilities was obtained on the attribute confidence measure between the control groups and the experimental subjects. We had found greater confidence in the control groups who had not seen the ads. By assuming that the control group's level represented the ambient level of confidence, we "corrected" the control group's confidence scores by application of the Bayesian model. When the scores were adjusted for the effects predicted by a single exposure to an ad (given a negative effect of the ad on confidence as reflected in a $P(Ad/A_i)$ slightly below .5), the differences between control and experimental groups disappeared. The fact that the model only required a single exposure (one iteration when subjects actually had four exposures) probably reflects the ineffectiveness of multiple exposures or simply verifies Krugman's (1972) minimum exposure requirement.

Hypothesis IV was also supported. There was a significant difference in confidence levels between the low involvement treatments in the ad-exposed and controls, with a higher confidence observed in the unexposed controls as in the high involvement situation. The reversed effect of lower confidence after ad exposure required that the independence process be modified to reflect the negative impact using the formula,

$$P(An_i) = P(A0_i)^n$$

where $P(A0_i)$ is a person's subjective belief that a product has a particular attribute i with no exposure to an advertisement and $P(An_i)$ is a person's subjective belief that a product has a particular attribute i after n exposures to an advertisement. The difference in expressed confidence between the low involvement subjects who saw the ads and the controls could be adjusted away by using the above formula with n=2, the minimum n necessary to obtain a different result (n=1 is non-transforming).

Hypotheses V and VI were supported by significant volatility in the confidence measure. There were significant interaction effects of involvement with mode of presentation ($F=3.84, p <.05$) and involvement with day ($F=3.68, p< .05$). For the high involvement products, a higher confidence was found in the textual treatment and for the same-day (SD) subjects, whereas for the low involvement products, higher confidence was found in the pictorial treatment and for the day-after (DA) subjects.

Confidence covaried inversely with television enjoyment ($F=3.30, p < .10$) and remained significant ($F=2.75, p <.10$) when the control group was in the analysis. With the control group in the analysis, the presentation factor also attained significance ($F=9.41, p <.001$) as already stated the control groups exhibited higher confidence scores than either of the presentation groups. The interaction between involvement and presentation remained significant ($F=2.95, p < .05$), even with the control group in the analysis and the Day partition collapsed. In addition, with the control group in the analysis two other covariates achieved significance. Purchase intentions covaried inversely with confidence ($F=3.45, p < .10$) and affect covaried directly with confidence ($F=2.84, p < .10$).

Discussion

Involvement was a factor and its relation to situational cognitive processes was revealed. The analysis revealed insights into the instability of belief scores in response to situational factors and their relationship to generalizability concepts in attribution theory.

Television enjoyment covaried with the attribute confidence measure. In addition, affect and purchase intentions covaried with the attribute confidence measure when the control group was included as a zero level of the presentation factor. The presentation factor also achieved significance for the control group analyses on the attribute confidence measure. Similarly, the generalizability scores covaried with the attribute confidence measure.

Television enjoyment consistently covaried with the attribute measure, indicating a possible relationship with structural characteristics of cognitive function. The higher the degree of reported enjoyment of television the lower was the confidence (beliefs) about product attributes. This might have important implications for our increasingly television-based communication systems. Perhaps it has something to do with the reduced confidence (beliefs) in so many "attributes" of our social system. However, while it is very provocative, this speculation does stray a bit.

The covariation and correlation of attribute confidence with the generalizability scores supports the theoretical relationship between attribution processes and belief formation. The significant effect of involvement on the Consistency and Distinctiveness generalizability covariates strengthens the inference that attributions are limited to high involvement information processing situations.

Krugman (1977) suggested that high involvement would foster more thinking about an advertisement and this would produce more left-brain associations for subsequent recall, whereas low involvement would foster few word-form associations inhibiting recall. Our results suggest that the relationship is not quite that simple. Krugman's (1977) expectation was supported by the fact that average total thoughts during the advertisements were significantly higher ($p < .001$) for the high involvement treatments. The high-involvement subjects "thought" more (total thoughts) and remembered significantly more content than their low-involvement counterparts.

Future Research

Naturally occurring involvement has been shown to be related to attribution processes. The entire abstract discussion has been liberally sprinkled with the limitations all such studies into these areas must face. In fact, the instability and volatility observed in the attribute confidence measure, alone, would seem to merit considerable additional effort because of its widespread use in attitude modeling. The attribute confidence results provide insights into the probable cause of instability in the attitude representations used so widely in advertising and marketing research. The attributional nature of belief scores suggests that further work in the area of object-perception attributions, particularly as they might apply to intangible product attributes, could be quite fruitful. Further exploration of cognitive algebra representations of attitude employing some aspect of cognitive complexity (Hirschman 1981) might produce more enduring measurements of our "enduring predispositions."

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TIME AND CONSUMER INFORMATION LOAD

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Abstract

Changes in product labeling requirements stimulated interest in the influence of information quantity on the quality of consumer judgments two decades ago. Although the hope of policy makers was that more information might lead to better consumer decisions, results of consumer studies revealed that consumers can make poorer judgments in the presence of increased information. In the present study, the effect of time to process as well as information quantity were varied in order to gain some initial understanding of the determinants of an "information overload" construct.

Introduction

A momentary lapse in attention, a slight mental miscalculation, or an inability to integrate a momentarily heavy load of ambiguous information by an airline pilot or flight controller can, and occasionally does, lead to tragedy. People can, and occasionally do, mistakenly press an automobile accelerator pedal rather than the brake pedal under conditions of momentarily high informational loads. Less tragically, people can, and occasionally do, mistakenly turn on a car's headlights rather than the windshield wipers while in heavy traffic.

That prospective product buyers can also commit processing errors in everyday shopping situations was the focus of the "information overload" studies by marketing and consumer psychology researchers a number of years ago. As Jacoby (1984) notes, even a breakfast cereal package might have over 100 separate items of information, exclusive of graphic information, and a single store might carry as many as 90 different brands. Just as pilots and flight controllers can and do commit processing errors under conditions of "overload", it seems reasonable to expect that consumers in ordinary, everyday situations can also commit processing errors under mentally taxing conditions. It even seems possible that unscrupulous advertisers might deliberately present a large quantity of information to discourage close scrutiny of all of the information by consumers with a limited ability or willingness to expend the requisite time or effort. Although the purchase of a slightly inferior brand of breakfast cereal might not seem like a major catastrophe in the case of an individual consumer, such mistakes can, in aggregate, cost consumers millions of dollars and can result in huge profits for the seller of the inferior brand. The general issue of consumer mental workload is clearly deserving of attention.

The initial "information overload" studies (e.g., Jacoby, Speller, and Kohn 1974) were a result, in part, of concern for public policy issues regarding information on product packaging (cf., Moreno 1974). Certainly the consumer has a "right to know" with regard to product ingredients, size and weight, fitness for particular use, limitations and hazards in use, and so on, and government mandates have steadily increased the amount of such information on packaging in recent years. At issue was a simple question that does not appear to have a simple answer: Is more better or is more worse?

The issue of consumers' "right-to-know" naturally implies that "more is better". It also seemed intuitively obvious, however, that people have an asymptotic limit as to how much information they can actively process (cf., Miller's [1956] "magical number seven"). It seemed reasonable to consider that too much information could interfere with people's abilities to make product choice decisions. The results of marketing studies such as those conducted by Malhotra (1982) suggest that it is indeed likely that prospective buyers make "dysfunctional", or less than ideal, product choice decisions under conditions of heavy informational loads. In addition to verifying that an "overload" phenomenon exists, such investigations of information load were also interested, in part, in identifying the specific point at which "overload" begins to occur.

The consumer "information load" studies of the seventies resulted in substantial on-going debate (eg., Jacoby 1984; Malhotra 1984). One issue that surfaced was the notion that "load" must, in part, be a function of the amount of time that a consumer has available or is willing to invest in "thinking" about a given issue. Consider, for example, the explanation of Malhotra (1982, p. 27) regarding the presumed basis for the "information load" paradigm:

"The information load paradigm is based on the proposition that consumers have finite limits to the amount of information they can assimilate and process during any given unit of time. If these limits are exceeded, overload

occurs and consumers become confused and make poorer decisions."

Curiously, there has been little development of additional conceptual or empirical insights into the nature of an information load construct or the kinds of factors that moderate information load. The present study was undertaken, in part, with the goal of observing the effect of time on performance across changes in "information load".

Information Load and Mental Workload

Engineering psychologists have attempted to understand how much "mental workload" is associated with, say, the landing of a spacecraft or commercial airliner before the human processing system begins to exhibit problems of reliability. Similarly, consumer researchers have explored the issue of "information overload", attempting to determine, in part, if consumers can and will make significantly greater product choice errors if they consider too many product alternatives of product features. In both cases, "overload" is assumed to have occurred when people are unable to complete the task successfully or exhibit increased decisional errors (cf., Albanese 1977, cited in Willeges & Wierwille 1979; Malhotra 1982). The notions of "mental workload" and "information load", as concepts and as constructs, appear to bear a very close conceptual and operational relationship (cf., Owen 1992).

There currently is no generally accepted definition of the concept or construct of "mental workload", however, except for the recognition that it is apparently a multidimensional construct (cf., Chiles & Alluisi 1979; Wickens & Kramer 1985; Willeges & Wierwille 1979; Yeh & Wickens 1988). Clearly, the amount of confusion that could arise from too much or too little information might be one factor that generates "workload", being the basis of the "information overload" studies by consumer researchers. Miller's (1956) "magical number seven" elegantly posits that there is a finite amount of information that can be handled by the processing system. Yet another factor that would seem to affect "workload", however, at any single, given amount of "information load", is time.

Although "time" is a factor that has been considered in several multidimensional subjective workload scales used in military applications (e.g., SWAT of Reid, Shingledecker, Nygren, & Eggemeier 1981), the effect of time in the "information load" paradigm of consumer research has not been substantially addressed. Of interest in the present study, then, is an observation of the effect of time on performance across changes in "information load".

Generating Varying Levels of "Load" and Time

The pioneering "information overload" studies of Jacoby, Malhotra, and others varied "information load" by varying the number of products a subject was to consider in a choice set, or by varying the number of attributes used to describe each product in a choice set. As a measure of the outcome effects of "information load", subjects were asked to choose one of the products. A significant rise in the frequency of choice "mistakes" at some increased condition of load was taken to imply that the threshold of "overload" had been surpassed. The present study also varied "information load" by varying the number of products in a choice set in a between subjects design. "Load" was additionally varied by using two levels of time constraints.

Method

Housing was chosen as the product class to use in the present research because all undergraduate student participants were familiar with the basic features of the product, yet few had extensive experience in purchasing the product. The fact that undergraduate students were likely to be highly homogeneous in experience with this product class is seen as a benefit for this kind of study. Subjects (n=344) were recruited via an a extra-credit signup procedure. Upon arrival at the appointed times, they were shown advertisements for condominiums described with apartment features.

In order to provide a rationale for the task, students were told that the business school was conducting a survey for employers who assist new recruits who must relocate. Subjects were asked to scan condominium listings from "selected pages" of a real estate magazine of another unnamed city. They were also told to choose a condominium that they would most prefer to see as prospective home if they were given only a limited amount of time during an interview visit to the prospective employer's city.

Subjects were provided with stimulus materials in the form of condominium ads with 4, 6, 8, 10, 12, 14, or 16 product alternatives. This was, then, a 7 (number of alternatives in the choice set) X 2 (1.5 minutes or 2.5 minutes constraint on reading time) between subjects design, with about 30 subjects in each cell (except that the 1.5 minute condition did not include the 14 or 16 ad levels). (Given the exploratory nature of this study on the effects of time on mental workload, there was no a priori guidance in the choice these particular time limits; initial conditions of 5 minutes and 2.5 minutes quickly indicated that subjects in the 5 minute conditions almost universally chose the objectively superior product and expressed displeasure with the long amount of time allotted to the choice task.) Each

subject, under a single level of "workload", was to choose the "best" product after the allotted reading time.

One of the ads was an objectively superior listing and the remaining condominium listings were of lesser objective value. All listings described the same features (e.g., inclusion of specific appliances), including similar types of neutral "filler" material (e.g., "meticulous landscaping"), and all were the same number of lines and about the same number of words in length. The objective value was varied by varying the kinds of appliances that are included (e.g., washer and dryer vs. washer and dryer hook-ups; kitchen sink disposal vs. dishwasher), by whether a garage or carport is included, and so on. Price, location (distance from work and shopping) and several other features were held constant (via the part of the cover story which stated that the condominiums were identical in these respects) so that survey participants could compare the condominiums on the listed features alone. Again, the task was for the subject to indicate the most preferred product after the allotted reading time.

Results

Similar to past research (e.g., Malhotra 1982), the percentage of participants choosing the objectively "best" product in each of the conditions served as the main dependent measure. These results are illustrated in Figures 1 and 2. The various ad conditions were treated as qualitative, rather than quantitative, variables, with a point of comparison set at the apparent 10-ad peak for the 2.5 minute condition and at the apparent 8-ad peak for the 1.5 minute condition. These qualitatively different levels of "load" can be compared using a LOGIT analysis (cf., Malhotra, Jain, & Lagakos 1982) modelled in the form:

$$\log_e[P_i/(1-P_i)]=\Sigma b_k X_{ik} \qquad \text{(eq. 1)}$$

where the response transformation is denoted as "log odds", P_i is the probability (percentage) of choosing the objectively "best" product, X_{ik} represents terms associated with the number of product alternatives in $cell_i$, and the interpretation of the parameters b_k is qualitatively the same as in a non-transformed linear regression model, with the 10-ad peak of the 2.5 minute condition and the 8-ad peak of the 1.5 minute condition set as intercepts. Prior to analysis, the data must be adjusted for the effects of chance (cf., Malhotra et al.), using the correction:

$$P_i = (P_{io}-P_{ic})/(1-P_{ic}) \qquad \text{(eq. 2)}$$

where P_i is the probability of "correct" choice adjusted for chance, P_{io} is the uncorrected probability of "correct" choice, and P_{ic} is the probability of "correct" choice by chance alone. The results of a main effects only analysis, in which the 1.5 minute and 2.5 minute conditions are treated independently, are listed in Tables 1 and 2.

In the 1.5 minute condition, 8 ads results in significantly better performance than 6 or 4 ads. Perhaps fewer ads provide fewer points of comparison, possibly leading to greater mental workload than at higher levels of information. Although it might seem intuitively obvious that people have a limit as to how much information they can actively process, certainly there exist situations in which more information can create less confusion by providing a better basis for making comparisons (cf., Buck 1974). Perhaps greater processing time (2.5 minutes vs. 1.5 minutes) assists when confusion occurs at levels in which not enough information is provided, but does not assist processing beyond the "overload" threshold, evidenced if the two curves are offset and overlaid.

Discussion

Apparently, "information load" is a time-less notion as it relates to Miller's "magical number seven". That is, there is perhaps some finite limit in the ability of the processing system to handle some quantity of information, irrespective of time. The notion of "mental workload" necessarily requires the dimension of time, whereas the notion of "information load" would seem to be a special case of "mental workload" that necessarily requires that time is specifically not a constraining factor.

Subjects who receive a greater number of ads to read and compare in a fixed amount of time, then, would presumably suffer from the effects of "workload" as well as "information load" since there is less time on a per-ad basis. Introducing time as a variable, however, does not appear to simply lower the "overload" threshold. It is apparent from comparing Figures 1 and 2 that a decrease in the time allotted to the task did not simply shift the "overload" point, but rather appears to have shifted an apparent peak in task performance.

A possible explanation for this is that subjects would be expected to work "harder" and "faster" if given more "work" to do in a given amount of time, i.e., to adjust effort to the difficulty of the task. Bryan & Locke (1967) found that subjects given more time to complete math problems took more time to complete them. Apparently, subjects with shorter time limits will adjust their "effort" accordingly.

An important implication of the observations of this study is that whatever load curve shape is observed in any particular "information load" study might be an artifact of

the experimental setting (cf., Owen 1992). That is, the amount of information that results in optimal decision making performance might be a function of additional factors such as time constraints, and the time constraint might itself be a moderator of "motivation" or "effort". From a practical perspective, the ideal amount of information to provide consumers in advertising, product packaging, and such, might be subject to a variety of situational variables, such as the amount of time that the individual has available or is willing to expend on the marketing communication. Time is a factor that is subject not only to situational variables, but to individual differences between people's attitudes toward time use as well (Lane, Kaufman, & Lindquist 1991).

With new government mandates in the U.S. requiring that food products list even more complete information on product packaging, understanding the interaction of a number of variables on the influence of information presented becomes increasingly important. Results of research such as this suggest that the focus of future research should not only be on the amount of information presented but should also include considerations of how much time and effort individuals are likely to spend in assessing such information. In addition, it would seem to be important to begin to understand how information quantity might lead people to use simplifying heuristics (e.g., graphical cues) in guiding their choices. With regard to public policy considerations, it possible that an unscrupulous marketer might present a great deal of information in an attempt to be deceptive in some way. That is, presentation of an extremely high amount of information might actually reduce the motivation of consumers to process the information, leading to the use of simpler, but perhaps deceptive, cues.

Finally, an interesting area worthy of future research would be to explore the idea that the presentation of too little information might result in greater confusion, and therefore greater "mental workload". Whether through an increase in "workload" due to constraints in time, or possibly even through "underload" if there is little constraint in time, the effect of less information might be to reduce consumer motivation and result in poor choices as well. This idea is based on the observation in the present study that better choices were made at 8 vs. 6 ads (1.5 minute condition) and at 10 vs. 8 ads (2.5 minute condition). Such research might be usefully guided by the ideas put forth in Brehm's recent "energization" theory of motivation, which appears to have potential for predicting when effort will be expended under conditions of information scarcity (cf., Wright 1990).

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Table 1: Performance in 1.5 Minute Condition

parameter	b	stderr	tratio	freq	p
intercept (8 alts)	0.809	0.425	1.905	19/26	>.05
4 alternatives	-0.861	0.578	-1.490	16/26	>.10
6 alternatives	-1.411	0.590	-2.390	12/26	>.015
10 alternatives	-1.363	0.578	-2.356	12/28	>.015
12 alternatives	-1.401	0.585	-2.410	11/27	>.015

Note: Freq. is original data; analysis adjusted for chance.

Table 2: Performance in 2.5 Minute Condition

parameter	b	stderr	tratio	freq	p
intercept (10 alts)	0.866	0.400	2.166	22/30	>.02
4 alternatives	-0.071	0.562	-0.126	22/30	ns
6 alternatives	-0.461	0.547	-0.843	20/30	ns
8 alternatives	-0.782	0.538	-1.455	18/31	>.10
12 alternatives	-1.732	0.561	-3.088	11/31	>.0025
14 alternatives	-1.468	0.553	-2.655	12/30	>.0075
16 alternatives	-1.810	0.584	-3.129	19/29	>.0075

Note: Freq. is original data; analysis adjusted for chance.

Fig. 1: Performance in 1.5 min. cond. (adj. for chance).

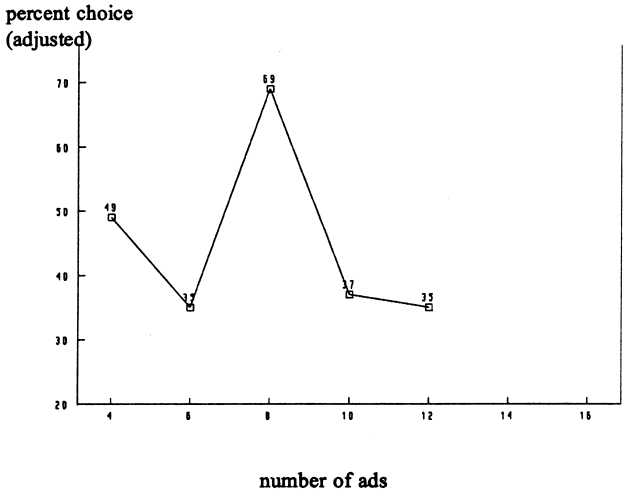
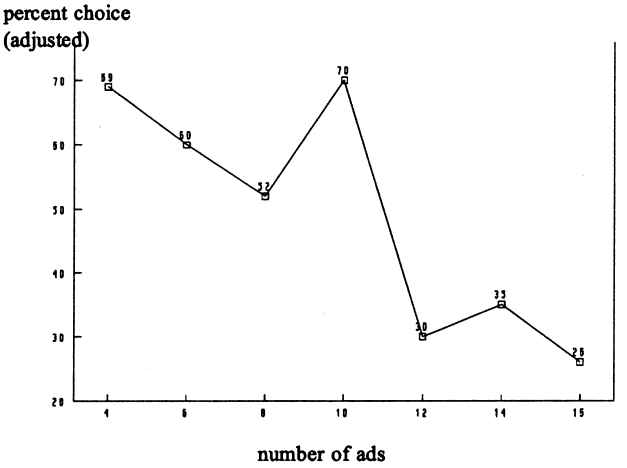


Fig. 2: Performance in 2.5 min. cond. (adj. for chance).



SUBJECTIVE, OBJECTIVE, AND EXPERIENCE-BASED KNOWLEDGE: A COMPARISON IN THE DECISION-MAKING CONTEXT

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Abstract

Product knowledge has been recognized as a major factor in information processing and decision-making research. This variable has been operationalized in different ways, and terms such as "product familiarity" or "product experience" have been used to describe essentially the same concept (Bettman and Park, 1980; Johnson an Russo, 1984; Raju and Reilly, 1980). Recently, it has come to be generally accepted that product knowledge can be categorized into three types. These three categories can be termed subjective knowledge, objective knowledge, and experience-based knowledge, respectively.

The objective of this research was to examine the relationships among the three types of product knowledge and to study their effects on selected aspects of information processing and decision-making. In particular, the three types of product-knowledge are examined in relation to: (a) the amount of information used to make a choice decision; (b) the importances attached to extrinsic versus intrinsic attributes in the decision process; and (c) certain critical outcomes of the decision process, such as satisfaction with the choice, certainty that the choice was the best, etc. These objectives were accomplished in the context of a purchase decision task where subjects were asked to select a brand of VCR based on the information provided on various attributes.

A total of 138 subjects volunteered to participate in the study as part of a classroom learning exercise. They were students in a medium-sized metropolitan university located in the midwestern United States. Of the 138 subjects, 22 were deleted from the analysis either because of computer problems or because they did not own a VCR.

Subjects were told that the study was being conducted to assess how consumers would react in a futuristic environment where purchase information is provided through personal computers. They were also told that they would be required to examine information on various brands of VCRs and select a brand to buy. Subjects were told that it was important to use the information just as they would if they were aatutually in the market to purchase a VCR.

After signing an informed consent form, subjects completed a pre-experiment questionnaire which measured their subjective, objective, and experience-based knowledge. They then participated in the decision-making task by selecting a VCR for purchase. The purchase decision was based on attribute and brand information provided via personal computer software designed specifically for this purpose. After the decision-making task was completed, subjects filled out another questionnaire relating to various decision outcomes.

The results show significant correlations among all three knowledge measures. However, subjective and objective knowledge appear to be more closely related than any of the other pairs of knowledge measures. Subjective and objective knowledge have significant effects on the proportion of information used and the desire for more information, but experience-based knowledge has no impact. Also, the relationship between knowledge and amount of information used appears to be different for subjective and objective knowledge.

Among the three types of knowledge, subjective knowledge is most closely correlated with such decision outcomes as certainty, confusion, and likelihood of getting the best buy. The results also show that, for the low and medium-knowledge groups, the extrinsic attributes (price, warranty) are more important than the intrinsic attributes irrespective of the type of knowledge. For the high-knowledge group, however, both extrinsic and intrinsic attributes are of equal importance.

Additional information and a complete set of references will be provided by the authors upon request.

AN EMPIRICAL EXAMINATION OF THE PRE-PURCHASE BEHAVIOR OF OPINION LEADERS

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Abstract

This paper reports on an exploratory study which investigated the personal decision-making process of opinion leaders. A multivariate nominal analysis (MNA) model was developed which significantly predicted interpersonal communication categories with independent variables representing stages of a basic model of consumer decision making.

Problem recognition and information search were found to be the most important areas of differences across the interpersonal categories. The results also suggest the existence of different patterns in the overall decision process for opinion leaders versus non-opinion leaders.

Introduction

While the importance of opinion leaders as sources of interpersonal communication and their role in the decision processes of others, has been widely investigated, the purpose of this paper is to examine opinion leaders with respect to their own decision-making processes. Variables representing all stages in a basic model of consumer decision making are used in this study to predict interpersonal communications categories suggested by Reynolds and Darden (1971) in order to determine the importance of various stages in the overall process, as well as to suggest possible pre-purchase patterns of decision making for each of the group classifications.

Methodology

Respondent information for the study was obtained from NFO Research, Inc. panel members who had recently moved and faced decisions concerning a new financial services provider. All panel members had recently made a choice of a new financial institution. Of the 665 questionnaires distributed by NFO, 396 (60%) usable questionnaires were returned.

The data for this study were collected through a self-administered questionnaire. The principal measures contained on the instrument included the following items: problem typology, an information seeking scale, an opinion leadership scale, a self-confidence scale, a product interest scale, number of information sources, number of alternatives in each of the awareness and consideration sets, number of important attributes, and verbal choice protocols.

Data Analysis

Data for this study were analyzed using a multivariate discriminating procedure. Using the four interpersonal categories ("socially integrated" opinion leaders, "socially independent" opinion leaders, "socially dependent" non-opinion leaders, and "socially isolated" non-opinion leaders) as the criterion variable, the technique empirically determined the discriminating and predictive power of the set of variables which represented the various stages of consumer decision-making.

Results

The model correctly classified 46% of the respondents into the four interpersonal communication categories. The early stages of the decision process, problem definition (type) and search (number in the awareness set and number of information sources), emerged as the more important predictors. Results indicate a strong association between the stages of the consumer decision making process and opinion leadership as represented by the four modes of interpersonal communication. The pre-purchase pattern for the opinion leader groups are very similar to each other. They are, however, quite distinct from the other two groups.

Discussion and Conclusion

The results indicate that pre-purchase or consumer decision-making variables can significantly discriminate among categories of interpersonal communication, and suggest the existence of different patterns in the overall decision process for opinion leaders versus non-opinion leaders. Financial marketers must appeal differently to opinion leaders, as compared to average potential customers.

COMPULSIVE BUYING: A MULTIVARIATE REANALYSIS

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ABSTRACT

This paper assesses the current theoretical base underlying the compulsive buying phenomenon. By reexamining the data put forth by O'Guinn and Faber (1989) in a multivariate manner, an evaluation of the discriminating power of the current predictor variables is performed. The variables appear to discriminate far better than chance with a hit ratio exceeding 80 percent. Nevertheless, theoretical development is needed to improve our ability to explain and predict the compulsive buying phenomenon.

INTRODUCTION

Compulsive buying is a poorly understood phenomenon. Yet, the pandemic rise in personal debt may be a reflection, in part, of compulsive proclivities within this society (O'Guinn and Faber 1989). The purpose of this paper is to help gauge the current nomological development within this substantive area. This will be accomplished by determining how accurately the theoretical correlates put forth by O'Guinn and Faber (1989), discriminate known compulsive buyers from the general population. Accordingly, a multivariate analysis of this data will be put forth.

IMPORTANCE OF THE COMPULSIVE BUYING

There are two major reasons why a better understanding of compulsive buying may contribute to the marketing discipline (O'Guinn and Faber 1989). One reason is that the study of abnormal consumer behaviors may enrich our understanding of more normal consumer behaviors. In all social sciences, the study of abnormal phenomena has helped facilitate the development of theories applicable to a wide array of normal phenomena. For example, the field of abnormal psychology has developed socioenvironmental theory which can help explain how different life events can create stress for the average consumer, thus affecting his/her behavior. A second reason is that compulsive buying can have severe consequences for the consumer, as well as for his/her family, friends, and creditors. Thus, along with facilitating the development of consumer theories, compulsive buying research may eventually provide help for troubled consumers as well as for credit-extending businesses.

COMPULSIVE CONSUMPTION

Over the recent past, researchers have exerted increased effort toward examining compulsive consumer behaviors. Consumption patterns such as compulsive buying (d'Astous, Maltais and Roberge 1990; O'Guinn and Faber 1989; Scherhorn, Reisch and Raab 1990; Valence, D'Astous and Fortier 1988), kleptomania (Fishbain 1987; Glover 1985; Goldman 1991), bulimia (McConaghy and Blaszczynski 1988; Mitchell et al. 1985) and drug addiction (Hirschman 1992) are extreme forms of consumption activity on which researchers are focusing.

While many consumers excessively buy, steal, use drugs, and/or purge, the vast majority of them do not become addicted (Hirschman 1992). Consequently, researchers have been laying the groundwork in order to help develop a nomological network to adequately explain why certain consumers fall prey to this problem. Compulsive behaviors generally go beyond the boundaries of what would be considered normal within a chosen culture, and the pattern of behaviors appears to overstep the consumer's ability to control them (Hirschman 1992). While consumer researchers are beginning to understand the symptoms associated with the phenomenon, a global evaluation of the proposed theoretical correlates has not been undertaken.

COMPULSIVE BUYING

Compulsive buying is defined by Krouger (1988, p.574) as "an overpowering urge to buy items, especially clothing, usually in the pattern of shopping binges." This definition fails to incorporate the negative ramifications that are ultimately associated with this pattern of behavior. The Valence (et al. 1988) typology characterized the compulsive consumer by the following dimensions: (1)strong emotional activation, (2)high cognitive control and (3)strong reactive behavior. In addition, it was proposed that the compulsive buyer frequently tries to reduce psychological tension and sees the buying act as a primary means to reach this end (Valence et al. 1988).

O'Guinn and Faber (1989, p.148) defined compulsive consumption as "a response to an uncontrollable drive, or desire to obtain, use or experience a feeling, substance, or activity, that leads an individual to repetitively engage in a behavior that will ultimately cause harm to the individual

and/or to others." Accordingly, this paper defines compulsive buying as:

> a response to an uncontrollable drive or desire that leads an individual to repetitively engage in purchasing behavior that ultimately causes harm to the individual and/or others.

This definition includes the three dimensions of compulsive buying which are: (1)repetitive, (2)problematic and (3)uncontrollable.

At present, consumer researchers are beginning to identify a number of variables that appear to be related to compulsive buying. These include: greater proclivity to fantasize (O'Guinn and Faber (1989), higher levels of psychasthenia (O'Guinn and Faber 1989); Scherhorn, Reisch and Raab 1990), low self-esteem (d'Astous, Maltais and Roberge 1990; O'Guinn and Faber 1989; Scherhorn, Reisch and Raab 1990) internal locus-of-control, and decreased loneliness (Shapiro 1992).

For many compulsive shoppers, buying appears to be a way of coping with negative affective states. Faber (et al. 1987) administered a questionnaire to members of a compulsive buying self-help group which included the open-ended question: "I am most likely to buy myself something when...". Over 43% of the respondents completed this sentence by listing a negative affective state such as, "I am depressed", or "feel bad about myself".

O'Guinn and Faber (1989) found that members within a compulsive buying self-help group differed from the general public (table 1) in terms of self-esteem (lower), fantasy seeking (higher) obsessive-compulsiveness (higher), materialism (higher), credit cards paid in full each month (fewer) and credit cards within $100 of their credit limit (more). In addition, their analysis shows that the compulsive group is more likely to have problems in controlling their spending habits as compared to the general population. Interestingly, members of the compulsive shopping self-help group were not significantly different than members of the general public in their desire to possess objects, but they were more likely to exhibit object attachment (O'Guinn and Faber 1989). Perhaps the act of purchasing becomes the focal point for the compulsive shopper. Although the newly purchased product may have special meaning (attachment), this meaning becomes less important when the compulsive shopper goes out on his/her next shopping expedition. Thus, due to the temporal nature of the object's meaning, the desire to possess any one product is not particularly high. Therefore, the groups differed in terms of their overall materialism but not within the dimension of object attachment.

Clinical psychiatric studies on compulsive buying focused almost exclusively on female subjects (Krouger 1988; Lawrence 1990). This may be due to the fact that women are more likely to seek help for treatment than men. Generally, compulsive buying problems have been illustrated in magazines and shown on television shows that target predominantly female audiences (Jacoby 1986). Thus, women may be more apt to acknowledge that they have this problem.

A primary goal among compulsive buying researchers has been to develop a clinical screening instrument. Faber and O'Guinn (1992) have developed a unidimensional scale that appears to be effective at discriminating compulsive buyers from the general population. The items on the scale reflect the symptoms associated with compulsive buying. The correct conservative classification rate was roughly 89 percent.

O'Guinn and Faber (1989) analyzed a number of potential predictors within a univariate context. The goal of this study is to re-analyze this data set using multivariate procedures in order to assess how well the predictors of compulsive buying work together to discriminate a known compulsive buying group from the general public. Thus, this paper's aim is to: (1)derive a preliminary indication of the effectiveness of the known variables at explaining the phenomenon and (2)help facilitate future theoretical research based on the appraisal.

PROCEDURE

The sample N=649 contained, N=379 from the known compulsive buying group and N=290 from the general public. The two groups were matched in terms of demographic variables.

First, an assessment of the reliability and the unidimensionality of each multi-item scale was conducted. Then, univariate ANOVAs were run on each of the predictor variables. Finally, a multivariate analysis of the data was implemented in order to evaluate the importance and usefulness of the predictor variables.

RESULTS

RELIABILITY

A 24-item component of Belk's (1985) materialism scale was used within the analysis. The scale has three components, possessiveness, non-generosity, and envy. Although each of the three dimensions is unidimensional, all have relatively low reliabilities. The Cronbach alpha for possessiveness, non-generosity, and envy were .52, .65, and

.63 respectively. These reliability values are slightly lower than the ones reported by Belk (1985). Furthermore, Belk's original measure falls below the .7 benchmark established by Nunally (1978) as well.

Compulsivity was measured using a five-item subset of the psychasthenia scale of the Minnesota Multiphasic Personality Inventory (MMPI). The items were unidimensional and had a Cronbach alpha of .84.

The shopping scale, which measures problems associated with controlling one's spending habits, was measured using an eight-item, self-developed scale. The items are unidimensional and have a Cronbach alpha of .67. In addition, both the fantasy scale and the self-esteem scale were self-developed and were found to be unidimensional. These had Cronbach alphas of .71 and .84 respectively.

ANALYSIS

The mean rating scale scores for the compulsive buying group and the general population are presented in Table 1.

TABLE 1
COMPARISON OF COMPULSIVE BUYERS AND GENERAL CONSUMERS

Dependent measures	Mean Compulsive buyers	Mean general consumers	ETA F-value	p	SQ.
Obsessive- compulsive scale	15.66	19.73	99.66	.001	.156
Self-esteem	15.20	19.88	122.07	.001	.184
Fantasy	7.73	9.20	31.67	.001	.055
Shopping	24.88	32.63	334.14	.001	.382
Materialism	39.00	42.80	33.52	.001	.058
Possessiveness	9.90	10.02	0.21	.651	.001
Envy	11.32	14.21	109.25	.001	.142
Non-generosity	17.84	18.51	5.46	.020	.008
Credit cards owned	3.41	2.45	14.40	.001	.026
Cards paid in full each month	0.66	1.94	52.06	.001	.087
Cards within $100 of limit	1.79	0.40	`49.28	.001	.083

As expected, nearly all of these scores revealed statistically significant differences between the two groups. All of the variables were significant except possessiveness ($F = .20$; $df = 1,546$; $p < 0.65$; ETA Square = .001). Non-generosity had a very small effect size ($F = 5.46$; $df = 1,546$; $p < 0.02$; ETA Square = .008). This suggests that these subscales are not practically significant. Thus, possessiveness and non-generosity will likely do little to discriminate among the two groups.

A discriminant analysis was conducted to determine the importance of each variable and to assess the ability of the aforementioned predictors to discriminate between the two groups. The three subscales of materialism were condensed into one global scale for the purpose of the analysis.

The assumption of homogeneity of variance was not met within this analysis. The Cochran C and the Bartlett-box F for the predictors, (1)obsessive-compulsive, (2)shopping, 3)fantasy, (4)self-esteem, (5)credit cards within $100 of limit and (6)number of credit cards paid in full each month, are significant. In addition, a number of the predictor variables appear to have a non-normal distribution in relation to the criterion; these include (1)materialism, (2)shopping, (3)fantasy, (4)self-esteem, (5)credit cards within $100 of limit, (6)number of credit cards paid in full each month and (7)number of credit cards owned.

In light of the violation of assumptions, a discriminant analysis was run. Since a LOGISTIC REGRESSION procedure can also be considered within this context (Norusis 1990, p.105), that procedure was subsequently conducted in order to validate the classification ability of

the discriminant analysis. If the classification tables of the two procedures were similar, it would seem to add support to the findings.

Table 2 shows the discriminant analysis between compulsive buyers and the general public. The discriminant loadings are not in full agreement with the univariate F-values.

TABLE 2
DISCRIMINANT ANALYSIS FOR COMPULSIVE BUYERS AND GENERAL CONSUMERS

Dependent measures	A. Standardized discriminant coefficient
Obsessive-compulsive scale	-.16
Self-esteem	.42
Fantasy	___
Shopping	.80
Materialism	-.16
Possessiveness	
Envy	
Non-generosity	
Credit cards owned	-.08
Cards paid in full each month	.26
Cards within $100 of limit	-.12

Shopping and self-esteem are the two important discriminators, but the number of credit cards paid in full is more important than the obsessive-compulsive scale. Furthermore, materialism is more important than the number of credit cards within $100 of limit and fantasy is the least important discriminator.

The sample was randomly split into two groups (Table 3) in order to validate the classification criteria. The hit ratio for the first sample is 80.8 percent. Furthermore, members of the compulsive buying group were correctly identified 79.6 percent of the time and members of the general public were correctly identified 82.6 percent of the time.

TABLE 3
DISCRIMINANT ANALYSIS AND LOGISTIC REGRESSION FOR COMPULSIVE BUYERS AND GENERAL CONSUMERS

Percent predicted membership

Actual group	Compulsives	General Pop.
Compulsives	133	34
General Pop.	19	90

Correctly classified 80.80%

Percent predicted membership

Actual group	Compulsives	General Pop.
Compulsives	124	33
General Pop.	18	98

Correctly classified 81.32%

Percent predicted membership - LOGISTIC REGRESSION

Actual group	Compulsives	General Pop.
Compulsives	276	48
General Pop.	47	178

Correctly classified 82.70%

The hit ratio for the second sample is 81.32 percent. Members of the compulsive buying group were correctly identified 79.0 percent of the time and members of the general public were correctly identified 84.5 percent of the time. These results indicate that there is little bias due to a single sample being used.

More importantly, the Z-statistic (16.73) is significant at the alpha = .01 level. This indicates that the discriminant functions classify better than would mere chance. The proportional chance criterion is calculated by squaring the proportions of each group (table 4). The calculated value is .5090. The maximum chance criterion, the hit ratio obtained if all observations were assigned to the group with the highest probability of occurrence, is ..5672. The hit ratios of the two analysis samples (82.6 percent and 81.34 percent) both exceed this criterion substantially. Therefore, the predictor variables discriminate between the two groups significantly better than chance.

Finally, using a LOGISTIC REGRESSION (Table 3), the hit ratio is 82.7 percent. This is slightly higher than the discriminant analysis. The LOGISTIC REGRESSION does a better job at properly classifying members of the compulsive group but does a slightly poorer job at classifying members of the general public. Nevertheless, the classification ratios are close to each other. This suggests that the known variables do a good job at discriminating the groups.

CONCLUSION

One major limitation within this analysis is the fact that 1.8 percent of the general public is made up of compulsive buyers (Faber and O'Guinn 1992). Therefore, there is noise within this analysis. Although this effects the precision of the findings, the significance would not be effected even if the hit ratio was decreased by 10 percent.

In summary, this paper found that the present predictors help discriminate group membership significantly better than does chance. Still, there appears to be room for improvement. Variables such as locus-of-control, loneliness (Shapiro 1992), anxiety, and differential identification may help shed more light onto this area. It is suggested that new research formulate an integrated theoretical base in order to better explain and predict this phenomenon.

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EMOTIONAL ADVERTISING: THE ATTITUDE TOWARD THE AD AND ATTITUDE TOWARD THE BRAND RELATIONSHIP FOR PLEASANT, NEUTRAL, AND IRRITATING ADVERTISEMENTS

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Abstract

The relationship between liking/disliking of advertisements to advertisement effectiveness has been studied since the 1930's (Silk and Vavra 1974). Recent research has established that ad-evoked affect does influence attitude toward the advertised brand (e.g., Mackenzie, Lutz and Belch 1986; Mitchell and Olson 1981; Shimp 1981). However, as Ray and Batra (1983) point out "Today, after years of advertising research, we still do not adequately understand if advertising must entertain in order to sell or whether, like headache ads that seem to sell through their very irritation, pleasantness is irrelevant to considerations of advertising effectiveness." (p. 543)

Two competing hypotheses -- the superiority-of-the-pleasant hypothesis (SPH) and the law-of-extremes hypothesis (LEH) -- have been proposed to answer this question (Silk and Vavra 1974). Based on the Pollyanna principle (Matlin and Stang 1978), the SPH predicts a linear positive relationship between ad-evoked affect and brand attitude. Ads evoking pleasant feelings are expected to be more effective than neutral ads which, in turn, are expected to be more effective than ads evoking irritating feelings. Based on the intensity principle (Matlin and Stang 1978), the LEH predicts a curvilinear (U shaped) relationship between ad-evoked affect and brand attitude. Pleasant as well as irritating ads are expected to be more effective than neutral ads. The objective of the present study was to test these two competing hypotheses.

Proponents of both hypotheses assume that better learning and recall of the ad message for emotional ads vis-a-vis neutral ads. The two hypotheses differ on whether or not ad-evoked affect is transferred to the advertised brand. Proponents of the SPH assume that ad-evoked affect is transferred to the advertised brand. Therefore, although information from both pleasant and irritating ads will be better learned than neutral ads, the negative affect evoked by irritating ads will get transferred to the advertised brand thereby lowering the attitude-toward-the-advertised-brand (A_b) for irritating ads below even the neutral ads. Proponents of the LEH argue that ad-evoked affect is transferred to the advertised brand only momentarily, and over time the two become dissociated, therefore, negative feelings evoked by irritating ads do not negatively influence A_b.

While there is ample anecdotal evidence in favor of each hypothesis, experimental evidence is limited and inconclusive (Moore and Hutchinson 1985; Silk and Vavra 1974). Also, most existing studies have two major weaknesses: (1) lumping together of the cognitive and affective components of A_{ad} and (2) use of semantic differential scales to measure ad-evoked affect. Researchers have argued that the cognitive and affective components of A_{ad} should be studied separately because their impact on consumer behavior is likely to differ (Madden , Allen, and Twible 1988; Shimp 1981). Also, the appropriateness of using semantic differential scales to measure ad-evoked affect has been questioned (Madden et al. 1988). The present study tried to correct both these problems: the affective component of A_{ad} was studied separately and scales deemed more appropriate to measuring ad-evoked affect (See Madden et al. 1988) were used. Additionally, this study differs from most existing studies in that it did not use existing ads as test stimuli but used specially created radio ads designed to evoke the desired emotions; this gives the researcher ability to make stronger judgements about the internal validity of the findings. The objective of the present study was to test the SPH versus the LEH hypotheses for radio ads using an experimental methodology. Two factors, subjects information processing strategy (brand or nonbrand) and time following ad exposure (immediate or delayed) at which A_b is measured, were expected to moderate the shape of the relationship between ads perceived as pleasant, neutral, and irritating and A_b.

Results show that the SPH holds in 3 out of 4 conditions (nonbrand processing-immediate measurement, nonbrand processing-delayed measurement, and brand processing-immediate measurement) while the LEH hold in the fourth condition, the brand processing-delayed measurement condition. Thus, the results of the study confirm the author's expectations that the shape of the A_{ad}-A_b relationship is moderated by the information processing strategy used and the time at which A_b is measured.

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THE ROLE OF ANTICIPATORY SELF-EVALUATION IN CONSUMER PURCHASE MOTIVATION

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Abstract

We argue in this paper that anticipatory self-evaluation plays a significant role in decision making when consumers consider choices between/among alternative courses of action. We hypothesize that purchase motivation is a function of four different types of anticipatory self-evaluations. These are: (1) the anticipatory self-evaluation in relation to the social consequences of purchase outcome finale, (2) anticipatory self-evaluation in relation to the social consequences of purchase completion, (3) anticipatory self-evaluation in relation to the social consequences of purchase non-completion, and (4) anticipatory self-evaluation in relation to the social consequences of purchase non-engagement. A study was conducted using 300 marketing undergraduates, who role played a scenario of being a business intern in an insurance company trying to decide on what to wear at work (and accordingly what to buy). The results indicated that consumers' purchase motivation is significantly affected more by anticipatory self-evaluations in relation to the consequences of purchase outcome finale and purchase completion than by anticipatory self-evaluations in relation to the social consequences of purchase non-completion and purchase non-engagement.

Purchase Motivation as a Function of Anticipatory Self-Evaluation

Previously, we theorized that purchase motivation is a direct function of anticipatory self-evaluation (Sirgy 1986). Anticipatory self-evaluation is defined as the process by which the consumer conjures up images of himself/herself given the purchase and/or use (or nonpurchase and/or nonuse) of the product. These anticipated images of himself/herself are then evaluated. The result of this type of self-evaluation affects purchase motivation.

One underlying motive of anticipatory self-evaluation is the need for social approval. That is, the consumer imagines himself/herself in a particular situation using the product. S/he conjures up the kind of image of himself/herself using the product, i.e., what would s/he look like given the product situation. The images that are conjured up are then evaluated for their social desirability. The greater the desirability of these conjured images, the greater the motivation towards the purchase and use of the product. The social desirability of the conjured images are directly related to the extent to which these images satisfy the need for social approval.

Product images that are consistent with the ideal social self (how the consumer would like to have others think of one self) motivate the consumer toward purchase, because the purchase is likely to satisfy the need for social approval. That is, consumers are motivated to approach product situations that involve anticipated images consistent with their ideal social self (how they like others to see them). Therefore, it is argued that the desirability of the conjured image in a product situation is very much dependent on the extent to which the product image satisfies the need for social approval.

Purchase Motivation as a Function of Four Motivational Tendencies

Previously, we attempted to delineate various forms of motivational tendencies reflecting different types of anticipatory self-evaluation (Sirgy 1986). It was argued that in evaluating a course of action, the consumer may (1) imagine the anticipated social consequences arising from consuming the product (product outcome finale), (2) imagine the anticipated social consequences of purchase completion, (3) imagine the anticipated social consequences of purchase noncompletion, and (4) imagine the anticipated social consequences of purchase nonengagement. We will discuss each of these motivational tendencies in the following sections.

Purchase Motivation Given Purchase Outcome Finale

Consumers consider the final social consequences of task engagement (the consumption of the product). The extent to which these social outcomes are positively evaluated the greater the motivational tendency to engage in that task (purchase the product). That is, people imagine the final social consequences emanating from a given task. For

example, let us suppose that a woman consumer went to a department store to purchase an outfit for work. She looks at three different outfits, an outfit projecting a casual look, an outfit projecting a professional look, and another outfit projecting a feminine look. Which of these outfits will she purchase? For the sake of simplicity, let us assume that these three outfits are approximately within the range of prices that our woman subject is willing to buy.

Our subject may conjure up an image of what she might look like wearing the casual outfit, wearing the professional outfit, and wearing the feminine outfit. She might evaluate her looks wearing the casual dress relative to others wearing causal outfits. She might allocate positive valence to the image of the casual outfit mainly because she thinks that she is conforming to the reference group made up by her workmates. Dressing differently from her workmates may make her workmates think of her in negative ways. Hence, the referent outcome may be the woman's perception of her workmates' dress expectations. She might have adopted this self-expectancy because of conformity pressures or because she identifies with her workmates.

Here, we can say that our woman subject may experience a positive evaluation with the casual outfit. In other words, she may develop a positive attitude toward the casual outfit.

HYPOTHESIS 1: Purchase motivation toward an alternative product is a direct function of the valence of the anticipatory self-evaluation given the outcomes arising from the use of that product (purchase outcome finale).

Purchase Motivation Given Purchase Completion

People consider the social consequences of an action given successful completion of that action. They may consider the anticipated social consequences given successful completion of a task through a specific course of action. They may ask them selves about the social consequences given they are successful in performing the task through that course of action. Hence, the motivation to engage in that course of action is partly a function of the valence outcome of the anticipatory self-evaluation given successful completion of that course of action, i.e., successfully completing the purchase task. Note the emphasis here is not on the social consequences generated from the product itself, but on the consequences generated by the sheer completion of the purchase task.

Let us go back to our woman subject to illustrate the evaluation dynamics in determining purchase motivation. In the context of discussing motivation given purchase outcome finale, we talked about how the woman conjures up images of how she is to be seen with a casual versus professional versus feminine costume. Note that the emphasis is on the final (end result) social consequences of the task (wearing a certain outfit to work). But now our focus is not on the end result of wearing a costume to work, but on completing the task, i.e., to be able to purchase and acquire a desired outfit.

The woman thinks about the image consequences of her purchase of an alternative outfit. Let us assume that she is evaluating the professional outfit and the price of that outfit is perceived to be expensive. She may ask herself, "how would I look if I were to buy this outfit for this price?" "Would my friends think of me as a fool to pay that much for that outfit?" "Would my friends think of me as a classy shopper?" "Would my husband think of me as nonthrifty and uncontrollable when it comes to spending?" Can I live with myself spending that much on an outfit?" Note all these images represent social consequences of successful completion of the task at hand, i.e., the purchase of the professional-looking outfit.

HYPOTHESIS 2: Purchase motivation toward an alternative product is a direct function of the valence of the anticipatory self-evaluation given successful purchase of that product (purchase completion).

Purchase Motivation Given Purchase Noncompletion

Motivation to engage in task performance is argued to be a function of anticipatory self-evaluation given failure action. Sometimes people do consider the social consequences of their failure action to complete the contemplated task, in addition to the social consequences of their successful action. A person might ask himself, "how would I look given that I fail to do this or that? or how would I be evaluated?" The social consequences of failure action is essentially an anticipatory self-evaluation process, however the focus here is on the consequences of how the person will appear given noncompletion or failure on the task (purchase). The valence of the anticipatory self-evaluation determines the overall desirability or undesirability of the anticipated social outcomes given task noncompletion.

Let us use our woman consumer to illustrate the principle involved in purchase motivation given failure action. Let us focus on the professional costume. And let us assume that she is shopping to buy a new outfit with one or two friends. The focus here is on how she thinks her friends may view her having set out to buy a new outfit but ended up not buying anything. Or how will she think of herself investing time, energy, and money going shop-

ping for a professional outfit, but coming back empty-handed. Note that the focus here is failing to perform the task, i.e., failing to purchase a new professional-looking outfit to wear at work.

HYPOTHESIS 3: Purchase motivation toward an alternative product is a direct function of the valence of the anticipatory self-evaluation given purchase noncompletion.

Purchase Motivation Given Purchase Nonengagement

Motivation to engage in task performance is postulated to be a function of anticipated social consequences given no action. There is a difference between the consequences of failure action and no action. Failing to achieve on a task may produce different outcomes than refraining from engaging in any action at all. Suppose that our fictional woman considers purchasing and wearing a professional outfit. She might only think about how she will be evaluated wearing the professional outfit (anticipated social consequences given purchase outcome finale), but also how she will be evaluated given that she does not purchase anything new, i.e., keep wearing her old outfits.

Here, the reader may note that the alternative course of action is no action. How will her workmates think of her given that she keeps wearing her old clothes? What will she think of herself? The woman may conjure up an image either positive or negative as a result of taking no action, and tests the evoked image against an ideal social self-image. This is essentially an anticipatory self-evaluation resulting from considering the social consequences given no purchase.

HYPOTHESIS 4: Purchase motivation toward an alternative product is a direct function of the valence of the anticipatory self-evaluation given lack of purchase engagement (purchase nonengagement).

Method

Sampling and Product Scenario

A questionnaire was administered to 300 marketing undergraduates. They were asked to imagine the following scenario:

> Suppose you are working as a business intern in an insurance company. You see different people wearing different types of clothes. Somewere wearing casual clothes, and some professional clothes. You have some money to buy some clothes, and you are thinking of buying some clothes for work.

Subjects were then asked to respond to questions designed to measure the valence (favorable/ unfavorable) associated with anticipated social consequences pertaining to purchase outcome finale, purchase completion, purchase noncompletion, and purchase non-engagement.

Measures of Motivation Given Purchase Outcome Finale

Respondents were asked:

> "Imagine yourself wearing professional [or causal] clothes at work, How do you think your friends at work will react to your looks? Indicate your opinion by making an "x" using the scales below:"

The response scales were three semantic differential (9-point) scales with the following bipolar adjectives: "dislike me/like me," "will disapprove of me/will approve of me," and "will not think highly of me/will think highly of me." Note that two sets of semantic differential scales were involved in the measurement of motivation given purchase outcome finale, one directed at professional clothes at work, the other at casual clothes. The measure used for the statistical analysis was either set of semantic differential scales as a direct function choice of casual versus professional clothes.

The three semantic differential scales for both professional clothes and casual clothes were subjected to a reliability test, and the results indicated that the two sets of measures are highly reliable (Cronbach Alpha for the professional clothes measures was .89 and the Alpha coefficient for the casual clothes measure was .86). Because of the high reliability of the three items in each set, composite scores were computed by averaging the three items per set. The mean, standard deviation, and number of observations for the motivation given purchase outcome finale with respect to the professional clothes were 7.2, 1.26, 294, and the corresponding figures for the casual clothes were 5.1, 1.65, 294.

Measures of Motivation Given Purchase Completion

Having indicated preference for professional versus casual clothes, the respondent was then asked:

> "How do you think your friends at work will react to the purchase deal you ended up with?"

Three semantic differential (9-point) scales were used to record responses. The bipolar extremes were phrased as

follows: "Dislike me/like me," "will disapprove of me/will approve of me," "will not think highly of me/will think highly of me."

The Cronbach Alpha for these three scales came out to be .94 indicating that the measure is highly reliable. The mean, standard deviation, and number of observations with respect to the average composite were: 6.8, 1.31, 299, respectively.

Measures of Motivation Given Purchase Non-completion

Respondents were instructed to respond to the following:

> "Now imagine yourself shopping for clothes. However, you do not find what you are looking for. How do you think your friends at work will react to you, knowing that you went out shopping for clothes, but came back empty-handed (decided not to buy new clothes)."

The same three semantic differential scales used to measure motivation given purchase outcome finale and motivation given purchase completion were used. The Cronbach Alpha coefficient was .94. The descriptive statistics (mean, standard deviation, and number of observations) of the mean composite were: 6.3, 1.55, 299, respectively.

Measures of Motivation Given Purchase Non-engagement

Respondents were instructed to respond to the following:

> "Now imagine yourself in the situation in which you decided not to go shopping for new clothes. Essentially, you decided to remain wearing your old clothes for work. How do you think your friends at work will react to your wearing the same clothes over again?"

The same three semantic differential scales were used to measure motivation given purchase outcome finale, motivation given purchase completion, and motivation given purchase noncompletion were used here. The Cronbach Alpha coefficient was .93. The descriptive statistics (mean, standard deviation, and number of observations) of the mean composite were: 5.5, 1.68 and 299, respectively.

Measures of Purchase Motivation (Dependent Measures)

Two sets of overall purchase motivation measures were used. The first set of measures were placed at the beginning part of the questionnaire, right after the place where subjects indicated whether they would be willing to buy professional or casual clothes for the new work situation. This first set comprised of three 9-point semantic differential scales with the following bipoles: "I couldn't buy it/I would buy it," "I feel unmotivated to buy it/I am highly motivated to buy it," and "I am not at all interested in buying it/I am very interested in buying it." The Cronbach Alpha of these items was .89, and the descriptive statistics (mean, standard deviation, and number of observations) of the mean composite scores were: 7.5, 1.33, and 299, respectively.

The second set of overall purchase motivation measures involved the same set of semantic differential scales, but were placed after the measures pertaining to the motivation to purchase given purchase outcome finale, given purchase completion, given purchase noncompletion, and given purchase nonengagement. The following cue was used:

"Considering all the situations you just imagined, and their consequences:

....the situation involving how your friends might react to your wearing casual or professional clothes at work,
....the situation involving how your friends might react to you given that you managed to buy new clothes for work,
....the situation involving how your friends might react to you given that you decided not to buy new clothes,
....the situation involving how your friends might react to you given that you decided not to shop for new clothes, i.e., wear the same clothes over and over,
....describe how motivated you feel about buying the type of clothes you indicated before (professional or causal)."

The Cronbach Alpha of these items was .93 and the descriptive statistics (mean, standard deviation, and number of observations) of the mean composite score were: 7.3, 1.34, and 299, respectively.

Results

As hypothesized, the two measures of purchase motivation were found to be significantly and moderately correlated with the motivation given purchase outcome finale ($r = .351$, $p < .001$; $r = .325$, $p < .001$), motiva-tion given purchase completion ($r = .441$, $p < .001$; $r = .413$, $p < .001$), motivation given purchase noncom-pletion ($r = .253$, $p < .001$; $r = .224$, $p < .001$), and motivation given purchase nonengagement ($r = .238$, $p < .001$; $r = .138$, $p < .05$).

Regression analysis was conducted testing the predictive strength of the various motivational tendencies in relation to the two measures of purchase motivation. Consistent with the pattern of correlations, the regression results showed that indeed motivation given purchase outcome finale (beta = .127, $p < .05$; beta = .127, $p < .05$) and motivation given purchase completion (beta = .346, $p < .001$; beta = .346, $p < .001$) play a more significant role in purchase motivation than motivation given purchase noncompletion (beta = -.003, $p > .10$; beta = .063, $p > .10$) and motivation given purchase nonengagement (beta = .047, $p > .10$; beta = -.096, $p > .10$). Both regression equations accounted for a range of variance between 18.5 and 20.8 percent.

Discussion

The results of this study indicate that purchase motivation is indeed significantly influenced by anticipated social consequences, and how social consequences are evaluated against the ideal social self-image. Anticipatory self-evaluations involve social consequences associated with the consumption of the product (purchase outcome finale), purchase completion, purchase noncompletion, and purchase nonengagement. The data suggest that consumers do consider the social consequences associated with purchase outcome finale and purchase completion much more so than purchase noncompletion and purchase nonengagement.

Buying and using products to impress people is not new to the consumer behavior/marketing literature. What is new about this study and its major finding is that the consumers consider the social consequences associated with trying to purchase, not only with the consumption of the product.

Recently, the work by Bagozzi on the theory of trying (Bagozzi 1992a, 1992b; and Bagozzi and Warshaw 1990) shows that purchase motivation may be a direct function of the attitude toward success and failure in trying to purchase. Bagozzi's work on the theory of trying underscores Sirgy's proposition that purchase motivation can be significantly influenced by the anticipated social consequences associated with purchase completion. Future research should be directed to exploring the ramification of the concept of anticipatory self-evaluation in further developing the program of research by Bagozzi on the theory of trying.

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SHE'S GOT THE LOOK: THE REPRESENTATION OF IDEALS OF BEAUTY IN CONTEMPORARY FASHION MAGAZINES

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Abstract

This paper reports data from an ongoing program of research intended to explore the ways that beauty is represented in mass media. Building on prior research that identified a finite universe of "looks" used by industry experts to categorize fashion models, we present the results of a content analysis of major American fashion magazines that explores the relative preponderance of different looks, and the degree to which these beauty types "match up" with or are at odds with the images of brands with which they are linked in contemporary fashion magazine advertising.

AN INVESTIGATION OF THE ROLES OF HUSBANDS AND WIVES IN FAMILY FINANCIAL DECISION MAKING PROCESSES: PRELIMINARY RESULTS

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Introduction

Financial tasks and decisions are an increasingly important aspect of family decision making and economic related behavior. Decisions regarding budgeting, savings, investment, alternative financial services, bill payment, and credit usage are among the many financial responsibilities that must be considered and resolved by most families, as well as the choice of the spouse that will participate in the many routine tasks associated with financial behavior (bill payment, bank transactions etc.). Current environmental and social changes that have taken place within the last decade have brought about changes in family decision making behavior. Major changes in the status of women and their employment in the work force have led to changes in the roles of women within the family decision making context. Changes have also occurred in gender role norms women hold for themselves and their spouses. Increasing educational levels, rising occupational status, and higher incomes among women have brought about increased personal resources, decreasing time flexibility, time pressures, and shifts in gender role norms among many wives (Scanzoni 1978). Thus, there are many possibilities for a variety of alternative roles in family financial behavior.

Previous Research

Two streams of research merit special attention in the investigation of family financial behavior. The first concerns prior descriptive marketing studies. The second, is the theoretical base of resource theory, and its application to a integrated theoretical framework.

Previous Marketing Studies

Marketing studies about the influence of husbands and wives in family decision making first appeared in the late 1950's. One of the earliest studies that investigated responsibilities for financial tasks within the family was conducted by Sharp and Mott (1956). The study included questions about handling of money, bill payment, and life insurance as well as non-financial family decisions and tasks. The focus of the study was analysis of roles of husbands and wives in economic decisions and the relative influence of the spouses in the decisions. The importance of income differences and influence between urban households was cited as a primary basis for role differences. The data were collected through responses by only one spouse of the family.

Wolgast (1958) studied five decision areas including savings, household goods, automobiles, money management, and bill payment. After an examination of the demographic independent variables, Wolgast concluded that the children's ages, spouse's ages, and geographic location affected the amount of shared husband-wife decision making. The study did not include psychographic or attitude variables. Also, only wives were included in the sample.

In a landmark study, Ferber and Chao-Lee (1974) studied the roles of husbands and wives in maintaining the role of family financial responsibilities. The areas of responsibility examined included payment of bills, accounting for expenditures in relation to budgets, and the use of money left over at the end of the pay period. The data were collected in two waves--the first and second year of marriage. The results displayed a shift in the second year of marriage toward more responsibilities assumed by the wife. The results also indicated that husbands were more likely to save a higher percentage of the income in variable forms such as real estate and securities when they undertook the primary responsibilities. Ferber and Chao-Lee labeled the spouse that dominated these decisions as the family financial officer.

The role of structure of family authority patterns was the major focus of a study by Douglas and Wind (1978). Although role structure was the dominant thrust of the study the areas of amount of money to spend on food, savings, and investment as well as insurance and bank choices were investigated. The authors found the greatest variation in roles and authority patterns in the financial decision area. The tasks were almost equally divided between husband dominated and joint task sharing.

In a study by Rigaux-Bricmont (1978) the effect of a large number of individual and family characteristics impact on economic behavior was examined. Although the models

explained a modest amount of variance, the study indicated the importance of demographic variables in explaining family economic decision making influence. The variable of the time pressure was particularly important in explaining role decisions of each spouse.

Current marketing family decision making studies have turned toward the effect of sex roles on family financial behavior, and sex role determinants. Schninger, Buss, and Grover (1982) examined the effect of sex roles on family finance handling and decision influence. The wives' sex role norms had the greatest impact on the roles of family financial behavior. The results of the analysis also supported the hypothesis that traditional patterns of influence are changing.

Resource Theory and The Family Financial Decision Making Framework

Although several studies have taken place in family financial behavior, there has been an absence of a theoretical base in the previous research. That is, the hypotheses that have been tested empirically have lacked a theoretical base. However, sociologically based theories exist that may be useful in the explanation and prediction of family decision making behavior; and resource theory is particularly applicable in the study of family financial decision making.

Since the 1960's a primary theoretical base for the explanation of power and influence in the family has been resource theory. Resource theory suggests that the greater the resources of the spouse, the greater their influence will be in family decision making. For example, the spouse with the highest income will have more influence than the spouse with the lesser amount of income brought into the family.

Scanzoni and Szinovacz (1980) stated that the resources each spouse possesses are a major factor in the amount of power or influence each spouse has in a decision making context. Scanzoni suggested that two types of resources may be applicable to family decision making behavior; the resources included tangible and intangible resources. Tangible resources are composed of the individual characteristics of education, income, occupational status, and previous experience in decision making. Intangible resources are composed of self esteem, and a spouse's confidence in decision making capability. The major aspects of the tangible and intangible resources possessed by each spouse were incorporated in a framework by Hopper (1984). The model appearing in Figure 1 is an integration of resource theory and variables previously found to be significant in marketing studies of family financial behavior. By synthesizing theory and previous significant findings the author attempted to begin a theoretical framework in which to study family financial decision making. The framework provided the basis for data collection in the present study as well as the preliminary analyses presented.

Purpose of the Study

A review of the marketing and relevant sociology family decision making literature reveals a major problem area in the study of family financial behavior. There is an absence of an explanation or model to explain the dynamics involved in marital financial decision making. Marketing researchers have not included theoretical aspects in their research, while sociologists have proposed theory, but have not tested the financial aspects of family decision making behavior. Apparently there is a need to develop and test a model that includes a theoretical base for the understanding of financial behavior within the husband-wife dyad. The model appearing in Figure 1 is an integration of resource theory and variables previously found to be significant in marketing studies of family financial behavior. By synthesizing theory and previous significant findings Hopper (1984) proposed a theoretical framework in which to study family financial decision making. The primary objectives of this study are to test the significance of the resource variables of education and income within the proposed family financial framework, and to incorporate the responses of both spouses (many studies have only collected data from one spouse) in the data analysis.

The objectives of the study will be met by investigating the following questions and exploring the relationships between the variables in the proposed framework:

(1) To what extend to spouses agree on their roles within the family financial decision making process?

(2) To what extent does each spouse take part in family financial decision making tasks?

(3) To what extent do the resource variables within the framework (Figure 1) affect the roles(s) performed in financial decision making and tasks?

Methodology

Data was collected from husband and wife couples residing within a midsize city in the southern United States. The study utilized a convenience sample of 446 married couples. The couples used in the sample were stratified by age, length of marriage, and educational backgrounds. Wide variance in income levels was also sought. Respondents of the study represented income levels ranging from below $20,000 to above $60,000 annual income; the median

income level was $36,000 for husbands and a $20,000 income level for the wives. Educational backgrounds varied widely. Among the husbands the sample ranged from 30% high school graduates to 10% with post graduate work. In general, wives were lesser educated with approximately 50% with a high school degree. Among the women respondents 49% had some college including 18% that were college graduates and 7% with post graduate degree. The couples were contacted through work, civic, and social organizations. Although not an ideal method of data collection, the use of convenience samples is commonplace in husband and wife purchase decision making studies (Burns and Granbois, 1979, Hopper, Burns, and Sherrell 1989). Further, Calder, Phillips, and Tybout (1981;1982;1983) have defended the use of convenience samples in consumer behavior research.

The data were collected through the use of self report questionnaires administered to spouses independently in their homes. Identical instruments were given to each spouse and instructions were explained by the interviewer to each couple. Questions were asked about several financial decision areas. Data was also collected on each spouse's income, education, occupation, number of children, length of marriage, interest in financial decision making, and sex role orientation.

Data Analysis

Data analysis was undertaken in a series of steps. First, the responses of the husbands and wives were paired and correlations were computed. Next, the role structures for each type of financial decision task were ascertained for the total sample. Finally, the preliminary exploration of the role of personal resources was undertaken by investigating the presence or absence of the significance of the income and educational levels of each spouse (within each husband-wife couple as a unit of analysis). Chi-Square tests were used for the preliminary analyses. The results of the tests appear in Tables 4 and 5. A discussion of the preliminary results follow.

Results

Correlations of Husband-Wife Paired Responses

The correlations of the husband and wife pairs were very high; the correlations ranged from .53 to .71, with a median of .64. All of the correlations were significant at the .01 level of significance. The relatively high correlations gave evidence of good reliability for the financial questions assessed in the survey. The results of the correlations appear in Table 1.

Budgeting Decisions

Of the couples surveyed 10.4% of the families do not have a family budget. In about one-half of the families surveyed the husband and wife equally share (equalitarian) responsibility for determining the family budget. Sole responsibility for the budgeting process by husbands was reported in 18.0% of the couples surveyed, and wife dominated decision making occurred in 17.8% of the families. Thus, it appears that joint responsibility is the most prevalent form of budget decision making; while sole responsibility or authoritarian type role structures are in a minority among the families surveyed.

Savings and Investment Decisions

The survey included questions about the amount of money to place in savings, choice of investments. and selection of financial institutions in which to invest savings accounts and certificates of deposit.

The decision of the amount of money to be placed in a savings account was predominately equalitarian among the families surveyed with 41.2% of the couples reporting equal responsibility between the husband and wife. The second most reported role structure was husband-dominated in 36.2% of the families. Wife-dominated decision making about the amount of money to save was prevalent in only 14.0% of the families surveyed. Overall the trend among non-equalitarian families was male-dominated decision making about savings account investments. A similar pattern was found in the choice of an institution in which to open a savings account. Approximately 43.0% of the families reported joint decision making on selection of a savings institution and 39.0% reported husband-dominated selection. Thus, it appears male dominated decision making is very evident among the couples surveyed.
In regard to choices of types of investment, the females in the study reported minor participation. In 47.7% of the families the husband was the major decision maker. The number of equalitarian decision making families were 29.4% of the respondents. Wife-dominated decision-makers were found among only 4.6% of the families. A sizeable number of the families (16.2%) did not have any type of investments. Similar patterns were also reported in the choice of an institution for investing in certificates of deposit. Thirty-nine percent of the families reported husband-dominated decision making in this area. Thirty-four percent of the couples reported equalitarian decision making styles, while ten percent reported wife-dominated decisions. Apparently males are clearly dominant in investment decisions among the families surveyed.

Insurance Purchase Decisions

The respondents of the survey were also asked about their roles in insurance purchase decisions for both the husbands and wives. In regard to insurance purchase decisions for husbands, in 47.4% of the families the husband and wife share equal responsibility. Approximately 40.0% of the families reported husband dominated decision making in the husbands' insurance selection process. Participation by the wives was slightly higher in decisions about the wives' insurance. Approximately 51.0% of the couples reported equalitarian decision making when choosing the wife's insurance. In 13.0% of the families the wife was the predominate spouse, while 30.5% of the couples reported husband-domination in this area. Thus it appears the husbands exerted a high degree of influence in all insurance decisions, including their wives' insurance. The amount of equalitarian influence is the most often reported decision making style, with about 50.0% of the couples reporting equal participation by both the husband and wife for both types of insurance decisions.

Decisions about Financing and Charitable Contributions

A more equalitarian style of decision making was reported among the respondents' participation in decisions about financing large purchases and charitable contributions. Over 55.0% of the families reported joint decision making when choosing financing for a large purchase, and 50.2% reported joint decision making when choosing gifts to charities. Husband-dominated financing decisions were reported in 36.1% of the families, while wives were dominant in only 5% of the families. However, the wives reported a more dominant role (13.8%) in charitable contribution decisions. Males were dominant in 13.2% of the families' decisions regarding charitable contributions.

The Role of Personal Resources of Each Spouse

The importance of education and income of each spouse was investigated through a Chi-Square analyses. The educational level obtained by the husband and wife were both significant for the majority of the decisions surveyed. For both husbands and wives the educational variable was not significant in determining which spouse decided on decisions about giving to charities and how much money to budget for monthly expenses. Thus, the analysis revealed that education is a very important resource variable. The results as indicated in Table 2 suggest that the more educated the wife, the more input she had in financial decisions.

The role of income as a resource determinant was much less important than the impact of education for the wives surveyed as revealed in Table 3. The wife's income was only found to be significant in determining how much money to put into savings, choice of the types of investments, and the choice of institution for a Certificate of Deposit at the .05 level of significance. Decisions about insurance for either spouse, family budgeting, charities, and down payments on large purchases were not found to be significantly affected by the wife's income level. With the exception of decisions about the purchase and down payment on a large purchase, all other financial decisions were significantly affected by the husband's income level.

Summary

The preliminary results indicate some very interesting patterns of decision making among the couples surveyed. At the aggregate level, the results indicate very strong influence by husbands in investments, savings, and insurance decisions. The equalitarian decision making style is most prevalent in decisions regarding charitable contributions, wife's insurance, financing of large purchases and budgeting. Clearly wives in the study reported much less influence than husbands. Another pattern evident in the preliminary results is the large variance in participation in tasks by husbands and wives. That is, although husbands appear to be more involved in the financial decision making responsibilities, the role of the wives varies considerably depending upon the type of decision surveyed and the education and income resources possessed by the wives.

The role of personal resources in family financial decision making was clearly indicated in the data analysis. The income level of the husbands and wives, and especially the educational level of the wives were found to be significant factors in the roles each spouse undertakes within a family unit. The results also indicate the need for further testing of the other variables proposed in the theoretical framework (Hopper,1984). Further analyses of the data collected in this study should provide a more comprehensive view of the process and determinants of family financial decision making behavior.

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TABLE 1: CORRELATIONS OF HUSBANDS AND WIVES RESPONSES

FINANCIAL DECISION:	CORRELATION
How Much Money to Budget for Monthly Expenses	.64 **
How Much Money to Put Into Savings	.68 **
Choice of Savings Account Institution	.59 **
Choice of Type of Investments	.63 **
Choice of Institution for C.D.	.61 **
Decisions About Financing a Large Purchase	.53 **
Decisions About Insurance for the Wife	.69 **
Decisions About Insurance for the Husband	.67 **
Decisions About Giving to Charities	.70 **
Decisions About Down Payment on Purchases	.71 **

** Significant at .01

TABLE 2: SIGNIFICANCE OF EDUCATION RESOURCE VARIABLES

FINANCIAL DECISIONS	WIVES Chi-Square Statistic	HUSBANDS Chi-Square Statistic
Monthly Budget	18.30	28.50
Allocation to Savings	50.20	39.60*
Choice of Savings Account Institution	27.00	39.80*
Choice of Type of Investments	76.20*	46.00
Choice of Institution for C.D.	42.60*	36.60*
Financing Large Purchase	38.30*	28.90
Insurance for Wife	42.90*	40.40*
Insurance for Husband	46.30*	45.30*
Gifts to Charities	25.08	31.30
Down Payment on Purchases	29.70	39.80*

*Denotes Significant at $\leq$ .05 Level of Significance

TABLE 3: SIGNIFICANCE OF INCOME RESOURCE VARIABLES

FINANCIAL DECISIONS	WIVES Chi-Square Statistic	HUSBANDS Chi-Square Statistic
Monthly Budget	27.21	50.11*
Allocation to Savings	54.06*	66.69*
Choice of Savings Account Institution	32.28	50.90*
Choice of Type of Investments	46.00*	70.20*
Choice of Institutions for C.D.	50.40*	88.10*
Financing Large Purchases	41.20	25.30
Insurance for Wife	33.30	61.75*
Insurance for Husband	24.70	68.70*
Gifts to Charities	36.20	47.60
Down payment on Purchases	31.90	38.40

*Denotes Significant $\leq .05$ Level of Significance.

EVOKED SET FORMATION: A LONGITUDINAL PERSPECTIVE

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Consumption decisions are made from relatively small groups of products or services known as evoked sets. The formation and usage of evoked sets, however, is currently not well understood by many managers and researchers. This paper presents a longitudinal rather than discrete model of this process and suggests that the evoked set decision-making process occurs in six stages: availability, awareness, evaluation, choice, implementation, and post-purchase evaluation. The authors also explore several research implications of viewing this process as dynamic rather than as a series of independent decisions.

INTRODUCTION

The concept called an evoked set has become firmly rooted in consumer behavior literature. Several consumer behavior textbooks (Howard 1989; Peter and Olson 1990; Wilkey 1990) discuss the concept, and the term is used widely in articles and papers.

Yet for a concept that is recognized as an important topic in consumer behavior, there has been a surprisingly limited number of articles which deal directly with the issue. Prior research has shown the concept to be valid; consumers do use them in the decision-making process. However, some of the more important and significant questions associated with evoked set formation and longitudinal stability remain unanswered.

The formation of an evoked set by a consumer is an extremely important event. The evoked set represents those brands that the consumer believes will best satisfy a particular consumption problem. To get to this point they have already discarded a number of brands after determining that they were not good candidates for purchase. Those that remain are subjected to a more rigorous review. If a product is chosen for purchase, it is chosen from this final group. Therefore, product managers are vitally interested in making sure that their product makes this final set of products.

When viewed from a longitudinal perspective, evoked set formation can be viewed as a funneling process. Consumers start with an awareness set- all those potential alternatives that they know about- and eliminate those that will not, for whatever reason, satisfy their needs. The awareness set can be rather large. The funneling process is seen as a logical method for reducing all potential alternatives to a manageable number of acceptable alternatives. Current models of this process stop at this point.

The Narayana and Markin(1975) model and the Laroche, et al (1986) model break the awareness set into subsets with no antecedent or post evaluation activity. Hoyer (1984) argues that much of the research on consumer behavior parallels this emphasis and has focused on the activities immediately prior to the act of purchasing. Many consumption decisions are made frequently, however, and therefore research should adopt a more continuous rather than a discrete perspective to decision making (Hogarth 1981; Hoyer 1984).

Macro models of consumer buying behavior; Engle, Kollat, and Blackwell (1986), Bettman (1979), Howard and Sheth (1969), and Howard (1989) provide comprehensive presentations of consumer information processing and decision making. The evoked set decision making process is a subset in these macro models of consumer behavior.

This paper presents a conceptual model of evoked set formation in a longitudinal perspective. It is a micro model of the process of consumer decision making which goes beyond the static models which separate brands into acceptable and not-acceptable alternatives for purchase. In particular, we incorporate purchase activity and post-purchase evaluation of the decision process mediating subsequent evoked set decisions.

The issues raised by satisfaction and dissatisfaction literature (c.f. Oliver 1980) on the repurchase of a product are incorporated into the model. Prior research in this area has shown that satisfaction mediates the relationship between future intentions and overt behavior in repeat purchase behavior, and that it can explain brand loyalty and brand switching in these situations (LaBarbera and Mazursky 1983).

LITERATURE REVIEW

Evoked sets were first discussed in the business literature by March and Simon (1958), and the concept was introduced into the marketing literature by Howard (1963). The

most cited definition of evoked sets in a buyer behavior context is probably provided by Howard and Sheth (Howard and Sheth 1969). They define evoked sets as a small number of brands that become acceptable alternatives in a buyer's purchase decision.

Narayana and Markin (1975) made a major contribution to this area of study when they developed a model of the evoked set formation process which identified the awareness set, those brands consumers are aware of, and its subsequent subsets. By recognizing the awareness set they recognized a marketing truism which is awareness is a prerequisite for choice.

In Narayana and Markin's model the awareness set is composed of evoked, inert, and inept subsets. While the evoked set contains brands that are acceptable, the inept set contains brands that are not acceptable. The inert set contains brands for which the consumer holds neutral attitudes. Brands in the inept and inert sets are not evaluated when making a purchase decision. Purchase choices come only from the evoked set (Narayana and Markin 1975).

A significant and important result from research into evoked sets is that several studies provide evidence for a two-staged decision sequence in the evoked set formation process (Abougomaah, Shlacter and Gaidis 1987; LeBlanc 1987; LeBlanc 1989; Nedungadi 1990; Park 1978; Parkinson and Reilly 1979). All of these studies have found that the decision rules used to choose and eliminate products change over the course of the decision process. One set of rules is used during the evoked set formation process and another set of rules or strategies is used by consumers when the final choice decision is made. LeBlanc (1989) argues that the decision rules used during the two decisions are independent of one another.

In recent years, the thrust of the research in this area has moved from investigating the size of the evoked set for a variety of products to investigating variables which tend to mediate the process itself. For example, Hauser and Wernerfelt (1990) investigate the way consumers trade-off between costs and increased information about larger sets of brands. Nedungadi (1990) and Lynch, Marmorstein and Weigold (1988) explore the role of memory on consumers choices from an evoked set. LeBlanc and Turley (1991) found that the influence of retailers is stronger during the evoked set development process than it is at final purchase choice.

Although not directly discussing longitudinal issues, several recent articles have explored the effects of new information and consumer experiences on evoked set composition. Sutton (1987) studied the effects of new information on both brands previously rejected and on newly found brands. Punj and Srinivasan (1987) explored the effects of both expertise and experience on the formation of evoked sets. They found that expertise reduces the size of the evoked set while experience counteracts that influence by increasing the sizes of choice sets. Belonax and Javalgi (1989) found both product class quality and high invlolvement decrease the size of evoked sets. In an experimental setting, Brown and Wildt (1992) report the size of evoked sets decrease with situation specific operational definitions. They also report that interproduct variation in evoked set size is related to the size of the awareness set.

The only explicit examination of longitudinal effects on consumers evoked sets was performed by Klenosky and Rethans (1988). However, their study asked students to make a hypothetical gift-giving decision and then to repeat that same decision one week later. Since the subjects never actually gave the first product as a gift, the effects of learning, experience and satisfaction with the product cannot be determined. However, even with this limited post-decision information, only slightly more than half (57%) of the products on the first list appeared on the subject's second list (Klenosky and Rethans 1988).

Indirectly, Block, Snerrell, and Ridgeway's (1986) work on consumer's extended search activity deals with the longitudinal consumer decision making process of forming evoked sets. The evoked set issues are implicit in this work in that consumers are seen as developing information banks for use in future decision making. Our model shows post-purchase activities used to provide consumers information for future evoked set evaluations.

In the following section, we present a model which explicitly accounts for post-decision effects on the composition of evoked sets. This model extends the model of evoked set formation from a series of independent and discrete decisions to a more continuous decision making sequence.

THE MODEL

Figure 1 represents our longitudinal view of the evoked set formation process. It is based upon the earlier work of Narayana and Markin (1975) and on the effects of satisfaction and dissatisfaction on future purchases (Howard and Sheth 1969; Oliver 1980; and LaBarbera and Mazursky 1983). What emerges is a six-stage model of the evoked set/decision process. These stages are availability, awareness, evaluation, choice, decision implementation, and post-purchase evaluation. The following sections will discuss each of these stages in greater detail.

STAGE ONE: AVAILABILITY

The first stage, availability, is comprised of all the products or services available to the customer in his/her market area. The brands available comprise the total set. It is important to recognize that this stage is largely marketer controlled. The size of the total set is determined by the number of firms which have decided to enter a market area with their brand(s). The total set would also include those marketers who send catalogs into the market area. The size of the total set will fluctuate as firms decide to enter or abandon a particular area. Consumers who are willing to travel to distant cities and shopping areas can be seen as attempting to increase the size of the total set. Many consumers strive for convenience in shopping. They end up choosing from those brands which are distributed in their regular or home shopping districts. Distribution is a management decision made by marketers which can have a tremendous impact on awareness.

STAGE TWO: AWARENESS

While marketers attempt to influence awareness with promotion activities, at the second stage in the model the focus shifts from the marketer to the consumer. The concept of the awareness set and non-awareness set was introduced by Narayana and Markin (1975). They recognized that a critical and fundamental task for marketers is to make sure that consumers know about the existence and availability of their brand. Products that the consumer is not aware of stand no chance of being selected. Awareness of a product's availability is related to the search activity of consumers and their selective perceptual processing of product promotions. Awareness may be function of active search or retrieved from active memory.

Alba and Chattopadyhay (1985) recognize a similar concept when they hypothesize that awareness sets can be divided into knowledge sets and retrieval sets depending on the amount and type of information stored in memory by the consumer. At least three types of information, product or service category, brand, or attribute can serve as memory retrieval cues (Nedungadi 1990).

In some situations awareness takes on an added dimension in the consumer decision making process. Hoyer and Brown (1990) found that awareness alone was a dominant choice heuristic for items which are regularly bought. In addition, their data showed that awareness even tended to dominate quality as a decision criteria finding that "subjects who are aware of one brand in a choice set tend to choose the known brand even when it is lower in quality than the other brands they have had the opportunity to sample" (Hoyer and Brown 1990, p. 147). From a product manager's perspective, achieving awareness in consumers is a vitally important process.

STAGE THREE - EVALUATION

Awareness of a product means that the consumers have allowed the brand into their selective perceptual process. The activation of the selective perceptual process results in an evaluation process. This is the third stage in our model.

There are at present several different views of the evaluation process. Several writers have postulated that awareness sets can be divided into three groups. Narayana and Markin (1975) visualize the formation of evoked, inert and inept sets. Laroche, Rosenblatt, Hochstein and Ransom (1987) argue that awareness sets are divided into four groups. These groups are evoked set, hold set, reject set, and foggy set. Besides differences in terminology, the key distinction between the two viewpoints is Laroche et. al.'s introduction of a foggy set. They define the foggy set as those products which the consumer is aware of but, for some reason, does not process. After reflecting on this concept, we disagree. We feel that the grouping process itself reflects at least some processing. If no processing had taken place, consumers would not be able to remember the brand name, and the products would, therefore, be a part of the non-awareness set.

The Narayana and Markin approach, which we incorporated into our model, views the awareness set as being broken into the inept set, the inert set, and the evoked set.

The inept set consists of those products which the consumer has rejected either due to experience or because of negative influences from social contacts. The inert set represents a type of "decision limbo" and consists of those products which the consumer does not feel strongly about one way or the other. Those products which did not progress from the knowledge set to the consideration set in Alba and Chattopadyhay's (1985) visualization of the funneling process are probably housed in the inert set. Both the inert and inept sets contain currently rejected brands. Only those brands in the evoked set are acceptable for a specific purchase.

Those products which Laroche et. al. classify as being members of the foggy set would actually be members of the inert set (Howard and Sheth 1969). For whatever reason, they are not seen as viable alternatives by the consumer.

The evoked set is the grouping of products from which the final choice will be made. These products are viewed by the consumer as those that are feasible alternatives to the

problem or opportunity that they face. In probably the most commonly accepted definition, Howard and Sheth (1969) define evoked set as a small number of brands that become acceptable alternatives in a buyer's purchase decisions.

Hauser and Wernerfelt (1990) argue that the size of the evoked set is at least partially determined by the results of a trade off between decision costs and potential benefits associated with this information.

After reviewing the literature, Turley and LeBlanc (1991) note that the sizes of evoked sets are small. Durable products in particular have evoked set sizes of three or fewer products. Evoked set sizes for durable products which average less than two products are not at all uncommon. Non-durable products have larger and more variable evoked set sizes. An evoked set size of four or five products is fairly typical for convenience goods (Turley and LeBlanc 1991).

Over time products may be reevaluated and move from one set to another (Sutton 1987). Usually this reevaluation is the result of the acquisition of new information or from experience. However, the reevaluation may be a result of changing needs on the part of the consumer. Over time learning causes changes in the perceived importance of some criteria, or even the adopting of new ones, which may change the evaluation of all the items in the awareness set and its subsets.

STAGE FOUR: CHOICE

The fourth stage in this funneling process is the choice between alternatives in the evoked set. After a relatively extensive evaluation of this set using whatever criteria that are salient to the consumer and employing some decision rule, a choice is made. This choice reflects that brand which the consumer feels is the best or least objectionable option open to him or her.

Recent research indicates that consumer's perceptions of the information about products and services influence the choices they make. Additionally, this research suggests that consumers regularly and systematically distort the information they acquire (Elliot and Roach 1991; Parasuraman, Zeithaml and Berry 1985). Information is distorted so it better fits the expectations people have for a product or service (Elliot and Roach 1991). Consumers who have already formed low quality impressions of a company may distort any favorable quality rating information as being less favorable than it actually is.

The systematic distortion of information may help explain some of the frustration managers have when trying to understand consumer choices. Actions managers would consider irrational become rational when information distortion is discovered. Even before systematic information distortion is factored into the process, consumer decisions are complex behavioral events. Consumers' evaluations of products and services can also be influenced by their learning styles (Sproles and Sproles 1990). Each consumer has an enduring and routinely patterned learning style. This learning style influences what information is considered relevant as well as the depth in which the information is cognitivly processed.

STAGE FIVE: IMPLEMENTATION

The next stage in the model is the implementation stage. In most evoked set research, it is assumed that a purchase will automatically follow the decision process. However, this may or may not be true. Consumers can decide to postpone purchasing for some period or may decide not to purchase at all. Deal-prone consumers, for example, may be willing to wait until the brand they have settled on goes on sale or until they can negotiate a better price. At the other end of the spectrum, the brand chosen from the evoked set may not be available because it is out-of-stock.

Most experienced real estate sales people can relate "war stories" dealing with this phenomenon. After spending months with a client and after painstakingly choosing a house, suddenly the client gets "cold feet" and stays put in his or her original home. All decisions do not result in a purchase even if one alternative is clearly better than the others.

The phased choice process does, however, allow consumers to develop a set of viable alternatives (brands) for a purchase situation. This would allow choice process for a specific future purchase to be made with little cognitive effort. This would also hold for frequent repurchase situations as well as for more complex decision making.

STAGE SIX: POST-PURCHASE EVALUATION

This stage represents an extension to the present literature in that it recognizes the variety of factors which could, over time, change the composition of the evoked set.

What then causes the structure of the evoked set to change? Several factors may account for this dynamic nature. First, is the effects of satisfaction with the past selection. The prevalent view of satisfaction indicates that the degree to which a consumer is satisfied with a product is based on a

comparison of expectations and actual product performance (Howard and Sheth 1969; Oliver 1980). Oliver (1980) argues that satisfaction evaluations influence both attitudes and purchase behavior. LaBarbera and Mazursky (1983) tested this notion in the context of consecutive purchase behavior and found that satisfaction measures could be used to explain the behavior of repeat buyers and brand switchers.

A second factor which could influence the structure of the evoked set is the effects of new information. Sutton (1987) studied the effects of new information on the structure of evoked sets and found that consumers were more likely to include a newly found brand into an evoked set than they were to include a previously rejected product even when faced with new and positive information. His research indicates that consumers were only likely to reconsider a brand if they obtained information which indicated that the rejected brand was better than they originally thought. Thus, new information about a salient criteria is likely to cause changes in the structure of the evoked set.

A third factor which could cause instability in the evoked set is experience and/or maturation. Research associated with family life cycles and studies of children and senior citizens show that needs and wants change over time. Although some of these changes may be the result of dissatisfaction, others may just reflect a natural progression and evolution of an individual over time.

THE MODEL AS A WHOLE

As second look at the model presented in Figure 1 reveals that our model has been superimposed on the five state decision making process central to the EKB style model: Problem recognition, search, evaluation, choice, and post-purchase problem solving.

Problem recognition is a necessary condition for the need to elauate alternatives, even if the problem does not require immediate action. Search activity may be internal or external and is related to the type of problem faced; extensive problem solving, limited problem solving or routine purchase problems. Our model shows how a consumer's experience with brands, over time, allows for post-purchase evaluation of the brand selection decision. This process impacts future purchase decisions when similar problems are encountered.

RESEARCH IMPLICATIONS

Evoked sets become even more complex when viewed from a longitudinal or continuous perspective. Over time experience, learning, and the maturation process will undoubtedly change the composition of some evoked sets. However, the changes in evoked set composition over time have not yet been adequately addressed in the literature. The conditions, events and factors which may cause these changes have not yet been identified.

Most research done in this area, particularly the studies associated with evoked set size, have been little more than snapshots of a what may be a moving picture. At best, they may reveal the structure of a subject's present evoked set. However, they may only be capturing the consumers latest version of a dynamic evoked set which could result in undercounting its real size.

For example, past research has shown the average evoked set size for automobile purchasers to be 2.07 (Gronhaug and Troye 1983). Does this mean that the average car buyer only seriously considered two models, or is this just the last best set of alternatives that was considered? If these same consumers had talked to salesmen and test driven five models and ended up choosing from two of them, is the evoked set size two or five? The snapshot may say two while the moving picture says five. In some situations, longitudinal studies may be the only way to identify correctly the true size of the evoked set.

When evoked sets have more than one brand in them only longitudinal studies will allow a study of the selection from the evoked sets of different brands. That is the study of brand switching from within the evoked set, without a change in the composition of the evoked set.

Additionally, old concepts like brand loyalty may need to be reassessed. Brand loyalty has traditionally been thought of as the degree to which a consumer buys the same product over time. Future research should explore the differences between brand loyalty where a consumer repeatedly chooses the same item from a multi-item evoked set versus a consumer that only has one brand in an evoked set (an evoked set of one). Does choosing the same product from a multi-item evoked set lead to an evoked set of one over time?

CONCLUSION

The basic purpose of this article is to review the existing knowledge about evoked sets and to model this process. There are usually a large number of brands available in the total set, and the process evolves through awareness to evoked sets until one brand is purchased. In time, the composition of the evoked set is likely to change. Three sets of factors may cause these changes in composition. Satisfaction with the last choice is one factor, the combined

effects of new information is the second, and the maturation of the consumer may be the third.

Although this evoked set formation process is widely recognized, very few studies have focused on it. The available studies were integrated into a dynamic and continuous model of this consumer decision process.

Since this issue is central to consumer behavior, the topic deserves increased attention from consumer researchers. Future research in this area should study the changes in evoked set composition over time. For the many product and services which are bought continuously, the evoked set formation cannot be viewed as a discrete event but should instead be viewed as a consumer's "latest best answer" to a problem. How this latest best answer changes over time needs additional exploration.

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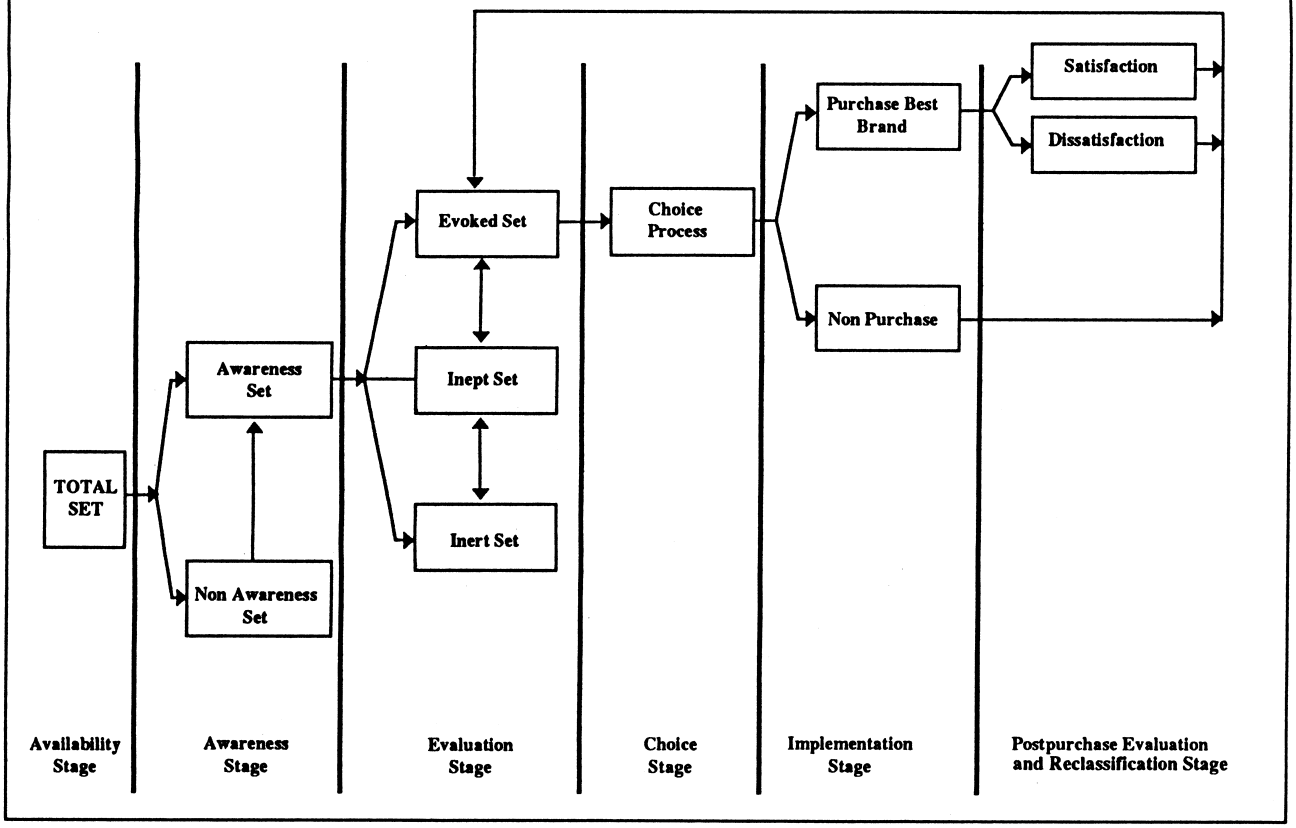
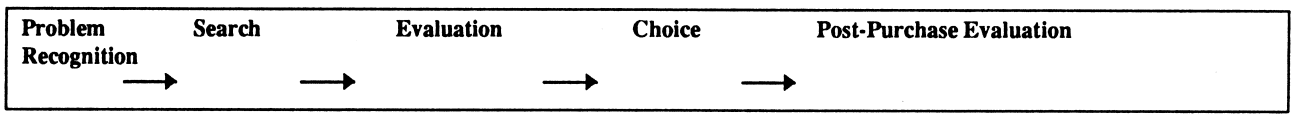
Figure 1

A MODEL OF THE EVOKED SET FUNNELING PROCESS





TIME-STYLES AND VALUE SYSTEMS : AN EMPIRICAL AND COMPARATIVE APPRAISAL

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Abstract

Perception of time is central to many marketing issues, especially for consumer behavior and comparative and international marketing. This reserarch first shortly explores the literature relating to values on the one hand, and time orientations on the other hand. We then use Kahle's List of Values and a new scale recently built in order to capture different time perceptual patterns. The main purpose of this study is to explore the possible connections between personal value systems and temporal orientations. This is done both by means of confirmatory factor analyses and cluster analyses. The results indicate close relationships between the two concepts either at the dimension level or at the segment level.

Introduction

Within the personal value research stream, the *"macro"* perspective still remains the most popular approach. Its success lies in its ability to segment individuals into qualitative groups defined by value orientations. Although more than 25 measures are available (Robinson and Shaver, 1985), the Rokeach's Value Survey (RVS) and the Kahle's List of Values (LOV) remain the most preferred instruments. Despite a few recent studies (S.C. Grunert and Scherhorn, 1990 ; Crosby et al., 1990), the structure of these two instruments has not yet been clearly established, especially in the context of different cultural settings. Moreover, the relationship of values with other psychological or social concepts has not yet received the attention of many researchers. At the most, a few researches have studied the nature of the relationships shared between values and innovativeness or the enduring and situational facets of involvement (Roehrich et al., 1989).

Among the numerous concepts studied in consumer behavior, the role of time has received an increasing attention (Jacoby et al., 1976 ; Hawes, 1980 ; Hornik, 1984 ; Bergadaà, 1990 ; Usunier, 1991). Indeed, perception of time is central to many marketing issues, especially for consumer behavior and comparative and international marketing. Very recently, Usunier and Valette-Florence (1991) have presented such a scale, designed to capture six important temporal orientations. The main purpose of this study is to bring new insights toward a better understanding of the possible connections between personal value systems and temporal orientations. Consumer life styles have already been studied with an emphasis on individual time orientation, but researches have been quite few (Settle, Alreck and Glasheen, 1979).

Since, this research remains exploratory in its very nature, we do not want to test specific hypotheses. Nonetheless, we are expecting (on a conceptual basis) some kinds of relations such as positive links between hedonism and orientations toward the future as well as between hedonism and preference for un-organized time. We are also expecting a positive connection of sociability with economic time on the one hand and time submissiveness on the other hand. Althought the relationships between value-systems and time-styles are not clearly established, we estimate **confirmatory-based causal models** which are solely able to take into account the *specific structure* of the scales we are relying on.

Value Systems

The nature of human values is a topic of growing interest in the social sciences and particularly in marketing. Within the field of marketing, a lot of empirical studies have established links with product/brand choice (Henry, 1976), media usage (Becker and Connor, 1981), media preferences (Beatty et al., 1985) and store patronage (Becker and Connor, 1982). Research has also brought evidence of the relationship of values with various variables influencing consumer behavior, such as attitudes (Homer and Kahle, 1988) or innovativeness (Roehrich et al., 1989).

According to Schwartz and Bilsky (1987), there are five features that are common to most of the definition of values. Values are described as :
-1/ concepts or beliefs,
-2/ about desirable behavior(s) and/or end states,
-3/ that transcend specific situations,
-4/ guide selection or evaluation of behavior and events,
-5/ are ordered by relative importance.

Switching to a less general definition of values, one can regard them as the most abstract type of social cognitions that help people to guide themselves in the interpersonal world (Grunert and Scherhorn, 1990). Consequently, their primary function is to guide the individual's adaptation to the circumstances in his environment (Kahle and Goff Timmer, 1983). In any social environment there are habits and customs related to how people plan and organize their activities, synchronize with each other in their personal and business lives. In that perspective, one might expect some connections between an individual's value system and his/her temporal orientations.

Concepts of time

The concept of time and therefore of time-related behavior, has been studied in numerous disciplines[1] (Jacoby et al., 1976 ; Feldman and Hornik, 1981 ; Jones, 1988 ; Levine, 1988 ; Adam, 1990). Time in economics may be an input in any consumption process (Becker, 1965). It then has to be allocated where its marginal productivity is the highest ; or, at least, the different *"slices of time"* have to be used in such a way that their respective marginal productivities outweigh their marginal costs. Individuals

1 For those who want a more complete review of the contribution of various fields to the study of time, see Bergadaà (1987, 1990)

maximize their overall satisfaction by optimally allocating units of time to units of activity. This economics-based concept of time is perceived as linear, continuous, and economic. It may be qualified as *"Anglo"* time (R.J. Graham, 1981).

Cultural anthropology has been a major contributor to the study of temporal orientations. Most of the litterature in anthropology considers time perceptions as cultural artifacts. As states Gurevitch (1976, p.229) *"Time occupies a prominent place in the "model of the world" characterizing a given culture"*. Numerous anthropological observations highlight that it is impossible to assume that men were born with any type of innate *"temporal sense"*. Our concept of time is always culture-based (Hallowell, 1955).

Psychology, and especially experimental psychology, has also been a large contributor to the study of time, with a more individual and perceptual approach (see for instance, Fraisse, 1957 ; Cottle, 1976 ; Knapp, 1971 ; Nuttin, 1979 ; Bond and Feather, 1988). Whereas the anthropological approach has been mostly conceptual and descritive in nature, psychological research has been more concerned with measurement. Psychometric scales emphasize the dimensions of individual adaptation to the cultural time patterns which are described by the anthropologists.

Dimensions of time orientations

When building the Usunier and Valette-Florence scale (1991), we have given emphasis to dimensions of time perceptions, which have been described both by anthropologists and experimental psychologists (Kluckhohn and Strodtbeck, 1961 ; Calabresi and Cohen, 1968 ; Hall, 1959; 1976, 1983). Their combination in a further scale will depict a concept of time which is partly internal and partly external to the individual. It is multidimensional, individual based, but also framed by prevalent patterns in a definite society and environment. These dimensions are :

• *economicity of time* and the monochronic versus polychronic use of time (as seen mostly by anthropologists). This organised-linear economic time has also been described at the individual level, with a word which is mostly *"structure"* (Alreck, 1976, *"structured routine"* ; Feather and Bond, 1983). This relates to individual orientations to planning and scheduling daily activities. These attitudes are perceived favorably, since they are supposed to facilitate the efficient use of one's own time ;

• *temporal orientations, and especially projection toward the past and projection toward the future* (as seen by anthropologists and also by experimental psychologists, and also by the litterature on time and consumer behavior). Time perceptions tend to be related to temporal orientations *vis-à-vis* the arrow of time. At the individual level, orientation towards the past, the present or the future, has been an interest for experimental psychologists. Broadly stated the research question is to discover how people locate their consciousness over the spectrum of time. Nevertheless, it is easier to unveil temporal orientations at the society level (where cultural artifacts are witnesses of these orientations), than at the individual lever. Orientations toward the future have been shown to be linked to education and the socialization process (Trommsdorf, 1983) ;

• psychological dimensions, which emphasize how people individually do cope with time (as an external and constrained economic resource, and as a social and culture based process of synchronizing themselves with others). They may be broken down in two main headings :

- *the motivational aspect* which refers to the capacity to undertake projects or tasks for which the rewards will not be received until the passage of long time periods (described often as persistence, tenacity). There are strong cognitive and motivational aspects in the future orientation dimension (Nuttin, 1979). For instance, Raynor and Entin (1983) show that there is a sort of path to the future horizon, where steps are interrelated. Success in the previous step is necessary to proceed on the next step. Therefore, not only does the time span of the future horizon influence the time perspective, but also the probability of success at each step. Hence, rewards are more or less necessary. When confronted to unexpected and significant failures, individuals tend to shorten their future time horizon (Bouffard, Lens and Nuttin, 1983). There is an imagination component in the orientation toward the future, which relates to the cognitive aptitude of people to envision what their life could be (imagination of the future, Holman, 1980) ;

- *anguish in front of time*. Life is seen as aimless, social time frame is viewed as a stressing constraint, and anguish is experienced when facing the long time horizons, and the constraint of time in daily activities. In their daily activities, individuals may feel adjustment problems and tend to feel some anxiety. For example, Calabresi and Cohen (1968) administered a 46 item questionnaire concerned with time experience and time attitude to a total of 508 psychiatric patients and colleges students. Among the four factors they found, one was related to discomfort and anxiety about time and the need to control it. Another factor, which they call *time submissiveness*, described a dutiful and conforming attitude toward time, emphasizing appointments and schedules. There is clearly an effective dimension of the individual relation to time.

RESEARCH PROCEDURE

Instrument Design

The questionnaire was subdivided into three parts :
- the first part contained 23 items aimed at measuring temporal orientations on a seven point Likert scale,
- the second was shorter and contained the 9 LOV (list of values) items measured on a seven point Likert scale,
- the third part was related to the identification of interviewed people, and the measure of the attitude toward vacation (four items ; not used in this research).

As for the selection of the scales, we made the following choices :

• Personal values were measured by means of the 9 items proposed by Kahle. We could have chosen Rokeach's questionnaire, but we didn't for many reasons :
- Kahle's questionnaire is shorter,
- it is based on the same theoretical concepts,
- Kahle's scale has the same internal structure as Rokeach's, but seems more appropriate to the study of consumer products (Valette-Florence, 1988),
- Kahle's scale has proven superior to Rokeach's when explaining behavior (Beatty and al., 1985).

• Temporal patterns were measured with Usunier and Valette-Florence's scale (1991) designed to capture six main temporal orientations :
- Preference for economic time,
- Preference for non-linear and un-organized time,
- Orientation toward the past,
- Orientation toward the future,
- Time submissiveness,
- Time anxiety.

Each of these dimensions was measured by four items (except one with three items) hence giving rise to a total 23 items scale[2].

Sample

This study took place in the city of Briançon (Southern part of the French Alps) during the summer 1991. 309 questionnaires have been collected. Interviewed people were mainly vacationists spending their holidays in that part of France. Although our sample is a convenience one, it still remains usable, due to the exploratory nature of our research (Calder, Philips and Tybout, 1981).

ANALYSIS AND RESULTS

Our analysis has been divided into four successive steps (figure I) :
• first, confirmatory factor analyses (PLS method) were performed on each of the selected scales. For each dimension reliability estimates have been computed as well ;
• second, two successive structural equation models were investigated in order to assess the nature of the links between value dimensions and temporal orientations ;
• third, for each scale, a cluster analysis was performed on the latent scores computed in the first step ;
• fourth, a correspondence analysis has been undertaken in order to visualize the similarities between the value-systems and time-styles segments.

Confirmatory factor analysis

Due to our limited sample size and the non-normality of the observed variables, we chose to perform confirmatory factor analyses by means of the partial least squares approach (PLS method). Tables I and II present the corresponding results. Since the structure of the LOV scale has not been clearly established, the **confirmatory** factor analysis was specified according to the results of a *prior* **exploratory** principal components analysis. Moreover, the dimensions conform to LOV internal and external orientations and are very closed to those obtained by Homer and Kahle (1988). Both models are validated in the light of the numbers obtained with regards to the convergent and discriminant validity criteria (Fornell and Larker, 1981). We recall that *convergent validity* is satisfied when the variance extracted is **above 0.50**. Also, when the squared correlation between two constructs is **less than** the average variance extracted between the two constructs, evidence of *discriminant validity* exists. As in other previous studies conducted in France (Valette-Florence et al., 1991), the items *"excitement"* and *"self-respect"* are not well taken into account. In

2 As it may be clear for the reader, all the theoretical dimensions outlined in literature review **but one** have been incorporated into our scale. At present, the *motivational aspect* has been also added to our scale (see Usunier and Valette-Florence, 1993, for a cross-cultural illustration)

General overview of the statistical analyses

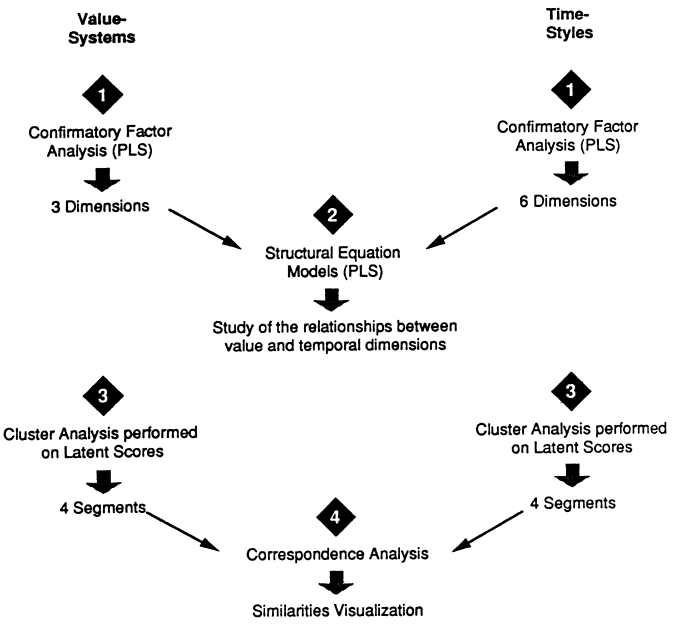

fig 1

Confirmatory Factor Analysis (PLS) : Value Dimensions

Items	F'1	F'2	F'3	Convergent Validity
Security	0,79*			
Sense of belonging	0,79			0,45
Self-respect	0,40			
Being well respected	0,60			
Warm relationships with others		0,82		
Fun and enjoyment in life		0,85		0,53
Excitment		0,43		
Sense of accomplishment			0,90	0,78
Self-fulfillment			0,86	

Meaning	Social orientation	Hedonic Orientation	Individual Orientation
Reliability ρ_η**	0,75	0,75	0,88

Correlations between Latent Factors

	Convergent Validity	F'1	F'2	F'3
F'1	0,45	1	0,061***	0,119
F'2	0,53	0,246	1	0,166
F'3	0,78	0,346	0,408	1

* All t-tests are statistically significant (i.e : >2)

** $\rho_\eta = \dfrac{\left(\sum_{i=1}^{n} \lambda_i\right)^2 \text{var}(\eta)}{\left(\sum_{i=1}^{n} \lambda_i\right)^2 \text{var}(\eta) + \sum_{i=1}^{n} \text{var}(\varepsilon_i)}$

*** $0,061 = (0,246)^2$; numbers above the main diagonal correspond to the squared correlation coefficients (test of discriminant validity).

Table I

Confirmatory Factor Analysis (PLS) : Temporal Orientations

Items	F1*	F2*	F3*	F4*	F5*	F6*	Convergent Validity
Eco1	0,81*						
Eco2	0,80						
Eco3	0,79						0,65
Eco4	0,82						
N-org1		0,74					
N-org2		0,75					0,55
N-org3		0,74					
Past1			0,74				
Past2			0,89				0,68
Past3			0,84				
Future1				0,81			
Future2				0,81			0,70
Future3				0,80			
Anx1					0,78		
Anx2					0,71		0,52
Anx3					0,67		
Sub1						0,82	
Sub2						0,71	0,59
Sub3						0,78	
Meaning	economic time	Un-organised time	past orienta-tion	future orienta-tion	time anxiety	time submis-siveness	
Reliability ρ_η**	0,88	0,79	0,86	0,85	0,76	0,81	

* All t-tests are statistically significant (i.e : >2).

** $$\rho_\eta = \frac{\left(\sum_{i=1}^{n} \lambda_i\right)^2 \text{var}(\eta)}{\left(\sum_{i=1}^{n} \lambda_i\right)^2 \text{var}(\eta) + \sum_{i=1}^{n} \text{var}(\varepsilon_i)}$$

Correlations between Latent Factors

	Convergent validity	F*1	F*2	F*3	F*4	F*5	F*6
F*1	0,65	1	0,34***	0,02	0,08	0	0,12
F*2	0,55	0,58	1	0	0,01	0,01	0,09
F*3	0,68	0,14	-0,07	1	0,12	0,10	0
F*4	0,70	0,28	-0,10	0,34	1	0,01	0
F*5	0,52	-0,06	0,11	0,32	0,09	1	0
F*6	0,59	0,35	-0,30	-0,05	0,04	-0,08	1

Table II

order to keep the nature of the LOV scale unchanged, we have decided not to exclude these two items. Moreover, the reliability estimates are fairly high and give further support to the validity of the scales. Once again, these estimates are similar to those obtained in former studies (Usunier and Valette-Florence, 1991 ; Roehrich et al., 1989). Lastly, latent scores on each of the uncovered dimensions were kept for further analyses.

Structural Equation Models

Two kinds of structural equation models have been investigated. The first one, which can best be seen as a generalized confirmatory canonical analysis, allows to directly test the incidence of each value dimensions upon each temporal orientations (figure II). The main relationships concern the incidence of the social (value) dimension upon respectively the organized economic time (.23), the orientation toward the past (.20) or the future (.16), and time anxiety (.11). The hedonic value dimension is mostly associated with unorganized non linear time (.25) and in opposition to the orientation toward the past (-.13) and to time anxiety (-.19). The individual value orientation is in opposition to the preference for non-linear unorganized time (-.26), and to a lesser extent to the orientation toward the past (-.07) and time submissiveness (-.12). Overall, time submissiveness seems to be weakly related with any of the value dimensions.

In order to have a better understanding of the overall incidence of the global value system on the main temporal orientations, we tested the causal model depicted in figure III. The social, hedonic and individual orientations are well taken into account by a second order latent value factor, whereas three main second order latent temporal factors emerge (respectively the *economicity of time*, the *arrow of*

Causal relationships between value and temporal dimensions

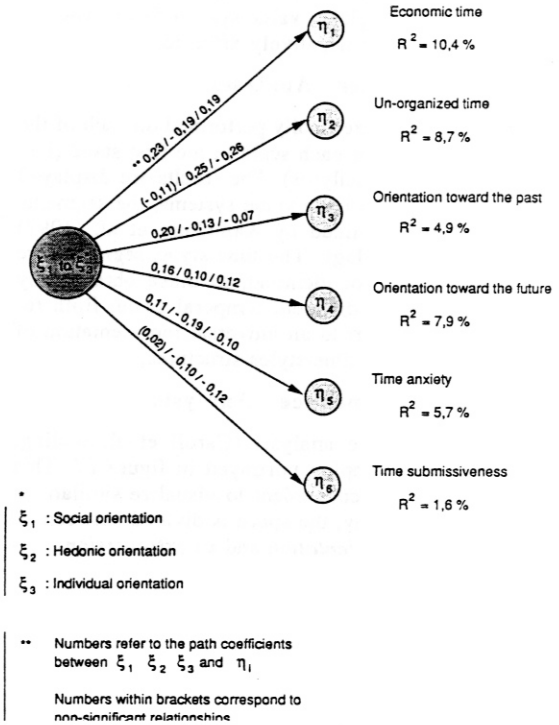

fig 2

Overall incidence of the global Value-System on the three main temporal orientations

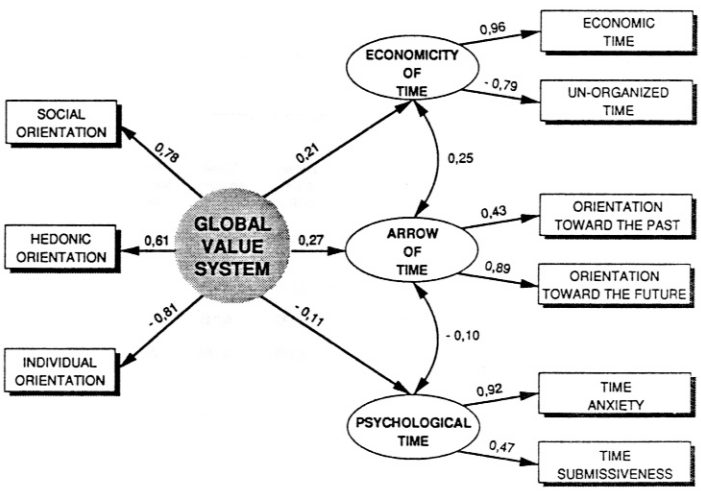

fig 3

time and the *psychological time*, see figure III). It appears that the economicity of time and the arrow of time are positively influenced by the global value system factor whereas the psychological time is negatively affected.

Cluster Analyses

Two cluster analyses[3] were finally performed on each of the latent scores computed for each scale in the first stage (i.e : the confirmatory factor analyses). The results are displayed in tables III and IV. As for the value systems, the segments are similar to those obtained by Kamakura et al. (1992) with a different methodology. The time-styles segments are also similar, although not identical, to those obtained by Bergadaà (1991) with a different temporal scale. Both results seem to give support to an universal representation of value-systems as well as time-styles structures.

Correspondence Analysis

Lastly, a correspondence analysis (Caroll et al. scaling, 1986) has given the mapping portrayed in figure IV. This kind of analysis is very convenient to visualize similarities between segments. Clearly, the space is divided between an *individualism / social orientation* and an *extroversion / introversion orientation.*

Cluster Analysis :
Value-Systems Profiles

Segments	Social Orientation	Hedonic Orientation	Individual Orientation	Size
Individualists	0,131*	0,112	**1,158**	47
Taciturn Individuals	**-0,655**	**-1,592**	**0,713**	58
Hedonists	-0,680	**0,374**	-0,385	93
Socially Integrated individuals	**1,011**	**0,556**	**-0,638**	94

* Standardized factor scores

Table III

Cluster Analysis :
Time-Styles Profiles

Segments	Economic time	Un-organized Time	Past orien-tation	Future orien-tation	Time anxiety	Time Submis-siveness	Size
Distressed backward-looking individuals	-0,363*	0,380	**0,554**	0,140	**0,517**	**1,443**	63
Un-organized worriers	**-0,889**	**1,030**	-0,017	0,137	**0,721**	-0,468	48
Rational futurists	**0,818**	**-0,726**	0,266	0,475	-0,185	-0,479	108
Present time lovers	-0,313	0,130	**-0,860**	**-0,914**	-0,647	-0,229	73

* Standardized factor scores

Table IV

3 K-Means algorithm (McRae, BMDP, 1991)

Value Systems and Time-Styles mapping

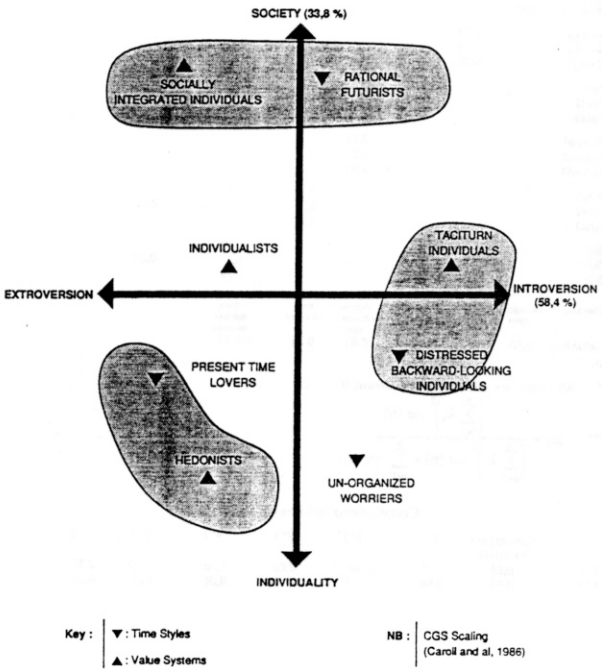

fig 4

Following Van Der Heijden et al. suggestions, a log-linear analysis was performed in order to clearly delineate (on the mapping) the associations between the value-systems and time-styles profiles. A close look at the mapping indicates that the associations are very plausible.

CONCLUSION

This article has been written from the outset with the main objective to investigate the nature of the possible linkages between social values (LOV scale) and selected temporal orientations (Usunier and Valette-Florence scale, 1991). An exploratory study, conducted on more than 300 subjects, has shown promising results since it reveals specific relationships, such as between hedonism and the preference for un-organized time, or between sociability and the preference for economic time and the orientation toward the future and close associations such as between the socially integrated individuals and the rational futurists or between the hedonists and the present time lovers.

However, due to the convenience nature of our sample, the results which are presented in this paper should not be generalized without some precautions. Replications with fully adequate samples have to be undertaken. Related research tracks also have to be investigated before we will be able to claim for the generalizability of these findings. Moreover, specific tests of nomological validity have also to be undertaken. For instance, what is the combined predictive power of value-systems and time-styles on selected consumption patterns ? Obviously, a lot of research avenues still remain open...

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BUSINESS TO BUSINESS MARKETING

TRADEOFFS IN INDUSTRIAL MARKET SEGMENTATION: THEORY AND PRACTICE

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Abstract

Market segmentation is one of the basic concepts in marketing. However, the issues of costs and profits have typically been ignored in discussions of segmentation. This paper introduces a straightforward framework to assess these issues. Various revenue and cost interactions are considered, and problems in implementing this process are discussed.

Introduction

Market segmentation is one of the most fundamental concepts in marketing; even at an abstract level the concept is surprisingly straightforward (Wind 1978). Prospective buyers of a firm's products or services are grouped into clusters with similar needs, those of prospective buyers within one cluster being quite similar to the needs of other buyers within that cluster but quite different from those in other clusters.

The firm's task is to identify these distinct need-based clusters and then design an appropriate marketing program--consisting of the marketing mix elements of product, price, promotion, and distribution--to profitably reach the clusters it selects. The goal of market segmentation is increased marketing efficiency. Therefore, the increased revenue due to segmentation must exceed the combined costs of segmentation research and analysis and the incremental expenses associated with implementing the segmentation strategy.

For market segmentation studies to be useful to marketing managers, at a minimum it is important that the techniques used assist in recognizing the potential profits of adding new segments. This involves not only the cost and response function approximations but also an understanding of the marketing, R & D, and manufacturing/operations synergies of entering new segments. The interactions of all relevant costs on profits should be considered.

The authors will attempt to delineate how these cost/revenue tradeoffs affect segmentation decisions. A framework of segmentation strategies and their possible impact on costs and profits will be examined. Then comparisons will be drawn between theoretically "correct" approaches and ones which may be mandated by organizational realities.

A Framework for Market Segmentation Decisions

A general process will be introduced for segmentation decision making. While not as comprehensive or exact as would be ideal, this framework at least suggests a defined process for segmenting industrial markets. It also forces managers to at least consider some of the cost implications of various strategies.

The General Case

There is only one reason for a firm to segment a market: to increase profit over what it would have been without segmentation. As shown in Figure 1, the right-hand, S-shaped curve is the sales response function for an entire market (M). The threshold level of marketing expenditures before any sales revenue appears is shown by the marketing effort E at the value of ${}^{E}M_{t}$. The profitable range of minimum (${}^{E}M_{min}$) and maximum (${}^{E}M_{max}$) marketing efforts in which marginal revenue exceeds marginal cost are shown on the horizontal axis to give the range of sales revenues (R) from ${}^{R}M_{min}$ to ${}^{R}M_{max}$.

However, it is generally not feasible to aim at the entire market. Assume that of all possible market segments, the firm selects (based on some criteria) market segment A shown at the left in Figure 1 with the threshold level of marketing expenditures and ranges of profitable operations as given. Examples of criteria the firm could use to select this segment are its revenue potential (reflected in the segment's size and expected growth and the firm's competitive position in that segment), the cost of reaching the segment, and its compatibility with the organization's objectives. Sinclair and Stalling (1990) suggest the use of attribute analysis in this process when segmenting industrial markets. This approach helps identify important product attributes between segments.

In the general case, the process of market segmentation and focusing the firm's efforts on segment A have significant

advantages: (1) the threshold level of marketing effort at which sales revenue starts appearing is lower (${}^{E}A_t$ versus ${}^{E}M_t$) and (2) the level of marketing effort at which profitable operations occur is also lower (${}^{E}A_{min}$ versus ${}^{E}M_{min}$). However, Figure 1 shows that larger profitable sales revenue can be generated from the entire market (${}^{R}M_{max}$) with the shapes of the sales response functions shown.

How can the firm achieve this greater profitable sales revenue available from the entire market? One of the obvious alternatives is to find a second segment to penetrate. The sales response functions for each potential market segment can be ranked according to expected profitability. Figure 2 shows the sales response functions for both segment A (described earlier) and segment B, the next most profitable segment. The marketing manager's decision to gain additional revenue by moving into segment B involves the tradeoff between (1) operating in the flattening, but profitable, range of the sales response function for segment A and (2) paying the high threshold expense associated with new segment B in order to reach the steeper, profitable portion of its sales response function.

Threshold Costs and Number of Segments

Threshold costs occur due to the unique needs of the new segment--marketing actions such as a new product, an entirely new sales force to reach the segment, or new advertising copy. A basic premise of this paper is that an understanding of the size of these threshold costs and ways to reduce or avoid them through synergies or scale economies should be central to a marketing manager's decision but is missed through conventional segmentation approaches.

There are, however, situations where threshold costs may be minimal. If new price-sensitive segments are added by successive price reductions through time, no or few additional threshold costs due to new product, new sales force, or new advertising copy are incurred. In geographic segmentation, a new product rollout into new regions in the same country probably does not involve new product or new advertising copy threshold costs but certainly incurs additional sales force, advertising media, and distribution costs.

In the general case, however, where the threshold cost of reaching a new segment is significant and where segments are ranked by potential profitability, each successive segment added contributes less profit. The result is that a firm encounters a potential limit of distinct segments that it can reach profitably unless it can take advantage of important synergies or scale economies.

One-Product and Multi-Product Segmentation

Table I is a representation of a discrete market-product space for a single product that might be sold to a number of alternative market segments. Assume that the sole product P, is initially sold to its most profitable market segment M that appears as market-product space M_2 P_1 in the figure. In this simple case, if the firm is able to reach other market segments like M_1 and M_3 through customer self-selection (Frank, Massy, and Wind, 1972, p.7), it can avoid incurring the high threshold costs that often preclude adding new segments. An example is when the same advertising campaign for an inexpensive diet drink reaches not only a weight-conscious segment (say, M_2 P_1) but also a price-sensitive segment as well (say, M_3 P_1). In other words, different segments seeing the same advertisement are reached simultaneously. In the more typical case, however, significant threshold costs are incurred in reaching new market segments even with the same product.

Wind and Robertson (1983) note the importance of recognizing market (or sales) response functions and synergies in market segmentation studies. However, they discount the value of product-market matrices like those used here in studying synergies, instead recommending a "positioning analysis". An opposing view is that the market-product structure is more useful because it enables often vaguely defined synergies to be clarified and better visualized.

We can define four synergies that must be assessed in decisions to reach additional market segments:

1. R = revenue effects of adding new segments. These are likely to be positive if a new product reaches a completely new segment of buyers. They may be negative for substitute products if the new product simply cannibalizes sales from old customers who were paying higher prices. In contrast, for highly complementary products, revenues may increase not only from the new product offering but from increased sales of old lines (a bank adding insurance or mutual funds increases its revenues from existing customers already using its saving and checking services).

2. D = research and development costs of offering a new product. These are zero if old products reach new segments but are significant if a totally new product is offered.

3. M = manufacturing/operations costs of producing a new product or increasing the sales of an old product. New tooling and production costs are

significant for a new product. In contrast, experience curve and scale economy effects may significantly reduce unit manufacturing costs if existing products are produced in greater volume to reach new market segments.

4. S = marketing and sales costs of taking a new product into existing or new segments or an existing product into new segments or more intensively into existing ones. Adding a new product for existing markets usually doesn't involve major marketing expenses. In contrast, reaching new segments--with either existing or new products--may involve significant marketing costs.

Table II expands the segmentation problem to a multi-product market-product space. Assume the firm is selling product P_2 to market M_3 (market-product space M_3 P_2). In seeking additional profit, the firm can move in any of the directions shown by the arrows and also diagonally. For simplicity, assume it offers substitute products and is considering only segments 1, 2, and 3 as follows:

1. Seeking revenue from new market segment (M_2) with new product (P_2)
2. Seeking revenue from existing market (M_3) with new product (P_3)
3. Seeking revenue from new market segment (M_2) with new product (P_3)

The probable synergies in terms of revenue and cost of these three strategies are summarized below, where ++ = very favorable, + = favorable, 0 = none, - = unfavorable, and -- = unfavorable.

	Strategy		
Synergy	New Market Old Prod.	Old Market New Prod.	New Market New Prod.
1. R : revenue	+	++	++
2. D : R & D	0	--	--
3. M : manuf.	+	--	--
4. S : marktg.	--	-	--

An analysis of this table and Table II suggests that significant scale economies (1) for R & D and manufacturing run down the columns in Table II and (2) for marketing run across the rows in Table II. This implies that segmentation decisions cannot be made in isolation by a marketing department without considering R & D and manufacturing/operations implications. Useful analytical market segmentation techniques must be able to capture these major synergies. Table II also reveals the danger of a "diagonal" (new market, new product) strategy because the firm is dealing with new unknowns in both (1) R & D and manufacturing on the one hand and (2) marketing on the other.

The Realities of Segmentation Decision-Making

The problems with this approach become apparent when an attempt is made to operationalize it. Green and Krieger (1991) suggest a method based on conjoint analysis, but admit that cost estimations and measurement problems are formidable. Mahajan and Jain (1978) recognized these problems with normative segmentation over a decade ago. Recently other authors (Sinclair and Stalling 1990; Laughlin and Taylor 1991) have proposed methods to specifically handle industrial segmentation, but cost tradeoffs are not explicitly considered. In their review of applied segmentation articles, Rudelius, Walton, and Cross (1987) found that costs are considered when translating research into strategy in only about half the cases.

Add to this possible organizational behavior problems and the task becomes daunting indeed. Managers likely emphasize the pragmatic aspects of segmentation and may disregard techniques which don't offer obvious suggestions for profit improvements. They may also not be inclined to pay for segmentation research if they sense the organization would resist changes in the firm's current strategy anyway. The amount of uncertainty in their decision environment may be so great that added research may not be seen as worth the cost. These traits could lead managers to draw implications from data and induce decisions which contain significant pitfalls.

It would be instructive to learn what percentage of industrial segmentation decisions 1) itemize the various cost items, 2) try to quantify them, and 3) do some sort of tradeoff analysis. Quite possibly some of these strategies are volume driven with little consideration of profit and loss. Since so little is known about how the translation of research into strategy actually occurs, a study of these practices is being conducted by the authors. The issues to

be examined include 1) how managers actually perform the translation, and 2) how they should do it to incorporate the cost considerations which have been discussed here. So the research will progress from positive to normative, with the first step aimed at quantifying current methods. The results of this survey should at least illuminate what criteria industrial marketers consider and actually use when segmenting markets. These results may suggest other appropriate techniques to use to capture some of the revenue/cost tradeoffs which are present.

Much has been written about segmentation and various methodologies since Smith's (1956) seminal segmentation paper. One of the areas which has been neglected and deserves more attention is the role costs play in segmentation decision-making. At a minimum, the authors recommend that marketing managers itemize the various costs that are present. Then decision makers at least have to consider them. If they can be quantified, a more explicit cost-benefit analysis can be performed. This might be a first step in overcoming organizational resistance to certain strategies which may deviate from the status quo. Actually, this type of exercise would be beneficial in any segmentation decision. It would force the organization to examine the basic notion in segmentation: efficiencies which increase profits.

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Table I - Market-Product Space for One Product

Market Segment	Product P_1
M_1	↑
M_2	M_2P_1
M_3	↓
M_n	
Total	

Table II - Multi-Product Market-Product Space

Market Seg.	P_1	P_2	P_3	P_n	Tot
M_1					
M_2		↑			
M_3	←	M_3P_2	→		
M_n		↓			
Total					

AN EMPIRICAL ANALYSIS OF BUYER UNCERTAINTY IN ORGANIZATIONAL PURCHASING

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Abstract

The purpose of this study was to analyze the impact of buying situations and buyer-seller relationships on several dimensions of uncertainty. The results indicated that both singularly impact uncertainty. Evidence also suggested that the importance of the buyer-seller relationship in uncertainty reduction is subject to diminishing returns. In an analysis of interaction effects, the buyer-seller relationship was found to be of value in reducing uncertainty in simple buying situations, but of limited importance in relatively complex cases.

Introduction

One of the most pervasive ideas to transcend organizational buying research is that organizational purchasing should be viewed as a form of problem-solving (Webster & Wind 1972). The buyer, when faced with a purchase decision, must select a vendor, a product, or a service using some decision-making criterion. Consequently, an understanding of the purchase phenomenon requires a knowledge of the problem-solving process and the myriad of factors that may impact it.

This research focused on developing an understanding of the linkages among uncertainty, buying situations, and buyer-seller relationship stages. Uncertainty is but one of the many factors that may affect the buyer's problem-solving process, while the buying situation and the stage of the buyer-seller relationship were posited as factors capable of influencing the magnitude of uncertainty inherent in the purchase situation.

Background and Model

Uncertainty

Even though uncertainty is a factor inherent in most organizational purchasing situations, the concept in itself, has received relatively little attention in the literature. It has, though, been the focus of considerable attention in the larger context of perceived risk (Cunningham 1967). In fact, the most often used operationalization of perceived risk utilizes a two-component model which computes perceived risk as a function of both uncertainty and consequences (Webster & Wind 1972).

Like risk, uncertainty can be perceived along a number of dimensions. Borrowing from the risk related literature, one may conclude that uncertainty can be perceived along: 1) financial, 2) performance, 3) physical, 4) psychological, and 5) social dimensions (Jacoby & Kaplan 1972); along a 6) time dimension (Roselius 1971); and along an 7) opportunity dimension (Zikmund & Scott 1973). These dimensions of uncertainty, as operationalized in this study, are presented in Table 1.

Table 1
Uncertainty Dimensions

Uncertainty Dimension	Operational Definition
	The certainty that buying a particular product from a particular vendor will not:
Financial	Result in a loss of money.
Performance	Result in an unacceptable performance.
Psychological	Adversely impact the way you think of yourself as a purchasing professional.
Social	Adversely impact the way others in the organization think of you.
Physical	Result in someone in your organization being injured or harmed.
Time	Result in wasted time because the purchase is not satisfactory.
Opportunity	Prohibit a more favorable selection in the future.

Buying Situations

According to Wind and Thomas (1980), the buying situation is a factor that is capable of affecting both organizational buying processes and the composition of the organizational buying center. In an attempt to capture the scope of buying situations Cardozo (1980) has determined that they may be classified along four dimensions. These reflect the: 1) buyer's familiarity with the buying task (new or rebuy), 2) product type, 3) importance of the purchase to the buying organization, and 4) principle type of uncertainty present in the purchase situation.

The buying situation is clearly a central concept in explaining organizational buying behavior. In the present research, this factor is posited as being capable of impacting perceptions of uncertainty.

Buyer-Seller Relationship

Early research in organizational purchasing often looked at a buyer as a passive recipient of an industrial salesperson's stimulus (Bonoma & Johnston 1978). The interaction, give-and-take, and the ability of either party to take the initiative were often ignored. Recent efforts have appropriately stressed the importance of the buyer-seller relationship as opposed to simply studying the buyer or the seller in isolation from their counterpart (Moller & Wilson 1988).

Additionally, earlier work often focused on discrete purchase events, systematically ignoring the relationships that may have developed over multiple interactions (IMP Group 1982). More recent work has tended to stress the importance of understanding the initiation, development, and maintenance of these long-term relationships (Dwyer, Schurr, & Oh 1987).

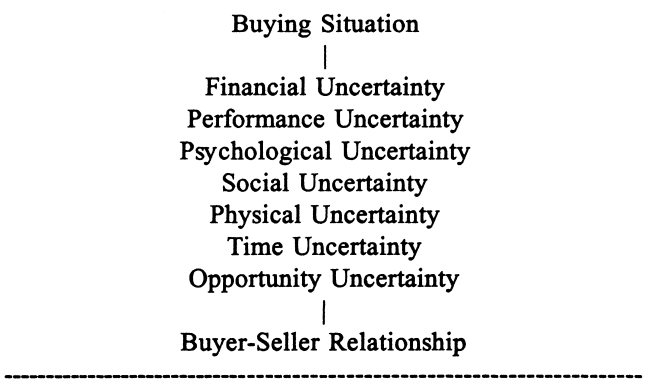
One of the important ideas to come out of these paradigm shifts is that the relationship between a buyer and a seller is a process phenomenon (Dwyer, Schurr, & Oh 1987; Ford 1980). It is a process in the sense that it goes through stages that are characterized by certain degrees of commitment, adaptations, experience, uncertainty, and distance. Ford (1980), for one, has used this process perspective in tracing buyer-seller relationships over the stages of: 1) pre-relationship, 2) early, 3) development, 4) long-term, and 5) final.

Given that there is a trend in industrial markets toward transactions occurring in the framework of long-term relationships (Arndt 1979), it is clear that the buyer-seller relationship is increasingly becoming an important concept in explaining organizational buying. This study models it as a factor capable of impacting uncertainty perceptions.

Research Model and Propositions

This research tests a model that views uncertainty as a function of both buying situations and buyer-seller relationships. Figure 1 presents the structure tested in this work.

Figure 1
Research Structure



The first link in the Figure 1 model suggests that uncertainty is a function of the buying situation. Relatively complex buying situations are expected to generate a higher degree of uncertainty than simple buying situations. It is logical to believe that this is true across product types (where a capital good is more complex than supplies), across task familiarity (where a new buy is more complex than a rebuy), and across degrees of standardization (where a custom product is more complex than a standard product). This relationship is reflected in research proposition 1.

> **Buyers perceive greater uncertainty in complex buying situations than in relatively simple situations.**

The second link in the Figure 1 model proposes that uncertainty is also a function of the buyer-seller relationship. As two firms interact over a period of time and transactions, it is logical to believe that the uncertainty felt by each party is reduced. This line of thinking is reflected in research proposition 2.

> **Buyers perceive greater uncertainty in the earlier stages of a buyer-seller relationship than in the later stages.**

The Figure 1 model also suggests a third relationship; this one reflecting an interaction effect of buying situations and buyer-seller relationships on uncertainty. The likely interaction is that the buyer-seller relationship is more important in reducing uncertainty in complex buying situations than in relatively simple buying situations.

A complex buying situation would be expected to increase the buyer's desire to differentiate between vendors with regard to uncertainty. Successful past interactions with the vendor would likely be relied on to a great extent to

aid in this discrimination. Conversely, a relatively simple buying situation would be expected to minimize the buyer's desire to differentiate between vendors with regard to uncertainty, and past interactions would have a minimal effect. This relationship is captured in research proposition 3.

The buyer-seller relationship's uncertainty reducing capabilities are greater in complex buying situations than in relatively simple situations.

Methodology

This study employed a 2 X 3 experimental design. It was experimental in the sense that the independent variables of interest (buying situations and buyer-seller relationships) were manipulated eliciting a response in the dependent variable set (uncertainty).

The buying situation was operationalized at two levels, one level reflecting a relatively simple (standard product) buying situation and the other representing a complex (custom product) buy.

The buyer-seller relationship was operationalized at three levels. These were the initiation, development, and maintenance stages and reflected the first, third, and fifth stages respectively of the previously mentioned Ford (1980) process model.

Case scenarios were used in the presentation of relationship stages and buying situations. Manipulation checks guaranteed that the written scenarios were capable of psychologically moving the respondents to a particular stage in the buyer-seller relationship or to a particular buying situation.

The measurement of uncertainty was accomplished using a 4-point uncertainty scale. The end positions of the scale were labeled with the terms "very uncertain" and "very certain". The central points were left unlabeled.

A mail survey was employed in the data collection while the sample was provided by the National Association of Purchasing Management (NAPM). 474 of the 1176 questionnaires were returned and usable yielding a response rate of 41%.

Results and Discussion

Proposition 1

As an initial step in testing proposition one, a one-way MANOVA was conducted using the set of seven uncertainty scores as dependent variables and the buying situation as the independent. The results are presented in Table 2.

Table 2
One-way MANOVA of Uncertainty across Buying Situations

Source	Lambda	F-Val	F-Prob
Buy Situation	.96713	2.243	.030

The results show that the vectors of uncertainty scores differ across buying situations. Given that the MANOVA was significant, it was appropriate to conduct seven one-way ANOVAs using the uncertainty scores individually as dependent variables and, in each case, the buying situation as the independent. These results are found in Table 3.

Table 3
One-way ANOVAs of Uncertainty across Buying Situations

Uncertainty Dimension	Buy Situation Stan	Cust	F-Val	F-Prob
Financial	2.71a	2.51b	7.730	.006
Performance	2.66	2.53	3.144	.077
Psychological	3.08	2.98	1.499	.222
Social	2.82a	2.67b	4.152	.042
Physical	2.86a	2.68b	3.959	.047
Time	2.64	2.56	1.079	.299
Opportunity	2.92a	2.70b	7.278	.007

Note: Mean scores that do not share common subscripts differ at the .05 level.

As can be seen, proposition one was supported along four of the seven uncertainty dimensions. Buyers perceived greater financial, social, physical, and opportunity uncertainty in complex buying situations than they did in simple situations.

The finding of partial support for this proposition is not particularly surprising given the operationalization of the buying situation. A product being designed for a specific application (custom product) has not yet had a chance to "prove" itself. On the other hand, a standard product has likely been employed in other applications or by other firms, and has in some sense established credibility.

Proposition 2

As a first step in testing proposition two, a one-way MANOVA was conducted using the set of seven uncertainty scores as dependent variables and the buyer-seller relationship as the independent. Results from this analysis are presented in Table 4.

Table 4
One-way MANOVA of Uncertainty across Buyer-Seller Relationships

Source	Lambda	F-Val	F-Prob
Buy-Sell Relationship	.89670	3.698	.000

This test showed a significant difference in the vectors of mean scores across buyer-seller relationships. With this finding, it was appropriate to conduct seven one-way ANOVAs using the uncertainty scores individually as dependent variables and, in each case, the buyer-seller relationship stage as the independent variable. Table 5 presents these results.

Table 5
One-way ANOVAs of Uncertainty across Buyer-Seller Relationships

Uncertainty	Buy-Sell Relationship			F-Val	F-Prob
Dimension	Init	Dev	Maint		
Financial	2.30a	2.77b	2.78b	19.244	.000
Performance	2.35a	2.70b	2.73b	10.895	.000
Psychological	2.84a	3.17b	3.07b	6.153	.002
Social	2.56a	2.94b	2.74ab	8.581	.000
Physical	2.54a	2.87b	2.91b	7.133	.001
Time	2.35a	2.73b	2.72b	11.243	.000
Opportunity	2.69	2.92	2.83	2.781	.063

Note: Mean scores that do not share common subscripts differ at the .05 level.

This proposition was also partially supported. In the case of financial, performance, psychological, physical, and time uncertainty, buyers perceived significantly more uncertainty in the initiation stage than in the development or maintenance stage. In the case of social uncertainty, buyers perceived more uncertainty in the initiation stage than in the development stage, but no difference was detected between initiation and maintenance stages. Along no dimension was there a significant uncertainty difference detected between the development and maintenance stages.

The partial support of this proposition supports the contentions of Arndt (1979), Ford (1980), and Dwyer, Schurr and Oh (1987) who all suggest that the relationship between a buyer and a seller is an important factor in uncertainty reduction. The findings also suggest that the buyer-seller relationship impacts uncertainty perceptions in a diminishing fashion. Significant uncertainty reduction took place when moving from the initiation to development stage, yet no reduction occurred when moving from the development to the maintenance stage. This suggests that the intensity of the relationship may not be particularly important. What seems to be important is whether or not there was any relationship.

Proposition 3

To test the third proposition, two one-way MANOVAs were initially conducted. In both MANOVAs, the set of seven uncertainty scores was used as the dependent variables, while the buyer-seller relationship was used as the independent. In the first, the buying situation was controlled at the standard product level, while in the second it was maintained at the custom product level. These results are presented in Table 6.

Table 6
One-way MANOVAs of Uncertainty across Buyer-Seller Relationships (Controlling for Buying Situation)

Source	Lambda	F-Val	F-Prob
Buy-Sell(Buy Situation Controlled at Standard)	.79141	4.042	.000
Buy-Sell(Buy Situation Controlled at Custom)	.94650	.908	.550

One can see that when the buying situation was controlled at the complex level, there was no difference in the vectors of uncertainty scores across buyer-seller relationships. Only when the buying situation was of the relatively simple variety was there a difference.

To further investigate this, a series of seven one-way ANOVAs was conducted using the uncertainty scores individually as dependent variables and the buyer-seller relationship as the independent variable (controlling for the buying situation at the simple level). These results are presented in Table 7.

Table 7
One-way ANOVAs of Uncertainty across Buyer-Seller Relationships (Standard Buying Situation)

Uncertainty	Buy-Sell Relationship			F-Val	F-Prob
Dimension	Init	Dev	Maint		
Financial	2.28a	2.95b	2.92b	20.063	.000
Performance	2.29a	2.84b	2.85b	13.039	.000
Psychological	2.77a	3.32b	3.14b	8.879	.000
Social	2.52a	3.15b	2.80a	13.814	.000
Physical	2.57a	3.03b	2.99b	5.464	.005
Time	2.30a	2.86b	2.76b	10.131	.000
Opportunity	2.73a	3.11b	2.92ab	3.643	.028

Note: Mean scores that do not share common subscripts differ at the .05 level.

In this situation, significant differences were found along every dimension. In the case of financial, performance, psychological, physical, and time uncertainty, buyers perceived significantly more uncertainty in the initiation stage than they did in the development or maintenance stages. In the case of opportunity uncertainty, they perceived more uncertainty in the initiation stage than in the development stage.

Social uncertainty generated a different pattern in that buyers perceived more uncertainty in both initiation and maintenance stages than they did in the development stage. This unique score pattern could possibly be a remnant of the stigma associated with becoming too attached to a particular vendor.

Better developed buyer-seller relationships clearly reduced uncertainty, but only when the buying situation was maintained at the simple level. In the complex buying situation, the buyer-seller relationship was insignificant in its impact on uncertainty. Consequently, the third proposition can not be supported.

The surprising results may suggest that the tendency to stay with well-known vendors (because of the uncertainty reducing value in doing so) is greater in simple buying situations than in complex ones. "Inertia" may be more of a factor in the former than in the latter.

The findings also suggest that it may be relatively easier for an unknown vendor to sell a complex product than a simple product to a buyer. Even though the overall uncertainty of the episode will be high (due to the nature of the product), the vendor wouldn't have the uncertainty reducing value of the buyer-seller relationship working against them.

Finally, the analysis may suggest that uncertainty emanates from both the vendor and the product, and the relative dominance of these two sources alternates across purchase episodes. When the buying situation is relatively simple, "product uncertainty" is minimal and uncertainty differentiation takes place on the vendor dimension. Conversely, in a complex situation, "product uncertainty" is dominant and it is along this dimension that uncertainty differentiation takes place.

Conclusion

The individual and collective impacts of the buying situation and the buyer-seller relationship on buyer uncertainty were clearly shown in this study. Subsequent research needs to take into consideration both of these factors along with other factors as attempts are made to develop a comprehensive understanding of the organizational purchase phenomenon.

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INNOVATION ORIENTATION AND PERFORMANCE IN INDUSTRIAL MARKETS

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Abstract

The contribution of innovation to corporate survival and growth is an accepted notion in much of management. Typologies of strategic orientations of companies based on innovation have been developed and analyzed. Most of these typologies focus on a single dimension of innovation. This study, using the PIMS database, develops innovative types from multiple dimensions of innovation and examines their performance. Results suggest that these types have different performance levels some of which confirm findings based on other typologies. Major implication in terms of performance is that great care must be taken in accepting innovation's contribution. In particular the type of contribution or outcome needs to be examined carefully.

Introduction

Strategy may be viewed as a consistent pattern of decisions about objectives, and plans for achieving them (Kamm 1987). It therefore describes the direction a firm will follow in its chosen environment and guides the allocation of resources and effort (Day 1984). One main objective of strategy is to enable an organization adapt to its environment (Miles and Snow 1978) and this includes such business-level objectives as the development of specific products and services, entry into new markets and the establishment of major research and development projects (Cohen and Cyert 1973). Innovation is thus a major means of linking these business-level objectives to performance and survival. For this reason considerable importance is attached to understanding the process of innovation, and this is reflected in the wealth of literature on the subject.

There are obviously a variety of ways of looking at innovation. The focus in this study is to consider it in terms of an orientation. Thus, no consideration is given to the role of the individual innovation. Rather, the emphasis is on the innovative posture or orientation of a firm as a form of strategic orientation. Unlike some organization theorists, however, the concern is not with the processes that led to the selection of any particular orientation or its effects on internal structures and processes. The study focuses on the strategic role played by innovation orientation in terms of such issues as resource allocation, functional attributes and performance.

Strategic orientation refers to how an organization uses strategy to adapt to changes and challenges in its environment. The strategy aims at a co-alignment with the environment and has variously been described as strategic choice, strategic thrust, strategic fit and strategic predisposition (Chaffee 1985). This adaptive approach to strategy requires the organization to critically assess its environment and then to match its capabilities to opportunities and risks present in it.

There are a variety of ways by which organizations can adapt to or coalign themselves with their environments. This multiplicity of options has led to the development of generic strategies or strategic archetypes from classifications of how different organizations adapt to their environment. Included in these strategic archetypes are those directly related to organizational innovativeness (Ansoff and Stewart 1967; Freeman 1974; Miles and Snow 1978).

These studies focused on organizational innovativeness as a single variable construct and were based on such factors as timing of market entry, research and development (R & D) expenditures, and rate of change in products and markets. Thus, while each study in its own way contributes to an understanding of the dimensions and importance of innovativeness, there appears to be a lack of consideration of how these different dimensions link together. We cannot, for example, tell how rate of new product introduction, timing of market entry and research and development (R & D) expenditures, when taken together, relate to strategy and performance. Consequently, we do not get a very full picture of the links between innovative orientation, strategy and performance.

This study then aims at identifying different types of innovation orientation and the performance levels associated with them, but with a multivariable conception of innovation. The purposes of the study then are to:

(1) develop a typology of innovation orientation using multiple variables relating to innovativeness; and
(2) compare the performance levels associated with each of the types.

Conceptual Background

One approach to examining the relationship between strategy and performance suggests that assessments of a firm's performance are a function of differences in market conditions and the particular strategy employed (Lenz, 1981). This approach can be linked to the viewpoint of Miller and Friesen (1983) who proposed the existence of certain forms of alignment between attributes of an environment and strategy-making behavior to ensure effective selection of strategies. The framework for this study follows these lines of reasoning and implies that different innovation orientations are different forms of adaptation and are associated with different performance levels. In other words the strategies cannot be equally effective as suggested by Miles and Snow (1978).

Innovation Orientation

The importance of innovation has been indicated by numerous authors (Cooper 1984; Kamm, 1987). An aspect of this importance that is of interest for this study is the strategic role of innovation. In considering this role innovation should be considered in terms of an outlook, posture or orientation of a firm that guides its strategies and resource allocation. This is the notion of innovation orientation.

The concept of innovation orientation has been operationalized in a number of ways. Ansoff and Stewart (1967) for example, developed a typology of strategies based on the timing of entry of a technologically intensive firm into an emerging industry. Freeman (1974) focused on the strategic options available for firms faced with changes in their technological environments and classified them on the basis of innovative efforts and their focus, primarily in terms of R&D expenditures. Miles and Snow (1978) based their notion of innovation orientation on the rate at which organizations changed their products and markets in response to changes in the environment.

These studies identified innovation orientation using single variables such as timing of market entry, rate of new product introductions, or R&D expenditures. Such operationalizations do not fully take into account the possible interactions between different aspects of innovativeness and also do not consider the broad scope of what constitutes innovativeness. This scope relates to products, markets, processes, technology and market entry, as well as the effort behind them. In order to understand better the implications of innovation orientation it is important to include as many of these dimensions as possible.

Thus, the concept of innovation orientation used in this study has three main components:

1. New product introductions in both relative and absolute terms.
2. R & D expenditures (product and process).
3. Order of market entry.

Methodology

Database

The data which provide a basis for analyzing issues dealing with the above objectives come from the Profit Impact of Market Strategy (PIMS) database. Information on the environments, competitive characteristics, strategies and performance of a number of business is provided through a survey undertaken annually by the Strategic Planning Institute. A number of limitations of the database have been noted such as its cross-sectional nature, the lack of goal structures which would emphasize intended strategy, the unrepresentative nature of businesses and problems with the measurement of some variables (Anderson and Paine 1978). Despite these limitations, however, studies based on the database have been considered as having substantive relevance and merit (Phillips, Chang and Buzzell 1983; Ramunajam and Venkatraman 1984).

A number of variables describing innovation orientation and performance were selected for analysis. Selection was based on a review of literature relating to aspects of innovation orientation and performance.

Data Analysis

Data analysis was conducted in two phases, with each related to one of the research objectives. Phase 1 dealt with the issue of developing a typology of innovation orientation. Phase 2 dealt with a comparison of the performance levels associated with the types generated in Phase 1.

Phase 1

The approach to developing innovative types was through the use of cluster analysis with the derived clusters serving as a basis for the identification of the types. A cluster program from the Analysis of Quantitative Data (AQD) package provided by the Strategic Planning Institute was used. The program involves a hierarchical algorithm using the minimum squared error approach and is based on squared Euclidean measures of similarity. The Euclidean measure of proximity is not a critical issue for a hierarchical algorithm, which is sensitive to the presence of outliers, if data is standardized before the clustering routine

(Punj and Stewart 1983). This procedure is followed and it also gives the additional benefit of making comparisons easier since all variables are indicated in the same unit of measurement. The minimum squared method chosen is indicated as producing better results when Euclidean proximity measures are used (Punj and Stewart 1983) and is also better for forming homogeneous groups (Schlaifer 1974).

This clustering procedure was applied to a random sample of 350 industrial businesses drawn from the PIMS database. The clustering was based on the dimensions of innovation orientation discussed earlier, i.e., order of market entry, percent new product introductions, relative percent new product introductions, product R & D expenses, and process R & D expenses.

Two criteria were used to select the appropriate number of clusters for further analysis:

1. The interpretability and practicality of the derived clusters in terms of concepts of innovativeness discussed earlier.
2. The drop in the overall root-mean-square prediction error at different merger levels as shown by a dendrogram of the cluster process.

These criteria have been used in similar research (Galbraith and Schendel 1983; Douglas and Rhee 1989; Miller 1988). The resulting clusters are shown in Table 1.

Phase 2

The second phase of the data analysis examined the performance levels associated with the innovative types developed in the first phase. The statistical approached used in this second phase is ANOVA with cluster membership as the independent variable and the functional

TABLE 1

RESULTS OF CLUSTER ANALYSIS: INNOVATION PROFILES OF INNOVATION ORIENTATION TYPES (STANDARDIZED MEANS)

CLUSTER VARIABLE	PRODUCT INNOVATORS (# 30)	PROCESS INNOVATORS (# 49)	LATE ENTRANT NON-INNOVATORS (#136)	ORIGINAL PIONEERS (# 135)
ORDER OF MARKET ENTRY	-0.139	0.472	-0.966	0.832
RELATIVE % NEW PRODUCTS	2.561	-0.285	-0.164	-0.300
PERCENT NEW PRODUCTS	2.002	0.855	-0.414	-0.338
PRODUCT R & D	0.941	0.882	-0.446	-0.080
PROCESS R & D	0.275	1.561	-0.264	-0.362

TABLE 2
PERFORMANCE LEVELS OF THE INNOVATION ORIENTATION TYPES
(Standardized Mean Scores)

PERFORMANCE	PRODUCT INNOVATORS (#30)	PROCESS INNOVATORS (#49)	LATE ENTRANT NON-INNOVATORS (#136)	ORIGINAL PIONEERS (#135)
Return on Investment	-0.3758*	-0.1159	-0.0255	0.1513*
Cash Flow on Investment	-0.6985***	-0.2429*	0.0119	0.2313***
Cash Flow From Operations	-0.7211***	-0.3992***	0.06323	0.2415***
Market Share	0.0009	-0.1152	-0.1968**	0.1566**
Relative Market Share	0.0643	0.1088	-0.2276***	0.1756**
Market Share Growth	1.0179***	-0.1151	-0.0358	-0.1484*

$p < 0.5$; **$p < 0.01$; ***$p < 0.001$

attributes and performance level variables as dependent. A comparison of a cluster with the overall mean of the sample on a particular dependent variable gives an indication of how the particular cluster differs. The results of this phase of the analysis are shown in Table 2.

Results and Discussion

It should be borne in mind when following the discussion and also in reading the figures in the tables that the numbers represent the mean scores of the different cluster groups relative to the average for the sample as a whole. Cluster comparisons are therefore made in terms of their relative differences from that average. A negative score indicates that a particular cluster is below the average while a positive score shows that it is above the average for all businesses in the sample. With respect to the order of market entry variable though a negative score indicates relative late entry while a positive score describes relatively early entry.

Innovative profiles of clusters

Cluster 1: Product Innovators
This group is characterized by the highest rates of new product introductions in both absolute and relative to competitors terms. Expenditures for product R & D are also highest while those for process R & D are moderately high, second only to the second cluster. This group of businesses entered their markets relatively late. Based on these characteristics they are labelled Product Innovators and constitute about 9% of the sample.

Cluster 2: Process Innovators
Characterized primarily by the highest expenditures on process R & D this group also has moderately high expenditures for product R & D, second only to the Product Innovators. They also have moderately high rates of new product introductions, again second only to Product Innovators. In relative terms, however, they score quite low, only slightly better than the fourth group which is the lowest. This group also entered its markets relatively early. On the basis of these characteristics this group is described as Process Innovators. They comprise 14% of the sample.

Cluster 3: Late Entrant Non-Innovators
This is probably the least innovative group. They entered their markets relatively later then the other groups and have quite low rates of new product introductions as well as low expenditures on both types of R & D. Comprising about 39% of the sample these businesses are described as Late Entrant Non-Innovators

Cluster 4: Original Pioneers
Having pioneered in their markets these businesses are quite non-innovative especially with respect to new product introductions and process R & D. They do, however, have a relatively smaller difference from the more innovative groups in terms of product R & D expenditures. This may suggest some concern with product modifications. Constituting about 38% of the sample this group is labelled Pioneers.

The innovative profiles of the groups suggest similarities to types identified by other researchers. Product Innovators

may be considered a type of the Prospectors of Miles and Snow (1978) in that they change products at a very high rate. Their high rates of product R & D also suggest a similarity to the Offensive type of Freeman (1974). Given their relatively low scores on market entry variable these businesses may be described as Late Entrants of the Ansoff and Stewart (1967) type which are now in the innovative mode.

The Process Innovators are akin to the Defenders of Miles and Snow (1978) and Imitators of Freeman (1974). Their high expenditures on process R & D indicate an emphasis on achieving greater efficiency in production processes and engineering in general. Their relatively early entry into their markets, coupled with relatively high product R & D expenditures also suggest an Imitator strategy, as well as being the Early Follower of Ansoff and Stewart (1967).

Late Entrant Non-Innovators may be compared to the Reactors of Miles and Snow (1978), Dependents of Freeman (1974) and Me-Toos of Ansoff and Stewart (1967). The basic characteristic of these types is their extreme non-innovativeness as evidenced by low R & D expenditures, low rates of new product introductions, and lack of a pioneering attitude.

Original Pioneers, as identified in this study, are characterized primarily by having been the leaders or among the leaders in first developing a type of product in their markets. They are probable most closely related to the Applications Engineering type of Arnsoff and Stewart (1967) and the Traditionalist of Freeman (1974). These types have little or moderate product R & D expenditures probably aimed at product modifications to maintain position in existing markets, given their low rates of new product introductions.

Performance levels of the innovative types

Product Innovators experience very poor financial performance, a finding similar to that of Hambrick (1983) for Prospectors. Such a finding is not surprising given the high costs associated with the strategy. Yet new products and innovation in general are considered or accepted as crucial to the survival of companies. One rationalization for this apparent inconsistency may be that it is a temporary strategy designed to gain entry into a market. This is plausible because the businesses are primarily late entrants into established mature market situations. The other significant performance attribute of this group is the very high rate of market share growth and again this is consistent with Hambrick (1983). For this strategy then attempts to gain market share are successful but result in negative impacts on cash flow and ROI. These latter effects suggest that the strategy cannot be pursued for long periods of time.

Process Innovators also exhibit poor financial performance, especially in terms of cash flow although they are somewhat better than the Product Innovators. Previous research (Freeman 1974; Miles and Snow 1978) indicated that such efficiency-oriented strategies led to good performance but the assumption there would be that the efficiency objective was achieved. The performance of this group reinforces the discussion on Product Innovators that a strategy of extreme innovativeness is a drain on cash flow and profitability. Businesses in this group are not even rewarded by market share gains.

Significant attributes of Late Entrant Non-Innovators are very low levels of market share in both absolute and relative to leading competitors terms. Obviously this kind of low end budget strategy is not designed to gain a strong market share position. Like the Dependents of Freeman (1974) and Reactors of Miles and Snow (1978) these businesses appear to accept their subordinate positions. While not statistically significant they do not appear to fare as badly on the measures of financial performance.

The Original Pioneer group has superior performance on all measures except market share growth for which it has the lowest score. Their superior marketing performance supports previous research by Robinson (1988), Robinson and Fornell (1985), and Urban et al. (1986) which indicated the superior market share associated with pioneering in a market. Such pioneering leads to superior performance because of cost advantages, experience, and serving the more attractive markets first (Kotler 1980; Robinson and Fornell 1985; Spence 1981).

Conclusion

Through the process of cluster analysis a taxonomy of innovative types was developed which provided a basis for assessing differences in the performance levels of businesses with varying innovation orientations. The taxonomy clearly indicates that different groups of businesses focus on different dimensions of innovativeness and this leads to differences in performance. Evidence from this study indicates that innovation may not be all that it is made out to be. In the case of extreme product and process innovativeness the impact on performance does not appear to beneficial, at least in the short term. A logical extension of this study then would be a more careful analysis of the rationale behind the traditional acceptance of innovation's contribution to the survival and growth of firms. Specifically, researchers need to focus

more on the environmental contingencies and time frames associated with traditional assumptions.

A striking finding is the poor performance of Process Innovators. It could be argued that this is a situation where intentions (i.e., process R & D expenditures) do not match outcomes (i.e., production efficiency). This is an area where the criticism of the PIMS database as lacking indicators of intended strategies and goal structures may be pertinent. In essence there may be gaps between intended outcomes and actual outcomes. One could also argue, though, that efficiency effects of process innovativeness do not show up in the short term or over the four year period that the data is averaged for.

The multidimensional nature of innovation used in this study probably makes analysis more difficult. This, though, is a more realistic picture of what goes into innovation. For example, extreme product innovativeness is likely to go hand in hand with high levels of product and process R & D. If the effort that goes into the product innovativeness, that is, R & D is ignored, then the true cost of that innovative orientation would have been underestimated. A contribution then of this study then is how it takes into account three important dimensions of innovativeness, output, input and timing to give a fuller picture of its implications. Such a consideration of the major dimensions of innovativeness is necessary for a better perspective on its implications for businesses.

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CROSS-FUNCTIONAL ISSUES IN SALES AND SALES MANAGEMENT

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In a recent article Wind and West (1991) argued for the reinvention of the corporation. The corporation of the future would be as follows:

1. integrated and cross-functional
2. flatter and empowered
3. vision-directed
4. global
5. networked
6. information technology based
7. customer-driven
8. stakeholder focused
9. value added quality oriented
10. time based
11. innovative and entrepreneurial
12. flexible and adaptive

All of these notions should be familiar to the reader and are in some sense interrelated. This paper will specifically examine the idea of increased cross-functional cooperation, both within the organization itself, and with significant other organizations. It will examine the impact of increased cooperation on the selling and sales management activities of firms seeking to do business with significant other firms. Following a brief introduction to some of the literature on cross-functional cooperation, the paper will discuss many of the possible effects on the selling process. It will conclude with a discussion of one of the newest manifestations of cross-functionality, that of JIT II as practiced by the Bose Corporation.

Cross-functionality

Reinventing the corporation as suggested above requires the organization to change and to embrace change as a way of life. In order to be flexible and adaptive, entrepreneurial, and customer driven, the firm needs to provide a culture as well as an organizational structure to compete in fast changing environments. As Ford and Rudolph (1992) note, matrix organization, in which a vertical hierarchy is overlaid by some form of lateral authority, influence, or communication has been used for over 30 years in organizational design. The notion of the matrix organization is the forerunner of today's concerns with project management and team building as concepts within organizational development.

Cross-functionality can be defined as the degree to which different functional areas within a firm or even outside of the formal structure of the single firm bond together in the pursuit of mutual goals. As an example, a firm with a high degree of cross-functionality would have employees pursuing goals which pertain to the overall organization or the integration of organizational activities. More traditional firms tend to have different functions pursue goals within their own function which may or may not correspond with other functions, or the overall organizational goals. A truly cross-functional firm would also bond with significant other firms such as suppliers, distribution partners or even major customers and pursue mutual goals of interest to all parties. In this instance, the notion of partnering or strategic alliances becomes relevant.

Cross-functionalism has many manifestations and has been examined in a number of contexts. Gordon (1992) provides some insight on the development of work teams, a major organizational device for achieving greater cross-functionalism. He notes that in a recent survey approximately 80% of all organizations over 100 employees have assigned at least some employees to work teams. That figure goes up to almost 90% for firms over 10,000 employees. In an average organization that employs work teams, approximately 50% of all employees are members of at least one team. Some 18% of company employees are members of long term cross-functional teams, while some 30% are assigned to temporary project teams across functions. The 18% number is instructive and is probably a more accurate indicator of actual cross-functional activities within firm. However, the article gives no indication of cross-functionality between firms and it is suspected that this is much lower.

Wheelwright and Kim (1992) examine the impact of cross-functional integration on product and process development. They argue that effective development requires cross-functional integration and this leads to possible competitive advantages in product quality, performance, and low cost.

Monczka and Morgan (1992) examine the notion of cross-functionality as it applies to the purchasing process suggesting that strategic sourcing is, in fact, a cross-functional activity. Along the same lines, Purchasing (1992) reported on an undergraduate major in industrial supply management at Western Michigan University which has a cross-functional orientation. In fact, that program,

housed in a marketing department exposes the student to purchasing, logistics, marketing, product engineering, manufacturing engineering and quality control. An explicit outcome of that program is a graduate who can operate as a purchasing professional, but is comfortable with, and in fact expects to work, in a cross-functional team oriented purchasing operation.

In the marketing area, both Lim and Reid (1992) and Spekman and Johnston (1986) are examples of the relevance of cross-functionalism to marketing. Lim and Reid (1992) take an internal firm perspective and talk about how marketing needs to coordinate with other functions. They develop a nine step plan for implementing a cross-functional perspective. Spekman and Johnston (1986) examine how a cross-functional orientation can lead to helping the selling firm manage the buyer-seller interface. Krapful, Salmond and Spekman (1991) expand on this by examining buyer-seller relationships from a strategic perspective. They discuss the types of relationships and how to strategically manage them. They develop types of relationships, suggest management modes (mapping), and suggest matching of firms with specific interests in having a kind of relationship, and finally how to signal to the significant other about an acceptable match. Using their framework, partners might match in a collaborative management mode to achieve cross-functional integration between the firms. Other types and management modes appear much less likely to achieve cross-functional integration between the partners.

The purchasing literature likewise has both an internal perspective and an external or boundary spanning perspective to cross-functional integration. Whereas Monczka and Morgan (1992) talk mainly about the use of internal cross-functional teams, and its importance in purchasing, many others such as Landeros and Monczka (1989), Elram (1991), and Hutchins (1992) deal with it from a partnering perspective. These authors, among many, deal with some aspect of cross-functionality between firms in a buyer-seller relationship.

Unfortunately there has been little discussion of the impact of cross-functionality on the selling process. As an example, the question needs to be asked, "If a salesperson encounters a firm with a high degree of cross-functionality, does the nature of the selling job and what it takes to be effective change from dealing with firms who have little or no cross-functional integration?" A corollary is the impact of increases in cross-functionality on the sales management function in general?

Another series of questions needs to be asked about the impact of selling to a firm that insists on developing cross-functional relationships between the buying and selling firms. Again what are the effects on sales management activities. These are complex questions and the purpose of this paper is not to answer them, but to suggest some possible answers and at least initiate some inquiry.

Implications for the Selling Function

Understanding and predicting sales performance is at best a difficult proposition. A recent empirical review of the literature by Churchill et al (1985) indicates very little ability to actually predict or explain sales performance.

Plank and Reid (1993) have recently argued that an improvement in both predictability and understanding can be achieved by examining the actual sales behaviors that salespeople do as mediating variables between antecedent conditions such as personality or role issues and overall sales effectiveness. While the Walker Churchill and Ford (1977) model of sales performance is instructive, their later model (1979), which included behaviors, has been little examined.

More recently, the idea of adaptiveness or adaptive behavior as an indicator of sales performance has been explored in some depth. Weitz (1978, 1979, 1981) and colleagues have developed the idea theoretically and recent empirical research by Rhoads (1988) Giacobbe (1991) and Blackshear and Plank (1993) are examples of testing of the concept. The notion of adaptiveness was also central to the model of Plank and Dempsey (1980) who used the Webster and Wind (1972) industrial buyer behavior model. These authors suggested that the successful salesperson needed to understand the IGOE (individual, group, organizational, and environmental) relationships they were facing and then adapt their sales planning and presentations to meet the reality of the situation.

Other more dyadic perspectives have also been taken. The IMP interaction model (Campbell 1985; Metcalf, Frear, and Krishnan (1990) is one dyadic perspective to buyer-seller relations and thus sales performance.

The following discussion of the impact of cross-functionality on sales activities will have two streams. The first stream will be the impact of internal company cross-functionality on selling and sales management. The second stream will take that further to examine the effects of dealing with cross-functionality under the guise of a strategic alliance or partnership relationship.

For purposes of exposition the Plank and Dempsey (1980) model provides a simple focus for examining some of the issues that increased cross-functional cooperation from an

internal perspective, bring to bear on the selling process. Plank and Dempsey (1980), reacting to presentation oriented models of selling, suggested that the industrial salesperson needs to be able to understand the individual, group, organizational, and environmental impacts on buying behavior in order to sell and that selling was not only making a presentation, but obtaining the relevant information in order to do so.

Clearly, the mix of impact of the four factors will change within a buying decision group. The notion of cross-functionality being important is an organizational factor and a part of the organizational culture. Those organizations that value cross-functional relationships as part of their way of doing business, do business in a different way. Recent work in marketing using social decision theory (Reid 1987; Wilson, Lilien, and Wilson 1991) has explored the process of group decision making in organizations. Organizations with high levels of cross-functionality will make decisions differently than do those companies who have low levels of cross-functionality. Organizations with formal teams who meet regularly and have a long term relationships are likely to make decisions differently. From a salesperson's perspective, not only is the decision different, but the means they go about finding out how the decision is made, who to talk to, what is important in terms of features, advantages and benefits to fit the situation, is also likely to be different.
Selling to a formal group, even if you meet with them individually, is likely to be very different from selling to a loosely organized buying group, with each group member having likely more preformed notions of what is acceptable to them and/or their specific formal group.

This not only has implications for the selling function itself, but also general sales management. Questions such as how do we train salespeople to sell in this kind of environment are important. A more fundamental question to ask is are the sales activities sufficiently different so that different kinds of salespeople with different skills and aptitudes may be necessary. This author thinks probably not, but it is a fair question to ask.

Once you start examining extending the notion of cross-functionality across company boundaries as is typically done in strategic alliances or partnerships, the impacts are seemingly more complex. Alliances and partnerships are a relatively new idea, although in concept and in application one can find such relationships dating back over 50 years (Forbes 1992). In buyer-seller relationships, the heart of most of these relationships is a change in the way the buyer handles risk. The traditional method of handling risk was to have several suppliers of important goods and services. Thus the seller was facing an environment where they could get some portion of the business, but not all of it.

By forming an alliance or partnership with a supplier as an example, the buyer agrees to purchase all of the material from one supplier. This has rather important implications for suppliers and buyers. If enough firms in the industry do this then the potential number of clients shrinks with the typical resulting shrinkage in the number of suppliers. Firms today have been driven to reduce, sometimes by over half, their supply base. This has the longer term impact of reducing the supplier base. In addition, often part of the strategic partnership relationship involves members of the selling firm getting involved with intimate operations of the buyer firm, such as product development. Members of the selling team become team members of the buyers product development teams, as an example.

The notion of cross-functionality and strategic partnerships has tremendous implications for selling firms. Facing a share of situation versus facing a single winner take all situation provides a very different selling environment. If we think about from the perspective of switching costs (Bund-Jackson 1984), a share of situation generally means that switching costs are low and the effort of the salesperson and selling company is to somehow increase those switching costs in their favor. Once, however, a partnership is developed, the switching costs are typically very high for both parties.

Even more important is the role of the salesperson. In share of situations, their role is to constantly compete and in most instances the goal is to increase share. Service to the client is always important, but as a means to get more share. In a strategic partnership role, once the business has been gained, service of various types becomes preeminent and there is no more share to be gotten, just held. Just what role does the salesperson play in all of this? The concept of selling centers (Hutt, Johnston, and Ronchetto 1985) provides some insight.

These kinds of issues impact on all facets of the selling process from structuring the sales force, to training, compensation, and as Hutt, Johnston, and Ronchetto (1985) note, including many people from outside the sales function in the selling team. Very little empirical work has been done to examine what works and what does not. In addition, the environment is constantly changing and new wrinkles are being developed constantly. One such new innovation is JIT II which is discussed below.

JIT II

JIT II is the brainchild of Lance Dixon, who is director of purchasing and logistics for Bose Corporation. As discussed in the practitioner literature (McClenahen 1991; Millen-Porter 1991; Chantal-Pike 1991), JIT II involves a unique partnership arrangement where a vendor works at the Bose operation replacing the buyer and salesperson for the both companies. Paid by the vendor, the vendor employee basically does the ordering and servicing for Bose, subject to minimal checks and balances. The representative also often practices concurrent engineering, attending any and all design meetings as an example. Although the people are paid by the vendor they are jointly hired by both Bose and the vendor with the job specifications made up by both parties subject to the nature of the job. Bose has received many benefits including lower costs, fewer purchasing personnel, and reduced inventory. For the supplier it means elimination of the sales effort, once completed, (at least in its tradtional sense) increased volume from a partnership agreement, and reduced costs of invoicing and payment systems.

At this point in time Bose has at least 7 suppliers ranging from parts to transportation services operating in a JIT II format. Other companies have been studying the operation. The concept of JIT II is just another indication of the kind of change organizations are facing as companies attempt to innovate to stay competitive. In this case, cross-functional integration in the product development and manufacturing area is achieved across companies by involving the supplier directly in decisions made by the company.

Conclusion

This paper has not really offered any answers, however it has attempted to point out that the trend toward cross-functional integration, both within and across companies may have substantial impact on the selling function. This impact may require companies to restructure their sales forces, it may to some extent even redefine in some sense the sales job. Certainly companies have to ask themselves how they are going to deal with these trends. In the business-to-business arena, sales costs are the largest part of marketing costs. In order to remain effective and efficient, the sales function must not only deal with cross-functionality, but probably embrace the concept as its own and use it to add value to their company offerings and thus ensure its survival.

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MULTIFUNCTIONAL RELATIONS IN CHANNEL PARTNERSHIPS

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Abstract

There are numerous and varied opportunities to create multifunctional linkages between manufacturers and distributors. Indeed, the very number and variety of links tends to obscure important conceptual and managerial issues. The research reported here proposes a framework for classifying types of linkages by focusing on channel flows. Categories of multifunctional relations are then assessed for a) cost/benefit ratios and b) difficulty of implementation.

Introduction

As the title suggests this paper is concerned with two important topics. First is interorganizational linkages, that is, the relationship between suppliers and distributors in a channel setting. Second is multifunctionalism, the simultaneous interplay of separate (or separable) functions in the pursuit of some identified objective. The first implies representation from at least two organizations; the second implies individuals from multiple functional areas, constituting teams with a greater or lesser degree of formality.

Our purpose is to outline the types and characteristics of activities which may occur at this intersection of dyadic relations and multifunctionalism. Additionally, we assess, in general terms, the benefits, costs and implementation difficulties associated with these activities. This paper is part of a larger research effort and, as such, represents an overview of relevant issues and research areas.

Multifunctional links may be accomplished by a wide variety of activities; hence a structuring framework is necessary to yield systematic evaluations. The channels literature offers a considerable number of possible frameworks, ranging from political economy (Stern and Reve 1980) to transactional cost analyses (Williamson 1975). The discussion below is structured around the notion of channel flows (Bucklin 1970). This framework is selected because the concept of multifunctional teams suggests a work-oriented unit, and flows are the work of the channel. That is, the topic of interest is more closely related to tasks than to strategies, power relations or channel sentiments, although these certainly affect and are affected by the work outcomes.

As identified by Bucklin (1970), relevant flows in the channel of distribution are flows of goods, information, title, funds and negotiation. While these flows are not affected equally or uniformly by multifunctional relationships, all are impacted to some degree. It should also be noted that this discussion is not strictly confined to those relationships which are classified as strategic partnerships. As Anderson and Narus (1991) point out, relationships may fall across a wide range of working relations from pure transaction to pure collaboration. Multifunctional links can and do occur in working relations which are near the transaction end of the continuum. Such links are, however, more numerous and comprehensive toward the collaboration end of the range.

Multifunctional Linkages in Channel Flows

This section identifies, briefly describes and evaluates a number of interfirm linkages and is organized by relevant flow categories.

Flow of Goods

A prime example of multifunctional linkages in the channel flow of goods is the application of just-in-time (JIT) techniques to manufacturer/distributor relations. In manufacturing, this involves close coordination among supplies, production planning, quality control, and logistics. A variety of benefits are believed to accrue to JIT, including inventory reduction, quality improvement, and reduced set up times. Operational costs are high in the beginning, as multiple interrelated programs are implemented (White and Ruch 1990). Degree of difficulty in instituting a JIT arrangement is substantial, requiring a thorough reorientation of management philosophy applied to areas of production, purchasing, design and human resources (Davy et al. 1992).

Specifically related to distribution channels, JIT systems require coordination of customer demand, logistics, and inventory control among manufacturers, distributors, and customers (Arnold and Bernard 1989; Frazier, Spekman and O'Neal 1988). Multifunctional teams in manufacturer-

distributor systems would include personnel from sales, logistics, and inventory management from both levels, as well as from distributor purchasing and research and manufacturer production planning.

New product development is another aspect of the flow of goods which is affected by multi-functional linkages. First, a number of channel partnerships come into being as a result of product innovation. In cases where a manufacturing firm was formed because of an invention, the distributor is frequently the entire marketing function in the partnership (Marti and Smiley 1983). Second, an outcome of manufacturer-distributor relations is a modified product or package. Inventory handling, sales, and customer service personnel at the distributor level are expert sources of design input regarding breakage, perishability, service requirements, and customer usage behaviors. Benefits to both parties are likely to exceed the relatively modest cost of obtaining the inputs and suggestions. Difficulty of implementation is generally low.

Information Flows

Information may offer the richest field for enhanced linkages of a multifunctional nature. Sharing of information is, in general, one of the hallmarks of strategic partnerships. Channel information flows directly involve inventory ordering, demand forecasting, product scheduling, and inventory management functions. The structured vertical arrangement of distribution channels brings telecommunications and direct computer-to-computer links into play as an additional element in improved information flows.

Trade journals and the business press offer numerous examples of automated ordering systems. These typically involve the inventory and purchasing functions of a distributor and the order-entry, inventory and production scheduling functions of a manufacturer. To establish this system, the computing and communication functions of both parties are involved. Benefits include reduced stock-outs, lower ordering costs, and better customer service. Operating costs include telecommunication and computer expense. This linkage is not difficult for most firms, unless the parties are not internally computerized.

A somewhat more advanced example of information linkages is described by Reddy and Marvin (1986). Here the computerized invoice files of a distributor are merged with the market research files of a manufacturer. The invoice files contain detailed information regarding actual sales while the market research files contain information on customer and market potential. The combined information assists the distributor in a number of ways, including sales call planning, and the manufacturer benefits with product line/customer performance information. Benefits include more efficient sales force deployment and more complete competitor intelligence.

Enhanced information sharing is particularly valuable in new product launch because it is often difficult for manufacturers to distinguish pipeline filling from end-customer purchases. Inventory buildups or drawdowns at the distributor level may mask actual market acceptance and result in poor decision making by both production and marketing functions. Also, Millson, Raj and Wileman (1992) note that incomplete information flow from manufacturer to distributor may result in inappropriate inventory and selling decisions by the distributor. The benefit to manufacturers is earlier recognition that launch is off target, hence additional time to react. The benefit to distributors is enhanced customer satisfaction and loyalty. In sum, information is a key flow in channels, and is one asset that can be made more valuable by sharing. Indeed information may be considered a strategic asset whose worth is increased, rather than diminished, with use. Glazer (1991) makes two points which are highly pertinent to the present discussion on multifunctional linkages. First, as firms make more intensive use of information, the marketing function tends to interact more with other functions. Second, as firms become more information intensive, they tend to refer more decisions to groups or teams. Hence, increased emphasis on information flows in channels will call forth increased activity by multifunctional teams.

Funds and Title Flows

Flow of funds and title may be affected in three principal ways: credit terms, joint investments, and pricing. The issues of funds and title are directly impacted by the closeness of the partnership and are thus indirect outcomes of multifunctional linkages.

First, funds and title are affected by credit terms specifically as applied to inventory holding and transportation terms between manufacturers and distributors, as well as distributors and customers. Multifunctional teams could include distributor personnel from purchasing, sales, logistics, billing and accounts payable. Manufacturer personnel could likely include sales, logistics, and billing. Partnerships spanning national boundaries may include special provisions for handling payments and exchanging currencies.

A number of multifunctional arrangements must be supported by specific investments, many of which are jointly incurred (Johanson and Mattsson 1987). These may

include new production or logistical facilities in support of JIT, or computing and telecommunication equipment, among others. Inventories may be jointly held if produced in joint venture operations. If so, title is jointly held.

Third, with regards to pricing, Anderson and Narus (1991) note opportunities to restructure pricing based on closeness of the relationship. Products and associated services may be bundled for pricing purposes to partners and unbundled in other transactional exchanges. The bundled priced is set lower than the total of unbundled prices.

Various services may be desired by individual partners; thus, various functional areas may need to be represented. For example, price including technical assistance for customers would involve sales and engineering personnel from both the manufacturer and distributor.

Negotiation

The connection between negotiation and multifunctionalism is somewhat more complex than in other flows. Negotiations often incorporate functions and outcomes from the goods, information, funds, and title flows. In particular, the desire for multifunctional relations is a cause of increased negotiations between channel partners, while the negotiation of the arrangements requires multifunctional participation of both parties. Example negotiations include pricing, inventory holding, transportation provision and costs, and provision of customer services. Thus, sales, purchasing, logistics, and customer service personnel may form negotiation teams.

The prospective benefits and costs identified for multifunctional relations in the preceding flows cannot be realized without prior negotiation and agreement. The closer the working relationship between two firms, the more need for negotiation (Arndt 1979). Costs include the time spent by negotiating personnel but, more importantly in the long term, include the costs of assuring compliance with the agreement. As Williamson (1975) argues, such governance costs may be substantial to either party and might, in extreme cases, outweigh the potential benefits.

The degree of difficulty of negotiations is inversely related to the degree of trust between the negotiating parties. Anderson and Narus (1990) identify trust as a core concept in partnerships, which is related to interactive outcomes of cooperation and conflict. Reddy and Marvin (1986) observe that it is difficult to gain trust in a partnership without some track record of cooperation. Their advice is to start on a small scale and expand the relationship on the basis of past successes. It is in this light that the next section evaluates the various multifunctional linkages for payoff and difficulty.

Discussion and Conclusions

As noted above, a typical channel dyad would have a significant degree of difficulty attempting to implement a range of multifunctional links at the same time. Even if both parties were highly motivated and inclined toward trust rather than suspicion, the level of change and adaptation required is enormous. If motivations were unequal or trust incomplete, failure would certainly attend a comprehensive attempt to link firms in a short period of time.

Following previous researchers, we advocate a phase-in of linkages (Reddy and Marvin 1986; Frazier 1983). As success breeds success in these matters, it is sensible to start in areas with a good cost/benefit ratio and avoid areas which are difficult to implement. Table 1 represents the rough coordinates of selected multifunctional linking activities by cost/benefit ratios and difficulty of implementation.

It is our opinion that information flows represent an advantageous starting point in forming multifunctional linkages. Specifically, automated ordering links and market information sharing are high-potential candidates. In accord with the notion that information is a strategic asset, more complete and more timely flows are rated in the high benefit category. The assignment of both low cost and low difficulty are predicated on the linking firms already having the requisite equipment and skills for computing and communication. Also, it should be noted that increasing information links can be phased in by product line or other relevant subdivision.

Table 1

Degree of Difficulty	Favorable	Moderate	Poor
Low	Market Info. Computer Ordering.	Product Development. Credit.	
Med	Price Bundling. Successful Negotiation.	New Product Development.	Failed Negotiation.
High	Joint Investments.	JIT	

Cost/benefit ratio

Multifunctional links for credit and product development are also rated as low degree of difficulty, but with a somewhat less favorable cost/benefit ratio. Costs are not high; but benefits are likely to be moderate. Specifically, the types of product development resulting from manufacturer-distributor collaboration are likely to be incremental in nature. An improved product will generally be designed, however it will rarely result in a new major source of competitive advantage. The results will also take some time to produce benefits for the collaborating parties. Development of substantially new products are a more difficult and involving task for partnerships.

Price bundling typically works to cement relationships between channel partners and to reward cooperation and loyalty. Costs associated with bundling for partners and unbundling for transactional accounts are not high; benefits are tangible rewards for partner loyalty and better margins from nonpartners. There are certain implementation difficulties, including the necessity of classifying all customers into two distinct groups and the creation of a highly visible distinction between customer types. Whether price bundling should be attempted earlier or later in forming partnerships depends largely upon the role bundling is expected to play: as an inducement or as a reward to closer linkages.

JIT and joint investments are considered to represent significant challenges in terms of difficulty of implementation. Those linkages require extensive multifunctional cooperation and coordination. The cost/benefit ratio is assessed as moderate for JIT mainly because of the magnitude of costs associated with the start up of JIT activities. Substantial employee training and organizational reorientation is required. Also, the time required to attain smooth JIT interfacing means that benefits may not be obtainable in the near term. We propose that the cost/benefit ratio for joint investments is favorable. Economies of scale may accrue to joint operations in transportation, inventory handling, and computerized information system. For these reasons, JIT and joint investments appear to be problematic as first steps in multifunctional relationships.

Negotiations are positioned in two areas in Table 1 depending on the outcome of negotiations. Negotiation is the flow with greater uncertainty of outcome than other channel flows, hence two positions on the cost/benefit axis. In an unsuccessful negotiation, few benefits are obtained by either party and a high cost in mistrust or mutual dislike is a likely outcome. In a successful negotiation, on the other hand, many types of benefits may be secured and cost is relatively low. It should be noted that degree of difficulty is also variable, being higher with greater threat of opportunism and decreasing as trust increases. Some sort of negotiation must precede agreement on any and all of the multifunctional linkages discussed above, and negotiation is typically required on a periodic basis to strengthen the links. In other words, negotiation is a continuous feature of multifunctional linkages as the relationship shifts from transactional to partnering.

Clearly there are a host of situation-specific factors which will affect the relative positions of the activities depicted here. Also, consideration of strategy or of opportunity may dictate that activities other than the upper left corner be designated high priority. Nevertheless, this chart appears to capture salient aspects of prioritizing the choice among linkages.

Conclusion

The foregoing is an outline which sketches an approach to systematic evaluation of multifunctional linkages in channel relationships. This evaluation procedure has two components: identification of linkage opportunities and assessment of costs, benefits and difficulty of implementation. These two components also represent areas for future research.

With regards to linkage opportunities, future research should culminate in a more comprehensive inventory of possibilities along with examples of working partnerships. With regards to cost/benefit ratios and degree of difficulty, not only are more specific estimates needed, but also a better grasp of the range of values in various applications and situations. Indeed a systematic appraisal of cost/benefit and difficulty variation would constitute an important research objective in its own right.

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MULTIFUNCTIONAL TEAMS IN MARKETING

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Introduction

As competition and the rate of change continues to accelerate in most markets, firms are recognizing the importance of managing the "horizontal" aspects of their businesses. These "horizontal" aspects have to do with the linkages or interfaces between the various functions in a firm as well as those between the firm's different business units. The "horizontal" issues become even more significant given the trend towards flatter organizational structures with fewer managers and fewer management levels.

As a number of individuals (Drucker 1972; Peters 1987; Schonberger 1990) have pointed out, to effectively create value and serve the firm's customers all functions must be dedicated to serving those customers. Yet, functional areas may lose sight of this because of strongly ingrrained functional thinking. Despite the fact that each function is part of the same firm, relationships between the various functions in many firms are often adversarial instead of cooperative, with each functional area fighting to protect its turf (Peters 1987). However, as Kanter (1989) notes, horizontal linkages in terms of activity and communication are replacing traditional vertical ones. In fact, according to Peters (1987, p. 370), evidence suggests that 75 percent of a middle manager's time must be spent on horizontal rather than vertical communication. As firms increasingly require corporate staffs and functional departments to take a more strategic role and to engage in greater cross-functional collaboration, Kanter argues that managers will have to assume roles and operate in ways quite different than they have in the past.

Purpose

One such way that this change is occurring is through the use of cross-functional teams. While teams in various forms and for various purposes have been used over the years by business, it is only recently that firms, as well as many academics, are beginning to recognize the value of teams as a key organizational building block. This paper provides a conceptual overview of the literature on teamwork and teams in organizations and examines the nature, use, role, and involvement of marketing in multifunctional teams. In addition, this paper also identifies critical issues in formation and management of cross-functional teams involving the marketing function.

Research Issues

Most of the existing literature has come primarily from the organizational design and organizational behavior literature. Only limited research in marketing has dealt with the various cross-functional issues facing marketing. This research can be divided into studies that have looked at cross-functional issues from a broad multifunctional perspective (e.g., Hutt and Speh 1984; Lim and Reid 1992; Ruekert and Walker 1987) versus those that have focused more narrowly on relationships between marketing and one or two other functional areas such as R & D or engineering (e.g. Blois 1980; Gupta, Raj, and Wilemon 1986). However, with respect to teams, the extent of marketing's academic research efforts have been limited mainly to product development teams and team selling. There is an urgent need for further research on team issues as they relate to these two but even more so for research on marketing's involvement in other teams within the firm and between the firm and its suppliers and customers. In addition, research from a marketing standpoint is needed to examine such team issues as composition, communication, coordination, and the responsibilities and roles of the various functions involved.

As the pressure for firms to become more market-driven continues to increase, due to more intense domestic and global competition, many firms are recognizing the importance and usefulness of cross-functional teams and cross-functional organizational arrangements in becoming market-driven. With the adoption of a cross-functional team structure, the role of marketing will inevitably change. The critical issue to be addressed is how marketing will respond to this challenge.

INDUSTRIAL BUYERS' PERCEPTIONS OF SALESPEOPLE: AN EXPLORATORY INVESTIGATION

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Introduction

In understanding the process of the buyer-seller interaction, it is important to understand the antecedents as well as the dynamics of the process. For example, the expectations that buyers bring to the sales interaction are important, since these expectations can determine the outcome by setting the tone of the process. A negative impression of one party on the part of the other may hinder further progress in the sale (Spiro, Perreault and Reynolds 1977; Wortruba 1980). Simply put, the prospect's perception of the salesperson is an important determinant of salesperson effectiveness (Webster 1968).

A body of literature exists which supports the supposition that salespeople are not generally held in high esteem (e.g. Ewing 1962; Mason 1965; Webster 1968; Thompson 1972; Wortruba 1980; Weeks and Muehling 1987). Wright (1986) implied that consumers *expect* sellers to use manipulative and persuasive tactics in order to consummate the sale of a product. In this conceptualization, called the "Schemer Schema," customers may pre-judge salespeople based on intuitive theories about what salespeople might typically do to accomplish their sales goals.

This concern over salesperson perceptions is significant. If negative stereotypes do exist, and if they can influence the outcome of the sales process, then it becomes critical to more fully understand the nature of the stereotype in order to avoid being characterized by it. Therefore, it is important to learn buyers' actual perceptions of salespeople to begin assessing the existing stereotype. This research begins that process.

Previous Research in Salesperson Stereotypes

It is said that salespeople are both strongly and precisely stereotyped (Thompson 1972). While much of the research on salesperson stereotypes and salesperson perceptions was performed in the early and mid 1960's, recent writers confirm the continued existence of this salesperson stereotype (Wright 1986; Weeks and Muehling 1987). A stereotype, in this sense, is essentially a consensus of role expectations shared by a large segment of the population (Webster 1968).

A preponderance of evidence exists that salespersons are generally associated with a negative stereotype. This has been the case for many years; Ewing (1962) observed that many students associate a low level of honesty with selling. Results of a survey commissioned by Sales Management (1962) assessing the likelihood of college graduates entering a selling career noted a general negative perception of salespersons by college students. Only six percent of the sample indicated a desire to choose sales as a career; the primary objection was the perception that such a career required one to force people to buy things they did not need. Words typically associated with selling were "selfish," "insincere," "dishonest," and "purposeless."

While the initial work on perceptions of salespersons resulted from investigations of students' career orientations, later work began to examine the actual nature of the consumer salesperson stereotype. This research has found that salespeople are generally perceived as negative (Webster 1968; Thompson 1972; Wortruba 1980; Weeks and Muehling 1987), as having low social prestige (Mason 1965; Adkins and Swan 1981; Weeks and Muehling 1987), and as employing deceptive tactics (Mason 1965; Thompson 1972; Wortruba 1980; Adkins and Swan 1981; Weeks and Muehling 1987; Kiley 1990). Research on the industrial salesperson stereotype has been surprisingly limited. Featherman and Hauser (1978) and Blau and Duncan (1967) found that, overall, manufacturing or nonretail salespeople are above average in prestige ranking. But researchers have not generally investigated whether the negative stereotype pervasive in the consumer market holds in the industrial sector.

Sales Effectiveness

The problems arising from a negative image of salespeople have long been recognized. Executives have been concerned for years about improving the professional character of salespeople (Wortruba 1980). As noted, negative perceptions about the salesperson held by the buyer can hinder the sales process (Spiro, Perreault and Reynolds 1977; Webster 1968). Whether through a general view of sales as a low prestige occupation (Adkins and Swan 1980), or through the subsequent decrease in salesperson self-esteem resulting from this negative view

(Adkins and Swan 1981), the ability to achieve satisfactory sales outcomes seems to be contingent upon the buyers' perceptions of the seller.

The decrease in sales effectiveness connected with buyer preconceptions about salespeople role behavior can also be viewed as a source credibility problem (Levitt 1967; Dholakia and Sternthal 1977). In this view, anything a salesperson says to a buyer has the potential to be discounted if a strong negative stereotype exists. This "source effect" has the potential to drive the sales relationship in directions other than those desired by marketers. In short, salesperson credibility has an impact on sales message acceptance (Sharma 1990).

The Schemer Schema

Considering that a negative stereotype of salespeople can greatly affect sales success, it becomes important to better understand the mental processes of the buyer and how his or her viewpoint is generated and held in memory. One theme that has appeared in the literature is the schemer schema, which posits that customers have intuitive theories about the persuasive attempts made by sellers (Wright 1986). This schema represents a mental structure in the mind of the buyer that results in a view of persuasive marketing attempts as necessarily scheming; they are designed to manipulate the buyer into a purchase.

By virtue of their occupations, salespeople are often regarded as having manipulative intent, and this perception could lead to a certain resistance; customers who have no previous experience with a particular salesperson will respond in terms of the general salesperson stereotype (Webster 1968), or in terms of their schemer schema (Wright 1986). It would appear that salespeople are generally not trusted, and this significantly impacts the effectiveness of the communication process in the buyer/seller dyad (Levitt 1967).

The Research Problem

In recent years, the schemer schema has been applied in research on the effectiveness of sales presentations (Sujan, Bettman and Sujan 1986). However, research to date has not dealt with the schemer schema in the context of industrial buyer/seller interactions. Much of the literature on salesperson stereotypes is dated, and the only application of the concept of a negative stereotype (the schemer schema) has been in the field of consumer goods buying and selling. Therefore, it seems significant to investigate the existence of the schemer schema in an industrial context by determining industrial buyers' perceptions of industrial salespeople and how these perceptions affect the success of the buyer-seller interaction. The first step toward reaching this goal is to determine salient dimensions of salesperson perceptions on the part of professional buyers and purchasing managers in industrial enterprises.

Methodology

Since the purpose of this exploratory study was to determine how industrial buyers perceive the industrial salesperson, the methodology was designed specifically to elicit an number of descriptive thoughts. The goal was to determine which specific adjectives or adverbs buyers might use to characterize sellers that they dealt with. By using techniques designed to maximize the production of descriptive words, a more comprehensive understanding of the nature of salesperson perceptions across a sample of buyers might be gained. A sound base from which to build future studies might also be gained.

The Sample

Forty individuals, representing 40 different companies in a major metropolitan area and nearby towns were interviewed. Respondents consisted of purchasing agents, purchasing managers and materials managers and were selected randomly from Chamber of Commerce Manufacturers' Guides. The companies represented a diverse group of industries including manufacturers of equipment and machinery, component parts, pharmaceutical and health-care products, building supplies, plastics, packaging materials and soft goods.

The Interviews

In-depth interviews were conducted either in-person or by telephone, depending on time and travel constraints. Because of the exploratory nature of the study, it was felt that the combination of the two approaches did not lead to method bias nor severely affect the findings. Respondents were told that the research was university-sponsored, and that the researchers were interested in buyers' perceptions of industrial salespeople.

Question Design Considerations

The primary focus of questioning as well as the initial question dealt with overall image of salespeople. Initial impressions have been found important in salesperson research (Henthorne, LaTour and Williams 1992), and this study focused on these important impressions. Further, Szalay and Deese (1978) and Friedmann and Fox (1989) have indicated that word association techniques are useful in the determination of the contents of subjects' cognitive

schemata. Therefore, it was decided to utilize the association with the word "salespeople" to stimulate the initial response on the general image of sales representatives.

On the initial question, respondents were asked to indicate in one word their overall impression of industrial salespeople. Research on the nature of salesperson stereotypes utilizing the word association technique has indicated that the "first thoughts" of respondents will often be the most salient and most valid, as they represent the most immediate and easily accessed information. Thus, they are most likely to be truly representative of the respondent's actual judgement and opinion (Weeks and Muehling 1987). Therefore, in order to elicit this "first thought" effect, the first question limited responses to a single word response.

However, to gain additional information on "second thought" perceptions, a second question directly assessing perceptions was also asked: "what other individual words would you use to describe salespeople?" In this manner, it was hoped that not only would the valuable information represented in the immediate response of respondents be gained, but also the potentially valuable pool of related descriptors and trait terms elicited in the follow up probe. The ultimate purpose of such a method was to compile a pool of potentially usable salesperson-related adjectives and trait terms which can be analyzed, culled and focused into a proper survey instrument for further investigation in this area. Therefore, probes and follow-ups were utilized extensively. Additional questions were also asked regarding perceived social prestige, relative importance, professionalism, and education level of industrial salespersons. Also, respondents were given the opportunity to speak freely about their perceptions of salespeople.

Analysis and Results

Trait Analysis

A total of 68 different trait terms was elicited from the 40 interviews. Of these 68 terms, 27 different trait terms emerged as first thought responses, while 55 were elicited in the form of second thought responses. Fourteen terms occurred in both classifications.

Three expert judges from the faculty of a major southeastern university were asked to categorize the traits as positive, negative, or neither positive or negative. This simple categorization system was chosen, since the basic purpose of the study was to ascertain whether or not a negative (positive) stereotype existed among buyers. Positive traits were identified as those which indicated a favorable attitude toward salespeople, while negative traits evidenced a generally critical attitude toward salespeople. The third category included items that did not seem to fit in either the positive or negative categories. Judges were asked to assign each term to one of the three categories. Unanimous categorization (3 out of 3 judges agreeing) resulted in the successful categorization of 98.5% of the terms.

In analyzing the traits, order of response was a primary consideration. First thought trait terms were analyzed separately from second thought terms, given previous findings supporting the primary salience and validity of first thought responses in word-association measurement techniques (e.g. Szalay and Deese 1978; Weeks and Muehling 1987). Frequencies of both first and second thoughts in each trait term category are shown in Table 1.

Two points are of importance here. First, because six of the respondents failed to offer an initial response to the first question, no traits are listed for these six subjects. Further probing offered results, but since encouragement was necessary, these subjects' responses were not considered immediate, and therefore not included in the first thought tally. Instead, these eventual responses were incorporated as second thoughts. Secondly, because respondents were encouraged to report as many traits as possible in response to the second question, the number of traits given varied considerably from respondent to respondent. A total of 88 responses was elicited in the second question (as noted earlier, 55 different traits were identified by the question).

Based on these initial results, one can begin to identify a primary stereotype that is not necessarily negative. While more first-thought responses were, indeed, negative (20 of 37, or over 54%), nearly 38% (14 of 37) were positive. For second-thought responses, the gap lessened slightly. Over 43% were positive terms, with more than 52% considered negative. The pervasive negative stereotype suggested by the literature was not strongly evidenced. Instead, there was a fairly even dispersement of positive and negative thoughts. Chi-square analysis indicated that there was no significant difference between the frequency of positive and negative thoughts (X^2=.1620, p=.6873), suggesting that the negative stereotype pervasive in the

TABLE 1

FIRST AND SECOND THOUGHT CATEGORIZATIONS

	1st Thought	2nd Thought
Positive Trait Terms[1]	14 (37.84%)	38 (43.18%)
Negative Trait Terms[2]	20 (54.05%)	46 (52.27%)
Neither Positive or Negative[3]	3 (8.10%)	4 (4.50%)
	Total 37 (100.00%)	88 (100.00%)

1) Business-like, capable, cares about product, competent, concerned, confident, conscientious, cooperative, cordial, courteous, determined, easy to like, energetic, fair, friendly, good, helpful, informative, interested, knowledgeable, motivated, nice, outgoing, patient, pleasant, professional, polished, qualified, subtle, thoughtful.

2) Aggressive, aggravating, complacent, dishonest, fast-talking, flirtatious, hard-headed, high-pressure, inconsiderate, jerks, lazy, nagging, not informed, nuisance, obnoxious, order-takers, overpowering, overzealous, passive, patronizing, persistent, pushy, rude, self-serving, shy, stupid, tricky, uniformed, unknowledgeable, unprepared, unprofessional.

3) Average, eager, important, necessary, necessity, service.

TABLE 2

INDUSTRIAL BUYERS' PERCEPTIONS OF SALESPEOPLE

Perception of Salespersons	Percentage
Education:	
Bachelor's degree	45.00%
Some college	47.50%
No college	5.00%
No answer	2.50%
Professionalism:	
Professional	85.00%
Semi-professional	2.50%
Unprofessional	5.00%
Not sure/no answer	7.59%
Importance:	
Important	97.50%
Unimportant	2.50%

consumer arena does not necessarily hold in the industrial sector.

Prestige, Education and Importance

The question on social prestige was investigated using a scale of 1 to 7 (1=low social prestige, 7=high social prestige). The mean response was 4.26 (s.d = 1.115), indicating a slightly higher than average ranking of social prestige. Consequently, it would appear that industrial buyers do not place salespeople at the low end of the social strata. Rather, they seem to be perceived as middle class workers. This finding is somewhat similar to earlier work which reported above average prestige ratings for manufacturing and nonretail salespeople (Featherman and Hauser 1978; Blau and Duncan 1967). This finding is

further supported by two additional results: a high percentage of buyers perceived salespeople to have at least a college degree, and a large majority perceived sales to be a professional occupation (see Table 2). Forty-five percent believed salespeople were educated at the bachelor's level, with 47.5% percent indicating that industrial salespeople had at least some college. Only two respondents felt that salespeople had no college education, and one respondent had no opinion. Additionally, 85% of respondents viewed sales as a professional occupation, with one respondent viewing sales as "semi-professional." Only two respondents viewed sales as "unprofessional." The others weren't sure, or felt it depended on the specific type of sales.

Finally, on the question of perceived importance, 97.5% of respondents believed that salespeople were important, stressing that salespeople were necessary for providing important information on industry trends and new product availability. This parallels the work of Williams and Seminerio (1985), who found that buyers like "when salespeople know their product." Several respondents indicated that supplier salespeople were necessary to the operation of a manufacturing facility.

Discussion of Results

Contrary to the findings of earlier consumer stereotype research, industrial salespeople may not *always* be viewed in an entirely negative light among industrial buyers. Based on the results of in-depth discussions with industrial manufacturers' purchasing executives, a positive stereotype may exist, with buyers believing salespeople to be friendly, knowledgeable, competent professionals who are fulfilling a facilitating and informing role. Industrial salespeople may be considered a part of the ubiquitous professional middle class.

It is important to note that a negative component still exists; as long as deceptive sales tactics continue to flourish, industrial salespeople will face the potential of negative perceptions. However, business-to-business sales may not, overall, suffer from the same negative reputation (e.g. the schemer schema) inherent in the consumer door-to-door sales market. The findings of Sujan, Bettman and Sujan (1986) are worth remembering here: atypical salespeople are judged in a more positive light. Perhaps industrial sellers are not as "typical" as consumer salespeople?

It is interesting to note that several of the respondents supported their answers by emphasizing that these perceptions and beliefs strictly concerned industrial salespeople, with some respondents indicating a much different opinion for salespeople outside of the industrial sector.

Conclusions

Very little research has been conducted in the area of perceptions of salespeople in the industrial sector. Earlier research on the nature of consumer perceptions of salespeople indicated a pervasive negative stereotype. Findings from the present exploratory study indicate differences between consumer perceptions and industrial buyers' perceptions of industrial salespeople. Interviews with industrial buyers suggest that buyers depend on salespeople as a source of information and that they are often viewed as a vital link between the manufacturer and the supplier. This, coupled with a high perceived level of salesperson education, may also indicate an enhanced reputation for industrial salespeople, as compared to their consumer goods counterparts. In short, the schemer schema, while shown to exist in consumers' attitudes toward salespeople, seems to be less prevalent among industrial buyers.

One can speculate that while industrial companies need salespeople to serve as their link between supply and production, mainstream consumers do not need such input for the purchase of their day-to-day necessities. Though many consumers seek cost savings, they are not continually in the market for an incessant number of products, and thus, are not always receptive to information supplied by consumer goods salespeople. Conversely, the industrial buyer is constantly seeking information on new products and reduced costs to improve the manufacturing process for his/her company, whether an immediate purchase or a future purchase is the motivator. In this sense, industrial buyers are, to a certain extent, always in the market.

Because this study was exploratory in nature and utilized a small sample size, caution is advised in generalizing the results. However, the findings do suggest that a positive stereotype might exist in the industrial market. Consequently, there can be serious implications for the buyer/seller relationship. In short, further research identifying the nature of the industrial salesperson stereotype is critical. Specifically, this study provides a beginning point for scale development, inasmuch as it provides a pool of descriptive items which can be examined through factor analysis in future studies.

(References available upon request from the authors.)

INTERNATIONAL MARKETING

LINKING CORPORATE POLICY AND GLOBAL ADVERTISING STRATEGY: A CROSS-NATIONAL FRAMEWORK FOR COMPETITIVE ADVANTAGE

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Abstract

Although scholarly research has provided some linkage between strategy and international marketing, it has for the most part remained very broad in scope and therefore has provided little specific guidance for the international marketing manager. Until recently very little research has developed propositions linking specific marketing components to an overall international strategy and environment framework. It is the purpose of this paper to offer a conceptual framework that suggests propositions about the most appropriate creative advertising strategies to match generic product policies in triad national companies. Furthermore, we argue that firms which use the appropriate cross-national advertising strategies will perform better than those that use other strategies.

STUDENT ATTITUDES AND THE PROMOTION OF RISK FREE BEHAVIORS IN AIDS PREVENTION EDUCATION: AN EXPLORATORY COMPARATIVE ANALYSIS

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Abstract

A cross-national survey comparing United States students with students in a West African country, Ghana, revealed several similarities and differences in attitudes towards AIDS patients and in the use of risk-free behaviors for AIDS prevention. Based on the study findings, suggestions are offered to guide the transfer of marketing know-how for AIDS prevention programs in Ghana and similar Third World countries.

Introduction

The importance of sociomarketing techniques to foster education about the prevention of AIDS has received increased recognition by experts and policy makers worldwide, reflecting the growing realization that prevention may be the only effective recourse to controlling the spread of this fatal disease. Although no population group is immune to this disease, it is generally believed that young adults face higher risks of contacting the disease than other population groups. Young adults are considered to be at a higher risk because their adolescent lifestyles increase their chances of engaging in high risk behaviors such as casual sex. From a global perspective, the risks of infection are probably higher for young adults in Third World countries because AIDS spreads mainly by homosexual contacts, the form of contacts considered by experts to pose greater risks of infection to the general population. Despite the increased importance of social marketing to AIDS prevention world-wide, there are surprisingly little empirical research on the application of social marketing to the promotion of risk free behaviors among young adults in the United States and certainly fewer studies exist that examine how sociomarketing know-how can be applied to assist AIDS prevention education in Third World countries.

The purpose of our study is to compare the risk-free behaviors of students in the United States and in a typical Third World country, Ghana. More specifically, the study seeks to address the following questions:

1) Are there any significant cross-national differences and similarities between American and Ghanaian students with respect to their attitudes towards AIDS and risk-free behaviors ?

2) To what extent do cross-national differences in attitudes, if any, impact the dominant risk-free behaviors of students?

A comparative analysis of risk-free behaviors involving United States and Ghanaian students is necessary because, increasingly, international and local health care agencies are "exporting" social marketing techniques developed for AIDS prevention in the United States and other industrialized nations to Third World countries. While budgetary constraints preclude a truly global study, recent efforts to start a national AIDS prevention program in response to concerns about the lack of a national program for AIDS prevention in Ghana makes such a study timely and useful. Thus, a comparative analysis of risk free behaviors among United States and Ghanaian students would be useful to international agencies and policy makers in Ghana and similar Third World countries in assessing the extent to which social marketing approaches developed in the U.S might be applicable to a Third World country such as Ghana.

Attitudes and Risk Free Behaviors

Marketing professionals generally believe that "mindsets" or attitudes are important in influencing behavior. Attitudes include three components: beliefs or information about the object; feelings of like/dislike concerning the object and behavioral component of the action; and tendencies or predispositions toward the object. Information on attitudes is often used in marketing programs designed to influence behavior.

In the formulation of marketing strategies for AIDS prevention education, it is important to understand what attitudes exist about AIDS prevention behaviors or risk-free behaviors, such as abstinence from casual sex, use of condoms, avoiding consumption of alcohol when it can impair one's judgment about sexual activity, and maintaining one sexual partner. This concern is especially

true for young adults because of the behaviors associated with adolescent lifestyles. For young adults in Third World countries these risks are probably increased by prevailing social and economic conditions. For example, awareness of AIDS and misinformation about the AIDS disease is reported to be so pervasive in several African countries that experts fear such misinformation could exacerbate the spread of the HIV virus without immediate public educational programs.

From another perspective, young adults, especially students, are probably more likely to be influenced by their peers than other population groups. Thus, modifications in existing attitudes and lifestyles necessary to prevent the spread of AIDS among them may be more effectively pursued through peer groups. This assumption appears to be valid in the United States where voluntary student groups have organized peer group educational activities for AIDS prevention on campuses and communities. At Georgia State University, in Atlanta, a group called Leadership in the Education about AIDS and other Disease (LEAD/GSU) has been organizing such peer group educational programs for the past three years. Similar conditions exist in Africa for such peer educational programs. Hence, students' attitude toward AIDS prevention behaviors and its potential impact on the social marketing program for AIDS prevention are explored in the context of Ghana, where the spread of AIDS is relatively low and prevention programs are in their infancy.

Social Marketing Approaches to AIDS Prevention in Third World Countries

The need for AIDS prevention education in Third World countries is underscored by the reported drastic impact of the disease on their fragile economies. In recognition of the severity of the situation, international and local health agencies have recently begun AIDS prevention education programs modeled after U.S programs. For example, the U.S. Agency for international Development (U.S.A.I.D) in conjunction with other international and Ugandan health Agencies have developed a 50-minute video, "Its not Easy," aimed at correcting misconceptions about the AIDS disease. The promotional theme of this video is based on high fear appeal and there are plans for its distribution in other African countries including Ghana.

The distribution of condoms and educational materials are also appearing in African countries. However, there is no empirical validation of the applicability of these programs. Our study attempts to make a contribution in this area.

Methodology

Sample

A sample of 482 undergraduate business students were drawn from one historically black University, one predominately white university and an urban university in Ghana. The questionnaires were personally administered by the authors in the United States, while they were administered by a colleague in Ghana.

The sample consisted of 221 U.S. students and 261 Ghanaian students. An examination of the two samples showed that they were comparable in many respects. For example, in terms of age, the average age of the U.S subjects was 23.4 years, while that of Ghanaian subjects was 24.7

The questionnaire for the study was developed after an extensive search for comparable studies in the United States in order to establish a credible basis for comparing the survey results with published studies of United States students. The first part of the questionnaire elicited information about personal knowledge and affective reactions towards persons with the AIDS disease or the HIV virus that carries the disease. The second part of the questionnaire asked for information on the use of alternative risk-free behaviors, such as use of condoms, abstinence from casual sex, keeping of monogamous relations, and avoidance of alcohol as it may relate to judgment about sexual activity. The final part of the questionnaire asked for information on individual characteristics, such as gender, sexual activity, etc. It was pretested on a sample of Ghanaian and U.S. students before its use.

Analysis and Findings

The attitude data were first analyzed by means of ANOVA and a post-hoc comparisons to determine cross-national differences and similarities among subjects. Next, the data were subjected to regression analysis for each of the four risk-free behaviors with the attitude variables as the independent variables.

The results of the analysis of the attitude data revealed that United States subjects generally reported a more positive and forgiving attitude towards AIDS patients, and a higher level of personal knowledge about the how the AIDS disease spreads than their counterparts from Ghana. There were few significant differences, however, in risk-free behavior practices between both groups, with the Ghanaian subjects emphasizing abstinence from casual sex and avoidance of alcohol consumption while United States students emphasized the use of condoms. On the other forms of risk-free behaviors both groups reported similar practices. The result also show the use of risk free behaviors were not significantly influenced by attitude

variables. For the use of condom, the results indicate that availability ($p<.05$), religious beliefs ($p<.001$) and the presence of monogamous relations ($p<.03$) were associated with the use of condoms ($p<.05$).

Conclusions and Implications

A major finding of the study is that the Ghanaian students reported much less personal knowledge abut the AIDS disease in more negative attitude towards AIDS patients and HIV infected persons than the United States students. Thus, the study results confirm the concerns about the need for a national AIDS prevention educational programs for college students in Ghana.

The second major finding of the study is that, although both the United States and Ghanaian students share similar set of risk-free behaviors, they differ in their emphasis. The Ghanaians seem to emphasize abstinence from casual sex and avoidance of alcohol consumption, while emphasis on use of condoms appear to be more popular among the Unite States Students. Differences in attitude, however, do not seem to account for this difference in emphasis.

As a whole students' use of condoms seems be better explained by availability, religious beliefs and the nature of their relationships with sex partners than their attitude towards AIDS patients or the HIV virus.

Implications

Given the limitation of our sample and the exploratory nature of our study, we hesitate to generalize on the implication of the study findings. However, these limitations notwithstanding, our study findings suggest the need for a social marketing program to educate Ghanaian students about AIDS. Our results would suggest similarities between United States and Ghanaian students to support the use of United States based social marketing programs in Ghana, and possibly in similar Third World countries. However, caution should be exercised in the emphasis of such application programs.

It would seem that the use of condoms for AIDS prevention should not be stressed unless continued availability can be assured. Similar, respect for religious beliefs and other factors, may suggest different approaches to the promotion of risk-free behaviors among students as a whole.

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NICHE MARKETING REVISITED: THEORETICAL AND PRACTICAL ISSUES

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Abstract

The mass markets of previous decades have splintered into smaller market segments or niches, in which companies could be safer from cut-throat competition and explore new market opportunities. Although part of a positioning strategy, niche marketing may be used as a deliberate marketing strategy to create "safe havens" and business opportunities for many companies. This paper aims to analyze the basic issues, different methods and ways of applying the niche marketing approach.

Introduction

Niche marketing is an approach which has been applied successfully by several companies in the U.S. and around the world. Despite its growing interest and increasing popularity there seems to be limited research on this subject. Although several articles have been published they are predominantly from a practitioners' point of view. From an academic perspective research publications seem to be limited to some general definitions and brief explanations under the general heading of segmentation or positioning in some marketing textbooks. This paper will attempt to bring together both the practical and theoretical aspects of niche marketing , leading to some practical guidelines which may be applied in business when a company chooses to use niche marketing as a strategy.

Niche marketing is nothing new, and has been with us for some time. What is new however, is the increased diversity of markets, advanced technologies enabling new marketing approaches and the deterioration of large companies and their traditional marketing approaches. Niche marketing seems an appropriate method to be employed in this changing environment. It also seems appropriate with the unification of the present markets of the European Community (EC) and future enlargement towards the creation of Euromarketing (Dalgic 1992) as well as further globalization of other markets and an increase in competition among companies active in these markets.

Due to this intensification of competition a shake out may take place in these markets leaving only the strongest. Niche marketing may help companies to remain among the healthy survivors. Companies who want to survive, grow and be profitable may be forced to find markets that have:

- sufficient size, to be potentially profitable,
- no real competitors or have been ignored by other companies,
- growth potential,
- sufficient purchasing ability,
- a need for special treatment,
- customer goodwill,
- opportunities for an entrance company to exercise its superior competence (Leeflang 1990, Kotler 1988).

The above characteristics may be termed as niche characteristics. They could however just as well apply to a market segment. A further analysis of the differences between a segment and a niche, later on in the section entitled;Niche Marketing Versus Segmentation this issue, will be clarified. Another characteristic according to Kotler (1988) is that niches are relatively small. Although niches might be comparatively small at their initial stage, they might grow out to become large markets. According to McKenna (1988); "most large markets evolve from niche markets" .

What is Niche Marketing ?

Target marketing, focused marketing, concentrated marketing and micro-marketing are all used as synonyms for niche marketing. Although they inhibit substantial similarities they do differ to some extent. In this section we will not attempt to explain these differences. We will however attempt to define niche marketing. In order to do this, we have to establish the meaning of the word niche. Webster's Dictionary (1992) describes a niche as:

- a recessed space or hollow; specifically a recess in a wall for a statue or the like,
- any position specifically adapted to its occupant.

According to the Penguin Dictionary of Biology (Crambie, Hickman and Jonson 1978) an ecological niche has the following meanings:

"A particular role or set of relationships of organisms in an eco system which may be filled by different species in different geographical areas".

Some marketers have long advocated the use of ecology or biologic theory in marketing in order to study markets.

A relationship may be drawn between the ecological niche and the market niche (Lambkin and Day 1989). This refers to ecological niche and market niche similarities. In both cases, organisms and organisations; live in their immediate physical environment and continue their life forms. Eco system of biology may serve as an analogy to the macro environment of an organisation which continues its life without being threatened by the environmental forces. Another definition is given by Keegan, Moriarty and Duncan (1992). They define a niche as , " a small market that is not served by competing products ". We consider a niche to be a small market consisting out of an individual customer or a small group of customers with similar characteristics or needs. In niche marketing we can make a distinction between two approaches;

- To see niche marketing as a creative process as Shani and Chalasani (1992) called nichemanship, which is; ".. a process of carving out a small part of the market whose needs are not fulfilled. By specialization along market, customer, product or marketing mix lines, a company can match the unique needs".

- To see niche marketing as the last stage of segmentation, taking place in the following sequential stages: segmentation, targeting, positioning and niching (Keegan, Moriarty and Duncan 1992).

A more general definition of niche marketing is provided by Stanton, Etzel and Walker (1991) as; " a method to meet customer needs through tailoring goods and services for small markets". Kotler (1991) suggests that the key idea in niche marketing is specialisation and he provides the following ways open to specialise:

- end user specialist,
- vertical level specialist,
- customer size specialist,
- geographic specialist,
- product and productline specialists,
- product-feature specialist,
- service specialist,
- channel specialist,
- quality/price specialist,
- job shop specialist.

Kotler's idea of specialisation leads us to the distinctive competencies a firm needs to possess to pursue niche markets. According to Pavitt (1990), "innovating small firms are typically specialised in their technological strategies, concentrating on product innovation in specific produced goods such as machine tools, scientific instruments, specialized chemicals and software. Their key strengths are in their ability to match technology with specific customer requirements". We may conclude that niche marketing could be defined as positioning into small,profitable homogeneous market segments, which have been ignored or neglected by others.
This positioning is based on the integrated marketing concept and the distinctive competencies the company possesses. This definition addresses five essential elements of niche marketing:

- positioning,
- profitability,
- distinctive competencies,
- small market segments,
- adherence to the marketing concept.

Other essential elements not mentioned explicitly in this definition, although included, are long term relationships and company reputation. This brings us to the concept of relationship marketing which can be defined as;" a marketing strategy that seeks to establish an ongoing business relationship with customers whereby the product becomes the total relationship" (Keegan, Moriarty and Duncan 1992). In niche marketing long term, strong relationships are key. In order to develop them, we have to practice relationship marketing. In this approach we try to build a relationship for the mutual benefit of both parties. Through this win/win situation the niche marketer can build a barrier to deter potential competitors and sustain long term profitability as well as customer retention and supplier relationships (Davis and Davidson 1991). According to Copulsky and Wolf (1990) the relationship marketing process incorporates three key elements :

i- "Identifying and building a database of current and potential customers,

ii- Delivering differentiated messages to these people,

iii- Tracking each relationship to monitor the cost of acquiring the consumer and the lifetime value of his purchases".

In relation to the first element, Blattberg and Deighton (1991) stressed the need for a customer data base in order to keep track of customer preferences and increase marketing effectiveness. They claim that, "niches too small

to be served profitably today will become viable as marketing efficiency improves". Without further embarkment on this process it must be clear that the central theme in relationship marketing is that those companies who can relate to and satisfy the customer in the most comprehensive way over a period of time will survive and thrive competitively.

The other concept of major importance to niche marketers is reputation. In niche marketing you do not only market your product, you also market your business; reputation is key. According to McKenna (1988), "niche marketing depends on word-of-mouth references and infrastructure development, a broadening of people in related industries whose opinions are crucial to the product's success". We may conclude that a solid reputation in the minds of the customers is essential to be successful as a niche marketer.

Evolvement of Niche Marketing

-General Observations

Since the eighties mass marketing companies are under enormous pressure from niche marketers, who are nibbling away at the major markets of these mass marketing companies. These niche marketers are steadily eating up parts of formerly traditional mass markets. New demands, changing customer motivations and further individualisation both business to business as well as business to consumer marketing, have created a multitude of diverse and fractured markets in contrast to what once was a simple mass market. This fragmented market is also termed "multiple option society" by Naisbitt in his book Megatrends is mainly technology driven. These new markets need a new non-traditional approach of marketing from these larger companies in order to keep and expand their presently held markets. According to Sheth (1992) changing macro-economic forces are reshaping marketing strategies. Consequently doing faster and better may not be sufficient and, instead, businesses will be required to develop new marketing concepts and practices (Thurow, 1985 and Rosow, 1988).

American and European mass markets have been broken down into fragmented markets due to several causes since the second world war; these causes as identified by Stanton and Linneman (1991), McKenna (1988), Rapp and Collins (1990) which have led to this profusion of smaller markets are :

- single parent households, double income no kids, Yuppies,
- working women, overweight people, tall people,
- increasing minority markets,
- technological advances ,
- evolvement of consumer countervailing power,
- changing demographics and lifestyles,
- the demands on personal time,
- overcrowding by too many product, services and stores,
- the weakening of the magic in network television advertising,
- the decline in brand loyalty,
- advertising clutter, overkill and waste,
- feeding the discount promotion monster.

To fulfil the demands of these newly emerging markets requires, amongst others, flexibility and differentiation. In todays fragmented market we have to tailor our products and marketing mix to suit the different tastes of the customers. In niche marketing we focus on the customer and on profit; niche marketers specialise in serving marketing niches. Instead of pursuing the whole market (mass marketing) or large segments of the market, these firms target segments within segments or, for the sake of simplicity, niches. This is true for small firms in particular due to their often limited resources but also applies to business units within large firms.

-Underlining Trends

Smaller companies do not have a monopoly on niches but they may be better focused and equipped to serve these specific markets, in contrast to their big brothers. There are smaller, nimbler companies which are termed as the "Third Force" by Ferguson and Morris (1992) who have gained ground from the bigger US and Japanese computer giants. Larger companies like; IBM and Philips, may also make use of niches but they, like most large companies, will have to change their ways of doing business and adapt their organisations, to enable them to take hold of niches as a part of repositioning. IBM, in it's quest for profit and IT leadership has announced further decentralisation and formation of strategic business units to enable them to carry out this process. The Chief Executive Officer (CEO) of IBM, John Akers (1991) said; "we expect that more independent businesses will make better investment decisions because they are more agile, faster and closer to the markets they choose to serve". Whether the proposed actions of CEO John Akers will prove successful remains to be seen. We may conclude that large mass marketing firms will need to adapt to this change from uniform markets to individualised/fractured markets.

Niche marketing for larger firms amongst others could mean:

- new opportunities for healthy profits in smaller markets,

- a new approach to the market; from uniform to fractured,
- smaller profits per market, but more markets,
- an easier defence against potential competitors, by creating safe havens,
- structural internal organisational adaptation; due to inherent cultural changes this could be a lengthy process. (See McKenna 1988, Stanton, Etzel and Walker 1991 and Keegan, Moriarty and Duncan 1992).

An example of a large company pursuing and organised for a niche strategy is Johnson & Johnson (health care). It consists of 170 affiliates (business units). Most of which pursue niche markets. In a 75 percent response survey conducted by Stanton and Linneman, among all Fortune 1000 firms, the results showed that almost all of these firms have in some way started to serve smaller segments. This indicates that most of these companies are abandoning traditional mass marketing techniques and are steadily switching over towards niche marketing. Niche marketing may, from the viewpoint of larger firms be seen as, selling big by selling small; meaning selling to as many niches as possible. Where each niche is a small market aggregating into a large one. As Kotler (1988) observed, companies usually have niche markets at the initial stages of their product life cycles as in the case of Body Shop. This company has leapt from a local niche marketer to an international niche player. It has found a niche market in cosmetics; as reported by Simkin and Dibb (1991); " based on a clear understanding of certain customers' needs and a very distinctive positioning strategy, Body Shop is one of the world's fastest growing and most successful niche retailers ".

Customer focus helps companies to respond faster to the dynamic changes in customer demand but it takes more than customer focus to become a successful niche marketer as McKenna (1988) points out ; "an essential requirement for approaching markets however is for the company to focus on the fragmented, ever evolving customer base as if it were part of the own organisation". According to Piercy (1991); " being market-led is simply about putting the customer at the top of the management agenda and list of priorities. It is about focus on the customer, specialising in the customer, finding better ways of doing what the customer values, educating and informing the customer, commitment and care. This is the only thing we have that genuinely makes sense of our business operations".

In order to create a better positioning for your product in the marketplace, you have to differentiate your product from your competitor. Your product should not be just a 'thing' but should include added values like service, good customer perception, quality, word of mouth references, company image etc. In niche marketing you do not only market your product, you also market your business.
In niche marketing you focus on the customer and you provide the customer with the products they need , now and in the future. If you can involve your customer in the design of your product you're half way there. Some IT companies such as Apple have done this. They worked with the customer to create new applications and as a result found new niche markets, like desktop publishing.

Niche Marketing and Mass Marketing- A Comparison-

In marketing management we have moved through several stages; from the production concept to the selling concept and from the selling concept to the marketing concept. The marketing concept holds, "that the key to achieving organisational goals consists in determining the needs and wants of target markets and delivering the desired satisfaction more effectively and efficiently than your competitors" Kotler (1991). It may be argued that this concept is better suited towards niche marketing than mass marketing to approach present day fragmented markets, because niche marketing functions closer to the customer. Niche marketing has recently become a trend as a result of severe competition in mature markets. Standardised mass production and trying to sell the same product to masses of consumers seems to become less profitable, in these mature markets.

Most managers were taught that mass production and mass marketing were the most advanced and efficient methods to produce and market products. In today's competitive world there still is a strategic debate about the desirability of mass marketing focusing on standardisation or niche marketing focusing on customization or tailored products for niche markets. Although there can be benefits to mass marketing it may be argued that niche marketing is more equipped to deal with the existing and rapid changing mini markets. As stated by Kotler (1991), mass marketers, "engage in the mass production, mass distribution and mass promotion of one product for all buyers". Verhage, Dahringer and Cundiff (1989) state three arguments in favour of the mass marketing strategy:

i- Economic-advantages can be gained through-economies of scale and experience curve effects,
ii- Strategic- price mechanism,
iii- Competitive- if the economic and strategic argument has been achieved,the company can be competitive, through offering the 'best' product at the 'best' possible price.

In mass marketing- undifferentiated marketing- a company attempts to reach buyers with one product with one

marketing mix. In the product oriented era of marketing the so called mass marketing strategy was pursued by many companies. Like : Coca Cola , which was only available in one flavour and in one type of bottle. In this era entrepreneurs perceived the market as one aggregated market, predominantly focusing on the common needs of customers instead of focusing on differences. Mass marketing does still take place, especially with 'undifferentiated' products such as; sugar, salt and milk. But even these are becoming more and more differentiated. According to Porter (1980); by making units of a fairly standardised product and underpricing everybody else you can attain overall cost leadership; this is one of the most important arguments in favour of undifferentiated marketing.

The difference between mass marketing and niche marketing starts with the difference in an organisation. A mass marketing company can be characterised as centrally led and bureaucratic which may lead to inflexibility. Niche marketing organisations can be characterised as decentralised through several strategic business units, if the company is large. If the company is small it can be characterised as concentrated on one part of the market. This entails anticipative decision making which constitutes responsiveness and flexibility. In the Third Wave Toffler (1980) talks about the de-massified society as a part of the corporate identity crisis. He states that: "the mass society, for which the corporation was designed, is beginning to de-massify. Not merely information, production and family life, but also the market place and the labour market as well are beginning to break into smaller, more varied pieces". The beginning of de-massification has created a plethora of smaller markets that demand continuous change and customizaton.

An economic argument in favour of niche marketing in contrast to mass marketing is 'greater profits'. "Why is niching profitable? The main reason is that the market nicher ends up knowing the target customer so well that he meets their needs better than other firms that are casually selling to this niche. As a result, the nicher can charge a substantial markup over costs because of the added value. The nicher achieves high margin, whereas the mass marketer achieves high volume " (Kotler 1991).

Many companies (Campbell, Coca Cola, IBM) are changing or have adapted to what once was viewed as a single mass market towards a multitude of smaller markets. Some are still focusing on too large segments but this differs depending if the product is classified as a commodity or a specialty product. "A firm which chooses to serve commodity markets must be the low-cost producer. Specialty manufacturers are less concerned with cost; they must isolate the customer segments they wish to serve and develop a superior product at an appropriate price" (Jain 1985). But even when a product can be classified as a commodity a niche marketing approach can be successful. Like Diet coke or Nutrasweet; Diet Coke only contributes to 4 percent of Coca Cola's sales volume and might be considered as a narrow segment or niche, but it contributes 27 percent to its entire profit. If adhered to the marketing concept it is clear that a marketing strategy must be adjusted or tailored to the markets.

Niche marketing is only for small firms, is often argued. It is interesting to know however that most of the successful medium sized companies today are niche marketers. There are some observed common factors among them. These firms;

- offering high value,
- charging premium price,
- creating new experience curves and shaping a strong corporate culture and vision (Clifford and Kavanagh 1985). According to Tom Peters (1990), the backbone of German economic success are the small and mid-sized companies, almost all of which are niche marketers.

We can draw a parallel between mass marketing and niche marketing in that niche marketers often evolve to mass marketers and mass marketers return to be niche marketers. It seems that most companies start out as niche marketers and evolve into mass markets as their product life cycles tend to develop into maturity and once maturity is reached and saturation starts, innovation occurs and former mass markets tend to return to niche markets. A similarity which can be notified between a large niche marketer and a mass marketer is that they both control a large market, the niche marketer however controls aggregated/linked niche markets in contrast to just one large market.

A combination of mass marketing and a niche marketing approach can be found in mass customization. Technological advances such as CAD/CAM have made it possible for marketers to customize their offerings for individual buyers. Some car manufacturers for example like BMW and GM offer their customers, within some constraints, the opportunity to custom design their own cars.

Choosing a Niche Strategy

When do we choose a niche strategy ? According to Leeflang (1990); a niche strategy is selected under the following conditions:

- If the company concerned has the ability to approach a niche in a specific manner, better and different than others,

- If the company is able to create a considerable amount of goodwill in a relatively short period, in order to deter potential competitors.

Jain (1985) labelled a niche strategy as a single marketing strategy which can be employed for the following reasons:

- to avoid competition/confrontation with larger competitors and to devote its energy to serving a unique market,
- to enhance on an opportunity,
- survival.

Another reason for choosing a niche strategy in our opinion is its use as a competitive strategy. It can be used to penetrate into large markets or existing segments as was done with ORAL-B, the kid-toothpaste, a weak spot was discovered in the toothpaste market and was subsequently filled by positioning ORAL-B as a niche brand.

Leeflang and Beukenkamp (1981) warn against choosing for a niche strategy and the inherent the danger of hyper segmentation-selecting niches which are too small-. This can however be countered through contra segmentation -joining several niches-. Leeflang (1990) suggests the following points to be taken into account when identifying and selecting a niche strategy:

- realising sustainable competitive advantages with products in specific markets,
- advantages must be based on long term interests of customers,
- long term interests can be transformed to long lasting relationships with different interestgroups,
- taking initiatives to sustain relationships.

Niche Marketing versus Segmentation

It is often assumed that segmentation is a starting point in niche marketing. Shani and Chalasani (1992) however hold a different view. According to them; "segmentation is the process of breaking a large market into smaller pieces. It is a top-down approach". They further state that;" niche marketing is a bottom-up approach where, the marketer starts from the needs of a few customers and gradually builds up a larger customer base"; in contrast to breaking up a market into smaller markets. In this respect niche marketing could be termed as inverted or reversed segmentation. This view opposes the view that perceives niche marketing as the last or final stage of segmentation. Other differences are :

- A niche is usually smaller in size compared to the size of a segment,
- A niche focuses on individuals, in a segment we focus on a so called homogenous group,
- A niche is specific in fulfilling a specific need in contrast to a segment where the emphasis is on being a manageable part of the market.

Making Niche Marketing Strategy Work

-General Examples

The slogan 'getting bigger by acting smaller' is one which can literally be applied to niche marketing. Large companies as well as medium sized and smaller ones see the opportunities niche marketing can provide. Consider the following examples :

- American Express by introducing several credit cards applicable to as many niches e.g.gold card for heavy users, corporate card for business users, platinum card for heavy users. This has been followed by other credit card companies like Visa and Access cards.

- Niche publishers e.g. Woman's Day, Better Homes and Gardens.

- BMC software inc. jumped in a niche due to the fact that IBM created a niche through producing mainframe software that is not as efficient as it could be. BMC filled that gap with packages that let mainframes run faster, pack more data on disks and make data bases easier to update. This saves the customer money and helped BMC into a niche of US $ 90 million. Their earnings jumped by 50 percent to 1 million in one year.

-European Cases

Due to its fragmented character, old traditions, regional differences and different nationalities, Europe could be considered a breeding ground for niche marketers. Although used by several marketers, mass marketing as opposed to niche marketing is not really suited for Western Europe. National identity, regional characteristics and traditional business practices have played and do play important roles in the formation of successful Euro-niches. These traditions and fragmented national markets may hinder the application of large scale mass marketing techniques in the Euromarket and postpone the realization of expected benefits of Europe 1992 measures. However, Euro niches may be found across

the Euromarket which may give the same economic benefits of mass marketing as well as the benefits of niche marketing. Consider the following examples:

- The Dutch banking organisation 'Direktbank' uncovered a niche through focusing on a market other bankers ignored. They concentrated on the growing market for loans to the elderly which seems to be a very profitable market. The same method may be used in other European countries with high proportion of elderly citizens.

- Albert Heijn-This Dutch supermarket chain introduced some special programs enabling customers to select their own amounts of products (e.g. vegetables, dogfood, sweets). This is profitable for Albert Heijn and also profitable for the customer; it makes the products more accessible to the customers,resulting in increased usage and decreases costs for the retailer. The same method has been followed by other European food retailers.

- Bavaria - Bavaria, a Dutch beer producer, identified the need for an alcohol free beer, due to the fact that people want to drink and drive; a key buying motive for purchasing beer without alcohol; which proves to be a very successful niche market in the Netherlands. The same method has been applied in other European markets. During the Gulf War Bavaria exported a million cans of alcohol free beer, for the consumption of the Allied Forces, to the Gulf per week. Another key buying motive and a very successful temporary niche market.

- Pickwick -Pickwick is a Dutch tea brand of 'Douwe Egberts'a Dutch 'food' producer. They found a niche market through producing tea with specific tastes like strawberry, melon, orange, lemon etc; with which they found new niches.

- Linx Printing Technologies -Is a U.K. based company in the industrial inkjet market with an estimated value of US$ 50 million. Industrial inkjet printing is a niche technology which has so far escaped the attention of the big battalions of the electronics industry.

- The German firm Scharman- producer of machine tools-found an opportunity by solving an intractable problem for Caterpillar Inc.'s Belgian operations. This job convinced the company to focus on high quality products that they could sell at a premium. This strategy has been an undeniable success. In 1970 Scharmann sold 150 machine tools for 18 million USD. In 1987 sales totalled 100 million US Dollars.

- SAP, a German software firm specialises in writing special software for IBM mainframes and as a result uncovered a very profitable niche market. Today SAP is one of the most successful software houses in Europe.

Practical Guidelines

Under this heading we would like to elucidate some practical guidelines in order to use a niche marketing strategy. There are many pitfalls to niche marketing; Linneman and Stanton (1991) have provided us with some guidelines to develop and successfully implement niche marketing strategies to fit any company. We have used these guidelines and others to provide you with some practical advises in the format of a step-by-step approach when attempting to use the niche marketing strategy. They by no means represent the ultimate and only method to make niche marketing strategy work. It however provides you with a general check-list to prepare company and market-specific action plans.

Step 1- Thy know yourself: Know your company's strengths and weaknesses. Its uniqueness, competitive advantages, distinctive competencies, regional and traditional characteristics.

Step 2- Thy know your customer: In order to be able to focus on specific niches or customers groups you need exact information on these customers, unlike mass marketing techniques we can not make assumptions on specific customers groups.
You have to know your market and you have to know them better than your competitor. Companies will have to transform to knowledge companies. The key to getting to know your customer is through talking and listening to them. This can be the key to success because it will provide you with the necessary information to focus on. Proposed actions : Gain economies of knowledge in contrast to economies of scale, meaning : know your customer and his business; become a specialist in the business of your customers; know your competitor ; know your environment. Customise your product to suit the customers business do not suit it to suit your own business ; focus on the customer, be market driven.

Step 3- Thy know your competitors: Find out why customers don't use your products but the competitors and find out how you can turn them to purchase your products. This might be accomplished through repositioning your marketing offer or through other means.

Step 4- Develop a continuous information system: Present day data base techniques can provide us with a comparatively cheap efficient marketing data base. This

data base can register prospects and customer traits. The types of data needed however is the data needed for decision making. In niche marketing we do not need sales volume but profit figures. This is due to the fact that in niche marketing we make a decision based on profit and not on sales volume. Sales volume is of secondary importance in relation to profit. Customer data bases need to be linked to other marketing information systems and business intelligence systems in order to be responsive to the market place.

Step 5- Apply differentiation: Be differentiated-not just different- offer significant benefits to your customers, determine what your customers really values and appeal to these values better than anyone else. Position by differentiation and segmentation. Position on your own strengths and weaknesses of others. Develop a clear product image for each niche. Communicate how your product can fulfil key buying motives.

Step 6- Do not compete in the same market segments with yourself: Avoid competing with your own products in the same market segments. Do not let your 'soldiers' fight with each other, so; be specific in defining your own niches.

Step 7- Create your safe haven: Create high entry barriers through building a close relationship with your customers; patents; copyrights; alliances , and relationship marketing. Cover all the bases to deter potential competitors.

Step 8- Don't spread too thin: If you have discovered one niche you'll probably end up finding more but make sure that you do not exceed your limit by expanding all your abilities and resources; stay flexible.

Step 9- Develop a corporate marketing strategy: You can not develop your niche markets as stand alone markets but you have to link them to gain synergies and create efficiency. For large firms this could entail linking the SBU's niche marketing plans into a corporate plan.

Step 10- Be alert, be in control: It is essential to constantly watch for shifts in the market place and to respond to them.

Step 11- Don't be static, look for new pastures continuously: In addition to the methods already mentioned for locating niches hereafter some additional approaches to locate niche markets. Those who use your competitors products- find out why they don't use yours and find out how you can turn them to your products, this might be done through repositioning your marketing offer or through other means. Those who don't use your or your competitors products, find out why.

Possibility of creating new products/services for an old category meaning new solutions to old problems. Conglomerate diversification (be careful, watch your resources). Look at emerging markets.

Step 12- Minimize your dependence upon any one customer or product: Don't put all the eggs in the same basket. Try to increase your alternatives. Create more room for manoeuvre.

Conclusions and Recommendations

Niche marketing could be viewed as the implementation of the marketing concept, in that niche marketing requires a customer/market-oriented organisation which is customer focused, competitor oriented, responsive, anticipative and functions in balance with the market and their internal resources; in pursuit of long term relationships and sustainable profitability. Niche marketing is a continuous process.

In this study, we tried to cover all the important studies, to reach a general understanding and develop basic guidelines for the application of niche marketing strategies. This is only a start. Further empirical and theoretical research is needed to determine the success factors of this strategy.

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THE EFFECTS OF CULTURAL DIFFERENCES ON ACCOUNTABILITY AND INFORMATION SEARCH AND ANALYSIS BY INDUSTRIAL BUYERS

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Introduction

Firms targeting business-to-business markets must possess an in-depth knowledge of the organizational buying process and the countless factors which influence it. Recently, the role accountability plays in organizational decision making has received attention in the literature. Accountability, defined as the pressure to justify one's decisions to others (Tetlock 1983), is a fact of organizational life and should be incorporated into the research on organizational decision making. However, while these studies shed light on the real-world context in which organizational decision makers decide, they generally ignore the influence of culture on accountability and its outcomes. This presents a serious limitation since the specific norms, values, and ideologies to which people are held accountable differ dramatically from one culture to the next. Therefore, what is considered a socially acceptable justification for behavior likely depends on social contextual factors such as "cultural system" ideologies (Tetlock 1985, p. 308). In other words, the steps decision makers take to cope with demands for accountability may depend upon cultural factors.

To date, only one study has compared the effects of accountability in different cultures. Earley (1989) examined the effect of individualism versus collectivism (Hofstede 1983) on social loafing, under conditions of high or low accountability. For individualistic managers (United States), social loafing decreased with increased accountability. Collectivists (Peoples Republic of China) did not exhibit social loafing at high or low levels of accountability. On the whole, the influence of culture on organizational decision making is not a frequently researched issue. In one of the few studies in this area, Tse et al. (1988) found that home country culture influences international marketing decisions.

Increasingly, U.S. organizations are crossing national boundaries in search of market share and profits. An important question facing international marketers is whether marketing strategies and practices can be standardized across markets (e.g., Levitt 1983), or whether they must be adapted on a country by country basis (e.g., Douglas and Wind 1987). It has been argued that too many opportunities have been missed because American business people were not aware of the importance of cultural differences (Reeder 1987). Because is it likely that cultural differences influence business functions (Sekely and Collins 1988), business decisions, and the success of the operation (Maddox and Short 1988), consideration of cross-cultural differences is important to those involved in international business.

Purpose

This paper examines whether or not, and in what way, culture influences accountability and its outcomes. Specifically, do cultural differences impact perceived accountability and the extent to which accountable decision makers collect and analyze information in an attempt to justify their purchase decisions to others? Two prominent schools of thought on the concepts and dimensions that differentiate cultures form the basis for research propositions. Hall and Hall (1990) present several key concepts useful for understanding cultural differences in organizational decision making. For the current study, research propositions are based on comparisons of high-context versus low-context societies, and monochronic versus polychronic societies. A second important schema for understanding cultural similarities and differences emerges from Hofstede's (1983) work. Three of Hofstede's cultural dimensions appear relevant to the current study: individualism versus collectivism, power distance, and uncertainty avoidance.

Research Propositions

Cultural Factors Affecting Accountability

The context of communication (Hall and Hall 1990) is expected to influence the extent to which organizational buyers feel accountable to others. In high-context cultures, decision makers have an open flow of information with superiors and others in their organization which increases the transparency of their decisions. Further, buyers are expected to have a personal relationship with their counterpart in the selling firm embodying much background information. Both the personal relationship

between buyer and seller and the free flow of information within the firm are likely to increase perceived accountability. Therefore, we expect perceived accountability to be higher in high-context societies than low-context societies.

Similarly, monochronic versus polychronic time orientations are expected to influence the extent to which buyers feel they will be called upon to justify their decisions to others. Unlike those in monochronic cultures, polychronic people ". . . have many close friends and good clients with whom they spend a great deal of time. The close links to clients or customers creates a reciprocal feeling of obligation and a mutual desire to be helpful," (Hall and Hall 1990:p.16). This suggests that perceived accountability will be higher for decision makers in polychronic societies than monochronic societies. The fact that polychronic people are generally high-context (Hall and Hall 1990, p. 15) provides additional support for this proposition.

PR 1: Perceived accountability is higher in countries with high-context cultures than low-context cultures.

PR 2: Perceived accountability is higher in countries with polychronic cultures than monochronic cultures.

Hofstede's (1983) individualism versus collectivism dimension pertains to the degree of integration in a society. Individualistic societies are loosely integrated and individuals primarily are concerned with their own self-interest. As a result, we would not expect decision makers to feel a strong sense of accountability to others. Conversely, in collectivistic societies, ties between individuals are very tight and individuals are expected to look after the interests of their in-groups. Therefore, it seems likely that decision makers in collectivistic societies will feel a strong need to justify their actions to others in their in-group.

PR 3: Perceived accountability is higher in countries with collectivistic cultures than individualistic cultures.

Although the converse is not true, essentially all collectivist countries are high power distance societies. Within organizations, this high power distance manifests itself as the degree of autocratic management and the centralization of authority. When the power distance between decision makers and upper management is great, we expect decision makers to exhibit increased concern for justifying their decisions.

PR 4: Perceived accountability is higher within organizations in high power distance countries than low power distance countries.

Another factor differentiating cultures is uncertainty avoidance (Hofstede 1983). Clearly, organizational decision makers frequently face uncertain situations. For example, buyers may be uncertain about organizational goals, product alternatives, or purchase decision outcomes. However, whether or not they expect to be held accountable for their purchase decisions probably depends upon their society's attitude about uncertainty. In societies which accept the fact that the future is unknowable and little can be done about it, individual decision makers may not be concerned about justifying their decisions. However, in strong uncertainty avoidance cultures, individuals try to "beat" the future. In this instance, we expect decision makers to exhibit concern about future evaluations and take steps to justify their decisions.

PR 5: Perceived accountability is higher in countries with high uncertainty avoidance cultures than low uncertainty avoidance cultures.

Culture Affects Information Search and Analysis

In a single-country study, Doney (1991, 1992) found that accountable decision makers in organizations justify their behavior by extensively searching for information and/or by carefully evaluating the information they collect. However, in certain societies, these responses to demands for accountability may prove ineffective. For example, in high-context cultures most information is shared by the parties and only a small part is encoded and transmitted. According to Hall and Hall (1990), "high-context people are apt to become impatient and irritated when low-context people insist on giving them information they don't need" (p.9). This suggests that performing an exhaustive information search in high-context societies does not provide an effective justification for a decision maker's behavior. On the contrary, it may signal a lack of focus on the relevant issues. Conversely, low-context people require detailed background information prior to making a decision. This suggests that accountable decision makers in low-context societies will collect and disseminate copious quantities of information.

PR 6: The effect of accountability on information search will be greater in countries with low-context cultures than high-context cultures.

If, as predicted, decision makers in high-context societies restrict their information search to the most relevant issues, they may engage in extensive information analysis. That

is, they will thoroughly analyze the information they collect in order to make it worthy of transmission. In contrast, although decision makers in low-context cultures are expected to gather more information, their information analysis is probably less extensive. Since much of the information they collect provides a "background" for the decision, thorough information analysis may not be required.

PR 7: The effect of accountability on information analysis will be greater in countries with high-context cultures than low-context cultures.

According to Hofstede (1983), members of weak uncertainty avoidance cultures accept uncertainty and take risks easily (p. 315). People who believe that little can be done to reduce uncertainty may be satisfied with limited information search and analysis. In strong uncertainty avoidance cultures, on the other hand, people attempt to decrease uncertainty. This may cause decision makers in strong uncertainty avoidance cultures to engage in a more extensive information search and a deeper analysis of the information gathered.

PR 8: The effect of accountability on information search and analysis will be greater in countries with high uncertainty avoidance cultures than low uncertainty avoidance cultures.

In an organizational context, Earley (1989) found that social loafing occurred when subjects held individualistic beliefs, but not collectivist beliefs. This finding suggests that decision makers in collectivist cultures are more likely than their individualist counterparts to exert the effort required to perform extensive information search and analysis. However, Early also found that the loafing effect for individualists was eliminated under conditions of high accountability. In individualistic cultures, therefore, we expect information search and analysis to be greater under conditions of high accountability as compared to low accountability.

PR 9: Information search and analysis will be higher in collectivistic countries than in individualistic countries under conditions of low individual accountability.

PR10: There will be no difference in information search and analysis between individualistic and collectivistic countries under conditions of high individual accountability.

Conclusion

The question of whether a firm should standardize or adapt its marketing strategy in different countries is an important one. Accountability and its outcomes (e.g., information search and analysis) are important strategy considerations for industrial marketers seeking to answer this question. For instance, if organizational buyers have different perceptions of their accountability in different countries, then marketers need to understand this culturally based difference. Their marketing approach can then be adapted to their customer's culturally driven situation. Further, if the extent of information search and analysis is culturally dependent as we expect, then cultural differences have important implications for industrial marketing communication strategy. For instance, in high-context cultures, buyers may require more information about the sales person than the product. In low-context cultures, specific factual information about the product may have more value to buyers.

Recently, single-country studies have contributed to our understanding of the role accountability plays in organizational decision making. However, we argue that it is not possible to generalize the findings to "theory" without considering the effects of culture in a cross-national sense. Based on the literature, we developed testable propositions pertaining to the effects of cultural differences on accountability and its outcomes in an organizational decision making context. While these propositions have face validity, they nonetheless require careful empirical verification before they can contribute to theory building. If the propositions developed here are not supported, then Levitt's (1983) argument for globalization would receive some support. On the other hand, if these propositions are supported and differences are found, then Levitt's premise would be falsified and Douglas and Wind (1987), among others, would receive support for their counter arguments.

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AMERICAN TOURIST TRAVEL EXPECTATIONS: FOREIGN VERSUS DOMESTIC TOURS

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Abstract

American travellers showed significant expectation differences between domestic tours and foreign tours. Foreign travelers expected tours to be more adventurous, more comfortable, and a better value. Both groups expected the tour to be the best way to see as much as possible with congenial atmosphere. Additionally, both groups expected comfort, scenery, and experienced tour guides. Results are discussed in terms of product planning.

Introduction

The major issues addressed in tourism research have been related to promotion instead of other components of marketing (Ryan 1991). While promotion is important, other issues need to be considered in creating a quality product. Tour designers must understand consumer wants, needs, and perceptions to determine benefits sought to create tour experiences that meet these needs (Calantone and Mazanec 1991). To measure the consistency needed between needs and services delivered, important cognitive issues which must be investigated include attitude, image, perceived risk, and cognitive dissonance.

Expectations and Satisfaction

Although consumer satisfaction is the fundamental element of the marketing concept and serves as a surrogate measure of service quality, satisfaction is difficult to measure and to track (Hunt 1976). But by modifying some portion of the product mix, increased consumer satisfaction will increase the probability of business success. Hunt (1976) considered consumer satisfaction to be an evaluation that the experience with the product was at least as good as the expectation of the experience. Satisfaction may occur when evaluation of the product is consistent with prior beliefs (cf. Engel, Blackwell, and Miniard 1990). The central idea in these concepts is that prior impressions of some sort must be met. To meet these prior impressions, travel companies must understand what consumers expect in a tour experience.

One approach to satisfaction determination is the expectancy-disconfirmation model (cf. Erevelles and Lockshin 1991). This notion suggests that consumers have certain beliefs about the attributes that a product has or should have (cf. Oliver 1980). Post-purchase evaluations compare the perceived results of experience with the prior expectations to determine if expectations have been met or not met. Unmet expectations may cause dissatisfaction and may decrease the consumer's inclination to repurchase (cf. Tse and Wilton 1988). Additionally, expectations provide an anchor point for further processing of satisfaction determination which may operate independently of "disconfirmation effects" (Oliver and DeSarbo 1988).

Expectations of travelers serve as a basis for tour planning and design. Escorted tours participants likely bring with them high expectations because the tour purchase, accompanied by its high cost, is a decision of great consequence (Mancini 1990). However, little work has been done to examine reactions from a large number of various tours to verify this assumption. Prior literature exploring tour expectations have concentrated on a specific applications (cf. Lopez 1980; Quiroga 1990). To enhance the ability of managers to act on generalized information, multiple tours from a wide variety of suppliers should be studied.

Additionally, no prior work has investigated the expectation differences among consumers of foreign versus domestic travel. The issues for tour designers may be approached from two directions: (1) differences in expectations among various nationalities, and (2) differences in expectations within a given nationality for tours within their own country versus those in a foreign country. Ziff-Levine (1990) suggested that global marketing (similarities in product offerings across boundaries) should be used as a basis for tour development with local refinement to provide the best use of individual assets in meeting expectations. This approach inherently suggests that each tourist nationality or ethnic origin may require a different segmentation approach. Whereas operators may offer certain services for domestic tourists, foreigners may require other services. Also, operators can offer different features to its own nationality tourists depending on whether they travel domestically or internationally. This latter issue of foreign versus domestic expectations within a specific nationality is the focus of this study which investigated expectations of a national sample of escorted tour participants. The specific objectives of the study were (1) to determine the prominence of selected expectations for an upcoming tour

experience, (2) to determine differences in these expectations according to characteristics of the sample.

METHOD

Sample and Data Collection

Expectations and participant characteristics were compared for American tourists preparing to go on either domestic or foreign tours. Sampling used a two-stage method. A random sample of travel agencies and tour operators from throughout the United States were asked to distribute five questionnaires to clients who had already booked motorcoach tours or who had inquired about tours within the last four months. Control of the distribution in the first stage was adequate, but distribution from the agencies and operators could not be controlled. This lack of control was considered an acceptable trade-off for access to a national sample.

Responses were obtained from 136 tour participants representing a questionnaire response rate of 25 percent. The majority of respondents were female (61%), and most participants were between the ages of 61 and 75 years of age (66.2%). Education level was relatively high with 37 percent indicating a high school education and 27 percent indicating a bachelor's degree. These demographics compare favorably with previous motorcoach tour studies (cf. Quiroga 1990). Respondents reported they were experienced group travelers with 23.5 percent participating in 1 to 3 previous escorted tours and 70.6 percent having been on four or more escorted tours. Thirty-seven respondents (27.2%) indicated they had visited their tour destination before. Tours occurred in every month of the year except January. Respondent residences, identified through zip codes, indicated 29 states in the U.S. ensuring a "national" response.

Instrument

Printed questionnaires requested respondents to provide information on their prior tour experiences and current tour plans. Respondents also completed Likert scales (+2 = strongly agree, -2 = strongly disagree) rating tour expectations as well as tour purchase issues. Attributes and issues used in tour ratings have shown little consistency (cf. Um and Crompton 1991; Ross and Iso-Ahola 1991; Yau and Chan 1990; Chon 1990). However, this situational approach may be appropriate given the variability of travel experiences available. Expectation issues used in this study were derived from an exploratory study of American motorcoach tour participants (Persia and Duke 1991). Respondents in the exploratory study were asked open-ended questions concerning their expectations about an upcoming tour. Content analysis of the responses revealed seven categories of expectations: itinerary, personal, nature/scenery, service, social, safety, and weather.

One criticism of any study is the lack of managerial application. In research, one approach is to use a "reasonability check" from industry professionals. In this study, the seven expectation categories were used to generate 32 statements which reflected expectations about general escorted touring. Research professionals from national tourism trade associations were asked to critique the statements for appropriateness. The final list of 20 statements was used to determine the existence of the expectations of this sample of tour participants.

RESULTS

Expectations of All Tourists

Tourists indicated high expectations in several areas regardless of tour destination (Table 1). Nineteen of the 20 statements received a mean score within the "strongly agree" to "agree" range, indicating that these were appropriate expectations for tour participants. The highest ranked expectations showed that participants expected tours to be the best way to visit the destination, see important sights, and see scenery. The next group of expectations continue itinerary issues including seeing as much as possible and stopping long enough to see what is important. Additionally, comfort and safety ranked highly. In the medium ranking level, participants wanted good value for their tour expenses and a friendly atmosphere along with competent escorts and the ability to do things they could not do alone.

Foreign versus Domestic Expectations

Although foreign travelers indicated higher expectations in virtually all areas (Table 2), few of the differences were statistically significant at conventional levels (significance = .05 or less). On foreign tours, travelers have higher expectations of comfort. Additionally, these travelers expect to "get their money's worth." However, some of the expectations were marginal (significance = .06 to .10) with this sample and might be considered as potential issues in future studies. Foreign tours were expected to be marginally more educational and more adventurous. Also, foreign tourists marginally expected stops to be long enough to see those things which are important.

Limitations

Although selection of travel agents and tour operators was controlled to enhance the probability of a national sample, there is a potential that their actions in distributing the questionnaires may have biased the study. Instructions

were detailed and callbacks to agents and operators indicated that their procedures were consistent with the spirit of obtaining a representative sample. Non-experienced tour travelers were not represented in this sample as a result of the lack of control in the procedure. However, the relative stability of expectations across experience levels might indicate that even inexperienced travelers would have similar responses. Additional research can verify this idea.

Nonresponse bias may be a significant influence if differences between those who chose to return questionnaires and those who did not are different. However, because of the method used in selecting potential tour participants for the study, it is not possible to probe for nonresponse bias. Client mailing lists are proprietary information and will not be released by tour operators nor travel agencies.

This study focused on motorcoach tours. Other tour travel modes might have different response patterns. Additionally, short tours (lasting for a single day or less), might generate less involvement and expectation by the participants. These issues must be considered in additional studies.

Although expectations are critical to success, continued work is needed to relate post-trip satisfactions to understand how participants view their experience after the tour is completed.

Discussion

Almost all of the expectation statements showed a high or moderate level of agreement indicating that the statements used were expected aspects of tours. Some differences were noted between foreign and domestic travelers. The highest level of agreement among the expectations were related to tour itinerary and service issues. Participants expected to be shown the most important scenery and attractions that they perhaps might not be able to see as well on their own. Social issues were not rated high among other statements, but participants expected to be safe with an enjoyable atmosphere and an escort who made the trip enjoyable. This ranking of expectations underscores the reliance of prospective tour participants on the expert knowledge of the tour operator and escorts. The responsibility, therefore, lies with the tour operator to carefully select those elements which are deemed the most important aspects of the destination by their clientele. Tradeoffs must be developed between the need to spend an adequate amount of time at each location to enhance the scenery and educational experience with the need to see as much as possible so that the traveller will feel that the tour is a good value for the money. The expectation of participants of definite procedures and structure support previous findings concerning purchase characteristics of prospective tour participants (Persia and Duke 1991). Selectivity in the design of the tour and length of visiting time during the execution of the tour should be considered as critical elements by both tour planners and tour directors.

Foreign traveller expectations are generally higher, but are significant in only a few areas. Structure, comfort, safety, and value are dominant themes which require tour planner and manager attention. Also, planners must attempt to deal with the conflicting issues of providing enough time for each attraction versus seeing as much as possible. Increasing use of special interest tours which attract tourists interested in similar attractions may help to meet these conflicting needs.

Conclusions

From experience, travel professionals are aware that travelers want to see important attractions and scenery while feeling comfortable about their trip. The empirical results of this study confirm these operator experiences. This study indicates that, for this nationwide group of respondents, the destination of the tour and the attractions associated with that area claim the highest ratings among the list of expectations appraised. By acknowledging and addressing differences between American tourist expectations for foreign tours and domestic tours, tour providers can begin the process of satisfying the traveller. Structure, safety, and comfort in providing access to appropriate locations and information are critical for foreign tour success.

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TABLE 1
OVERALL EXPECTATION MEANS

Statement: "I expect ..."	Mean	(s.d.)
1. to see important attractions	1.64	(.58)
2. scenery to be enjoyable	1.63	(.61)
3. stops will belong enough	1.55	(.62)
4. to be comfortable.	1.52	(.56)
5. to see as much as possible.	1.51	(.69)
6. to be safe.	1.49	(.67)
7. tour to be best way to visit.	1.47	(.83)
8. to get my money's worth.	1.46	(.63)
9. friendly group atmosphere.	1.40	(.59)
10. to do what I couldn't do alone.	1.37	(.88)
11. escort to make tour enjoyable	1.36	(.73)
12. not to make major decisions	1.25	(.85)
13. to relax.	1.08	(.91)
14. tour to be adventurous.	1.06	(.85)
15. to make friends.	1.03	(.72)
16. not to be alone often.	.97	(.88)
17. tour to be educational.	.97	(.84)
18. to never be bored.	.92	(1.0)
19. to be treated special.	.90	(1.0)
20. to learn about myself.	.30	(.90)

NOTE: Statements have been shortened to conserve space. Results are represented on a five-point scale from strongly agree (+2) to strongly disagree (-2).

TABLE 2
EXPECTATION LEVELS OF TOUR PARTICIPANTS BY DESTINATION

Statement: "I expect ..."	Expectation Means [1] Domestic	Foreign	t-Value	prob.
1. tour to be educational.	.83	1.10	1.77	.08
2. to see as much as possible.	1.48	1.51	0.19	.85
3. to do what I couldn't do alone.	1.32	1.45	0.87	.39
4. tour to be adventurous.	.94	1.17	1.63	.10
5. friendly group atmosphere.	1.42	1.42	0.03	.97
6. to be treated special.	.84	.94	0.61	.54
7. never to be bored.	.87	1.07	1.20	.23
8. escort to make tour enjoyable.	1.24	1.41	1.29	.20
9. to learn about myself.	.29	.31	0.13	.90
10. stops will be long enough.	1.42	1.61	1.71	.09
11. not to be alone often.	1.02	.92	0.66	.51
12. to be safe.	1.47	1.61	1.25	.21
13. to be comfortable.	1.43	1.63	2.10	.04
14. to get my money's worth.	1.40	1.62	2.14	.03
15. to relax.	1.10	1.07	0.16	.87
16. to see important attractions.	1.60	1.72	1.24	.22
17. tour to be best way to visit.	1.50	1.48	0.15	.88
18. to make friends.	1.06	1.06	0.07	.95
19. scenery to be enjoyable.	1.55	1.70	1.48	.14
20. not to make major decision.	1.23	1.21	0.10	.92

NOTE: Statements have been shortened to conserve space.
[1] 2 = Strongly Agree; -2 = Strongly Disagree.

A COMPARISON OF AMERICAN AND NEW ZEALAND CONSUMER PERCEPTIONS OF SEX ROLE PORTRAYALS IN ADVERTISING

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Abstract

This study attempts to extend the research on perceptions of role portrayals in advertising to a cross-cultural setting. The instrument used was identical to the one used by Lundstrom and Sciglimpaglia in their landmark 1977 Journal of Marketing study. The respondents used were business students from comparable universities in the United States, Japan, Thailand, Australia and New Zealand. Often representing the vanguard of social views on controversial issues, this student sample showed differing views on perceptions of role portrayals, company image of the sponsor, and purchase intention of products advertised by "offensive role portrayals." The findings were that business students in New Zealand, the United States and Australia were the most critical followed in turn by the Japanese and then by the Thais, and that for each country, females were more critical than males. The respondents were basically apathetic about company image and purchase intentions with the Thais being somewhat more critical than the others. Future research suggestions are provided.

Introduction

Consumer perception of sex role portrayals in advertising has been an active area of research since the early 1970s. Courtney and Lockeretz (1971) conducted one of the first studies, which found not only a wide discrepancy in gender role depictions, but also a heavy use in American advertising of female stereotyping (i.e., the woman belonging in the home, women not being in a position to make important decisions, women being viewed by men as "sex objects," and women being seen as dependent upon men). The existence of this type of role portrayal of women raised the ire of feminist activists who claim American advertisers violate the dignity of women. One activist, Jean Kilbourne, particularly criticized advertisers in her 1987 Cambridge Documentaries film, "Still Killing Us Softly," of: 1) glorifying violence against women; 2) fostering the unrealistic inferiority of anything less than "ideal beauty;" 3) presenting women as inferior to men; and 4) emphasizing women as "sex objects." A more recent study found that American advertisers continue to portray women in a distorted way in society (Ferrante et. al. 1988).

Since the 1970s, many studies have focused on this sensitive issue from a U.S. domestic perspective (Ford, LaTour and Lundstrom 1991; LaTour 1990; Loudon and Della Bitta 1988; Soley and Reid 1988; Soley and Kurzbard 1986; Lysonski 1983; D'Amico and Hummel 1980; Kerin, Lundstrom and Sciglimpaglia 1980; Schneider and Schneider 1979; and Weiss 1972), and it would appear that while there have been some perceived improvements in the way American advertisers handle female role portrayals, some female stereotyping continues into the 1990s.

There have been far fewer studies, however, which focused on extending this research into cross-cultural settings. In 1974 Ortner posited that the subordination of females to males is a universal cultural expectation. It would be reasonable to expect, then, that many of these same role portrayal disparities exist and would be manifested in other cultures. The small number of studies published appear to support this premise.

One of the first international studies focusing on this area was conducted in Australia (Edgar and McPhee 1974). The authors concluded there was indeed a disparity between role portrayals of men and women in Australia with women rarely ever being portrayed as working, single, older, divorced, or unhappy with their roles. A similar examination of role portrayals (Marquez) was completed in 1975 in the Philippines. This study involved a content analysis, and concluded there was a disparity of work-related role portrayals with women rarely being depicted in a career setting. Lysonski, in a 1985 study, examined the trends in British advertisements in 15 magazines between 1976/77 and 1982/83, and found that while there were fewer portrayals of women as dependent upon men, there

were also fewer portrayals of women as career-oriented or in non-traditional roles.

The first major cross-cultural comparative study was that of Gilly (1988) who compared sex role portrayals in television advertisements in the United States, Australia and Mexico. The author found that Australian ads actually minimized sex role differences more significantly than either American or Mexican ads. The indication from this study was that role portrayals of women, at least in Australia, had improved since the study in 1974 by Edgar and McPhee. Another cross-cultural comparative study, conducted by Lysonski and Pollay (1990), compared the perceptions of business students in the United States, Denmark, Greece and New Zealand regarding their sex role portrayals and possible purchase intentions. The study found that: 1) students in Denmark, Greece and New Zealand were more critical of their role portrayals than Americans and 2) very few males or females in any of the countries were supportive of actual product/company boycotts.

Little research involving this issue has focused on Asia. It is surprising that very few published studies have focused on Japanese consumer perceptions of their sex role portrayals. The women's movement in Japan is becoming increasingly important, and Japan recently has seen the development of over 50 women's groups and lobbying organizations. For benchmark purposes, there have been several content analyses of Japanese advertising which have been done (Hong et al 1987; Mueller 1987; Madden et al 1986); however, these have focused on the use of emotion and ad content rather than sex role portrayals. Only one limited study was found which directly focused on this issue (Gandhi and Bodkin 1992) which found no disparities in depiction of males and females in Japan. With the recent sexual harassment issues in Japan, the time is right for an examination of Japanese perceptions of their role portrayals.

Research into sex role portrayals in Thailand has been even less developed than has been seen in Japan. Studies have shown that Thailand has recently experienced some liberation in the societal views of younger women (Gardiner et al 1974; Gardiner 1968); however, women still appear to be traditional in their orientation to roles in society as compared with the United States, New Zealand or Australia (Komin 1990). Thailand would be expected to be the most traditional of the societies involved in this study, and, therefore, would be expected to be the least critical of the sample populations involved. From the previous literature review, one would expect that the New Zealand sample respondents would be highly critical of sex role portrayals in advertising. This should also be reflected in the responses of the American sample due to the recent Clarence Thomas-Anita Hill harassment controversy and the 25th anniversary of the National Organization for Women (NOW). Australian sample respondents might, on the other hand, be somewhat less critical of their role portrayals due to the equality of depictions noted by Gilley (1988). Japanese respondents would be expected to be less critical than Australian respondents, and finally the Thais would be expected to be the least critical of their role portrayals.

Purpose of the Study

The purpose of this study was to compare the general perceptions of American, New Zealand, Australian, Thai and Japanese business students regarding their role portrayals in advertising, their images of the companies advertising, and their purchase intentions. Business students were considered appropriate subjects for this type of research since they represent both actual product consumers and future business managers. It was also believed that business students were appropriate since they were reporting their general perceptions in the role of observers and commentators on their respective cultures. Williams and Best (1990) found that university students are particularly appropriate for this task in that they are "likely to have given more attention and thought to the question of the different statuses and roles occupied by women and men and to have become sensitized to the psychological traits attributed to men and women in their respective countries" (p. 53). The specific research questions examined were:

1) Are there significant differences across samples regarding perceptions of sex role portrayals, company image and purchase intentions?

2) Are there significant differences across female respondent populations regarding perceptions of sex role portrayals, company image and purchase intentions?

3) Are there significant differences across male respondent populations regarding perceptions of sex role portrayals, company image and purchase intentions?

4) Are there significant differences between males and females within each of the populations with regard to perceptions of sex role portrayals, company image and purchase intention?

Methodology

The survey instrument used to collect the data was entitled, "Advertising Opinion Survey," and included the same attitudinal statements included in the instrument used by Lundstrom and Sciglimpaglia in their seminal 1977 study. These attitudinal statements were developed to assess: perceived advertising role portrayals, company image of firms using such practices, and intention to buy products sold by such firms. The statements were measured on a seven-point Likert-type scaling with the anchors being 1-Strongly Disagree and 7-Strongly Agree.

The sample respondents were business students at comparable large, urban, commuter universities in major metropolitan areas of the Mid-Atlantic region of the United States, the Thai capital city of Bangkok, the northern island of New Zealand, the province of South Australia and the Kitakyushu area of Japan. The instrument was translated into Thai and Japanese and then back-translated into English and compared for accuracy. The survey was completed by 100 students from each of the different locations with male/female proportions, respectively, as follows: 46/54 for the American sample, 44/56 for the New Zealand sample, 48/52 for the Australian sample, 40/60 for the Thai sample, and 50/50 for the Japanese sample. The mean age and the age range for the New Zealand sample was 24.07 years and 17 to 55 years of age while the Australian, U.S., Japanese and Thai samples were in order as follows: 23.53 years and 18 to 38 years of age, 27.84 years and 20 to 45 years, 18.86 years and 18 to 32 years, and 24.98 years and 19 to 52 years.

Results

The first research question addressed whether there were any significant differences across the three samples regarding role portrayal perceptions, company image and purchase intentions. Analysis of Variance (ANOVA) was used for analytical purposes, and significant differences were found for 16 of the 17 attitudinal statements. The only non-significant statement (item 6) dealt with ads suggesting that women make important decisions, and all respondent populations were basically neutral on this issue. In terms of role portrayals in particular, New Zealand, American and Australian respondents were found to be more critical than their Japanese counterparts who were in turn found to be more critical than the Thais. When examining company image and purchase intention, the results were similar although less revealing. While there were significant differences found for all five statement means, the respondent means ranged only from 3.27 to 4.83 (4.00 is the scalar midpoint which equates to neutrality with regard to the statement involved). One would expect that if the level of criticism is high relative to role portrayals, those respondents would also have negative perceptions of company image and purchase intentions. This was not found here, and these somewhat apathetic results support the findings of Lysonski and Pollay (1990). What is particularly interesting here, however, is that a greater level of criticism was found for the Thais in terms of purchase intention and company image than for the other 4 respondent populations involved. This is somewhat surprising since they were the least critical population with regard to sex role portrayals.

The second research question dealt with a comparison of the perceptions of the different female populations regarding their role portrayals, company image and purchase intentions. In this case significant differences were found for 14 of the 17 statements. As before, item 6 showed up as non-significant, but the two additional items which were not significant were those connected with company image (items 13 and 14). These items reflected basic neutrality on the part of the repondent populations. Again, the New Zealand, American and Australian respondents were found to be more critical than the Japanese who were found to be more critical than the Thais regarding sex role portrayals, and the same results as before were found when examining company image and purchase intention and the negativity of the Thai respondents.

The third research question dealt with the perceptions of males regarding their role portrayals across the five populations involved. Significant differences were found for 13 of the 17 statements. As before, the items relating to company image (items 13 and 14) were not found to be significant and reflected a basic apathy with regard to the statements involved. Item 6 was found in this case to be significant for the male respondents. Item 2 ("Ads suggest that women are fundamentally dependent upon men") was not found to be significant with the five respondent populations in basic slight disagreement with the statement. The other non-significant item was item 17 ("Even though I may see an ad which is offensive for one product, I would continue to purchase other products that I have been using from the same company"). In this case, all sample respondent populations were in basic slight agreement with the statement. As before, the New Zealand, American and Australian male respondents were found to be more critical of sex role portrayals and the Thais were found to be somewhat more critical of purchase intentions than the other 4 respondent populations.

The last research question examined the differences in perceptions between males and females for each of the five populations. There were more significant differences found between the perceptions of men and women in the American sample than there were for any of the other

samples (9 items). The American sample was followed in turn by the New Zealand sample (7 items), the Japanese sample (6 items), and finally the Thai and Australian samples (3 items each). The similarity of responses would have been expected for the Thais whose culture is more traditional than the others involved in the study, but the similarity of Australian responses was somewhat surprising.

Conclusions

While it is difficult to generalize from these types of samples, it would appear that the responding New Zealand, American and Australian female business students are very critical of their role portrayals in advertising. Somewhat less critical were the Japanese and Thai female students. These same basic results were also found for the male business students. There was greater heterogeneity of perception across American, New Zealand and Japanese men and women than was found for the Australians and Thais. Male and female New Zealand, American and Australian business students were more in agreement in their critical appraisal of role portrayals in ads while male and female Japanese and Thai business students were more in agreement in their neutrality. Established women's movements in New Zealand, America and Australia would be expected to heighten sensitivity to issues such as these, but it appears the more recent female movement in Japan has not, as yet, had the same effect upon Japanese females. What is particularly surprising is the lack of impact upon company image and purchase intention reported. This is particularly surprising for New Zealanders where sensitivity appears to be extremely high.

Advertisers who are currently advertising, or contemplating advertising in these countries, should be particularly aware of the attitudes of females toward their sex role portrayals in ads. However, one might question how much negative impact these criticisms will have on purchase behavior. Apparently, as Lysonski and Pollay (1990) found in their study of the United States, Denmark, Greece and New Zealand, there is little consumer effort to "put their money where their mouths are."

This sample, by nature, is limited for generalizability purposes. It would be prudent to extend this research to random samples of both males and females which are representative of their cities. Future studies should also include a series of demographic variables to ascertain possible differences in perceptions across different income levels, education levels and occupations. It would also be informative to assess consumer perceptions of role portrayals for specific product or service classes and companies. There may be particular criticisms for certain kinds of products more than others.

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WHAT MOTIVATES AMERICAN CONSUMERS TO CHOOSE DOMESTIC OVER FOREIGN PRODUCTS: AN EXPLANATION BASED ON HELPING BEHAVIOR

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The success of imported products in the United States has brought the loss of jobs for many American workers. Consequently, labor unions and other groups have urged American consumers to "Buy American." In essence, purchase of domestic products for the purpose of supporting American industry and its workers is a form of helping behavior. This study uses nine constructs taken from the behavioral literature involving helping behavior to provide an explanation for consumers' Willingness to Help threatened American workers: Salience, Social Concern, Deservingness, Group Identity, Perceived Equity, Similarity, Empathy, Responsibility, and Benefits. A quota sample of consumers provided the survey data. Each construct was measured by multi-item scales using a 6-point LIkert format. The first analysis regressed Willingness to Help on the nine helping constructs. The second analysis initially formed five clusters on the basis of the six Willingness to Help items, and then used the nine helping constructs in a descriptive discriminant analysis.

The regression results show Willingness to Help is strongly related to the nine constructs, taken as a set. The regression analysis highlights Group Identity, Social Concern, and Benefits as providing the primary motivations for helping, as reinforced by a bivariate contribution from Salience. These constructs represent concerns directed at the level of the culture, society, and economy. In short, the strongest predisposition toward helping reflects a very general concern for our nation.

The cluster/discriminant analyses showed three functions to significantly discriminate among the five groups. Based on this analysis, Group Identity, Social Concerns, Benefits, Deservingness, Salience, and Empathy emerge as the most promising variables for understanding the nature of consumers' assistance and cooperation in marketing contexts. Overall, greater helping can be expected from persons who identify with the distressed victims, who feel a greater concern for the social implications of the victim's situation, who project benefits to themselves and their nation from helping, who find the victims deserving of assistance, who consider the threatening situation important, serious, or severe, and who feel sorry for those who are victimized.

This analysis discloses three patterns of influence on helping. First, it shows a general predispositon to help in various ways, with reliance on the government and marketing channels for control over imports. In addition, two specialized forms of Willingness emerge. The second pattern of preferred modes of helping is a predisposition for the consumer to personally take the burden of filtering out imports by manifesting American-brand proneness and checking information on labels. The results indicate that preference for American brands loads most highly on the same variate as does looking on labels (Function 2), but preference for American-made clothes loads most highly on the same variate as does dependence on quotas and retail stores (Function 1).

The third, more specific pattern is a propensity to shift the burden of filtering out imports to quotas imposed by governmental bodies and to choice of products by retailers (through patronizing some stores and avoiding others). But unlike the first two patterns, the third pattern is bi-polar in nature. On reflection, it seems reasonable to assume the pole connoting reliance on quotas indicates support for a modest reduction in general availability of foreign goods, more than a desire for government (as opposed to business firms) to take the major responsibility for combatting imports.

Group 1 (Non-helpers) expresses meager Pro-America Feelings; its members do not manifest in positive fashion the characteristics that the helping literature associates with helping behavior. Consumers in Group 2 (Strong Helpers) report considerable Pro-America Feelings, but little Fear of Loss; their support issues from a feeling of closeness to their society, rather than an association with individual members of that society (i.e., the workers). Persons in Group 3 (Channel Helpers) hold both strong Pro-worker Concerns and Pro-America Feelings; their concern envelopes the society and its individual citizens in the broadest fashion. Those in Group 4 (Personal Helpers) express a definite Fear of Loss; their affinity with the workers regarding their common vulnerability to a possible loss of job dominates their characterization. Group 5 (Limited Helpers) consumers have reduced Pro-America Feelings; their restricted involvement follows that of Group 1, but in lesser magnitude.

THE MARKETING OF COUNTERFEIT INTERNATIONAL PHARMACEUTICAL PRODUCTS: THE PROBLEM AND A PROPOSED SOLUTION

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ABSTRACT

The increase in product counterfeiting has been significant in the last five years. The most dramatic modification in counterfeiters' strategies involves the sale of bogus industrial and medical products, rather than solely focusing on nationally branded consumer products. The impact of counterfeit pharmaceutical products being sold in the United States could be devastating to consumer confidence in the prescription drug industry. This paper depicts one method of reducing access to the marketplace for (foreign) pharmaceutical counterfeiters by increasing control over the distribution of prescription drugs in the domestic market.

BACKGROUND TO THE PROBLEM

Counterfeiting is a problem that has grown significantly and one which has had a negative impact on United States businesses and the consuming public. Counterfeiting is not a new means of doing business, but counterfeiting pharmaceuticals is a relatively recent occurrence (Robinson, 1985). This paper focuses on international counterfeiting in the pharmaceutical industry. Counterfeit pharmaceuticals pose potential dangers, including possible deaths, that may affect many consumers. This paper also provides a system for increased surveillance of domestic channels of distribution of pharmaceuticals to reduce the inflow of both international and domestic counterfeiting.

Counterfeiting is defined as the unauthorized copying of patented products or copyrighted works and trademarks (Harvey, 1988). The word counterfeit once sent the American consumer scurrying to examine the money in their wallets or purses. Today, those billfolds and handbags themselves may be counterfeit along with scores of other products from computers and car parts to jeans, jewelry, pills, and perfume (Rowan and Mazie, 1986). The realm of counterfeiting is limitless; it has reached an alarming rate of growth in the past five years. Product counterfeiting is growing at a rate of 30 to 40 percent a year, and has reached an estimated $60 billion a year in sales worldwide (Harvey, 1988).

While the economic impact of product counterfeiting is significant, the myriad of non-economic consequences are just as devastating. It is estimated that legitimate United States businesses will lose $8 to $20 billion in revenues to counterfeiters, foreign, as well as domestic who provide consumers with inferior products. Adding to the lost revenues is the estimated domestic job loss ranging from 130,000 to 790,000 (Harvey, 1988). Loss of goodwill and/or reputation may also be a result of counterfeiting. Often a firm's reputation is downgraded by substandard, bogus products particularly among professionals like the doctors. The products that are misrepresented to consumers influence the future purchase of products from the legitimate company, resulting in a loss of brand loyalty and previously portrayed image (Harvey and Ronkainen, 1985).

The legislation directly related to counterfeiting is not comprehensive enough to reduce counterfeiting significantly. Two Acts, the Lanham Act of 1946 and the Trademark Counterfeiting Act of 1984, do little to threaten the unscrupulous counterfeiters, particularly those who are located in foreign countries. The companies being infringed upon are not being protected adequately (Miller and Miller, 1985). The Lanham Act of 1946 is the primary structure of legal protection in the United States, but the penalties given are not adequate to deter counterfeiters. This civil law requires violators to stop using another company's trademarks or pay damages. Importers caught violating a company's trademark results only in the seizure of the bogus goods (Harvey and Ronkainen, 1985).

Due to the lack of more severe penalties in the Lanham Act of 1946, new legislation was enacted in 1984 to try to help curtail the growing problem. This Act, the 1984 Trademark Counterfeiting Act, greatly enhanced the effectiveness of the Lanham Act. The law makes product counterfeiting a federal crime. It imposes stiff penalties (first-offense fines of up to $250,000 and five years in jail for individuals and fines of up to $1 million for corporations) for manufacturing or for knowingly trafficking in counterfeit merchandise. Individual repeat offenders can draw up to $1 million in fines and fifteen years in jail. The maximum fine for corporations is $15 million. The presence of criminal penalties and significant monetary damages has gotten the attention of domestic counterfeiters in

some industries, signaling the positive effect of the new law (Gatty, 1985). But the problem of foreign counterfeiters still continues to exist with no or minimal laws directed toward these counterfeiters (Griffin, 1992).

THE PHARMACEUTICAL INDUSTRY AND COUNTERFEITING

Counterfeit pharmaceuticals were first identified as a problem in lesser developed countries (LDC's). Recently, bogus pharmaceuticals have flooded into the United States, posing a significant problem (Stern, 1985; FDA, 1992). In 1984, a highly publicized counterfeit products case surfaced; 1.26 million bogus birth control pills labeled Ovulon 21, made by Searle & Co., had to be taken from the market. Unfortunately, unexpected pregnancies and, in some cases, internal bleeding were the result of the use of them (Harvey, 1988). It was never determined the source of all the products but there was concern that at least a portion of the products supplied were counterfeit.

Various reasons contribute to the recent influx of foreign bogus drugs. Counterfeiting was a problem in the pharmaceutical industry prior to the 1930's before drug anti-substitution laws were enacted. Between the years of 1969 and 1972, however, all states repealed the anti-substitution laws. This action, in turn, permitted pharmacists to offer substitute drugs. Thus, generics were allowed to enter the market, and a strategic window was provided for counterfeiters to enter the market. The number of available legitimate products multiplied, giving the counterfeiters a variety of choices in entering the distribution system (Brasfield, 1987; Simmonsmeier, 1992). As in other industries, the worldwide recession has also contributed to the increase in bogus products (Pharmaceuticals, 1984; Kakinuki, 1989; Griffin, 1992; Sigelman, 1992). Counterfeiting took on a new appearance in 1980 when declining businesses looked for new ways to enhance their financial situation (Chiles, 1986). The prevailing reason for the infiltration of internationally produced bogus pharmaceuticals in the United States is the industry's loosely controlled distribution system. It appears relatively easy to insert bogus pharmaceutical products into the system at numerous points. A congressional subcommittee that studied this problem concluded that the integrity of the United States drug distribution system is insufficient in preventing the introduction of substandard, ineffective, or counterfeit pharmaceuticals (Robinson, 1985).

The distribution system in the pharmaceutical industry is simple, but it provides many opportunities for counterfeiters to access markets with very little opportunity of being detected. Drug counterfeiters have two primary means of access to the system: direct sales to pharmacists (retailers) or sale to drug distributors. The fact that distributors often sell to other distributors presents a major problem in detection, which requires a systematic approach to curtail the problem. The widespread use of drug distributors creates a difficult control situation in which drugs pass through many hands before reaching customers, making them extremely difficult to trace. In the case of the bogus birth control pills, Ovulon 21, the use of distributors was extensive and thus brought the severity of the problem with distribution to the forefront (Pharmaceutical Industries, 1984).

Pharmaceutical fakes originate from both foreign and domestic manufacturers. Both are easily inserted into the domestic distribution system and create credibility problems for the entire prescription drug industry. Generic look alike drugs from United States or European manufacturers become available in as little as two weeks after they are marketed overseas. The potency of the drugs is the only distinguishing factor between the originals and the copies (Industry Happenings, 1986; Hodgson, 1992). Any manufacturer with the capability of making tablets has the ability to make counterfeits and insert the bogus products into the distribution system (Sigelman, 1992). The large number of manufacturers, the almost limitless assortment of pharmaceutical products, and the many links in the distribution system provide unscrupulous business people with profitable opportunities in counterfeiting (Brasfield, 1987). There is no indication that the growth in foreign pharmaceutical counterfeits will subside or be self correcting in the future.

SYSTEMATIC CONTROL AND MONITORING OF DRUG DISTRIBUTION

As one can infer, a solution to curtail international pharmaceutical counterfeiting requires a cooperative effort from many entities. Also, the potential impact of the problem on the industry as well as individual companies should make it a priority even if the solution appears to be complex and costly. The problem lies in the distribution system of the pharmaceutical industry. Unscrupulous manufacturers, distributors, and retailers can either individually or in consort distribute adulterated products. Complicating the problem, some distributors and retailers may not realize that they are handling counterfeit products. In order to police the distribution chain effectively and minimize bogus products from entering the system, a cooperative effort is needed between each member of the chain. Channel of distribution members will need to be educated on the problems and ramifications of pharmaceutical counterfeiting. A systematic approach involving six interacting entities is needed to protect the distribution system from counterfeit drugs entering their system.

The three major members of the distribution system, i.e., manufacturer, distributor and retailer, should be monitored by two separate parties, a multi-level detection system will help to identify illegal activities among members of the channel of distribution (see Exhibit One). Specific functions will be

Exhibit One here

shared among these entities. The shared responsibilities will be the crux of the multi-level surveillance system. Through proper coordination and cross checking among channel entities, counterfeiters will have a more difficult time accessing the domestic marketplace. The goal of the proposed monitoring system to curtail pharmaceutical counterfeiting, is ensuring that only legitimate drugs reach the consumer. The six active participants included in the system are: (l) the United States Government; (2) the Pharmaceutical Manufacturing Association (PMA); (3) pharmaceutical manufacturers; (4) pharmaceutical distributors; (5) retailers (pharmacists); and (6) consumers. Each of these entities' responsibilities (see Exhibit Two) will be discussed separately, but the success of the system is contingent on the shared responsibilities

Exhibit Two here

and the coordination of the investigation by various levels in the channel of distribution surveillance system. There are also suggestion that World Health Organization should assume a more authoritative role in the international quality control of drugs and to establish an international code of conduct for the pharmaceutical industry (Cone, 1983). The problem is that many parties believe that these codes should be voluntary guidelines that do not create any obligations for firms or states.

I. United States Government's Responsibilities

The United States Government could/should provide assistance to the pharmaceutical industry to help curtail the growth of foreign as well as domestic counterfeit prescription drugs. The passage of the 1984 Trademark Counterfeiting Act was a major step forward to interfere with drug counterfeiting domestically, but more sanctions need to be enacted. The government should evaluate the re-enactment of the anti-substitution laws, which keep pharmacists from substituting a non-branded product for a brand pharmaceutical. This would reduce the number of look alike pharmaceutical products in the industry, making it easier to police. The difficulty of counterfeiting products would increase, and therefore risk to the consumer would be reduced. Granted, there would be active lobbying against repealing the anti-substitution laws because of the desire to reduce the cost of drugs to the consumer. This would be particularly true among the active lobbyists for elderly consumers. The government needs to mount an educational program to heighten consumers'awareness of counterfeit pharmaceutical products in the United States. Increased awareness of the counterfeiting problem might provide the impetus to consumers to accept probability of higher drug prices if they could be assured that the drugs were legitimate. Again, the concern shown by the consuming public regarding product tampering indicates a willingness to accept higher prices for safer products.

Many counterfeit pharmaceuticals are imported from foreign countries, especially from developing countries. The government should continue to apply pressure on these nations, Taiwan, Hong Kong, and South Korea, who are violating the integrity of the domestic drug industry. Rights granted to these nations that provide them with quotas and exemptions from duties under the Generalized System of Preferences" (Griffin, 1992, Hodgson, 1992) could be used as a bargaining point if they fail to protect copyrights, trademarks, and patents. In short, the government could keep other products from these countries from entering the domestic market. This form of moral suasion has brought about changes in the laws to help reduce counterfeiting in the electronics industry. The government could also enlist the assistance of the United Nations agency that promotes world commerce, General Agreements on Tariffs and Trade (GATT), to provide additional pressure to reduce pharmaceutical counterfeiting. They could be a strong force in stopping international counterfeiting (Hill, 1986c, Hill & Gram, 1986b). Coordination and cooperation among United States government and foreign governments could center on patent/trademark legislation which provides more protection and legal remedies in many countries than their counterfeit legislation (Kakinuki, 1989).

The government should also interact directly with the PMA and manufacturers in the industry to help monitor the distribution of drug counterfeits. A special division of the Food and Drug Administration (FDA) should be empowered to periodically assess pharmaceutical manufacturers' practices to reduce counterfeiting. The FDA (Conlan, 1992) has created a special investigative division to investigate the problem of counterfeiting. Five agents are already at work and another 95 are being recruited. Shipments of look alike products of dubious cleanliness and potency into the US were so abundant that early in the year, the FDA was forced to place an import alert on prescription drug-mail orders. Government involvement should expedite the system, as well as give the system credibility.

The federal government team and the PMA should both provide some sanctioning mechanism for the distribution system, while at the same time educate the manufacturers with insights on how to reduce foreign counterfeiting. These same policies should deter many unscrupulous manufacturers from counterfeiting products domestically. The FDA standards that provide the guidelines for drug manufacturers and the addition of inspections at lower points in the channel of distribution should prevent many would-be domestic counterfeiters. Moreover, ensuring the integrity of marketing and packaging in the channel of distribution is essential for a systemic process to work. Without direct involvement of the federal government, the system becomes a self-policing effort that has less probability of success.

II. Pharmaceutical Manufacturing Association's Responsibilities

The PMA's primary responsibility should be the position of industry coordinator of the surveillance system to coordinate the various members at different levels of the channel of distribution. As director of the program, the PMA should ensure that the various entities of the channel system are carrying out their responsibilities in controlling counterfeiters. Standardized quarterly reports should be obtained from all participants in the system to provide follow-up on the functioning of the control process. Through gathering and evaluating information, the PMA should be able to take action and make changes to help reduce the level of counterfeiting in the pharmaceutical industry.

The PMA should also have a surveillance team like that of the FDA. Its responsibilities would include monitoring the activities of both the manufacturers and drug distributors in the industry. The PMA needs to maintain industry standards and monitor anti-counterfeiting activities undertaken by the manufacturers (Mason, 1983; Harvey, 1988; Kakinuki, 1992). Close surveillance of industry standards and activities can reduce the occurrence of illegitimate intervention into the channel of distribution. The PMA's authority and effectiveness are reduced at the distribution level, but the PMA may still work with manufacturers to maintain the distribution of legitimate pharmaceuticals in the initial phase of distribution. The interaction between the PMA and individual manufacturers should improve the communication level and, at the same time, reduce counterfeiters' access to the initial stages of distribution.

Another major responsibility of the PMA is active lobbying at the state and Federal level. The PMA should lobby for increased sanctions (criminal and civil) so that counterfeiters will be less attracted to the pharmaceutical industry. Because of the immense potential danger of counterfeit pharmaceuticals, legislation should be enacted that would increase the severity of the sanctions. The success of such an effort would enhance the effectiveness of the PMA and ensure the integrity of the pharmaceutical industry as a whole. The key to legislative control probability lies outside the United States in the enactment of foreign counterfeiting laws and more importantly the enforcement of these laws (for example see, Griffin, 1992; Sigelman, 1992).

III. Manufacturers' Responsibilities

Manufacturers in the pharmaceutical industry have additional responsibilities to maintain along with product standards of their industry. They not only need to ensure that legitimate drugs are produced but they must also provide assurance that products reaching the final consumers have not been counterfeited. To do this, extensive interaction with distributors and retailers will be required. In short, manufacturers need to actively monitor their distribution system, including policing distributors, forcing compliance, and ensuring that distributors are fulfilling their responsibilities instead of allowing counterfeit products into the channel of distribution to enhance their profit margins. Manufacturers need to actively monitor the product standards and reduce the probability of counterfeit products being used to "spice-up" the original supply of manufactured products. The manufacturer's relationship with distributors and retailers should be one of both product/service supplier as well as "proctor". Manufacturers should offer incentives (monetary) for counterfeit pharmaceuticals that are confiscated by channel members. With both the PMA and the manufacturers looking for bogus goods, many counterfeits would be unwilling to attempt to access the marketplace through legitimate distributors and retailers. When bogus goods are found, the distributors and manufacturers handling these goods need to be identified and turned into the PMA.

Manufacturer representatives need to be trained to perform investigative tasks and therefore provide a manufacturers' surveillance team. They need to check the authenticity of their shipments at both the distributor and retail levels. This can be done in a number of different ways. Several companies have developed methods by which a pharmaceutical manufacturer can mark his or her products so they can be checked at a later date for legitimacy. Currently, over $50 million is spent each year on high tech gadgetry to unobtrusively authenticate products like, for example, hidden magnetic or microchip tags, disappearing-reappearing inks, holographic images, digitized "fingerprints" on labels, and other hard-to-copy tricks

(Mason, 1983; Kakinuki, 1989). While many of these anticounterfeiting technologies are not presently used by pharmaceutical manufacturers, there appears to be a need to evaluate the application of such technologies to drug distribution.

Finally, manufacturers should implement random sampling. Random samples could be bought from distributors and retailers for testing to ensure their products authenticity. This is an effective way to identify distributors and retailers who have "salted" the legitimate product supply with counterfeit products at their level in the channel of distribution.

IV. Distributors' Responsibilities

The distributors' responsibility in the surveillance system is basically one of protecting the most vulnerable elements in the channel system. They need to monitor the retailers they service for their own personal protection. Distributors' representatives need to affirm the authenticity of their shipments, whether sold to retailers or subdistributors. Just as manufacturers monitor their channels, distributors need to verify that no one is altering their shipments at the retail level of the channel of distribution. Checking identifiable anticounterfeiting characteristics used by the manufacturers would be an appropriate method to augment the program.

As mentioned in the previous section, distributors need to work with manufacturers as their primary enforcement arm in the channel of distribution. A continuing part of the distributor's operation should be investigating resellers for counterfeited products. In return, distributors should receive an increase in their margins for performing this function as well as for confiscation of counterfeit products and pertinent information leading to the prosecution of counterfeiters.

V. Retailers' Responsibilities

Retailers have the responsibility of providing effective pharmaceuticals to the ultimate consumer. To help them in this quest, pharmacists and retail druggists need to buy from credible manufacturers and distributors. The use of questionable (secondary) suppliers should be evaluated very carefully, and much more stringent random testing of products should be under taken by the retailer.

As part of the distribution system, pharmacists should strive for proper distribution of pharmaceutical product by making product confirmation checks on those supplied by distributors. They should assess the packaging with anticounterfeiting elements attached and conspicuous deviations in that packaging to protect the integrity of the products they sell to consumers. Retailers should also be concerned with both distributors who supply and the manufacturer producing the product. In return, they should be compensated for confiscated counterfeit products and for providing valuable information on distributors to the manufacturers. The incentives should be enticing enough to interest retailers to be a major contributor to preventing counterfeit pharmaceuticals. They could provide the most significant control due to their close proximity to the final consumers of the product. If the retailers' monitoring efforts were enhanced, access to the marketplace would be limited for the counterfeiters.

VI. Consumers

Consumer involvement would be essential to enacting a proactive surveillance system in the drug industry. Consumer education and awareness of the drug counterfeiting problem and direct consumer-manufacturer interaction is essential to combating counterfeiting. Feedback about the product and its effectiveness will provide invaluable information to the manufacturer and enhance the effectiveness of the surveillance system to uncover channel members who permit counterfeit products into the system. Communication between the manufacturers and consumers could lead to detecting counterfeiters who have successfully entered the distribution system. Also, such interaction could provide organizations with information to improve their marketing/sales efforts as well as their products, thus enhancing the firm's position in the industry. A problem with obtaining direct feedback from the ultimate consumer would center on uncertainty of where the pharmaceuticals were manufactured. The pharmacists and physicians are the ones responsible for selecting the manufacturer of the drugs. To effectively obtain information, pharmacists should be required to dispense evaluation forms with each prescription that is to be returned to the appropriate manufacturer. A state law or industry standard established by the PMA could provide the information necessary for this activity. This feedback to the manufacturer could result in the final check of the surveillance procedure to help reduce the flow of counterfeit pharmaceuticals.

A concern of many manufacturers, which should be taken into consideration, stems from the publicity concerning pharmaceutical counterfeiting. Manufacturers publicizing the possibility of counterfeits could cause negative reactions toward their products and their companies (from an investment standpoint). To fight possible negative reactions, consumers should be made aware of systematic efforts undertaken by the manufacturers to curtail the problem of pharmaceutical counterfeiting in the prescription drug industry as a whole. If the publicity and

public relation activities are handled appropriately, the respect for and image of the drug industry, as well as a single company, could improve rather than be downgraded.

SUMMARY AND CONCLUSION

The potential dangers of foreign and domestic pharmaceutical counterfeiting could be devastating to consumers as well as to the pharmaceutical industry. The problems of curtailing such counterfeiting activities are complex and involve many entities. Therefore, the adoption of such a plan to increase the security of the distribution channels used to market prescription drugs in the United States is the first step in reducing counterfeiting. The surveillance system in this paper should be viewed as the first step in the eradication of pharmaceutical counterfeiting. By using the systemic, multi-level surveillance system of each member of the distribution chain by separate investigating parties, the system should effectively keep counterfeits from reaching the final consumers. The system is not simple, nor is it inexpensive; but it needs to be considered before additional tragedies occur.

References: Contact primary author for list of references

CHINESE CULTURE AND ITS INFLUENCES ON EXPORT MARKETING STRATEGY OF TAIWANESE COMPUTER FIRMS

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Abstract

This paper examines Confucian values, a fundamental part of Chinese Culture, and the influence of these values on the export marketing strategy of Taiwanese computer firms. The findings indicate Confucian values affect virtually all aspects of export marketing strategy in the firms studied. Among the most influential of the Confucian values are differential rules based on status, an emphasis on flexibility, and the use of "appropriate speech," all of which are interpreted in Confucianism to facilitate the maintenance of an harmonious society. Specific examples of how these values operate to affect strategy and marketing mix are provided.

Introduction and Background Information

Western culture and its influence on consumer and managerial behaviour have stimulated a number of studies (Bartels 1982; Hall and Hall 1990, McCracken 1988). With the increasing importance of the Pacific Rim (Krarr 1992), Asian culture and its impacts on consumer behaviour and business operations have captured scholars' and practitioners' interests.

Bartels (1982) compared cultural impact on business behavior in general between the U.S. and Japan, whereas Kotler and Fahey (1982) emphasized the practice of marketing strategy of Japanese firms and related only corporate culture to their marketing strategy. Neither of them, however, conducted real world research and investigated the ways in which cultural values are associated with firms' marketing strategy. Given the importance of marketing strategy in export performance (Hsieh 1993), it is necessary to investigate how cultural values affect firms' marketing strategy, especially the influence of Confucian values on Chinese marketing strategy, an area rarely studied by marketing scholars.

Confucian values, although not encompassing all Asian cultures, dominate a variety of Asian countries, such as China, Taiwan, Singapore, Japan, Korea, Hong Kong, and Chinese in Southeast Asian countries. To assess the influence of Chinese culture on export marketing strategy, this paper explores Confucian tradition's influence on business behaviour and particularly export marketing decision making in Taiwanese computer firms.

According to Liu and Rarick's (1991) classification, there are six major Confucian-based values which may affect marketing strategy and other business behaviour. These values are informal negotiations, situation-contingent decisions, rough estimation and environmental adaptation, all of which are based on an emphasis on flexibility, and differential rules based on status, and "elaborate linguistic control" or "appropriate speech," which facilitate the Confucianist maintenance of harmony and avoidance of conflict. These values are the framework used in this study to analyze the impact of Confucian values on marketing strategy.

Method

Depth-interviews were the major technique used to explore the "personal realities" of informants. Of particular interest were informants' views about the ways in which Confucian values influence their export marketing strategies. Informants were CEOs and marketing managers from Taiwanese computer firms selected through a two-stage process. In stage one, 1000 members of the Taipei Computer Association were mailed a self-completion questionnaire as part of a larger study. From among the 124 respondents returning the questionnaire by the cut-off date, those willing to participate in a follow-up personal interview were identified. In stage two, interviews were conducted with those informants. Five interviews were conducted with Taiwanese business executives in Taiwan by research assistants in November and December 1991. One interview was conducted in the U.S. and sixteen interviews were conducted in Taiwan with Taiwanese business executives by the investigator between January and March 1992. The data for this study consist of verbatim transcripts of these interviews and field notes kept by the investigator.

Findings

Zyindex (key word research) was used to search for common themes and responses among the 22 transcripts and the fieldnotes. These themes were then analyzed for consensus as well as disconfirming opinions among informants. Parallel to the cultural factors discussed by Liu

and Rarick (1991), six themes emerged to influence virtually all aspects of export marketing strategy in the firms studied. Among the most influential of the Confucian values are differential rules based on status, an emphasis on flexibility, and the use of "appropriate speech". The impact of these cultural values on export marketing strategies are demonstrated as follows:

The Influence of Chinese culture on Product Strategy:

The feature of hard working among Chinese employees discussed above pushes them to introduce new and advanced products, as well as high quality products. The emphasis on flexibility also enables Chinese businessmen to make "appropriate" product modification to compete with foreign computer firms. Several informants described Chinese culture's influence on their product strategy:

> Our customs influence our thinking, our work attitude, and the way of doing business and advertising. Because we work very hard, we try to have new and advanced products coming out as soon as possible. We also have to send out thousands of DMs by a few employees who all work very hard. I am not the type of boss who only signs documents behind his big desk. I like to work with my employees. Of course, I focus on R&D. I am also very interested in marketing. When our customers come here, they like to talk to me. I know both technology and marketing, thus, I can develop appropriate products to match market needs and trends (Ming, M 33).[1]

> I think Chinese have more marketing strategies....For example, we will replace some computer parts which are not so important with cheaper ones. For example, a VGA's memory can range from 256K to 1024K. All of these VGAs, although having different memories, are all called VGAs or super VGAs. If we sell to the Chinese in foreign countries, we can sell VGAs, which have fewer memories, with lower prices. These cheaper VGA computers have the same functions as others except some specific functions, such as graphic or something else. Because these Chinese distributors are sure that consumers won't use these specific functions, they import VGA computers which have fewer memories. They, of course, pay less. Their advertising is also very nicely done. They won't discuss a computer's memory in detail, but emphasize other functions of the computer when advertising the product. They can offer lower prices than other foreign distributors. These foreign distributors care very much about memory capacity than do Chinese distributors when they buy products from us (Wang2, M 28).

The Influence of Chinese Culture on Pricing Strategy:

Chinese businessmen believe that low profit margins are good for both their customers and themselves; low profit margins represent low price, which benefits consumers. Low price also enables these Chinese firms to compete in international markets and generate larger sales, thereby increasing total profits. In addition, Chinese businessmen price their products flexibly to increase the likelihood of success in the international market. Some informants express their opinions as follows:

> Yes, of course [the Chinese culture influences our export marketing strategy]. Chinese and Americans have different customs. For example, Americans require high profits for the products they sell, thus, they have high list prices. On the other hand, The Chinese work very hard. Survival is prerequisite to further development in the business for most Chinese. As a result, our price is very flexible. American firms ask for a certain profit. If they cannot earn a certain percentage of profit, they won't sell you the products. The Chinese are different. The Chinese will sell the products to you as long as they have some profits no matter how little the profit is. The Chinese in Hong Kong and Singapore are also very good at doing business. Because the spaces in Singapore and Hong Kong are so limited and the competition is so intense, the Chinese there know how to survive and make profits (Jiang, M 44).

> Yes [the Chinese culture influences our export marketing strategy]. The Chinese are very flexible. We don't think as Westerners do....I believe the price I give the English buyers should be different from that I give to German buyers. Because they have different nationality, cultures, and buying habits, I should have different [pricing] strategies. I think we are more flexible to react to these differences among nations than are our foreign counterparts. My flexibility is demonstrated in business behaviour. For example, my pricing policy is flexible. Quantity discount is a basic principle for me to price my products. I may change this policy when I am in a different situation (Chen-2, M 33).

While specific ethics are emphasized by Confucian values, these values can be applied flexibly when doing business with foreigners. Some informants express their opinions:

> Confucian values are the basic cultural factors which influence Chinese thinking and behaviour heavily....Confucian values influence Chinese behaviour in several ways. First, Confucian values state that people's nature is good. Second, five codes of interaction between human relationships are very important to follow. Confucian values care about human ethics [human relationships]. A nation has its ethics to obey; a society should follow defined ethics; and a family has its own ethics to take care....Confucian values tell us to price fairly in terms of the quality; this is right. But I don't think we should be confined by these values. The purpose of doing business is to make profits. I don't see anything wrong to make as many profits as possible. As long as customers accept and are willing to buy our products, we, of course, like to make as many profits as possible. This is dominated by market mechanism instead of our firm. The ethical issue here is not whether we should make a lot of profits, but how we use the profits we make. I don't think that we should be confined by Confucian values. The ethical issue related to Confucian values is how we make use of the profits. Should we distribute the profits to employees or should we return some of these profits to practice our social responsibility (Win, M 43)?

> The Chinese care more about their promises than foreigners. However, we need to make some adjustments when we face foreigners. We need to behave differently when we talk to people with dissimilar cultural background (Cheng, M 36).

The Influence of Chinese Culture on Promotion Strategy:

Since most of these Taiwanese computer firms' customers are agents or other computer producers, these firms commonly adopt a "push" promotional strategy. Salespersons are considered critical to success in the international market. The Confucian emphasis on informal negotiation and personal relationships stimulates these computer firms to rely even more heavily on personal contacts to promote their products. Some informants state:

> For example, when those salespersons (ours and our customers') meet together, they may like to discuss how to do business. When my manager chats with our customers' manager, they may like to chat about how to run a company or how to manage their employees. They exchange opinions. Of course, they, sometimes, will talk about their personal lives. From this continuous communication between we and our customers, we build stable relationships. We, later on, may develop a new product. Our customers, of course, are interested in this new product. They are interested in this new product not because it is a "new product" but because it is "our" new product. They like to buy "our" new product because they have been satisfied in doing business with us (Lee, M 38).

> Talking about promotion, we go to visit our buyers very often. Do you think foreigners will go to visit their buyers so often? I don't think so. I don't know whether I am right by following Chinese ways of doing business. Maybe I can tell you the answers five or six years later (Chen-2, M 33).

The Influence of Chinese Culture on Distribution Strategy:

The most important influence of the Chinese culture, however, is in the arena of personal relationships. This key linkage in the Chinese personal network system is often applied by Taiwanese businessmen specifically in maintaining channel relationships with their foreign customers. Several informants demonstrate the importance of personal relationships when exporting:

> It [the personal relationship] is very, very important. For example, my European buyers sometimes send me more than $1 million payment before I deliver my products. Sometimes, they loan me money when they know that I am in need of money. Our relationships have been improved to such a stage....I had more than twenty visitors in the past two weeks. I have to receive another guest at about 11:30. I have about 140 customers in more than forty countries....I welcome them the same as I treat other customers in Taiwan. I take them to pleasant Chinese restaurants. I arrange the places they want to visit to understand Taiwan. If we are good friends, I will take them home to further understand Chinese daily life and home display (Chen-2, M 33).

> For example, some customers have become our friends. We start to produce the products for

them only by a phone call from them. We don't even have orders from them. Sometimes, we have some unexpected situations. For example, one of our customers phoned us to produce products for them. We did it. However, he later told us to postpone delivering the product for two months. We usually receive the cash [L/C] in ten days after we deliver the products. To delay delivering our products for two months means our money is put aside along with these inventories for two months. Thus, we negotiated with this customer. Our customer was also very understanding about our situation. We finally agreed that they paid us one month later. We, thus, shared the interest expense equally. We always try to compromise with each other (Fu, M 44).

Yes, of course. The personal relationships are very important. There is a Chinese saying: harmony is the most important thing in human communications. It does not matter whether we are within the company or we are dealing with our customers. Personal relationships are very important....A critical point to make our products successful is to make our customers appreciate our products. It includes the appreciation of both our product quality and services by our customers. Our jobs are not done yet after delivering products to our customers. We need to maintain our products in good condition in the long run. So our relationships with our customers are long-term oriented. To maintain good relationships is very important (Uy, M 38).

It is clear from these interview data that Taiwanese businessmen often perceive cultural factors as important in their computer firms' marketing strategies. Although some cultural impacts, such as emphasizing product quality but not (physical) packaging, may have negative effects on export marketing strategies, other cultural dimensions, such as flexibility and personal relationships, enable these firms to react quickly to rapid changes in this industry and to adopt appropriate approaches to compete internationally. Confucian values thus influence the export marketing strategy of Taiwanese computer firms differently from the way in which Western culture affects American firms' export marketing strategy.

Discussion and Recommendations

This study illustrates the relationships between cultural values and export marketing strategies. The result is consistent with the findings of Bartels (1982) and Kotler and Fahey (1982), although they studied Japanese firms. While the cultural impact on export marketing strategy is apparent, this influence differs from that of Western culture on Western firms. Confucian values emphasizing personal relationships, "appropriate speech", long-term view, and flexibility are major considerations when Taiwanese computer firms design their export marketing strategy. While a unified product strategy is claimed to be appropriate for international markets (Levitt 1983), this argument may not be appropriate for Taiwanese computer firms. Flexibility, considered as the most critical factor for international success by most Taiwanese managers studied, means virtually everything is changeable. This is especially true in certain rapidly changing industries, such as the computer industry.

The qualitative data, as they are useful in exploratory studies and in-depth understanding of human phenomena, help explain the specific export marketing strategies employed by Taiwanese computer firms in this study. These export marketing strategies are different from those employed in Western countries and their identification enhances the understanding of the Chinese way of doing business.

Because export marketing strategy is only one tool, albeit a very important one in fostering international marketing success, the direct influence of cultural factors on international marketing performance in general deserves further study. To further explore the influence of Chinese culture on international marketing performance, it would be useful to examine Chinese culture's impact on foreign investment performance, or other stages and aspects of the international marketing process as well as Chinese culture's influence on export behaviour of other Asian countries.

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Note:

1. Ming is the disguised name for the informant, M represents male, and 33 is the age of this informant. Interviews were conducted in Chinese and translated by a native Chinese speaker (the author).

THE ROLE OF CHINESE CULTURE IN INTERNATIONAL MARKETING

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Introduction

People tend to behave in ways that are culturally appropriate. Although advanced communication systems have shortened the distance among people, culture is one of the few things which cannot be changed easily.

Culture influences both consumers' and managers' activities. Thus, when doing business abroad, cultural understanding is particularly important, because culture dominates a people's purchase behaviors and business decision making processes. Cultural sensitivity is especially critical when contrasting Western cultures, where Judeo-Christian values predominate, and Eastern cultures, which exhibit strong adherence to Confucian traditions.

Confucian values dominate a variety of Asian countries, such as Mainland China, Taiwan, Singapore, Japan, Korea, Hongkong, and Chinese in Southeast Asian countries. To assess the influence of culture on international marketing, this paper explores the influence of Confucian traditions on business behavior, and particularly export behavior in Taiwanese computer firms.

Literature Review

Culture, defined by Cateora (1990) following Tylor (1958), is "the human-made part of human environment--the sum total of knowledge, beliefs, art, morals, laws, customs, and any other capabilities and habits acquired by humans as members of society" (p. 66). Because our very thinking is influenced by culture (Harris and Moran 1987 p.188), our behavior is also culturally bounded. Businesses thus are influenced by culture. Culture affects business operations in such ways as work and reward policies, relationships between government and business, the roles of owners, managers, and employees, business ethics, and entrepreneurial spirit, for example (Bartels 1982). To understand a country's business behavior, it is necessary to examine its cultural background.

Judeo-Christian ethics are characteristic of Western societies, while Confucian values characterize many Eastern/Asian cultures. The former emphasize individualism, equality of men, and self-fulfillment; the latter emphasize close-knit family or social structure, personal relationships, and obligations and harmony of the inner-self (Bartels 1982). These cultural differences, in turn, result in different business philosophies. For example, Liu and Rarick (1991) contrast the business philosophies of the United States (Western culture) and Taiwan (Chinese culture) as follows:

The United States		Taiwan
• Contractual law	vs.	• Informal negotiation
• Determination of what is universally right	vs.	• Situation-contingent decision
• Freedom of expression	vs.	• Elaborate linguistic control
• Fairness and equality	vs.	• Differential rules based on status
• Precision and accuracy	vs.	• Rough estimation
• Pre-determined rules	vs.	• Environmental adaptation

Yau (1988) argues that, in recent years, Western thoughts and ideology have played an important role in the cultural changes of many Chinese societies, especially in Taiwan, Hongkong, and Singapore. Hsieh and Scammon (1993) also note that Western consumer culture has affected Taiwanese consumers. Kao and Oh (1991) suggest that, in order to understand Chinese, Japanese, and Korean managerial thinking and practices, one has to examine the broad cultural traditions of these countries, many of which can be traced to Confucianism.

Confucian Values

Confucian values, which are the foundation of the Chinese value system (Yau 1988), focus on harmony (Hsieh and Scammon 1993; Liu and Rarick 1991; Kao and Oh 1991; Redding 1982). Bartel (1982) suggests that the harmony which characterizes Japanese behavior and attitude is a product of Confucian values. The main focus of Confucian values is to teach members in the society to comply with strictly established behaviors; conformity is critical to a harmonious society.

A number of rules govern behavior in different roles. Confucian values teach children to be polite to their seniors, teach students to respect their teachers, and teach people to tolerate unfairness (Hsieh and Scammon 1993).

Subordination is a central element within Confucian values. As Kao and Oh (1991) suggest, ideal relationships include interactions that are: 1) righteous between ruler and minister; 2) affectionate between father and son; 3) tuned to separated functions between husband and wive; 4) in order between older and younger brothers; and 5) trustful between friends. These codes maintain that both sides of the relation have a moral obligation to behave appropriately with respect to relative superordination/subordination (Liu and Rarick 1991). In other words, Confucian values attempt to create a harmonious society through hierarchical arrangements.

This study examines the influence of Confucian values on export behavior of firms. By so doing, it provides examples of the ways in which Chinese philosophies influence business behaviors in particular circumstances.

Method

A number of factors which may contribute to export performance of firms have been identified. Management's commitment to export, its international views, and favorable perceptions and attitudes toward export, as well as good planning and management systems are factors (Aaby and Slater 1989; Bello and Barksdale 1986; Sullivan and Baverschmidt 1980). The qualitative methods used in this study provide an opportunity to eplore the reasons these factors are important and their relationship to cultural values.

Depth-interviews were the major technique used to explore the "personal realities" of informants. Informants discussed their views of the ways in which the six Confucian values outlined by Liu and Rarick (1991) influence their export behavior and performance. Twenty two interviews were conducted between November 1991 and March 1992. Zyindex (key word search) was used to discover common responses from the interview transcripts and fieldnotes. These responses were then assessed for consensus among informants. Quotations reflecting informants' views on the six themes identified by Liu and Rarick (1991) are identified below by a disguished name, gender, and age of informants.

Findings

Rough Estimation

The export decision is a two-stage process. Rough estimation as a principle is followed when making general decisions. Detailed calculation may be used when product costs or taxes are concerned. Timing is also an important determinant of the precision of projections. Several informants' comments illustrate these considerations:

- I think it is necessary to have exact calculation to make export decisions. But, we should separate the export decision into two processes. In the first part of the decision, when you say you are interested in our products, I would just give you a rough estimation. However, if you tell me that the probability is more than 80% that you will buy my products, I will calculate exactly (Warng, M 28).

- I think both rough estimation and detailed calculation are necessary. Rough estimation is sufficient for strategic decisions, but we need to have detailed calculations for some detailed things, for example, taxes (Win, M 43).

- To have detailed calculations or have only rough estimation depends on the timing. If you have only one day to make a decision, it is impossible to calculate exactly and it is useless to have exact calculations. If you have sufficient time before you make a decision, it is better to have detailed calculation (Chu, M 44).

Informal Negotiations

One of the Chinese characteristics is to adapt to foreign culture and get along well with foreign customers. The findings from the qualitative data reveal that contracts are necessary in certain circumstantes. However, trust is considered more important in other situations.

- Although we still care about informal negotiation, formal contracts are getting more and more important. For example, customers used to give us a call to order products. However, we require them to fax us orders before we deliver our products to them (Warng, M 28).
- It seems unnecessary to sign contracts with these buyers in terms of the quantity they buy, unless it is an OEM contract or a continuous contract for the whole year. I think formal contracts have been ignored in the current business world which emphasizes fast action and reaction (Che, M 45).

- No, we don't have to [sign contracts when exporting]. However, if our foreign customers want us to be their OEM, we may have to sign the contract to agree on when we should deliver how many products to them. If we have had long-term cooperating experience with these customers, we won't sign contracts with them (Cheng, M 36).

Several informants mention trust should be considered as the most critical factor when doing business with customers, and signing contracts is unnecessary.

• We don't [sign contracts with our customers]. There is no contract in our transactions. What we have between each other is trust. We trust each other. I think trust is critical in doing business. I rarely sign contracts (Jiang, M 44).

• We don't sign contracts with either Taiwanese firms and foreign distributors. I think the most important thing is to trust each other (Lin, M 41).

These descriptions reveal that although the existence of a few factors (such as OEM) influences some informants' attitudes towards signing contracts, trust is still underscored by many in the business world. Contracts are more common with foreign buyers.

Situation-Contingent Decisions

As asserted by Liu and Rarick (1991), "Western culture appears to assume a universal right while Chinese culture tends to emphasize situation-contingent decisions." These informants prefer to make situation-contingent decisions. Most informants indicate there are no absolutely right or wrong decisions in the business world. Informants, however, offer different reasons for, and examples of, contingent-specific decisions:

• Whether it is a right or wrong decision depends on whom we do business with, what we do, the timing, where we do business, and what we sell. For example, the decision may be right in East Europe, but it is wrong in America. As a result, there are no absolutely right or wrong export decisions (Warng, M 28).

• You may be right to price your products in this level, but you will be wrong to provide same products in the same level three months later. You may be right now but wrong tomorrow. I think we care more about whether we have the right direction to operate our firm than other details (Chou, M 38).

Elaborate Linguistic Control

While free speech is encouraged in Western culture, it is not compatible with Chinese people's conservative characteristics. The term "moderate speech" is used in this study to describe the Chinese attitude toward elaborate linguistic control. Moderate speech in Chinese usually means speech appropriate to the occasion. But, moderate speech can also mean being honest and enthusiastic, telling the truth, or telling "a little white lie."

• Moderate speech is the most important thing in exporting business, especially in marketing and sales. Moderate speech, rather than deception, is the right way to continue your business with buyers. If you can be honest and have moderate speech, people will consider you trustworthy (Che, M 45).

• Moderate speech is what I think we all should have. I am telling you what I know. If there is something I think that I should not tell you, I will tell you I have some difficulty in answering certain questions. I will tell you what I know and what I don't know clearly, so you don't have to waste time to guess my thoughts. I don't like to beat around the bushes. I think to talk honestly is a better way to do business (Jiang, M 44).

• Well, being flexible is related to how honestly you talk to your buyers. I think...sometimes, we cannot talk to our buyers honestly. For example, when your buyers call you about the products. You tell them you have delivered the products. Indeed, you haven't (Chern, M 33). (The informant went on to describe an "acceptable" explanation regarding quality control offered to the customer)

• Germans are a very straightforward people. They ask us whether we could deliver the products in seven days because they need those products then. We, of course, respond "yes" if we can deliver the products they want in seven days. However, I would not like to respond "no" even if we cannot deliver the products in seven days. Instead of responding "no", we would ask them whether they can give us two or three more days to deliver the products. I don't want to say an absolute "no" (Lee, M 38).

• Of course, you can modify your speech or do not mention minor product defects (you don't have to expose all your defects to your customers). But we have to be honest to customers in general (Wang, M 53).

Several informants state that moderate speech should be flexible and adaptive to cultural differences.

• I think it [the importance of moderate speech] depends on who the buyers are. We need to have different expression when we talk to different buyers. We may adopt different ways when we talk to a new buyer, an experienced buyer, and a regular customer. The ways we talk to Jewish, English, Indians, and Germans may also be different (Cheng, M 36).

• Confucian values tell us to keep moderate or even conservative attitudes in speech. However, when I have contact with foreigners, I may have anti-conservative or bragging attitudes. In nature, I am a very moderate and

conservative person when I talk. But, again, this attitude will change in terms of whom I talk to (Win, M 43).

Although these informants feel they should be honest with their customers they also understand the importance of flexibility when applying the principle of moderate speech to the business world. Recognizing differences between Confucian values and Western values, informants talk to people in a certain country in a way which fits that country's culture. It is clear that this flexibility in moderate speech enables these informants to communicate efficiently with their customers with different cultural backgrounds and thereby improving their export performance.

Differential Rules Based on Status

As Confucian values try to create a harmonious society through hierarchical arrangements, Taiwanese people who have long been influenced by these values are told to recognize their roles in different situations and behave appropriately. Employees are supposed to learn what they are expected to do in the company and to finish their jobs on time.

• Although to tell our employees what to do is not very creative, we can make sure that we would finish our jobs on time. We would give them some flexibility within a certain range. Beyond this range, they should finish their jobs on time (Warng, M 28).

Because the computer industry is a very dynamic industry and firms cannot define all the jobs which have to be done, the employees are also expected to be flexible.

• If we have very clear job descriptions, there are only a few Taiwanese companies which can survive. No matter how detailed you can define each job, there must be some jobs which you are not able to tell who should finish them...For a growth company, your job descriptions will never cover what you have to do (Huang, M 32).

One of Chinese firms' distinctive features is to maintain some rules for employees to follow for routine affairs, yet keep certain flexibility to adapt to environmental changes. As Confucius said, "it is only men of the highest understanding and men of the grossest dullness who do not change."

Adaptation to the Environment

Flexibility has become a competitive weapon which enables Taiwanese computer firms to succeed internationally. Flexibility was characterized by all informants as the most critical factor influencing their firms' export performance. In general, there are two types of flexibility. By being flexible with regard to environmental changes firms can discover niche markets and foresee threats from competitors.

• (adapting too environmental changes) is what we, Taiwanese firms, are good at. We are experts in this regard. It is, of course, very important. Because we are only small firms, we rely on this flexibilty to survive. Being flexible, it is easier to find niche market to sell our products. Big firms have more difficulty adapting to environmental changes (Chou, M 38).

Because customers' confidence in firms is critical to assured transactions, being flexible enables firms to respond to customers' questions and to reassure them.

• Yes, it (being flexible) is very important. For example, suppose this cassette player is the product our customers want, but you don't produce it. When your customer shows you this product and ask you whether you can produce this product for him, (your response) is related to your flexibility. If I think I have the ability, I will respond "yes" and tell him that we (produced cassette players) before. I like to give him confidence in me to produce this product. (Customers) hope that you can solve all their problems for them. If you cannot be flexible to solve problems, you (leave) these problems to them (Fu, M 44).

Being flexible with customers can also prevent them from losing "face." In describing a situation in which a misunderstanding between customer and seller regarding equipment ordered had occurred, our informant assumed the blame and appologized for any trouble caused, saying:

• I am very careful not to make any conflicts between these two persons (employees of customer firm). If I did, I could be sure that they would not like to do business with me later. Because I assumed the mistakes, both of them were very happy. We have to think about the problem in their position rather than only in our position. To maintain good relationships with these two people is very important (Wan, M 38).

The interview data demonstrate the impact of cultural values on the behavior of Taiwanese computer firms. Although Western culture is influencing Taiwanese businesses, Confucian values, especially flexibility (which interacts with other cultural values), continue to play an important role in export decisions of Taiwanese business people.

Discussion

Confucian values are different from those of Western cultures (Kao and Oh 1991). Confucian values emphasize tolerance, inclusiveness, and flexibility. They teach people not to be extreme. As flexibility is the principal belief of Chinese managers, most managers apply these cultural values flexibly when dealing with foreign customers. Recognizing the cultural differences in foreign countries, these managers adapt to foreign cultures and behave in ways perceived as appropriate in a particular culture.

Confucian values teach people to apply the rules, yet not to be restrained by them. Thus, a right decision in one situation may be the wrong decision in another situation, because the timing, people, place, and products are different. Situation-contingent decision making is emphasized by Chinese managers. As others have observed (Redding 1982), this study also found that these Chinese managers often feel there is no need to base strategic decisions on exact calculations. Determination of an appropriate strategy, including selecting the right market(s), understanding customers within the market(s), and developing an appropriate marketing strategy can ensure long term success. This finding is consistent with Redding's conclusion (1982) that staying power over the long run is very important for Chinese managers.

Because a harmonious society is emphasized by Confucian values and a Chinese society's central structure is a hierarchical arrangement, differential rules based on status exist in most Taiwanese computer firms. Although mainly dealing with Westerners and selling high-tech products, these managers underscore informal negotiation. Contracts are not common except in the case of OEM relationships. Rapid change in the computer industry make contracts unworkable while trust makes them unnecessary. While Western culture encourage aggressiveness, Confucian values emphasize elaborate linguistic control and moderate behavior (Hsieh and Scammon 1993 Roo 1989).

Given the importance of cultural understanding and tremendous differences between Eastern and Western cultures, the understanding of Confucian values will reduce conflicts and enhance international trade between Eastern and Western firms.

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MARKETING AIRLINES INTERNATIONALLY: U.S. TRAVELLERS' ATTITUDE TOWARD DOMESTIC VERSUS FOREIGN CARRIERS

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This article first presents the structural changes taking place in international airline industry and on the progression of changes in airline marketing strategies in global markets. To this end, the paper tries to find out airline passenger satisfaction/dissatisfaction while flying by a U.S. and/or foreign carrier to foreign destinations.

INTRODUCTION

During turbulent 1970s and early part of 1980s customer-oriented marketing activity was a comparatively unimportant activity among airline companies around the world due to stringent regulation and the industry was operating in a sellers' market conditions around the globe. In particular, protected by government ownership and regulation, airlines were safe from serious competitive effects of the marketplace. In this kind of an environment, most airlines practiced "sales orientation" through low price high volume operations. For instance, promotional efforts were limited, product/service quality was uneven, and little had been done to develop efficient distribution systems through "hub and spoke" networks. In a market which was dominated by airlines themselves the motto was if you offer flights from one destination to another, people will take them.

In recent years, there have been a number of changes in international airlines industry which have had profound effects on the development of this very volatile sector of the economy in most countries of the world. Demographic, socio-economic and technological changes have led the way to some philosophical transformation of the industry and the way they do business nationally as well as internationally. In particular, the emergence of consumer-oriented marketing approach was evident. Some of the factors which have triggered action in industry and its actors are: a) the advent of deregulation with the passage of the Staggers Act in 1981 in the U.S.A. Other countries such as Canada and the U.K. soon followed; b) the emergence and a creation of a new competitive environment (price wars, frequent flyer programs, and a host of innovative marketing programs); c) worldwide economic slump has created bankruptcies, mergers, co-marketing agreements, and downsizing particularly in 1990s; d) need for greater market access, force expansion and merging of airline route systems as market entry strategy; and e) development of "mega carriers" to streamline cost and create economies of scale. In all cases, it is the airline's marketing ability which will determine its future success or failure.

CUSTOMER-ORIENTED MARKETING CONCEPT AND AIRLINE INDUSTRY

Global airline industry is very much influenced by rapid changes taking place in its environment. The development of the consumer-oriented marketing concept by airlines industry has been a response to changed environmental conditions from a sellers' market to one of a buyers' market. Whether a marketing orientation is needed or not for organizational prosperity and well being will depend fundamentally on the prevailing relationships between the airline and its macro environment. On the impact of environmental changes on airlines industry, Elliott (1990, p. 28) examined Australian airlines industry. Traditionally Australian domestic airlines operated within a strictly controlled legislative framework where The Two Airline Agreement enable two airlines to share the major inter-state and intra-state routes. The two airlines, namely, Ansett and the government-owned Australian Airlines, together they dominated the domestic market but competed with each other in international markets. Despite their domestic cooperation, they engaged in competition in international markets with each other. Fearing the consequences of price warfare, they competed with each other through product and service differentiation and through vertical integration (Glaser 1985). The dominant approach in such a market environment is one of market segmentation.

In response to the changes taking place in the global airline industry environment, the airlines worldwide are also experiencing certain transformations. This fast action in the airline industry, however, is happening mostly outside the U.S.A. As such, international departures from the U.S. have been increasing by 11-15% per year. Other market-related types of developments taking place in international airline industry can be summarized as follows: a) in the booming Pacific region, the number of passengers increased by nearly 14%; b) within the U.S. six giants control more than 75% of the market; c) the number of passengers rises 7-10% a year in Europe; d) the EC has a flight plan for reduced regulation and increased competition by the end of

1992; e) almost all of South America's government-owned airlines are up for sale, and passengers are praying for improved service; and f) privatization of airlines in Eastern and Central Europe is creating tremendous market opportunities for major airlines.

In this turbulent environment of international airline industry, there will always be a solid market for quality carriers. Travel Magazine survey of first-class service ranks Swissair, British Airways and Singapore Airlines tops in the world. In another study, the international travellers surveyed were asked to name their preferred carrier on a variety of the key global routes. The results indicated that British Airways in the transatlantic and Europe/Middle East/Central Asia routes; Singapore Airlines in the Europe/East Asia and North America/East Asia routes; Lufthansa German Airlines in Europe/South America route; Air France in Europe/Africa route; Varig Brazilian Airlines in North America/South American routes; South African Airways in North America/Africa; and Quantas Airways in South Pacific route were route winners (Reamy 1989).

THE STUDY

In a competitive global airline industry, the success will hinge upon their knowledge of their changing environment. In particular, airlines' understanding their customers and their ability to devise marketing campaigns to suit the preferences of the customer segments becomes very important.

Bearing this in mind, the purpose of this empirical study was to find out airline passenger satisfaction and/or dissatisfaction while flying by a U.S. and/or foreign carrier to foreign destinations. The survey was conducted in the Tri-County Region of South Central Pennsylvania. Within this region of the state of Pennsylvania, three major cities, namely, Harrisburg, Lancaster and York were selected as the base for sampling of the population. A stratified sampling method was utilized. In terms of economic well-being of residents, two types of neighborhoods, namely, upper income and middle income were identified in each city. A total of 200 persons in each city was contacted. Drop-off and pick-up method of questionnaire administration method was used. Questionnaires were hand-delivered to pre-determined houses in each survey neighborhood by senior marketing research students of two local universities. In cases of "not-at-home", next house was targeted. In the cover letter, a request was made of the person who had made at least one foreign travel by plane within the last twelve months to fill in the questionnaire. After a week's waiting period, questionnaires were personally retrieved. Of the 600 households contacted, 398 responses were received and 22 questionnaires though completed were not usable due to incompleteness and being related to domestic air travel only. Final analysis was based on 376 completed questionnaires which gave us a response rate of 62%. Profile of respondents is given in Table 1. Demographic and socio-economic profiles of the respondents showed similar characteristics to the general population of the tri-county region. The sample population consisted of more males, 50% of the respondents had individual income of less than $30,000, 67% possessed college and graduate education, 69% of the respondents had white collar type of jobs, and the median age category (31-40 years group) consisted of 26% of the sample.

OVERSEAS FLIGHT RELATED BEHAVIOR

In this hard economic times, competitive fares are very important to most of the travellers. Economy fare was the most preferred scheme which was used by nearly 65% of the respondents. Nearly 28% of the respondents paid full fare, 6.4% charter fare and the remaining 1.4% paid business class, military and government fares.

Travel agency was by far the most frequently used intermediary to purchase airline tickets for foreign travel. It was utilized by more than 70% of the respondents. Other means used to purchase airline tickets were local airline office, foreign airline office, travel organizations, church, school, corporation and air hitch service. No statistical differences were observed between users of U.S. carriers and foreign carriers in the method used to purchase airline tickets.

Most frequently used sources of funds for foreign flight was personal funds which was used by 70% of the respondents. The second most widely used source of funds was employer funds (25%) and the remaining respondents purchased their tickets with funds obtained from outside agencies and institutions. Some 58% of the respondents paid for their airline ticket by using their credit card and the remaining 42% paid by cheque or cash. Visa card was the most frequently used (39.2%) for airline ticket purchases which was followed by MasterCard (25.2%), American Express (15%), Discover (12.4%) and the remaining 8.2% used Diner's Club, Carte Blanche cards and direct corporate and government billings.

A majority of the respondents have flown to foreign destinations with their spouses and the second most preferred travel choice was with family members. Other two travel choices were flying alone and flying with colleagues. Some 12.5% of the respondents travelled with

TABLE 1
Profile of Respondents

	Number	%
Sex:		
Male	209	55.59
Female	167	44.41
Total	376	100.00
Income:		
less than $30,000	187	49.73
$30,000-$60,000	146	38.83
above $60,000	43	11.44
Total	376	100.00
Education:		
High School	126	33.51
College	199	52.93
Graduate	51	13.56
Total	376	100.00
Job Category		
White Collar	258	68.62
Blue Collar	118	31.38
Total	376	100.00
Age:		
Less than 20	38	10.11
20-30	108	28.72
31-40	99	26.33
41-50	97	25.80
61 and above	12	3.19
Total	376	100.00

others from school, church or government colleagues. A majority of the respondents (48%) watch between two to seven hours of television and some 55% of the respondents listen to the radio less than four hours per week (Table 2). Survey respondents read different types of magazines but most frequently read magazines were Newsweek, Time, Sports Illustrated and Playboy (Table 3).

TABLE 2
Hours of Watching T.V. and Listening to Radio Per Week

	T.V.		Radio	
	#	%	#	%
less than 2 hrs.	56	14.89	131	34.84
2 - 4 hrs.	80	21.28	75	19.95
5 - 7 hrs.	102	27.13	68	18.09
8 - 10 hrs.	67	17.82	39	10.37
more than 10 hrs.	71	18.82	63	16.76

TABLE 3
Types of magazines Read by Travelers

	#	%
Newsweek	144	17.58
Time	123	15.01
Sports Illustrated	83	10.14
Playboy	83	10.14
New Yorker	59	7.20
Cosmopolitan	51	6.22
National Geographic	49	5.99
Fortune	37	4.52
McCalls	36	4.39
Vogue	34	4.15
Home and Gardens	32	3.91
Economist	14	1.71
Others*	74	9.04

*Others include: Business Week, Money, US News and World Report, Reader Digest, Rolling Stone, Golf Digest, Esquire and Good Housekeeping

AIRLINE SELECTION BEHAVIOR FOR FOREIGN TRAVEL

Respondents were asked their favorite airlines for foreign travel. Although there were slight differences between males and females but the ranking of top ten airlines remained similar. The top three airlines selected were United, American and Delta. The remaining seven airlines utilized most frequently were TWA, Lufthansa, British, Swissair, Quantas, Air Canada, Japan Airlines, Alitalia, Singapore and Air France (See Table 4).

TABLE 4
Travelers' Selection of Airlines: By Sex

	Male			Female		
	#	%	Rank*	#	%	Rank*
United	111	53.11	1	86	51.50	1
American	89	42.58	2	61	36.53	3
Delta	67	32.06	3	65	38.92	2
TWA	57	27.27	4	52	31.14	4
Lufthansa	44	21.05	5	35	20.96	6
British	36	17.22	6	42	25.15	5
Swissair	24	11.48	7	17	10.18	9
Quantas	24	11.48	7	21	12.57	7
Air Canada	15	7.18	8	16	9.58	10
Japan	14	6.70	9	15	8.98	11
Alitalia	13	6.22	10	7	4.19	13
Singapore	13	6.22	10	1	.60	19
Air France	11	5.26	11	19	11.38	8
SAS	9	4.31	12	11	6.59	12
Finn Air	8	3.83	13	2	1.20	18
Virgin Atlantic	6	2.87	14	3	1.80	17
Aero Mexico	4	1.91	15	5	2.99	15
Olympic	3	1.44	16	0	0	20
Austrian	3	1.44	16	7	4.19	13
Korean	3	1.44	16	4	2.40	16
Varig	3	1.44	16	5	2.99	15
Iberia	2	.96	17	6	3.59	14
Air Lingus	1	.48	18	3	1.80	17
Belgian	0	0	19	5	2.99	15
Others**	13	6.22	10	7	4.19	13

* Rankings of males and females are the same at $\alpha \leq .01$; determined by rank correlation.

**Others include Cathy Pacific, Flying Tigers, North West, Icelandic Air, U.S. Air, and KLM.

Respondents were asked about the main reasons for their selection of the top three airlines of their preference. No statistically significant differences emerged in the ranking of reasons for selecting the top three airlines. Reliability of the airline, past satisfactory experience with the airline and low price of the ticket were the three most important reasons for selecting the top three airlines for foreign travel. When respondents asked the factors influencing their decision to select the airline for foreign travel instead of another one, again no statistically significant differences were found in the ranking of factors by users of U.S. and foreign carriers. The three most important factors mentioned in selecting the most preferred airlines were most convenient schedule, reliable airline and cheapest fare offered in this order. When factors affecting selection of airlines examined in terms of sex, statistically significant differences were observed between males and females. While male respondents considered reliable airline as the most important evaluative criteria, female respondents paid more attention to most convenient schedule and quickest route direct flight (Table 5).

TABLE 5
Factors Affecting Selection of Airlines: By Sex

	Male			Female		
	#	%	Rank*	#	%	Rank*
Reliable airline	92	44.02	1	60	35.93	3
Most convenient schedule	61	29.19	4	67	40.12	1
Quickest route direct flight	65	31.10	3	67	40.12	1
Only airline available	32	15.31	6	48	28.74	4
Good service offered	52	24.88	5	38	22.75	6
Cheapest fare offered	71	33.97	2	62	37.13	2
Like the airline as a company	27	12.92	8	15	8.98	7
Like the airlines' aircrafts	9	4.31	9	4	2.40	8
Safety reasons	31	14.93	7	46	27.54	5

* Rankings of the males and females significantly differ at $\alpha \leq .01$; determined by rank correlation.

Respondents were also probed on factors they would consider important to their choice of an airline. Statistically significant differences were found among users of U.S. carriers, foreign carriers and users of both types of carriers. For instance, users of foreign airlines placed more importance on in-flight entertainment, free alcoholic beverages and availability of frequent flights. Whereas users of U.S. carriers placed significantly more importance to airport ticket counter service. Users of both U.S. and foreign carriers placed significantly more importance to competitive fare than domestic and foreign airline user alone. In terms of sex of the respondents, there were also statistically significant differences. Females paid significantly more attention to airport ticket counter service, accurate flight status information, convenient flight connections, frequent flights, and good connections to major cities. Whereas their male counterparts paid significantly more attention to

availability of free alcoholic beverages on board. When the data were examined by job category, it was found out that white collar job holders significantly differed from blue collar in factors considered important in choosing airlines for foreign travel. For instance, white collar people placed more importance to accurate flight status information, convenient flight connections, on time arrivals and departures and competitive fares. Whereas their blue collar counterparts placed more importance to in-flight entertainment and quality food on board.

Entertainment preference of travellers during overseas flight was also probed. Their favorite entertainment preferences ranged from news feature to children's stories. Entertainment preference of travelers did differ significantly between users of U.S. versus foreign airlines.

Differences between the respondents who have flown by a U.S. carrier, a non-U.S. carrier and both in terms of their perceptions or feelings were studied by analysis of variance (ANOVA). In other words we were interested in learning their comparisons of the airlines' performance.

The ANOVA results are significant at $p<.001$ indicating that there are differences between the respondents who have used different carriers in terms of their evaluations of airlines' performances. Turkey's post-hoc test was used to determine where the differences are. Test results indicated that respondents who have only used a U.S. carrier rated the U.S. carrier better in comparison with a foreign carrier. The respondents who have used only a foreign carrier, however, indicated that U.S. carriers were not better than the foreign carriers. On the other hand, the respondents who have used both carriers rated both carriers equally.

CONCLUSION

Airline industry world over is in a stage of rapid transformation. In this process, passenger satisfaction and repeat purchase is becoming a prime concern of airlines. To this end, both domestic as well as foreign airlines are instituting certain changes towards satisfying their customers' needs. Some of these changes are geared towards improvement of both airport and in-flight service. Airlines also offer more leg room and restful cabin decor. Passenger information system developed by certain foreign airlines shows the plane's course and flight data on the movie screen when movies are not playing.

Study results indicated that users of U.S. carriers showed different demographic, socio-economic and behavioral characteristics in selecting an airline for foreign travel. Statistically significant differences were found between the users of domestic and foreign carriers in the importance they attached to various service attributes. In developing strategic marketing plans, airline executives should place more importance to those attributes which are deemed most important by airline passengers. In the development of new services and aircrafts, consumer driven type of input should be utilized. This will, of course, increase the likelihood of success in the turbulent environment of airline industry.

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TOWARD A THEORY OF INTERNATIONAL MARKETING

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Introduction

The field of international marketing is replete with research outlining various similarities and differences which exist across cultures and national boundaries. However, many of these studies have been exploratory in nature and limited to comparative descriptions of the nations and cultures in question. Those which have attempted to employ a sound theoretical approach have done so by borrowing from other disciplines such as social adaptation theory and theories of cognitive representation (Grunert, Grunert, and Beatty 1989). This presents difficulties for the researcher focusing on international marketing phenomena. The purpose of this paper is to develop an initial starting point for the development of a framework for international marketing in an effort to provide deeper theoretical direction for research in this area. It is hoped the perspective developed in this paper will serve to give some direction for future research, thereby allowing international marketing to move toward the construction of more generalizable, integrated theoretical foundations (Wills, Samli, and Jacobs 1991).

The Role of National Character

Clark (1990) first introduced the concept of national character to the international marketing literature. In a detailed review he outlined the benefits this construct holds in terms of developing a theoretical foundation in international marketing. National character was proposed to be built around "the idea that the people of each nation have a distinctive, enduring pattern of behavior and/or personality characteristics". Using definition, Clark then proposed an "interpretive framework" based on five elements of culture: 1) material culture, 2) social institutions, 3) belief systems, 4) aesthetic systems, and 5) language.

By identifying these enduring national character traits it should be possible to better understand and identify the individual and societal behavior patterns relevant to marketing phenomena (e.g. consumer behavior, advertising, distribution channels, strategies for conducting marketing research, etc.) - both from a practitioner and research perspective (Yau 1988). It is important to note that the identification of national character traits involves more than the listing of particular behaviors (Inkeles and Levinson 1969). Simply relying on some form of aggregated behavior pattern, or patterns, thought to be unique to a given culture or nation as a means of defining national character may lead to superficial stereotyping. The description of differing behavior patterns across cultures, outside of some theoretical framework related to marketing, will produce research based merely on comparisons - as has been the case in much of the international marketing literature. It is not enough to state the obvious (i.e. that culture and nations behave differently); rather we need to identify dimensions in which these differences may occur and consider the impact of such differences on international marketing. To this end, the following discussion will attempt to utilize the concept of national character and place it into a framework useful for international marketing theory.

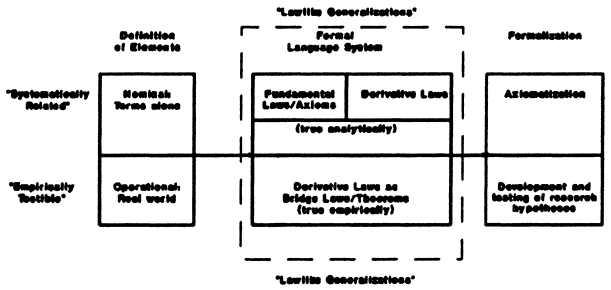
Theory Development Process

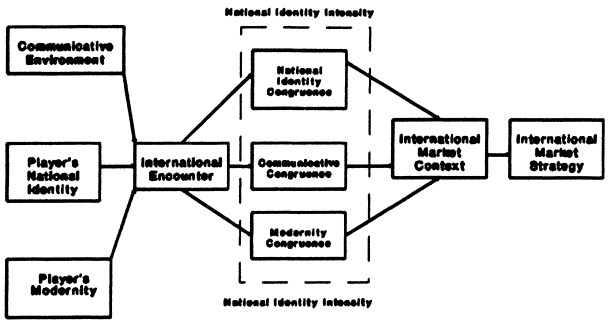
The method to be utilized in developing the proposed framework will be adapted from the criteria proposed by Hunt (1991). According to Hunt, a theory is best described as:

> "A systematically related set of statements, including some lawlike generalizations, that is empirically testable. The purpose of theory is to increase scientific understanding through a systematized structure capable of both explaining and predicting phenomena."

Therefore, the elements to be addressed in this paper will focus on: 1) the development of a systematically related set of statements in the form of "lawlike generalizations", 2) demonstrating adherence to the "empirically testable" criterion, and 3) a discussion of the resulting theory in the context of "explaining and predicting phenomena". As it is not this paper's purpose to test the proposed theory, but rather to develop a theoretical framework, the focus will be primarily on issues related to systematically related lawlike generalizations which may, in the future, be empirically testable. The figure outlines the theory development process.

The first step in theory construction involves the organization and definition of the components of the theory. These definitions take two forms: the nominal, reflect a fundamental description of the terms and serve as the first step in fulfilling the "systematically related" criteria. The operational definitions relate these terms to the "real world" in order to facilitate actual testing.





Once these basic "building blocks" have been set forth, the next step involves the development of the "formal language system" (Hunt 1991). These systematically related lawlike generalizations begin with axioms, also known as fundamental laws, which represent the basic premises of the proposed theory. By definition the axioms can not be derived from other statements in the theory. These fundamental laws can then be employed to established "derivative laws" illustrating relationships outlined by the theory. Hunt presents four criteria for a statement to be considered a lawlike generalization: 1) generalized conditionals - some form of "if-then" relationship, 2) empirical content, 3) nomic necessity - the assumption that the relationships between the phenomena do not occur due to chance, and 4) systematic relationships - that is, the statements are integrated into the existing body of knowledge. In terms of addressing the issue of empirical testability, the derivative laws can be employed as so-called "bridge laws" and used to develop research hypotheses. While the axioms must be true analytically, the bridge laws must be true empirically in a fully formalized theory.

The final basic step in theory construction involves the actual formalization of the theory. In the context of achieving systematic relationships, the fundamental laws must be subjecting to "axiomatization". The requirements for this are: 1) internal consistency - i.e. the axioms are free from contradiction, 2) independence - the axioms cannot be deduced from other statements in the theory, 3) sufficiency - all statements in the theory can be derived from the fundamental laws, and 4) necessity - there are no superfluous fundamental laws (Popper 1959). At this point, assuming the above criteria have been met, the theory can be considered to be "partially formalized". Full formalization can occur only through the extended empirical testing of the research hypotheses resulting from the bridge laws. While a fully formalized theory is the ultimate goal, according to Hunt (1991) no such theories exist in the marketing field.

Toward a Theory of International Marketing

The following illustrates the proposed theoretical framework for international marketing.

The model, as an illustration of the theory, proposes that the key elements affecting the international marketing environment, in terms of the actual players, are: 1) the communicative environment, 2) the player's sense of national identity, and 3) the player's level of modernity. The communicative environment involves the ability of the players to effectively convey ideas, opinions, and concepts and may be affected by language barriers (Swift 1991) as well as other forms of non-verbal communication such as promotional strategies (Kale 1991). The national identity component refers to the degree to which the players identify with their unique cultural and/or national heritage (i.e. their national character) and the restrictions such loyalties may place on cross-cultural/cross-national interaction. For example, the French and the Germans have often been at odds with each other on a cross-national basis. Finally, the players' level of modernity (e.g. their technological sophistication) will also affect cross-cultural/cross-national interaction (Inkeles 1983; Lee 1990).

Following the theory construction process already described, the first step in establishing the proposed theory involves the statement of nominal definitions. As the purpose of this paper is to focus on the development of a theoretical framework and not a fully formalized theory, operational definitions will not be addressed. The nominal definitions, relevant to the proposed framework are as follows:

Communicative Environment - The ability of the players to communicate with each other (Swift 1991).
National Identity - The players sense of their unique cultural/national character (Clark 1990, Inkeles and Levinson 1969).
Modernity - Level of technical innovativeness and receptivity to technological advancements (Inkeles 1983).
International Encounter - The cross-cultural and/or cross-national interaction between players.
National Identity Congruence - Degree of similarity between the player's national identity.
Communicative Congruence - Degree to which the players can effectively communicate with each other.

Modernity Congruence - Degree of similarity between the player's level of technical innovativeness and receptivity to technological advancements.
National Identity Intensity - The degree to which players identify with, and respond to, their unique cultural and/or national characteristics.
International Market Context - The environment resulting from the congruence comparisons and the players' national identity influence.
International Market Strategy - The response dictated by the preceeding international marketing context.

Based on these nominal definitions, the next step is the statement of fundamental laws, or axioms, as suggested by the theory's model. The basic axioms for the proposed theoretical framework are:

1. An international marketing encounter involves players from at least two different cultures and/or nations.
2. At least one of these players is attempting to operate within cultural or national boundaries not their own.
3. Every player has an identifiable national identity.
4. The key elements in an international encounter are the players' national identity, level of modernity, and the communicative environment.
5. An international encounter can not occur without some form of communication between players.
6. National identity intensity has a greater impact on the international market context than do the "congruence" elements.
7. Any given international market context results from an international encounter.
8. International market strategy is dependent on the international market context.

Derivative laws can also be developed from these axioms. For example, utilizing the following statements: 1) an international encounter involves at least two different cultures and/or nations, and 2) every culture and/or nation has an identifiable national identity the resulting derivative law would be "an international encounter involves two unique and identifiable national identities". A review of Hunt's criteria for lawlike generalizations shows that the fundamental laws, and the example of a resulting derivative law, exhibit generalized conditionals (e.g. "if-then" statements), empirical content (e.g. the axioms are testable), nomic necessity (the relationships are assumed not to occur due to chance), and are systematically integrated in the existing body of knowledge; e.g. national identity does exist in the form of national character (Clark 1990; Inkeles and Levinson 1969).

Explanation and Prediction

In explaining and predicting international marketing strategy within this framework, it may be best to conceptualize such strategy either as "standardized", "specialized", or "adapted" (Jain 1989; Kreutzer 1988). Depending upon the various elements leading into the international encounter dimension, the resulting congruences and the intensity of the players' national identity, one of these three approaches may be recommended. For example, given two countries with similar national identity and modernity characteristics, a fairly high degree of communicative congruence, and a low level of national identity intensity, a standardized market strategy may be adopted by the firm attempting to operate in this foreign environment (Walters and Toyne 1989). On the other hand, given two countries with very dissimilar national identities and modernity, a low degree of communicative congruence, and a high level of national identity intensity, the marketing strategy for the foreign firm will likely require specialization - or the market may not even be viable (Malhotra 1988).

In the case that the international encounter places the two players somewhere in the middle in terms of the congruency comparisons, a variety of "culturally relativistic" (Walle 1990) adaptations may be called for depending upon the area, or areas, of incongruence. Communication incongruence may require language adaptation. National identity incongruence may require emphasis being placed on different evaluative criteria in product advertisements. Modernity incongruence may require different media be employed for advertising or, perhaps, different distribution channels strategies be adopted. Finally, a country with a high level of national identity intensity may require the foreign firm to establish a subsidiary in that country or, in the case of advertisements, place an emphasis on "patriotic" evaluative criteria.

The final issue to be addressed involves partial formalization. In terms of systematic relationships, this means exposing the established axioms to Popper's (1959) criteria for axiomatization. Each of the fundamental laws presented are internally consistent; i.e. they do not contradict one another, thus the first criteria is met. Each axiom is also independent, in that they can not be deduced from other statements in the theory - they are fundamental to the theory's construction. Third, they are sufficient - all statements regarding the theory's ability to explain and predict can be derived from the fundamental laws. Fourth, and finally, none of the fundamental statements are irrelevant or unnecessary.

Conclusion

This paper has attempted to fill a gap in international marketing by providing a theoretical framework developed based on the procedures outlined by Hunt.

Heretofore, the international marketing literature has been criticized for its reliance on cross-cultural/cross-national comparative studies and the absence of theoretical foundations. The theory and resulting model proposed in this paper have been developed as a starting point for overcoming these deficiencies. The construction of a theoretical framework in this area should provide some guidance for future research in terms of empirically testing the model as well as exploring relevant dimensions (e.g. international marketing context and international market strategy considerations). Perhaps more importantly, this theoretical framework should also provide a basis for future discussion of theoretical issues related to international marketing and the development of more sophisticated theoretical international marketing tools.

Admittedly, this conceptualization is not without problems; several limitations can be addressed. First, the model assumes that the communicative environment, the players' national identity, and the players' level of modernity can all be adequately measured. Determining the degree of incongruence communication may be relatively straightforward (Swift 1991) and a given society's level of modernity has been effectively measured (Inkeles 1983). Research has also addressed the issue of cultural similarities and dissimilarities quantitatively (Hofstede 1980) and conceptually (Perry 1990) in an international marketing context. However, an instrument which effectively measures the strength of national identity has yet to be developed (Clark 1990). Another consideration not fully addressed in this conceptual framework relates to the limited number of dimensions relevant to an international encounter, the subsequent international market context, and the resulting international market strategy. For example, geographical proximity, past political relations, or current economic conditions could all influence the international marketing environment.

It is by no means suggested that the model is necessarily all-inclusive. However, it is argued that it does represent a starting point for further theoretical developments in international marketing. Delaying the development of a theoretical foundation solely based on the desire to construct the "correct" model the first time unduly inhibits growth in the area. Rather than operating under the assumption that it is possible to produce a complete theoretical framework which is free from criticism, this paper has attempted to solve the problem of a lack of theoretical foundation in the area of international marketing by presenting a conceptualization from which to begin the process of more rigorous theory building.

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WHAT IS TIME:
AN EXPLORATORY EXTENSION TOWARD THE FAR EAST

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Abstract

This paper is concerned with the way students from Thailand, Japan and Malaysia "define time" and is an extension of Lane and Lindquist (1989), the latter included data on U.S. students. The time definitions are compared and contrasted on the basis of time approach and processing. Potential differences were found on approach and processing. Implications for research and international commerce are offered.

Introduction

The exploratory work on time definitions across various groups of respondents by Lane and Lindquist (1989) has been replicated and extended to six groups of Far Eastern students.

The attempt was to classify the definitions given by the participants according to the time approach, and time processing scheme used by Lane and Lindquist (1989) and then to compare the results of this exploratory research to those found by the latter authors.

In the literature, and from recent research, four approaches to time have been hypothesized to exist. Settle (1980) postulated three called: 1) economic, 2) psychological and 3) socio-cultural. Along with these, 4) measurement has been found as a approach that individuals use (Page-Wood et al. 1991).

The economic approach treats time as some sort of commodity which has potential utility for people (Baumol 1973; Becker 1965). This is likely the approach to time that people in marketing and commerce use most often. The psychological approach reflects the way people perceive time personally (Hawes 1979; Holman and Venkatesan 1979; Settle, Alreck and Glasheen 1978). In particular, Settle, Alreck and Glasheen (1978) suggested a four dimensional view of this approach. The theoretical dimensions were: focus, a persons's tendency to remember, to sense, to project or to spread human consciousness across time; activity, the degree to which a persons sees himself/herself as having an over-supply or under-supply of time; structure, where time is viewed as enclosed in specific units or free flowing; and tenacity, where one stays with a task until finished as though time did not matter.

The socio-cultural approach that a person uses is tied to the way he or she has been socialized with respect to time (Hall 1959; Levine and Wolff 1985). Approaches used by family, friends, groups, subcultures, cultures, in the workplace, etc. underpin an individual's socio-cultural approach to time. A person's socio-cultural approach could certainly include the influence of economic and/or measurement approaches, the latter of which will be touched upon next. The measurement approach includes viewing time as physical. The use of minutes, hours, days, years, etc. when an individual interprets or uses time points toward this approach (Page-Wood et al. 1991).

A second way to think about time is on the basis of processing. Here three ways have been suggested in the literature. They are 1) ribbon or linear separable, 2) cyclical or circular and 3) procedural (Hall 1959; 1983).

Ribbon or Linear Separable time processing is related to economic time. People processing time in this fashion think in terms of a past, present and future and they break time down into discrete units. Cyclical or Circular time processing is present when individuals follow a rhythmic pattern with some regular beginning and end. Procedural time processing is characterized by not starting an activity or task until all preparations are ready and then staying with it until it is completed.

Methodology

The Far Eastern sample group studied consisted of 48 students who were attending a large midwestern university. Included were equal shares of men and women from Thailand, Japan, and Malaysia. The sample was drawn on a convenience basis. Participants were asked to fill out a questionnaire which contained descriptive information items about themselves and each was asked also to "define time". The students had been at the university for from less than one year to four years. This resulted in a situation of diversity of potential acculturation levels among

them. In fact, through they were all students, the universe represented is mixed and hard to characterize. But, because of the discovery nature of this exploratory project the participants do help in pointing toward the preliminary applicability of the approach and processing schemes to their time definitions.

Lane and Lindquist (1990) reported that a group of twelve female and eight male American undergraduate business students were asked to "define time." The data from this study is combined with that of the foreign students in the current study to facilitate the comparisons.

Findings

The findings will be presented in terms of the time approaches and time processing focus of the time definitions that the various respondent groups offered. The basis for classification is that scheme used by Lane and Lindquist (1989). The findings of this study of Far Eastern students will then be contrasted with those of the U.S. students with whom Lane and Lindquist interacted.

Far Eastern Students

Time Approaches. Table 1 is a summary of the definitions given that could be classified on the basis of measurement, economic or psychological approaches to time. The socio-cultural approach did not seem appropriate to deal with separately, since the authors would argue that the socio-cultural approach would be some combination of one or more of the other three. Nine of the 16 Thai students defined time with words that put them into the economic approach category. Examples were that time is an "important thing that everyone has equally," a "limited resource that we have to use it by a maximized utility way" and time "has value." Also 11 of the Malaysian students used language to define time that pointed toward an economic approach. In this case such words as "valuable" or "precious" were employed to explain how time was viewed. Further, one of these students stated that "every second should be used properly." Interestingly, four of the male Malaysians and one of the females stated that time was like "gold." Half of the Japanese participants also defined time in a way related to the economic approach -- saying such things as time is "an asset," "time is money" and time is "very important." Overall the economic approach was dominant among the respondent group.

The psychological approach had the second strongest showing. Six Thai, four Japanese and two Malaysian students wrote definitions of time that included references that could be classed as in this category. Statements such as time being "too tight" or "something I'm racing with" or time being referred to as "happy" or "boring" or "flat" were made by the participants.

Only five of the respondents showed the tendency to use the measurement approach to time. References to "days, weeks, months and years" surfaced and "measure how long you do something" or there are "24 hours in a day" phrases were used.

Time Processing. An overview of these results will be found in Table 2. Recall that the three processing options here are ribbon (linear separable), cyclic (circular) or procedural.

Across the three Far Eastern student respondent groups, procedural processing appeared to most often be used in their time definitions. Phrases such as "the work (is to be) done in a certain period of time" or "tells you when you have to start or finish your activities or your task" were contained within the definitions. Also, words or statements that pointed toward the use of a schedule or the prioritization of activities were interpreted to represent a tendency to process procedurally.

Cyclic processing of time was detected next most often within the study. References to recurring time periods (eg. days, weeks, months, years) were classified in this processing arena.

Of the six participant groups, all but the Thai men and the Malaysian men, included statements that could be evaluated as indicating ribbon (linear separable) time processing as they defined time. Phrases such as "always flowing" or "always running" or "cannot turn back" or "passes by all the time" revealed this viewpoint.

One also notes that the only processing area that was found applicable by the Malaysian male students was procedural.

Far Eastern Students - U.S. Students Comparison. Do the three approaches to time, economic, psychological and measurement, that have been hypothesized appear as respondents are asked to define time. Considering Table 1 (Approaches to Time) -- the male and female students from the U.S., Thailand, Japan and Malaysia in almost all cases offered words and/or phrases pointing directly to one or more of the three approaches. In the case of the female Thais only, was there no reference to a measurement approach to time. Likewise only among the female Malaysians was there no comment that could be classified within the psychological approach. There were two or more comments from all of the eight groups in the economic approach arena.

Table 1
Approaches to Time

Group	Measurement	Economic
Females - U.S.	Restricts or allows something; recorded differently; life organized by time measures; measures tasks.	Designates how we spend our days; precious.
Males - U.S.	An artificial creation; elements of history.	Valuable and limited commodity; wasted; value.
Female Thais	No comments.	Assigned equally to everyone; valuable; limited resource we have to use; has value.
Male Thais	Day; weeks; months; years; recorded in hours and minutes.	Most important; everyone has equally; to do something I think is important; indicator of ability (to manage).
Female Japanese	Measure how long you do something.	Important; asset of my life; (determines) what I should do.
Male Japanese	Unit or term (in which) to consume something; 24 hours in a day.	Important; time is money; manage the personal schedule.
Female Malaysians	Measurement used; measure in hours and minutes.	Like gold in our lives; very precious thing; very precious; every second should be used properly; valuable.
Male Malaysians	Measure; length.	Like gold; precious; (we must) budget our time properly; (more) valuable than gold or diamond(s); very precious.

Data on U.S. females and males is from Lane and Lindquist (1989).

No major differences were observed among the U.S. students and the Far Eastern students on the measurement approach. From the economic approach perspective one observes that the Far Eastern groups, particularly the Malaysian participants, express a higher value for time ("gold," "diamonds") than the U.S. respondents. Recall that the dominant approach for the Far Eastern students was economic. The small group of U.S. students appeared to differ only in their not having reported how quickly they perceive time to pass while the Japanese and Malaysians commented on this.

No generalizable conclusions can be reached because of the size of these groups and questions about their representativeness. However, the preliminary indication is that one of the dimensions used by individuals to define time is "approach." Further, the three approaches presented from the literature appear to be "on target."

Looking at Table 2 (Time Processing), one notes a disproportionate share of what appears to be ribbon time processing among the U.S. students as compared to the Far Eastern students in the sample. Little in the way of potential differences show out with respect to cyclic and procedural time processing. Hence one can tentatively conclude that these three forms of time processing were recognized by the respondents and reflected in their time definitions.

Table 1 (Continued)
Approaches to Time

Group	Psychological
Females - U.S.	People schedule around it; flows constantly.
Males - U.S.	Different kinds of moments; time comparisons; tells you when to do things.
Female Thais	(Time is) like the murderer; tight; sometimes so long.
Male Thais	Never waits for anyone.
Female Japanese	Passes away quickly; memories of the past.
Male Japanese	Difficult to manage; passes fast when I am doing something fun.
Female Malaysians	No comments.
Male Malaysians	Something I'm racing with; have to make a schedule; important factor that keeps me going.

Conclusions and Implications

Across all classes of student respondents, the approach and processing perspectives were apparently considered as they "defined time." This extends the preliminary confirmation of Lane and Lindquist (1989) to individuals from the Thai, Japanese, and Malay cultures.

The respondents had spent from less than one year to four years in the U.S., hence some acculturation probably had taken place with respect to how time they viewed time.

The following preliminary observations point toward areas for future research. Considering approach, as mentioned in their definitions, the U.S. male/female groups mentioned psychological more than measurement more than economic whereas the Far Eastern students showed greater mentions of economic over psychological over measurement. It would be useful to gather data from larger pools of representative individuals to more fully understand whether this is as it appears.

Thinking about processing, one notes that the U.S. students, appear to be more in tune with ribbon processing followed by procedural and then cyclical. Whereas the Far Eastern students place procedural first

in number of mentions followed by cyclical and then ribbon. Are people from the Far East (at least the countries included here) basically more procedural in the way they deal with time and activities? This is essential to know since it will impact on mutual understanding in human relations, marketing exchange and international commerce.

In sum, this exploratory investigation has helped to uncover areas of research interest for scholars and people in international commerce. Understanding how people "approach" and "process" time under varying situations will help frame up their consumer behavior and/or industrial buying behavior in the international arena. It will allow for increased sensitivity and communications among peoples and individuals and should open the door to more efficient exchange of goods and services.

REFERENCES AVAILABLE UPON REQUEST

Table 2
Time Processing

Group	Ribbon	Cyclic
Females - U.S.	Measure or schedule; it is a constant flow; it is constant.	Cycle of 24 hours.
Males - U.S.	Moves linearly; time elements make up; history; continuous stream; moving in the same direction.	No comments.
Female Thais	continues with no effect; passes by all the time.	Twenty-four hours a day.
Male Thais	No comments.	Days; weeks; months; years.
Female Japanese	Always exists.	Twenty-four hours a day; time orders; a day; a week; a month.
Male Japanese	Always flowing; always running.	Twenty-four hours a day.
Female Malaysians	Cannot turn back.	Measure in hour(s) and minutes.
Male Malaysians	No comments.	No comments.

Table 2 (Continued)
Time Processing

	Procedural
Females - U.S.	People schedule around it; span needed to do things.
Males - U.S.	Tells you when to do things.
Female Thais	To follow a schedule; manageable.
Male Thais	Tells you when you have to start or finish your activities or task; manage the priorities of your activities.
Female Japanese	To do something through human life.
Male Japanese	Manage the personal schedule; organize whatever I do; a necessity to do something.
Female Malaysians	Used to tell the duration (during which) activities are done.
Male Malaysians	Created by man to schedule their lives; time management; all the work done in a certain period of time.

EXPLORING STRATEGY AND PERFORMANCE DIFFERENCES BETWEEN U.S. AND EUROPEAN BUSINESSES IN EUROPE

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Abstract

Increasing internationalization of business and markets has led to a greater need for understanding international competitive strategy. One approach has been a focus on national origins of companies as important influences on strategy. Much less attention is placed on environmental context or organizational characteristics as influences. This paper compares the strategies, performance levels and environmental contexts of U.S. and European - owned businesses. Findings point to an influencing role for both national origin and environmental factors.

Introduction

Increasing internationalization of business and markets has led to a greater need to understand international competitive strategies. One focus of attempts to understand international strategies has been on national traits in company behavior. A view arising out of this focus is that the national origin of a company is a key factor conditioning management goals and strategies, and thus performance. American companies are, for example, often characterized as dynamic, innovative, aggressive, and emphasizing profitability. European companies are viewed as more interested in stability and survival, while Japanese companies are more concerned with growth and market share, even to the extent of sacrificing short-term profitability.

These national differences in the characteristics of organizations are typically interpreted as cultural differences (Bhagat and McQuaid 1982), but behavior could be due to culture, to the situation, or both (Beres 1984; Beres and Portwood 1981). Negandhi (1983), reviewing cross-cultural research contended that management behavior and effectiveness is as much, if not more, a function of contextual and environmental factors as they are of sociocultural ones. Yet much less attention is paid to the former factors in comparisons of organizations from different countries. There is some evidence though to suggest that such factors are important influences on competitive strategy and levels of performance (Hambrick 1983; Hambrick, McMillan and Day 1982; Hofer 1975; Lentz 1981).

The general purpose of this study is thus to compare the strategies and performance of businesses of two geographic origins, U.S. and European, as well as the environmental contexts in which they operate. More specifically the study aims at answering the following questions:

1. To what extent are there differences in marketing strategy and levels of performance?

2. How do these differences relate to differences in marketing strategy and environmental context?

3. How distinctive are strategies and performance under similar environmental conditions?

Literature Review

A basic objective in this study is to understand if and why differences would exist between businesses of different geographic origin. In the first instance, empirical support has been found for the existence of differences. Differences have been identified in strategic marketing behavior and performance for example, (Doyle, Saunders and Wong 1986; Rugman 1983; Samiee 1982; Saunders, Wright and Doyle 1987; Schneeweis 1983). American multinationals have been found to have high R & D intensities, relatively heavy advertising expenditures, and high product diversity (Vernon 1971). Hulbert and Brandt (1980), found distinct national influences on the strategies of subsidiaries. American owned subsidiaries relied on product innovation as a key to continued growth. European subsidiaries, on the other hand, were more defensive. They showed a strong preference for penetrating existing or closely related markets, rather than on entering through the introduction of new products into new markets.

Differences also occur in the behavior of domestic-owned firms and subsidiaries of foreign multinational corporations operating in the same national environment. Capon et al. (1987) attributed this to how a nation - state treats foreign subsidiaries (e.g. it discriminates against them), and home office expectations. For the most part host country governments act in a preferential manner towards domestic companies for national interest objectives. Subsidies, tax policies, grants, guaranteed government contracts and the like, are used to support domestic companies. The two types of firms are therefore likely to exhibit strategy and structural differences.

Headquarters expectations of and influence over subsidiaries is also likely to affect strategic behavior in a manner that makes them different from domestic companies. Subsidiaries typically leverage a few ownership - specific advantages developed in home country markets, to markets abroad. They therefore tend to be more narrowly focused. Domestic companies, on the other hand, typically attempt to exploit all their ownership - specific advantages in the domestic market once they are developed.

A related factor suggesting differences, has to do with the nature of the environments companies operate in. Factor and demand conditions, competitive and industrial structure, and the general nature of home markets, create differences in the strategies and markets chosen by firms of different national origin (Vernon 1972; Porter 1990).

The above discussion indicates that U.S. - owned and European - owned businesses should exhibit differences in their strategies and environments, as well as in performance. In particular, the notion of ownership - specific advantages suggests that subsidiaries should come up with stronger strategies and performance than local companies.

Research Methodology

Data Base: The data used to examine the research questions is drawn from the PIMS (Profit Impact of Market Strategy) project, a large ongoing study of the performance, strategy and competitive characteristics of individual businesses, conducted by the Strategic Planning Institute, Boston, Massachusetts. For the purposes of this research a sample of 120 industrial businesses with corporate headquarters in Europe, and a set of 68 industrial businesses with corporate headquarters in the U.S. selected. The two groups both operate in European markets.

Variables

Performance: Two broad categories of measures are used: measures of marketing performance such as market share, and financial measures such as ROI and cash flow. These types of measures have been utilized extensively in previous research (Douglas and Craig 1983; Buzzell, Gale and Sultan 1975; Gale 1974; Cvar 1982).

Marketing Strategy: A number of variables relating to key dimensions of competitive marketing behavior identified in the literature are chosen. Competitive marketing behavior has to do with such factors as advertising, sales force, product market scope, new products and product quality (Douglas and Craig 1983; Galbraith and Schendel 1983).

Environment: Elements of the environment selected have to do with market growth, market and industry concentration, competitive pressure, and product life cycle stage. Again, these are aspects which have been found in previous studies to be related to levels of performance as well as influencing strategy.

These variables and their definitions in the PIMS database are available from the author. In general expenses are measured as a percentage of sales. Relative measures are in relation to leading competitors.

Data Analysis: The data has been analyzed in two phases. The first phase compares the marketing strategies, environmental contexts and performance levels of U.S. and European businesses. This is done through a series of t-tests. The second phase focuses on the distinctiveness of the two groups of businesses under similar environmental conditions. This is also done through a series of t-tests.

Findings

Marketing Strategy and Performance

The findings provide a number of insights about the performance and strategies of European and U.S businesses, as well as the environmental contexts in which they operate. In the first place, there are clearly significant differences in the levels of performance and marketing strategies of the two groups of businesses. U.S. businesses in Europe significantly outperform their European counterparts in terms of both financial and marketing measures as shown in Table 1.

TABLE 1

Differences In Performance Between U. S. Owned And European Owned Businesses

Variable		U.S. Owned Businesses	European Owned Businesses	Significance
Gross Margin	28.21	19.68	0.01	
Return on Investment (ROI)	24.52	14.32	0.01	
Cash Flow on Investment (CFOI)		7.53	2.43	0.10
Market Share	26.93	20.31	0.10	
Relative Market Share	84.75	55.94	0.05	
Market Share Change	4.51	1.89	0.10	

TABLE 2

Marketing Strategy Differences Between U.S. Owned And European Owned Businesses

Variable		U.S. Owned Businesses	European Owned Businesses	Significance
Product R & D		1.40	0.93	0.05
Total R & D	1.97	1.28	0.01	
Shared Marketing Programs		1.54	1.59	NS*
Shared Customers		1.63	1.98	0.05
Sales Force Expenses	5.69	4.19	0.05	
Advertising Expenses	0.13	0.21	NS	*
Promotion Expenses	0.67	0.58	NS	
Total Marketing Expenses		9.10	5.74	0.01
Relative Product Line Breadth		2.06	2.22	NS
Relative Customer Types		2.13	2.11	NS
Relative Services		3.57	3.32	0.05
Relative Product Quality		28.77	19.15	0.05
Relative Price		107.08	102.70	0.01
Relative Percent New Products		- 1.26	1.02	0.01

*** Not Significant**

What marketing strategy variables may explain these differences in performance? Table 2 indicates some of the potential explanations. It indicates the higher research and marketing intensity of the U.S. owned businesses. They have higher expenditures on research and development but this is not reflected in higher rates of new product introductions. Thus, the drain on current profitability may not be as great. The greater marketing intensity of the U.S. businesses is particularly marked for sales force expenditures. Given the relatively higher importance of personal selling in industrial markets this may be a significant contributor to the superior performance of the U.S. owned businesses. There are no significant differences with respect to advertising and promotional expenditures in both absolute and relative terms.

Other contributing factors to the superior performance of the U.S. group may lie in their significantly higher product quality and levels of service offered. The latter factor is especially important in industrial markets. As a result of their superior quality and services U.S owned businesses are able to charge relatively higher prices which is another contributing factor to their superior profitability.

Environmental Context

A number of differences are also observed in the environments of U.S. and European owned businesses as shown in Table 3. No significant differences are indicated for rates of market and industry growth. The U.S. group operates in environments with higher levels of market concentration which may partially explain their superior profitability, since concentrated markets are typically believed to be more profitable.

Another environmental difference that is observed has to do with patent protection. The U.S. owned businesses enjoy significantly greater product and process patent protection. This may explain their higher research intensity since they are more able to appropriate the returns from their research. Finally, in terms of environmental context, we find the U.S. owned businesses operating in the earlier stages of their product life cycles. This fact may explain the apparent contradiction of high research intensity but low rates of new product introduction.

Strategy and Performance Under Similar Environments

In comparing the effectiveness of the different national groups and the distinctiveness of their marketing strategies under similar environmental conditions, market growth was used. Factor and contingency analyses by Douglas and Rhee (1989) on the PIMS database showed this to be the most important factor. Furthermore, growth has been identified as a major factor influencing strategy and its impact (Day 1981; Day and Montgomery 1983; Douglas and Rhee 1989). For the most part there are no significant differences in the marketing strategies of the U.S. and European owned businesses in the low market growth situation (Table 4).

TABLE 3

Differences In The Environmental Contexts of U.S. Owned And European Owned Businesses

Variable	U.S. Owned Businesses	European Owned Businesses	Significance
Real Market Growth	0.91	0.87	NS *
Competitors % New Products	6.56	4.45	NS
Product Patents Protection	0.38	0.12	0.01
Process Patents Protection	0.29	0.14	0.05
Served Market Concentration	72.28	66.36	0.10
Industry Concentration	61.56	61.14	NS
Product Life Cycle Stage	2.79	3.00	0.01

***Not Significant**

TABLE 4

Differences in Marketing Strategy and Performance:
The Low Market Growth Situation

Variable	U.S. Owned Businesses	European Owned Businesses	Significance
1. *Marketing Strategy*			
Product R & D	1.22	1.04	NS *
Total R & D	1.70	1.38	NS
Shared Marketing Programs	1.54	1.64	NS
Shared Customers	1.54	1.93	0.10
Sales Force Expenses	4.65	4.93	NS
Advertising Expenses	0.09	0.12	NS
Promotion Expenses	0.51	0.65	NS
Total Marketing Expenses	8.17	6.56	NS
Relative Product Line Breadth	2.15	2.28	NS
Relative Customer Types	2.13	2.16	NS
Relative Services	3.67	3.34	0.05
Relative Product Quality	26.77	18.21	0.10
Relative Price	106.12	103.34	0.05
Relative Percent New Products	0.64	1.06	NS
2. *Performance*			
Gross Margin	22.95	19.65	NS
Return On Investment (ROI)	17.97	9.67	0.10
Cash Flow On Investment (CFOI)	3.17	2.08	NS
Market Share	27.49	18.42	0.05
Relative Market Share	87.90	51.44	0.05
Market Share Growth	5.84	3.08	NS

***NS - Not Significant**

The significant differences have to do with product quality (0.1 level), service levels (0.05 level) and price levels (0.05 level). Consistent with earlier findings, the U.S. owned businesses offer much higher levels of product quality and service. Consequently, those businesses are able to charge higher prices. The superior product quality and higher prices of the U.S. group translates into more profitable performance. Return on investment is significantly higher at the 0.1 level for this group. There is also superior marketing performance for the U.S. group resulting from their superior product quality and service. Market share, in both absolute and relative terms, is significantly higher at the 0.05 level.

There do not seem to be many significant marketing strategy differences between the two groups. The major difference has to do, however, with a factor that has been identified as a major determinant of performance. This factor, product quality, may be the main marketing factor explaining the differences in performance since the two groups do not appear to be doing drastically different things with respect to other components of marketing strategy.

In the high or positive market growth situation (Table 5) many more differences are found.

Most of these differences have to do with differences in resource expenditures. High growth is a major indicator of the attractiveness of a market, so these expenditures

indicate the efforts made by businesses to take advantage of opportunities. Similar to the general comparison case, the U.S. owned businesses are significantly more research intensive. Again, however, this does not translate into higher rates of new product introduction. This may be due to the fact that in growing markets the emphasis may be more on product modification than on new product introductions.

TABLE 5

Differences in Marketing Strategy and Performance: The High Market Growth Situation

Variable	U.S. Owned Businesses	European Owned Businesses	Significance
1. *Marketing Strategy*			
Product R & D	1.63	0.81	0.05
Total R & D	2.34	1.11	0.01
Shared Marketing Programs	1.55	1.54	NS *
Shared Customers	1.76	2.02	NS
Sales Force Expenses	7.08	3.42	0.01
Advertising Expenses	0.17	0.29	NS
Promotion Expenses	0.88	0.51	0.10
Total Marketing Expenses	10.33	4.89	0.01
Relative Product Line Breadth	1.93	2.15	NS
Relative Customer Types	2.14	2.05	NS
Relative Services	3.44	3.29	NS
Relative Product Quality	31.46	20.12	0.10
Relative Price	108.36	102.04	0.01
Relative Percent New Products	2.08	0.97	0.01
2. *Performance*			
Gross Margin	35.28	19.71	0.01
Return on Investment (ROI)	33.33	19.13	0.01
Cash Flow on Investment (CFOI)	13.38	2.78	0.05
Market Share	26.18	22.26	NS
Relative Market Share	80.50	60.59	NS
Market Share Growth	2.73	0.67	NS

***NS - Not Significant**

The U.S. group is also significantly more marketing-intensive as evidenced by its significantly greater expenditures on sales force and promotion. In addition to this greater marketing intensity the U.S. group has significantly superior product quality and higher prices which is consistent with previous findings. Again this translates into higher levels of profitability. Unlike the previous comparisons, however, there are no significant differences in marketing performance. This may be explained by the fact that in growth markets there may be enough demand to go around and therefore market share differences may not be that marked.

Conclusions

The most striking result from the study is the consistent superior performance of U.S. owned businesses in both low growth and high growth market situations. Superior product quality and service appear to be the major causes of this higher performance of the U.S owned businesses. The superior quality of the U.S. businesses could also be related to their higher research intensities. In terms of environments, the main cause of superior performance may lie in the higher market concentration and greater patent protection experienced by U.S. businesses.

A major conclusion resulting from the above findings is that the U.S. businesses have strategies that deliver on the key components of marketing strategy relating to performance in industrial markets. Quality, service and sales force expenditures are all consistently higher for the U.S. businesses. The superior marketing strategy is also aided by the environments in which they operate.

In terms of distinctiveness of strategies under similar environmental conditions, differences are more marked for the high market growth situation, suggesting that the U.S. businesses are better at taking advantage of opportunities provided by such markets.

It should be noted that there are a number of environmental and marketing strategy factors for which there are no significant differences between the two groups. A question to be asked then is how much of the differences in performance are attributable to the observed differences in marketing strategy and environment. Attempts to answer this question will require more sophisticated methodologies. The preliminary findings suggest some insight into the differences in performance between U.S. and European businesses and the underlying causes. Further work needs to be done to investigate these underlying causes. It appears that environmental factors do play an influencing role on marketing strategy and its impacts.

Unfortunately, the AQD program for data analysis which PIMS researchers are obliged to use has very few multivariate procedures. Thus, vectors of strategy or environments could not be compared using a procedure like MANOVA. Analysis of similar data using such multivariate procedures should give additional insight with respect to the relative strengths of national origin and environments as explanatory factors.

Finally, the nature and size of the sample requires that the findings be viewed as tentative. The sample consists of mature, relatively successful medium to large business from predominantly Fortune 500 companies. Sample size is also small. There is therefore, a need for some caution in interpreting the study results, in extensions to non-PIMS business, and in viewing them as representative of European market industrial business.

This exploratory study suggests a need for further probing, using larger and more diverse samples, as well as more sophisticated methodologies.

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THE GEOGRAPHICAL FOCUS OF INTERNATIONAL MARKETING RESEARCH, 1982-1991

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Abstract

This paper investigates the international marketing research published between 1982 and 1991. Specifically, the study extends previous work in two ways: 1) it considers the identity of the countries which are included in the publications, and 2) it considers whether the volume of international manuscripts in published journals has increased.

Introduction

A number of assessments of empirical research in international marketing exist, such as those by Cavusgil and Nevin (1981), Boddewyn (1981), Reid (1981) and Albaum and Peterson (1984), as well as work in related areas by Arpan, Flowers and Ricks (1981) and Bilkey and Nes (1982). More recent efforts have been published by Bradley (1987), Graham and Grønhaug (1990), and Özsomer and Cavusgil (1991).

One of the purposes of this paper is to continue this monitoring, updating the assessment of published marketing research through mid-1991. Two more specific issues guide the particular focus of this paper.

The first issue concerns the selection of countries for research in international marketing. This question is (or should be) of more than passing interest. Numerous calls have been made for the cross-national validation of measures developed in the domestic marketing context (e.g. Davis, Douglas and Silk 1981; Douglas and Craig 1983; Parameswaran and Yaprak 1987; Netemeyer, Durvasula and Lichenstein 1991). Going a step beyond cross-national validation per se, it is worth asking which nations are employed for this cross-national validation work. Put another way, there is a sampling frame issue: are a small number of nations being used as proxies for the international environment as a whole? Alternatively, while any particular study might use a very limited sample of nations, is there a good dispersion of country samples so that we are on the road to achieving international validation rather than validation across only a limited sample of countries? To the degree that international marketing research is confined to a limited number of countries, the cross-national reliability and validity of the measures being investigated may also be limited. Therefore, in contrast to the earlier efforts that took the national origin of data into account largely in passing, here we examine this issue at some length.

The second issue concerns the accumulation of knowledge in international marketing. Graham and Grønhaug (1990) note a "decline of knowledge production in international marketing" (1990: 153). One piece of evidence they cite is the decline in the international content of the ***Journal of Marketing***, "...the oldest, most widely read, and most influential journal for marketing academics and practitioners alike." (1990: 155). They note increased attention to international marketing in the 1960s as reflected in the ***Journal of Marketing***, followed by a precipitous decline in the 1970s, and then a small rise in the late 1970s and through 1983, when their analysis ends.

This paper asks whether the trend they found has continued. If the latter 1980s witnessed an overall increase in the number of publications in international marketing, this would suggest that the decline Graham and Grønhaug found in the ***Journal of Marketing*** for the 1970s was due to one of two things. First, this effect may have been confined to the ***Journal of Marketing***: other journals may not have exhibited a reduction in the publication of international marketing articles. An alternative explanation is that the decline in the 1970s may have been a temporary aberration in the ***Journal of Marketing*** which has been corrected in the 1980s.

Methodology

The method used to investigate the state of research in the area of international marketing was content analysis of published research. Relevant research published during 1982 through the first half of 1991 was content analyzed to obtain a perspective on the research being conducted. The time period selected was chosen to provide an updating of the Albaum and Peterson article, while expanding on geographic focus and other issues mentioned above.

Domain of International Marketing

The selection of the domain of international marketing was purposely left broad: all activities that included marketing activities pertaining to products or services that cross

national borders were included in the domain. The subject matter included any research that involved generating primary data, collecting and analyzing secondary data, reporting conceptual research, or descriptive studies.

The investigation was limited to primary journals readily accessible to academics and practitioners. The requirements of "ready accessibility" constrains to some degree direct comparison of this research to that of Albaum and Peterson, who in addition to surveying the journal literature used ***Proceedings*** from the Academy of Management, Academy of Marketing Science, American Institute for Decision Sciences, American Marketing Association, Association for Consumer Research, and the Southwestern Marketing Association.

As Table 1 shows, thirteen publications comprise the sampling frame for this study. These sources yielded a total of 300 research studies during the period of investigation. Albaum and Peterson found 111 articles or papers in twenty-three sources in seven years, a rate of about .69 articles per year per source. We found 300 articles in thirteen sources over 9.5 years, a rate of some 2.43 articles per year per source. This comparison is somewhat misleading, however. While Albaum and Peterson examined only empirical articles, we also included conceptual and descriptive articles in the total of 300 articles. Descriptive and conceptual articles comprised about one-third of the total. Comparing only the publication of empirical articles in the two periods, the ratio is 1.57 articles/ journal/ year in the recent period versus .69 articles/ journal/ year in 1976-1982. Therefore, the rate of publication in international marketing appears to have risen by a healthy margin, more than doubling in the 1980s.

It is worth noting that the ***Columbia Journal of World Business*** published forty-four articles to lead the group. Perhaps surprisingly, the ***Journal of Business Research*** ranked second with thirty-six articles, eclipsing, for example, the ***Journal of International Business Studies***.

What Is Being Researched?

Countries of Study

Albaum and Peterson noted that in 1976-1982 some 31% of the studies they examined involved the U.S. as a market area, with the U.S. serving often as a contrasting country in cross-national comparisons. Further, they found that the most frequent country subjects of study outside the United States were in Western Europe, particularly France, the United Kingdom, and West Germany, each of which appeared in approximately 12% of the studies. 16% of the studies involved participants from Eastern Europe or the USSR.

In 1982-1991, preference is for single-country studies by a margin of almost 2 to 1. When multiple-country studies are done, the mean number of countries investigated is just over three (3.17) countries. The most-favored targets for single-country studies are the U.S., Japan, the United Kingdom, and Canada. The most favored country to use in a group comparison is (perhaps unsurprisingly) the United States, with Japan, Germany, the United Kingdom and Canada following. In both periods an almost identical percentage - 31% versus 30% - of the studies examined the

Table 1
Journals By Type of Article

	Empirical	Descriptive	Conceptual
Journal of Marketing	11	4	2
Journal of Direct Marketing	0	1	0
Journal of Consumer Research	12	0	0
Journal of Marketing Research	6	0	0
Journal of International Business Studies	36	3	5
Journal of Retailing	6	1	0
Journal of Advertising Research	17	6	1
Columbia Journal of World Business	27	22	11
Journal of Advertising	11	2	1
Journal of Business Research	37	4	2
Harvard Business Review	2	10	2
Industrial Marketing Management	27	8	1
California Management Review	2	20	0
TOTALS	194	81	25

U.S. as a marketing area. Strikingly, the percentage of studies involving Eastern Europe and the USSR decreased dramatically, from 16% of the studies in 1976-1982 to 5% in 1982-1991. While Albaum and Peterson found that France, the United Kingdom and Germany each appeared in approximately 12% of the studies, in the 1980s these percentages were 3%, 10%, and 7%, respectively.

The most dramatic increase in interest was for Japan as a subject of research (14% of the articles). Further, to a large degree, interest in Japan as a research area is of very recent origin: most of the single-country studies of Japan were published in 1990. The rest of Asia was also relatively well-represented, appearing in 16% of the articles.

Earlier surveys did not include data which would permit comparison across time of other areas, such as the Mideast, Africa, Oceania, or Latin America. It is obvious, however, that these areas are relatively under-researched. Even the relatively larger countries of Latin America such as Mexico (population of 85 million), Argentina (32 million) and Brazil (147 million) largely have been overlooked. With the exceptions of South Africa and Nigeria, the African continent has been almost entirely ignored.

Modes of Research

Albaum and Peterson concerned themselves only with empirical research, and in fact this constitutes the bulk (about two-thirds) of the studies published in the later period as well. However, we felt it would be useful to note those articles which are conceptual and/or descriptive. Of non-empirical published work, the greatest number are descriptive studies. Less than one of every ten articles (8%) is a conceptual piece.

Distribution of Topics Studied

In their 1984 article, Albaum and Peterson classified international marketing studies into seven topic areas. Where possible we utilized the same topic areas. However, we found it necessary to add six additional topic areas. For 1976-1982 Albaum and Peterson found that some three-quarters of the articles were concerned with either elements of the marketing mix or consumer/buyer behavior, with the single most widely studied element of the marketing mix being the channels variable. More recently articles on elements of the marketing mix have dropped from over one-half of the total to less than one-third of the published research, and channels have been replaced by promotion as the most widely-studied element of the marketing mix. Consumer/buyer behavior has remained relatively constant as a topic of interest, while research methodology and retailing have somewhat increased as topics of interest.

Conclusion

Cross-National Validation

Although the rate of publication of international marketing articles has grown during the late 1980s, the focus of "foreign" marketing subjects is still limited. This limitation can be seen in two ways, which might be called limits of breadth and of dispersion. As to breadth, a majority of international marketing articles are not "international" (in the sense of being several-way comparisons across a number of countries) or even "comparative" (comparison between two countries). They are, rather, single-country studies. As to dispersion, while to some extent the Eurocentric focus of the 1970s (France, the UK, and Germany) has decreased (from 36% to 20% of the total), a concomitant decrease in the study of Eastern Europe and the USSR was noted (from 16% to 5% of the studies). Vast areas of the world (Latin America [less than 1%], the Mideast [3%], Africa [5%], Oceania [3%]) are poorly represented. Japan is the only non-Western country that has been relatively extensively researched.

To what extent, then, are we validating measures cross-nationally? It appears that we are making progress: however, the geographic focus of most cross-national research is limited to the West and Japan. This undoubtedly constrains the cross-national validity of marketing research.

Is International Marketing Research Declining or Increasing?

The rather dismal scenario presented by Graham and Grønhaug (1990) was that published international marketing research has decreased. This scenario was based on a decline in the number of international marketing articles published in the ***Journal of Marketing***.

We suggested two possibilities for why this conclusion may be inaccurate. First, it may be that this effect was limited to the ***Journal of Marketing*** and that overall the trend has been toward publishing more, rather than fewer, international marketing articles. Second, we suggested that the decrease in international marketing articles in the ***Journal of Marketing*** represented only a temporary trend which might have changed.

The first possibility appears to have been supported. The overall rate of publication of international marketing articles across a range of journals has more than doubled from the late 1970s to the 1980s.

The second possibility is also plausible, although we have not attempted to examine this question in depth. Graham and Grønhaug found that international marketing articles in the ***Journal of Marketing*** had decreased from a high point of 13.7% of all articles in 1960-63 to 3.3% by 1972-1975, rising slightly to 5.7% in 1980-1983. We examined volume 55 (1991) of the ***Journal of Marketing*** and found that three of twenty-two, or 13.6%, of the articles are international marketing articles. A year of data obviously is inconclusive, but certainly suggests that the slight upward trend noticed in 1980-1983 may have continued.

In other words, the conclusions by Graham and Grønhaug may be inaccurate. While international marketing appears to have lost favor for a certain period of time, our own work suggests that international marketing articles are increasing, rather than decreasing.

Rather paradoxically, the results shown here are both favorable and unfavorable. The good news is that we are increasing our knowledge base in international marketing, as measured by the volume of publishing in the area. However, we are still doing a relatively poor job of increasing our knowledge about marketing across a sufficiently wide range of countries to be confident that we are understand marketing in a global sense. Thus, work remains to be done.

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COUNTRY-OF-ORIGIN EFFECTS ON PRODUCT PREFERENCES: A FLEXIBLE REGRESSION APPROACH

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Abstract

A number of attempts have been made to characterize the relationship between the country of origin of a product and consumer preferences for the product. One possible method is to examine this relationship via Rust's (1988) flexible regression methodology.

Although a small sample size suggests caution in interpreting the results, this marks the first attempt by authors other than Rust, to our knowledge, to utilize his methodological contribution to investigate country-of-origin effects on consumer preferences. Rust's contribution is found to be useful in marketing research where there is a non-linear relationship between variables.

Introduction

An impressive amount of research over the last two decades has established that the country of origin has an impact on buyer evaluations of products (e.g. Nagashima 1970: Bannister and Saunders 1978; Erickson, Johansson and Chao 1984; Johansson, Douglas and Nonaka 1985; Johansson and Nebenzahl 1986; Parameswaran and Yaprak 1987; Shimp and Sharma 1987; Tan and Farley 1987; Han 1989; Albaum and Golden 1991; for a review of earlier research see Bilkey and Nes 1982). The country of origin is an extrinsic cue which is particularly used by consumers when intrinsic cues are not available (Han and Terpstra 1988). Han (1989) shows that "country image may serve as a halo from which consumers infer product attributes...." The effect appears to be quite strong: the country of origin has greater effects on consumer evaluations of product quality than does the brand name (Han and Terpstra 1988).

In general, these studies have dealt with a very limited number of countries: in effect, the research questions have been addressed in an "either-or" situation, i.e., domestic products versus foreign products, usually with "foreign" represented by only one or two foreign countries. For example, Han and Terpstra (1988) used three foreign countries (Japan, Korea, and Germany): Han (1989) used two countries, Japan and Korea; Johansson, Douglas and Nonaka (1985) used two countries (Japan and Germany); Lee and Green (1991) employed Korean respondents. A recent article, however, extends analysis to seven developed and seven underdeveloped countries (Cordell 1992). Similarly, this paper investigates preferences for products from several countries (in this case, twenty-five countries).

An interesting possibility to investigate the relationship between product preference and country of origin presented itself in the "butterfly curve" effect suggested in the consumer behavior literature by Fleming Hanson (1972: see also Mowen 1990 and Minor and Mowen 1991). The butterfly curve effect draws on research in optimal arousal, the effects of repeated exposure, and particularly the adoption-level theory of McClelland et. al. (1953). According to McClelland, stimulus patterns with no surprise or novelty are less rewarding than those with moderate novelty, surprise, or complexity. Over-stimulating stimulus patterns will also be negatively evaluated. The butterfly curve argument is that preference for a stimulus (such as a product) is highest at a point just higher or lower than the adaptation level. At the adaptation level, preference declines slightly because the person has become habituated to the stimulus. As the level of the stimulus moves too far from the adaptation level, however, preference begins to decrease. Similar responses to stimulation have been observed by Berlyne (1960, 1971) and Haber (1958), and in the context of commercial "zipping" and "zapping" (Olney, Holbrook and Batra 1991).

Since the butterfly curve effect is a ready and convincing explanation of why fashion trends are constantly changing and it also accounts for spontaneous brand switching (Mowen 1990), the butterfly curve argument might also shed light on foreign product preferences. In the international context, the butterfly curve supports the following supposition. The U.S. customer is presented with choices of the same product (say, a bicycle) manufactured in more than one foreign country. A bicycle from a country perceived as "very foreign" will be less preferred because the country of origin is "too foreign" (an example might be a bicycle from the Cameroon). A bicycle from a country which is perceived as not at all foreign (for U.S. customers this might be the U.S. and Canada) is not particularly preferred because here the customer has reached his/her adaptation level: that is, there is no novelty to the product. A bicycle from a country which is somewhat foreign is more preferable because its "foreignness" is intriguing

without being foreign enough to arouse resistance due to unfamiliarity. The same product (say, a bicycle) from a country which is "very foreign" will be less preferred because it is "too foreign": products which are "somewhat foreign" will be preferred because they are just above or below the adaptation level. Products which are not at all foreign will lose their fresh and interesting qualities and preferences will decline. Thus, products from the U.S. and other countries regarded as similar to the U.S. would be preferred less than those from countries somewhat more "foreign."

Somewhat more rigorously put, our proposition is that:

P1: A curvilinear relationship exists between the perception of the foreignness of a country and preferences for its products.

It seems evident as well that the country-of-origin is not the only factor which can influence preferences toward foreign products. Of several factors which might influence these preferences, we propose that the level of technology of the product will also influence preferences. However, we can not predict the nature of the relationship.

Further, we assume that the type of product will affect the relationship between country-of-origin and product preferences. This suggests the following proposition.

P2: A relationship exists between the type of product and preference for the product. This relationship moderates the relationship between perceived foreignness of the country-of-origin and product preferences.

Methodology

One method of visually investigating an assumed curvilinear relationship is to build a response surface based on a predetermined model. This technique has used by, for instance, Batsell (1980), Batsell and Lodish (1981), Hussey, Myers and Houch (1987), Minor and Hodges (1992), and Roberson (1990). As pointed out by Rust (1988) and others, however, fitting data to a pre-determined model can result in distortion.

Rust (1988) recommends the use of flexible regression to perform a nonparametric multiple regression analysis. Flexible regression relaxes several of the standard assumptions of traditional regression. In particular, three key assumptions of linearity, normal error variances, and homoskedasticity are relaxed. Although a brief discussion cannot replace Rust's own explication, the following points highlight the possible advantages of using this approach.

Linearity. In traditional regression independent variables are assumed to be linearly related to the dependent variable. Nonlinear relationships can be modeled only by "...deft selection of transformations of one or all of the variables" (Rust 1988: 10).

Normal Error Variances. In traditional regression the error term is assumed to be normally distributed. Skill is required to successfully transform non-normal error distributions: thus, "...only a few non-normal error distributions can be transformed conveniently" (Rust 1988: 10).

Homoskedasticity. Again, heteroskedasticity is often present. In traditional regression, heteroskedasticity can only "...be addressed by using transformations of the variables or by using specialized estimation techniques such as weighted least squares" (Rust 1988: 10).

Rust's flexible regression technique addresses each of these problems, although space constraints require us to refer the reader to his 1988 work for a detailed discussion of how these problems are addressed[1]. The result is a regression-like analysis that addresses non-linearity, non-normal errors, and heteroskedasticity. Use of the flexible regression technique may be appealing when, as in this case, the investigator assumes a non-linear model. We should be able to model nonlinear relationships automatically without transforming the data or using other techniques.

Using Rust's methodological contribution should allow us to accomplish two objectives. First, we should be able to conveniently investigate our assumption of non-linearity in the country-of-origin/product preference relationship. Second, we can begin to evaluate Rust's flexible regression as a contribution to the marketing researcher's inventory of methodological tools.

Research Instrument

To perform this inquiry, a two-part instrument was designed. The first part of the instrument asked each respondent to scale a list of 25 countries on the countries' degree of "foreignness" from the U.S., on a scale of 1 to 100. The country scale was anchored by 1 = "very similar to the U.S." to 100 = "very different from the U.S." The list of countries appears in Table 1. Each respondent thus scaled each of the twenty-five countries according to the foreignness of each country, as perceived by the respondent.

In the second part of the instrument, respondents were asked to rank their preferences, on a scale of 1 to 10 (1= good product; 10= bad product), for four different products (described as a decorative wall hanging; an electronic camera; a 10-speed bicycle; and blue jeans) for each of the

25 foreign countries, plus the same type of product made in the U.S. We used the four product types to present a range of products in terms of technological sophistication (a decorative wall hanging, blue jeans, a ten-speed bicycle, and an electronic camera). The "decorative wall hanging" description was used in preference to a "painting" to avoid any connotations of preferences for one style of painting over another.

Table 1
List of Countries Used
In the Analysis

Australia	Belgium
Poland	France
Hong Kong	Turkey
Spain	German Federal Republic
Nigeria	New Zealand
Philippines	Ireland
Japan	Peru
Finland	Venezuela
Norway	Yugoslavia
India	Iran
USSR	Netherlands
Taiwan	Greece
Thailand	

Both the order of the country list and the order of the product list were randomly reversed to control for order effects. For ease of analysis the product preferences were reverse-coded so that increasing scores indicated increasing preference for the product. The result for each subject is a scale of countries by degree of foreignness from 1 to 100, and a preference for the products by country on a scale of 1 to 10.

Sample Selection

The instrument was administered as a pilot study to twenty-eight students in a capstone marketing strategy class. All of the students but two were senior marketing majors: one was a graduate student and one was a junior. Two instruments were returned incomplete and were discarded, leaving a total of twenty-six usable responses.

Results

Each subject indicated their perception of the foreignness of each of the 25 countries on a scale of 0 - 100, with larger numbers indicating a greater perception of foreignness. Subjects then indicated their preference for the four products (for a given country of origin) on a scale of 1 - 10, with larger values indicating greater preference. For each subject, this produced 100 sets of perception of foreignness of 25 foreign countries and a preference for each of the four products.

For each subject, we used Rust's (1988) flexible regression with preference for the product as the dependent variable and perceived foreignness of the country-of-origin as the independent variable, for each of the four products. This technique gives a non-linear regression surface which can follow the data flexibly, rather than fitting the data to a straight line.

We then took the estimates provided by flexible regression and graphed them by subject and product, yielding four graphs per subject. The graphs were produced by using STAGE, the graphics editor of STATA (1992), a micro-computer statistical package. Since we are interested in a visual inspection of the results, this technique can be expected to yield the results needed.

Figure 1 illustrates the results graphically. Four graphs, one for each product, are shown. We can interpret the results for the first respondent in the following fashion.

Wall Hanging: as the perceived foreignness of the country-of-origin increases, preference for the product remains stable but drops off sharply.
Blue jeans: here there is a relatively straight upward curve. Preference increases monotonically as the perceived foreignness of the country-of-origin increases.
10-speed Bicycle: as perceived foreignness increases preference for the product also increases, but then reaches an apogee and tails off.
Camera: here there is a monotonic inverse relationship between perceived foreignness and preference for the product.

Graphs for each of the other respondents are shown in succession.

Discussion

The general trend across all subjects and all products is a gradual downward slope, indicating that there is a generally inverse relationship between perceived foreignness of the

country-of-origin and preference for the product. Thus, there is little or no support for the notion of a curvilinear relationship between perceived foreignness of the country-of-origin and product preference. Visual examination of the graphical depiction of the flexible regression results suggests a rejection of P1.

The graphic depiction in Figure 1 provides support for P2, which predicts that the product type moderates the relationship between perceived foreignness of the country-of-origin and preference for the product. The effect of perceived foreignness of the country-of-origin on product preference is not consistent across products. Graphical depiction of the foreignness of the country-of-origin-product preference relationship suggests that our respondents do, in fact, assess product preference based not only on the perceived foreignness of the country-of-origin but also on the nature of the product.

This can be seen even more clearly from Figure 2, where we graph the perceived foreignness of the country-of-origin and preference for products from Japan for all respondents[2]. The results for wall hangings and blue jeans follow a pattern similar to those seen in Figure 2 (i.e. preference decreases as perceived foreignness increases). However, preference for bicycles and the camera remain constant for all levels of perceived foreignness. A tentative explanation is the well-known high regard for high-technology products for Japan among American consumers.

Further support for P2 is shown in Table 2, where we show the flexible regression R^2 and results of significant tests (subject by product). Only 17 of 26 subjects display any significant relationships between perceived foreignness of the country-of-origin and product preferences, and only five of the respondents display significant relationships across three or four products. Clearly, about two-thirds of the respondents are attending to variables other than perceived foreignness to assess product preference. Since bicycles and cameras are higher-technology products than wall hangings and blue jeans, we can tentatively suggest this addendum to P2:

> P2a: A relationship exists between the level of technology of a product and preference for a product. This relationship moderates the relationship between perceived foreignness of the country of origin and product preferences.

Generally speaking, we propose that the research reported here, while suffering from small sample size, does suggest the following three possibilities. First, in some cases a curvilinear effect appears between product preference and country of origin. This suggests that there is often a non-linear relationship (or at the very minimum a complex relationship) between country of origin and product preference.

Second, this relationship can be moderated by other variables such as product type. Thus, investigations of the relationship between country of origin and product preference must take into account other factors as well.

Third, the study suggests that flexible regression is an appropriate tool for exploring complex relationships between variables where linearity cannot be assumed. However, additional use of Rust's method by other researchers is required to fully assess the advantages and limitations of the flexible regression technique.

Notes

[1] Flexible regression also provides a comparison of the fit of the flexible regression model as compared to that of traditional regression. This comparison for the regressions performed for this paper is available from the authors.

[2] Page constraints do not allow the depiction of graphs and tables. These graphs and tables are available from the authors.

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DIMENSIONS OF NATIONAL CULTURE AND THEIR IMPLICATIONS FOR CONSUMER BEHAVIOR AND THE INTERNATIONAL MARKETING MIX

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Introduction

The world is increasingly an integrated marketplace. Economic and political barriers appear to be falling, and there is renewed appreciation for the benefits of free trade and international capitalism (Dornbusch, 1992; Koslowski, 1992; Meyerson, 1991). And yet, many U.S. firms continue to flounder in terms of their international marketing efforts, while the international performance of the U.S. business community as a whole has been characterized as extremely poor (Wills, Samli and Jacobs, 1991).

For their part, marketing scholars have contributed relatively little in terms of theories, conceptual frameworks, or empirical findings which can be used to improve this state of affairs (Li and Cavusgil, 1991). Of the issues that have received attention, perhaps the most important from a strategic standpoint is the question of standardization versus customization in the design of international marketing programs (Buzzell, 1968; Douglas and Wind, 1987; Levitt, 1983; Jain, 1989; Yip, 1989). That is, to what extent should firms adapt their marketing strategies in order to meet the varying demands of consumers in different countries? In this context, marketing strategies refer to decisions regarding the design of product, price, promotion and distribution programs (Jain, 1989)..

Of all the possible considerations in the design of international marketing strategy, perhaps the most complex is culture. Culture is a multidimensional construct that does not easily lend itself to measurement. Moreover, culture exists at multiple levels (e.g., national culture, sub-culture, industry culture) and appears to evolve over time. And, while there does appear to be some movement towards homogenization of economically advanced nations on certain cultural dimensions, there is also evidence of meaningful differences among even these countries on other dimensions (Hofstede, 1980; Peabody, 1985, Ronen and Shenkar, 1985).

The purpose of this paper is to more fully explore national culture and its implications for the design of international marketing programs. The definition and nature of culture will first be reviewed. Next, an attempt is made to comprehensively identify the underlying dimensions of culture at the societal level. The treatment of culture in the international marketing literature is then assessed. Based on these background perspectives, an integrative framework is presented linking cultural dimensions, consumer behavior, and marketing strategy.

Definition and Nature of Culture

Numerous viewpoints exist regarding the nature of culture (e.g., Adelman and Morris, 1967; Gregg and Banks, 1965; Hofstede, 1980; Inkeles and Levinson, 1969; Lynn, 1971; Parsons and Shils, 1951; Riddle, 1992; Ronen and Shenkar, 1985). Anthropologists, sociologists, political scientists, psychologists, economists, and marketers each emphasize different aspects of, and approaches to, the concept of culture, depending on their respective frames of reference.

In an attempt to reflect commonalities among the many perspectives that can be found in the various literatures or culture, the following working definition is proposed: Culture is a distinct way of life for a group of people which is governed by a learned and socially transmitted set of behavioral standards. It is held, expressed, and shared by the individuals within the group through their personal values, beliefs, norms, activities, attitudes, cognitive processes, interpretation of symbols, feelings, ideas, reactions, and morals both implicitly and explicitly.

Culture is learned, not instinctive or biologically transmitted. It is comprised of learned tendencies on how to cope with and respond to one's environment (Murdock, 1940). Moreover, culture is need-gratifying. Cultural learning occurs among peoples in order to bring about positive consequences or avoid negative consequences with respect to their surrounding environment.

The learning process, or inculcation, takes place over an extended period of time, with language (both verbal and nonverbal) serving as the principal factor in the transmission process. Anthropologists have identified three basic types of cultural learning: formal learning, in which individuals are told by others how to think or behave; informal learning, where attitudes and behaviors are adopted through imitation of others; and technical learning, which is provided by educational institutions (Hall, 1959).

Moreover, numerous individuals, groups, and institutions are involved in transmitting the components of a culture. These include friends and family, schools, religious organizations, labor unions, and the media, among others (Potter, 1954).

Culture, by definition, occurs within the context of a social unit or group. The components that make up a particular culture are widely held and kept intact through pressure from "the group" (Lynn, 1971; Murdock, 1940; Parsons and Shils, 1951). While there are variances in individual behavior within the group, these are largely irrelevant to the outsider (Goodenough, 1970; Herbig and Kramer, 1991; Hofstede, 1980). The size of the group can vary, with culture existing at a number of levels, including broad macro-cultures (e.g., national and ethnic groups) to more narrow micro-cultures (e.g., a corporation or neighborhood). There also tend to be linkages among the different levels of culture, with a need for some degree of consistency (Beck and Moore, 1985; Davies and Weiner, 1985; Moore, 1986). For the purposes of this study, we shall focus on culture at the national or societal level, sometimes referred to as national character (Clark, 1990).

Finally, cultures evolve over time. Culture is need-gratifying, and as hierarchies of needs change, the ability of particular aspects of a culture to help individuals satisfy those needs lessens. The culture adapts to better serve its members. Factors such as new technology, population shifts, availability of scarce resources, and economic development can contribute to the pace of cultural change in a society (Levine, 1984). Nonetheless, cultural change has historically tended to be slow.

Dimensions of Culture

While many researchers have acknowledged the multi-dimensional nature of culture, there has been little in the way of comprehensive cross-disciplinary assessments of the various perspectives presented in the literature. In the marketing discipline, the tendency has been either to ignore specific dimensions, or to adopt a single author's conceptualization on those dimensions (e.g., Douglas and Dubois, 1977; Henry, 1976; Jain, 1989; Tse, et al., 1988).

It has been suggested that a relatively objective and empirically observable approach to identifying cultural dimensions involves defining national culture as modal personality (e.g., Inkeles and Levinson, 1969; Lynn, 1971). With this approach, commonalities in adult psychological attributes are identified based on representative random samples of a national population. These common psychological attributes are deemed to be reflective of the value orientation of a society.

From the available research on value-based dimensionality, twenty-five of the more common perspectives are briefly explained in Table 1. This is neither a collectively exhaustive or mutually exclusive set, but does reflect the range of sociocultural characteristics common to human societies. They reflect perspectives from multiple disciplines and, as such, were derived for varying purposes. Moreover, some of them were derived empirically, while others were theoretically derived.

Perhaps the most prominent empirical perspective is that of Hofstede (1980), in which he surveyed one hundred seventeen thousand subjects from sixty-six countries. He proposes four cultural dimensions: power distance, uncertainty avoidance, individualism, and masculinity. Hofstede demonstrates how countries can be positioned on these dimensions, based on measures applied to cross-sections of employees from a major multinational firm (IBM).

Two of the more theoretical approaches are those of Kluckhohn and Strodtbeck (1961) and Inkeles and Levinson (1969). Kluckhohn and Strodtbeck (1961) focus on basic human questions which have different solutions. The solutions reflect the values of society, and provide direction to human behavior. Examples of such questions include "what is the relationship of man to nature?" and "what is the temporal focus of life?" These authors found differences in value orientations on these dimensions when comparing culture-based communities in the southwestern United States. Inkeles and Levinson (1969) derive from the literature three predominant analytical issues which characterize adults universally, and which have functional significance for personality and social behavior. These include the individual's relation to authority, conception of self, and primary dilemmas or conflicts (and ways of addressing them).

Various observers have noted similarities or commonalities among some of the dimensions identified in Table 1. For instance, Hofstede (1980) indicates his four dimensions are strikingly similar to those of Inkeles and Levinson (1969), and Clark (1990) suggests considerable convergence among the perspectives found in five different published studies. In an attempt to build on the work of Clark and others, Table 2 groups the twenty-five dimensions into four general domains based on the principal focus of each. These domains concern how individuals think about and deal with authority and hierarchy, how they approach and socially interact with other individuals (outside of authoritarian relationships), how they think about themselves, and how they approach risk and uncertainty. Based on these four general components of culture, we shall now attempt

to draw implications for consumer behavior and the design of marketing programs.

Culture and Consumer Behavior

Some years ago, Sommers and Kernan (1967) suggested that, of all the factors that affect buying behavior, culture is perhaps the one most taken for granted. Unfortunately, this tendency continues to prevail. While the volume of literature devoted to culture has expanded considerably, there remains little in the way of conclusive findings regarding the implications of culture for consumer behavior. Moreover, there are some observers who argue the long-term trend is toward cultural homogeneity, and so cultural differences ultimately will not matter (Peter and Olson, 1990).

The issue of cultural dimensionality has been largely ignored in the consumer behavior literature. Rather, the literature is replete with cross-cultural studies in which samples of consumers from two or more countries are compared in terms of their preferences for a particular type of product, the response to a particular type of promotional appeal, and occasionally, some specific consumer behavior variable (e.g., Erickson, et al.,1989; Moschis and Bello, 1987; Tan and Farley, 1987). Key consumer behavior variables receiving attention include involvement, cognitive search, information processing, reliance on opinion leaders, risk perceptions, linkages between attitude and intention, choice criteria, product trial, and satisfaction. And, while some of the variability in the data generated by these studies is usually traceable to differences in the countries themselves, as opposed to respondent descriptors or other explanatory factors, particular aspects or dimensions of national culture are rarely addressed.

Such cross-cultural (or cross-national) research tends to produce results that are fragmented and isolated. The focus is country-specific, as opposed to culture-specific. Researchers attempt to explain ex post facto their findings in terms of one or two particular aspects of culture within the countries being examined (e.g., individualism in the U.S., conformity in Japan). Table 3 provides a number of examples of such studies, none of which involve the researchers actually measuring or otherwise assessing the dimension of culture on which they base their conclusions.

In addition, this stream of research employs a variety of definitions of culture. Accordingly, the findings of a given study will tend to be traced to any number of different aspects of a culture, including its customs, symbols, stage of economic development, and family decision-making roles, among others. The values of the culture are addressed in some of the studies, but not others. Those particular cultural values that are cited tend to form a fairly diverse set, and generally do not reflect that cultural value frameworks of Hofstede (1980), Kluckhohn and Strodtbeck (1961), or others.

The limitations of this research can be seen in the treatment of culture within the leading consumer behavior textbooks. Most texts devote a chapter to culture, and some also address culture in a chapter on global consumer markets. A review of these treatments suggests a fairly high degree of similarity. The general approach is to define culture and describe its general characteristics, discuss problems in measuring or assessing culture, and then provide a detailed discussion of cultural values and how they are changing in the U.S. Emphasis is also placed on the significant differences in cultural values among nations. The discussion of values will generally include examples of actual marketing programs (usually advertisements) that appear to reflect a particular value orientation. While the findings of cross-cultural studies such as those cited in Table 3 are sometimes mentioned, the treatment is generally cursory. As a result, questions regarding how cultural variables produce differences in key consumer behavior variables are largely ignored.

Culture and the Marketing Mix

Limited attempts have also been made to link culture to the design of the marketing mix. While the logical flow would seem to be from culture to consumer behavior to the design of marketing programs, the consumer behavior linkage is often implied in this research. Thus, it has been suggested that a societal value for egalitarianism has direct implications for product design decisions (Sommers and Kernan, 1967), that a societal emphasis on individualism should be reflected in advertising copy decisions (Miracle, Chang and Taylor, 1989), and that societal attitudes toward risk-taking and authority should be key considerations in promotional campaigns (Dunn, 1977). Alternatively, Wills, et al. (1991) propose a linkage between the extent to which a country has a high versus low context culture and consumer learning and involvement levels, which should, in turn, be linked to personal selling techniques, selection of distribution channels, and pricing strategy. Similarly, Tan and Farley (1987) have identified linkages between a culture's family orientation, formation of attitudes, and intentions by consumers and the design of advertisements.

The key marketing mix variable emphasized in the culture-based literature appears to be promotion, and particularly advertising (use of models of various rationalities, design of copy). This is followed in frequency by the product itself (features, branding, packaging) with considerable attention devoted to country-of-origin effects. Distribution

receives some attention, principally in terms of retail outlet preferences. Pricing issues are largely ignored (see Douglas, 1976; Erickson, et al., 1989; Henry, 1976; Herbig and Kramer, 1991; Riddle, 1992 for examples).

Underlying virtually all of these studies is the managerial question of whether marketing programs can or should be globally standardized. The findings of almost every published study imply that they cannot, as the reported results typically highlight the existence of statistically significant differences between countries on one or more marketing mix variables. Thus, the French prefer a car that is fun to drive, while the Germans are more concerned with safety and modern engineering (Douglas and Dubois, 1977). Similarly, American consumers are much more enamored with special purpose gadgets than are their British counterparts (Sommers and Kernan, 1967). At the same time, one might question whether studies that find no significant differences would be well-received by reviewers and editors. Even so, the cross-national comparisons made in these studies have yet to produce any generalized implications for the design of international marketing strategy.

Again, a telling indicator of the state of progress in linking culture to marketing strategy can be found by perusing treatments of the subject area in leading international marketing texts. While the approaches vary considerably, most of the texts define culture and explore its major elements in society (e.g., material life, aesthetics, language, social interactions). Although some of them examine cultural implications for consumer behavior, these discussions focus on broad concepts, such as Maslow's need hierarchy or Roger's diffusion theory. All of the texts explore aspects of the marketing mix, principally by citing some of the country differences found in the cross-cultural literature. Moreover, all of them are heavily anecdotal, providing numerous examples of marketing programs that, when transferred from one country to another, performed disastrously, ostensibly due to some cultural factor. None of the texts examine the value-based dimensions of culture, and there is no mention of the works cited in Table 1. One of the texts explores values, distinguishing between instrumental and terminal values, but drawing no specific implications for marketing programs. Hall's (1959) work on high versus low context cultures also receives some attention.

In the final analysis, it appears that academic research on culture has played at best a nominal role in guiding the efforts of international marketers. Unless they are involved with the particular products and countries focused upon in a given study, managers have little more than their own experiences to go on when it comes to factoring culture into the design of the marketing mix. Progress in overcoming the limitations of the extant research requires the development of frameworks that integrate key cultural, consumer behavior, and marketing concepts. One such framework is proposed in the next section.

An Integrative Framework

The value-based dimensions of culture represent a potentially useful framework both for integrating the diverse cross-cultural literature, and for designing international marketing strategies. As illustrated in Figure 1, the four major categories of dimensions are a major determinant of consumer behavior variables, which, in turn, affect the design of marketing mix variables. The consumer behavior and marketing mix variables included in Figure 1 are those that have received attention in the culture-based literature to date.

The work of a number of scholars lends support to this framework. Henry (1976) empirically demonstrated relationships between Kluckhohn and Strodtbeck's (1961) four cultural dimensions (which are integrated into Table 2) and consumer choice behavior, which he then relates to market segmentation decisions. Hoover, Green, and Saegert (1978) found support for relationships between a value dimension concerned with man-nature orientation or locus of control (see Table 2), the importance of risk in purchase behavior, and the appropriateness of product warranties. Suchard, et al. (1992) identify linkages between the locus of control variable, environmental risk perceptions, and the market introduction of environmentally safe products. Riddle (1992) looks at nine of the value dimensions cited in Table 2, and proposes linkages between these, various aspects of the buying process, and the design of the service delivery process in a service business. McIntyre and Ligon (1991) attempt to relate Hofstede's four dimensions (see Table 2) to consumer decision-making styles, which is then related to communications programs.

The proposed framework allows researchers to systematically assess the extant cross-cultural research with an eye towards identifying the underlying cultural values that are responsible for the reported findings. More fruitful, however, may be studies that focus on identifying modal values on a country by country basis, and then link these results to available findings on consumer behavior and marketing mix differences in those countries. Researchers can then begin to identify which of the four underlying dimensional categories are most associated with particular buying behaviors and marketing approaches for particular product classes.

For instance, Hoover, et al.'s (1978) findings were based on the purchase of consumer packaged goods (soap, toothpaste). The value dimension they identified (man-nature orientation/locus of control) falls in the self-relationship category. Parallel studies involving the same products but countries that differ significantly in terms of self-relationship can be used to validate this conclusion. Clusters of countries may then begin to emerge which have similar modal values and for which marketing programs can be tailored.

By emphasizing the value inventory of a market, the marketer is tapping into culture at its most fundamental and stable levels, thereby providing a relatively low risk basis for customizing the marketing mix. The fact that some nations or country clusters may exhibit considerably more variance than others on a given cultural dimension may represent a potential complication, but may also be indicative of the degree of customization to emphasize in one's marketing efforts.

There is also the need to sort out how the value dimensions and categories interact with one another, and which takes primacy in a given situation. Thus, certain aspects of buyer behavior may be explained by both authority relationships and risk relationships, but moreso one than the other. Finally, values do not operate in isolation, and so there may be a need to include in one's analysis other aspects of culture or related country characteristics, such as stage of economic development. Clark (1990) provides some guidance in this regard.

References Available Upon Request

Table 2: Categorization of Cultural Dimensions

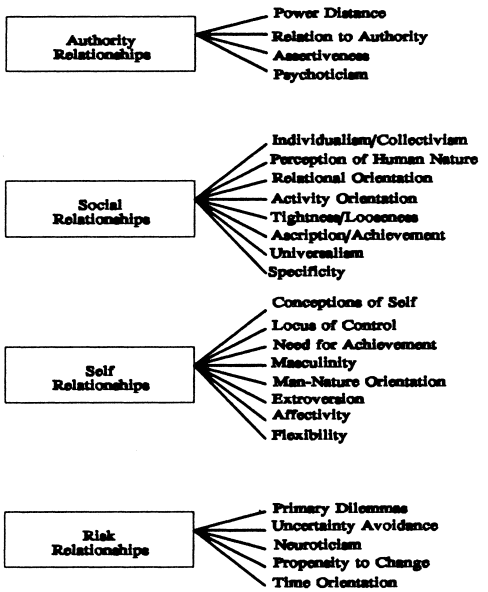

Figure 1: An Integrative Framework for Linking Culture, Consumer Behavior, and Marketing

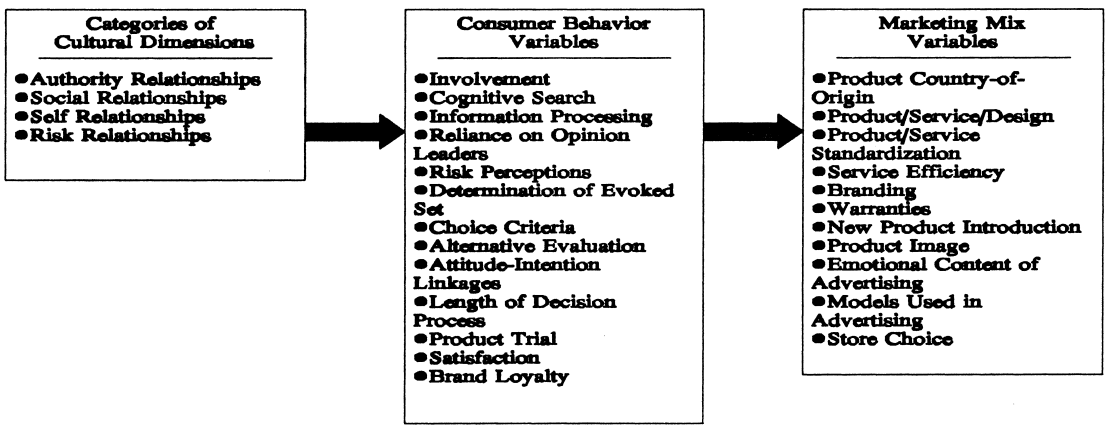

Table 1: Sample of Twenty-five
Dimensions of National Culture

Power Distance (Hofstede, 1980) - Deals with fact that those in society are not equal. Extent to which inequalities and status differences are emphasized (elitism) or downplayed (egalitarian).

Masculinity (Hofstede, 1980) - Refers to the dominant sex role pattern in society. Extent to which the division of roles between men and women is maximized or minimized.

Uncertainty Avoidance (Hofstede, 1980) - Deals with how society copes with uncertainty about the future. Extent to which society is threatened by uncertain and ambiguous situations.

Individualism/Collectivism (Hofstede, 1980) - Extent to which people pursue self-interests and are expected to take care of themselves versus pursuit of group welfare and having the group take care of them.

Relation to Authority (Inkeles and Levinson, 1969) - The beliefs, attitudes, conceptions of society's members toward authority; methods used to behaviorally adapt when in authority-subordinate situations.

Conceptions of Self (Inkeles and Levinson, 1969) - Concerns the conscious, subconscious, actual and ideal conceptions of oneself.

Primary Dilemmas/Conflicts (Inkeles and Levinson, 1969) - Deals with the resolution of primary dilemmas encountered as a result of ego development. Determination of what is most problematic in life and how those key dilemmas are dealt with.

Assertiveness (Peabody, 1985) - Extent to which members of society tend towards self-disparagement and conformity versus self-confidence and individualistic expression.

Tightness/Looseness (Peabody, 1985) - Deals with the amount of freedom, tolerance and formality of societies. Tight societies are more strict, controlling, and morally conscious. Loose societies are more flexible, tolerant of deviant behavior, and have underdeveloped values regarding permanence and group organization formality.

Psychoticism (Lynn, 1971) - Tough-mindedness, as evidenced in mental health, suicide rates, and alcoholism.

Perception of Human Nature (Good/Evil) (Kluckhohn and Strodtbeck, 1961) - Extent to which people believe in the innate goodness or badness of human nature.

Man-Nature Orientation (Kluckhohn and Strodtbeck, 1961) - Extent to which people in society believe in man's mastery over nature versus man's subjugation to nature. How does man fit into nature - subjugation, harmony, mastery.

Time Orientation (Kluckhohn and Strodtbeck, 1961) - The propensity of a society to rank the past, present and future in a certain order of preference or importance.

Activity Orientation (Kluckhohn and Strodtbeck, 1961) - Extent to which society values "doing" (the accomplishment of tasks) as opposed to "being" (interpersonal interactions while engaged in a task).

Relational Orientation (Kluckhohn and Strodtbeck, 1961) - Range of possibilities regarding man's relationships with other men. Spectrum ranges from considerable leeway allowed for individuality to an emphasis on group goals and hierarchial relationships.

Propensity to Change (Sheth and Sethi, 1977) - Extent to which individuals in society are receptive or resistant to social change.

Affectivity/Affective Neutrality (Parsons and Shils, 1951) - Relative emphasis on need gratification versus restraint of impulses.

Universalism/Particularism (Parsons and Shils, 1951) - Degree to which individuals in a society apply universal standards or apply different standards to particular situations or relationships.

Ascription/Achievement (Parsons and Shils, 1951) - Extent to which people are judged based on who they are (e.g., personal attributes) versus what they do (e.g., accomplishments).

Specificity/Diffuseness (Parsons and Shils, 1951) - Extent to which relations to others are limited to specific spheres versus unlimited.

Neuroticism (Lynn and Hampson, 1975) - Relative level of anxiety or stress in a society.

Extravension/Introvension (Eysenck & Eysenck, 1969) - Degree to which people in society feel free to express themselves. Extent of free expression of emotions, and amount of social support required.

Flexibility/Inflexibility (Gough, 1960) - Indicates individual adaptability. Tendency to generate and use novel responses, to spontaneously overcome currently-held beliefs.

High/Low Need for Achievement (McClelland, 1961) - Extent to which behavior is motivated by a need to set goals and successfully accomplish tasks.

Internal/External Locus of Control (Rotter, 1966) - Relates to how much individuals perceive they have extensive (internal locus) or little (external locus) control over their lives and world.

Table 3: Samples of Research on Culture and Consumer Behavior

AUTHORS	PRODUCT & COUNTRIES	FINDINGS	CULTURAL IMPLICATIONS
Erickson, Gallagher, Bators, Schiller (1991)	automobiles Europe, U.S.A.	Differences in self-congruity with regard to purchase intention.	Europeans perceive their ideal and actual self equally. Americans perceive their actual self nearer to the stereotyped image. Less pressure in Europe to be perfect.
Robbins, Paksoy (1989)	magazine advertising U.S.A., Germany	German advertising contains less family settings, more blue collar workers, less use of the product, more middle-aged models, and women in business and personal roles.	U.S. places high emphasis on success, and a preoccupation with age and staying young.
Miracle, Chang, Taylor (1989)	food, automobiles, appliances, and electronics Japan, U.S.A.	Japanese commercials took twice as long to show the product, showed the brand name for shorter periods of time, and mentioned the brand name less often.	Japanese culture and language has higher context, tendency is to depend on familiarity and trust. It also uses a non-confrontational or soft-sell approach to selling less often.
Anderson, Engledow (1987)	subscriptions to test magazines U.S.A. Germany	Americans perceived more important role for a brand & its reputation, are more discriminating in their use of attitude towards advertising, & more impatient and impetuous.	Germans look at the overall product in their decision-making and are more careful (thoroughness). Americans are more concerned with buying "now" and with image.
Moschis, Bello (1987)	international travel U.S.A., England, Germany, Latin-Europe, Mid-East,	Divided countries into demanders, educationalists, escapists based on underlying travel attitudes and behaviors.	U.S. behavior reflects high achievement orientation. Latin-European behavior reflects slower paced lifestyles. German & Nordic European behavior reflects thoroughness.
Hoover, Green, Saegert (1987)	bathsoap, toothpaste, and instant coffee Mexico, U.S.A.	Mexicans had higher brand loyalty & risk was a less important determinant of purchase behavior; Americans demonstrated a stronger relationship between perceived risk & brand loyalty.	The higher brand loyalty in Mexico reflects the traditionalism and their suspicion to change. The low risk levels reflect their belief in fatalism.

EXPORT PROFILE AND PROSPECTS OF MINORITY-OWNED U.S. FIRMS

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Abstract

The continued high level of interest in the exporting activities of U.S. companies is partly attributable to the ever-present U.S. trade deficit. Substantial effort has been devoted to providing export incentives to those companies with exportable products and services, particularly among small and medium-sized firms. The present study profiles the exporting activities and prospects of U.S. minority-owned firms. An examination of the export activities of minority-owned firms is useful to obtaining a better understanding of the status of international trade in this subgroup. Implications for public policy concerning the effective management of export marketing enhancement programs for minority-owned as well as small- and medium-sized manufacturing firms are also presented.

Introduction

Exporting continues to be an issue of national significance. The importance of exporting has become more prominent in recent years as a result of the ever-present U.S. deficit in international trade. Consequently, the often neglected area of export development and promotion has become an issue that is actively discussed in policy circles. Although the U.S. trade deficit steadily declined between 1986 and 1991 to the extent that it contributed nearly 30% of the growth in real gross domestic product, most analysts now agree that in order to improve the international trade picture of the U.S., American firms will need to export more. In 1992, however, slower export growth and an acceleration in the pace of imports will reverse some of the gains made in reducing the U.S. trade deficit (U.S. Department of Commerce 1992). Such news only heightens the interest in exporting among practitioners and academicians.

Growth in the volume of U.S. exports is desired by U.S. firms and consumers. The greater the proportion of world sales captured by U.S. firms, the higher the employment levels and standards of living in the U.S. Since the U.S. contains just 5 % of the world's population, relatively vast potential markets for U.S. products exist abroad. Yet knowledge about international marketing and international markets is often unavailable to U.S. firms (Edmunds and Khoury 1986), many of which are inexperienced in the international marketplace.

Previous researchers have examined reasons for companies initially exporting (Bilkey 1978; Bilkey and Tesar 1977; Cavusgil, Bilkey and Tesar 1979). Others have examined the changes in locations of sales offices and manufacturing which are consistently associated with international experience, as well as correlates of export intensity (Axinn 1988; Czinkota and Johnston 1983; Diamantopoulos and Inglis 1988).

The purpose of this study is to examine the perceptions of minority-owned U.S. firms, relative to attitudes towards selected exporting activities. For additional insight, these opinions are compared to those of a random sample of Illinois small- and medium-sized firms. It is hypothesized that perceptions will differ among firms, relative to the length of time the firm has been actively involved in exporting, on various aspects of exporting such as motivational factors, managerial attitudes and capabilities, and characteristics of the firm.

While several U.S. firms participate in some way in international trade, the level of participation typically varies, and foreign sales account for only a small percentage of total firm sales. Reasons for this "variability in participation" include limited foreign marketing effort, which, in turn, may be related to differences in perceived lack of financial capital or human resources, perceptions of government support for exporting, perceptions of domestic market size, and the perceived importance of various exporting activities (Cavusgil 1984), or narrow, domestic managerial foci (Axinn 1988; Cavusgil and Nevin 1981). Assuming that differences in level of export participation are related to differences in perceptions and attitudes regarding exporting activities, changes in these perceptions ought to produce incremental sales to entrepreneurial firms. If reasons for limited international marketing efforts can be identified, facilitating policies may be formulated to boost international trade efforts by those firms.

Background Discussion

Previous studies on exporting have revealed that perceptions and attitudes of U.S. firms' export activities may differ in the areas of motivational factors, managerial attitudes and abilities, firm characteristics, economic incentives and disincentives, and the perceived risk of exporting. This section of the paper highlights some of these findings.

Characteristics of the Firm: Firm characteristics that have been identified as associated with export success include size, domestic market performance, product uniqueness, production capacity, labor skills, and the type of industry in which the firm operates (Bilkey and Tesar 1977; Wiedersheim-Paul, Olson and Welch 1978; Czinkota and Johnston 1981). Size in particular, has been used as an independent variable in explaining export behavior and success (Bilkey and Tesar 1977; Christensen, de Rocha and Gertner 1987). Results of these studies suggest that market entry by small-sized firms may be constrained by the amount of financial and human resources as defined by sales, assets, number of employees, and managerial personnel.

Managerial Ability: Ongoing studies of small business failures in the United States by Dunn and Bradstreet indicate that major causes are incompetence and lack of experience and managerial ability. A study by Larson and Clute (1979) of 350 small businesses in Chicago found that personal characteristics (e.g., education, experience), managerial deficiencies and financial shortcomings were symptoms of export failure.

Managerial Attitudes: Pavord and Bogard (1975) found that negative perceptions of export possibilities were more often barriers to exporting. In another study, Simpson and Kujama (1974) explored why some decision makers make positive export decisions and others negative ones, when in some instances, the stimulus to export may be similar. They found that a decision maker's perception of cost, profit and risk were important for a positive export decision. They concluded that small manufacturers held erroneous conceptions as to the risk and profitability associated with searching for and exploiting export opportunities.

Proactive-Reactive Behavior: Some authors have attempted to dichotomize exporting motives into "proactive" (positive, forward) and "reactive" (negative, backward) categories (Bilkey and Tesar 1977; Welch and Wiedersheim-Paul 1980). Reactive motives for exporting have been identified as excess production, declining domestic sales, and competitive pressure while identified proactive motives include exploiting technological advantage, unique products, and comparative marketing advantages.

Research Methodology

Sample Procedure

The study was based on the responses obtained from the **1991** Black Enterprise Magazine's **Top 100** list of black-owned corporations in the United States. Responses were also obtained from a random probability sample of 500 small- and medium-sized Illinois manufacturing firms. These firms were selected from the population of firms listed in a 1990 Illinois manufacturers' directory.

The respondent in each firm was the Chief Executive Officer or the executive responsible for the firm's export activities. Two mailings of the cover letter, questionnaire and postage-guaranteed return envelope were conducted to achieve an acceptable response rate.

Of the total 100 surveys mailed to the BE 100 firms, 34 were actually returned, however, 31 questionnaires were completed and deemed usable for a response rate of 31.0 %. Of the total 235 surveys returned from Illinois firms, 224 were deemed usable for a response rate of 44.8 %.

Measures

In order to achieve the objectives of the present research, data from the two samples were analyzed according to company characteristics, respondent characteristics, and perceptions of export-related concepts. **Company Characteristics** were measured using categorical scales to determine the number of years the firm has been in operation, type of ownership, number of employees, total assets, total sales for the last fiscal year, the company's involvement in exporting, percent of management time devoted to developing new export markets, percent of outputs exported, and the percent of sales and profits derived from exporting.

Personal Characteristics included present job title, the number of years the respondent had been in their present position, level of education, age, if the respondent had ever studied in a foreign country, the number of trips a year made to a foreign country, the number of foreign publications read each month, and the respondent's exporting experience measured by determining if they had previous export responsibilities and/or export experience prior to their current position.

Specific managerial perceptions related to exporting activities included: **Size of the U. S. Market** - a single item measure related to the size of the firms' U. S. market

(1=very small; 5=very large); **Governmental Support for Exporting** - one item related to federal support for exporting (1=very positive, 6=very negative); **Relative Export Capabilities** - a single item scale used to measure the firm's perceived exporting capabilities compared to competition (1=much less capable; 5=much more capable); **Degree of Change in Export Activity** - single item (1=significantly increased over last year, 5=significantly decreased over last year).

Finally, management's perceptions of proactive/reactive behavior and current and potential exporting efforts were determined. Proactive/reactive behavior was measured using a fifteen-item scale to determine the importance of various factors in the firm's involvement in exporting (1=extremely important, 2=very important, 3=important, 4=somewhat important, 5=not important). Items in the scale were summed and averaged to formulate composite variables that may have been suggested as factors contributing to a firm's willingness to export. The first export variable contained four items that suggest the importance of maintaining a **Growth Strategy** for export activity (making greater profits, increasing yearly sales, having a larger market, increasing the growth of the company). The second dimension consisted of five items that represent the influence of **Competitive Forces** on the firm's decision to export (keeping pace with local competition, preventing dependence on the local market, making use of tax incentives provided for exporting, overcoming competition in the export market, and using up plant capacity). Another dimension included four items that suggest a **Competitive Advantage** the firm may want to exploit in the international arena (unique product, efficient production methods, competitive price advantage in a foreign market, closeness to an export market). The final variable consisted of two items used to capture a **Managerial Commitment** to exporting (management's commitment, satisfying the wishes of top management).

Current and Potential Exporting Activity was determined by asking respondents to indicate countries/regions where they currently export and to mark countries/regions they believed had the greatest sales potential for their company in the next 1-3 years. Respondents were asked to indicate the three top countries/regions.

Table 1: Company Characteristics

	%IL Firms	%BE100 Firms
Years in Operation		
1-5	3.2	10.3
6-10	12.7	27.6
11-20	19.9	44.8
Over 20	64.3	17.2
Form of Ownership		
Private	67.9	92.6
Other	32.1	7.4
Number of Employees		
Under 10	17.9	0.0
10-49	40.2	14.8
50-99	11.6	14.8
100-499	17.4	59.3
500 or more	12.9	11.1
Total Assets		
Under 5 million	68.2	53.8
$5 million to $19 million	35.7	46.2
$20 million or more	1.5	0.0
Total Sales-Last Fiscal Year		
Under $10 million	62.7	66.7
$10 million to $29 million	15.8	20.0
$30 million or more	21.5	13.3
Company Involved in Exporting	74.1	27.6
Percent of Management Time Devoted to Exporting		
Less than 10 percent	77.0	83.3
10 percent or more	23.0	16.7
Percent of Outputs Exported		
Less than 10 percent	75.1	93.3
10 percent or more	24.9	6.7
Profits Generated From Exporting		
Less than 10 percent	77.8	100.0
10 percent or more	22.2	0.0
Sales Generated From Exporting		
Less than 10 percent	76.8	96.7
10 percent or more	23.2	3.3

Results

This section will highlight the findings of the survey. The findings covered firm characteristics, respondent characteristics, and perceptions toward selected export concepts for BE 100 and Illinois firms.

Profile of Organizations

The profile of the organizations included in this study is summarized in Table 1. BE 100 firms typically have been in existence between 11-20 years (44.6%) and were privately-held corporations (92.6%), while the Illinois firms were typically 20 or more years old (64.3%) and with a smaller percentage being privately-held corporations (67.9%). The firms participating in the study varied in size, with the largest percent of BE 100 firms having 100-499 employees (59.3%) and Illinois firms having 10-49(40.4%). In addition, most held less than $5 million in assets (53.8% for BE 100 firms and 68.2% for Illinois firms) and under $10 million in sales (66.7% for BE 100 firms and 62.7% for Illinois firms)(see Table 1). Of the firms interviewed, only 27.6 % of the BE 100 firms are currently exporting, while 74.1 % of the Illinois firms are presently exporting. The amount of management time devoted to exporting, percent of outputs exported, and the level of profit and sales generated from exporting show a similar pattern where Illinois firms typically exceed BE 100 firms (see Table 1).

Profile of Respondents

The overwhelming majority of BE 100 respondents were CEO/Presidents (89.3%) while the respondents from Illinois firms were fairly evenly split (53.8% were general/export managers; 46.2% CEO/Presidents) (see Table 2). As shown in Table 2, the age of the respondents and years in their present position was consistent for the two samples; however, BE 100 respondents appear to have more education (67.9% of BE 100 respondents have post undergraduate study or degrees compared to only 37.6% of Illinois respondents). The level of study and trips to foreign countries, as well as, the number of foreign publications read by each group appear to be similar. Finally, there does appear to be a difference in the two groups relative to export experience (only 3.7% of BE 100 respondents have had export responsibilities at another firm and only slightly more (6.7%) have had any export experience prior to their current position while 16.2 % of the Illinois respondents had previous export responsibilities and 32.1% had previous export experience)(see Table 2).

BE 100 and Illinois firms perceive governmental support, export capabilities relative to competitors, and the importance of competitive advantage to exporting involvement quite similarly (see Table 3). However, Illinois firms perceive their exporting activity to be greater than competitors, while BE 100 firms believe they export less than competitors; although this trend may be shifting. BE 100 firms' exporting activities had increased in the previous year and they perceive exporting as a means for growth and to offset local competitive pressures (see Table 3). Finally, BE 100 firms recognize the importance of obtaining the commitment of management to exporting (see Table 3).

As can be seen in Table 4, BE 100 and Illinois firms, for the most part are focusing current export activities in Canada, Europe, Latin America, and the Far East (albeit a higher percentage for Illinois exporters). There is also consistency between the two samples as to the potential of these countries/regions for their firms' future exporting activities. The exceptions are Africa, where 20.0% of the BE 100 firms perceive future exporting potential compared to only 4.5% of Illinois firms and Latin America where 30.8% of the Illinois firms perceive future exporting potential compared to only 13.3% of BE 100 firms (see Table 4).

Discussion and Conclusions

Findings of the present research point to a lack of current exporting activity by BE 100 firms. While characteristics of the firms and individuals participating in the study, and managerial attitudes appear to be conducive for these firms to be participating in exporting activities, only 27.6% of the BE 100 firms are presently exporting. A lack of exporting experience at these firms may deter or slow their pursuit of international markets. Only 6.7% of the BE 100 respondents had exporting experience prior to their current position, potentially a key liability.

However, there appears to be a readiness by BE 100 firms to enter the international arena. BE 100 firms have indicated they have significantly increased their export activities and see exporting as a means for corporate growth and a way to stave off competitive pressures in local markets. In addition, it appears that these firms have been able to identify relatively attractive international markets to begin their exporting activities. BE 100 firms also recognize the need to have the support of management to exporting activities. Another impetus for higher commitment to exporting relates to the apparent profit enhancement for exporting firms. On the basis of previous research, larger firms derived a larger percent of their profits from exporting activities (Bilkey and Tesar 1977). In addition, these firms spent more of their management time to develop new export markets and had a higher level of management support for exporting. Consistent with previous research, another finding of the present study is the fact that while BE 100 firms and Illinois firms see similar potential in various foreign markets, it appears Illinois firms are already realizing the benefits of that potential. For instance, a larger percentage of Illinois firms are currently exporting to those countries/region where they perceive a potential. In addition, Illinois firms are realizing

Table 2: Respondent Firms

	% Illinois	% BE100
Present Job Title		
CEO/Pres	45.3	89.3
General/Export Mgr	53.8	10.7
Yrs in Present Position		
5 yrs or fewer	38.8	39.3
5-10 yrs	27.7	28.6
11 or more yrs	33.5	32.1
Level of Ed		
Grad 2 yr college or less	25.7	14.3
Grad 4 yr college	36.7	17.9
Post Grad Study/Degree	37.6	67.9
Age of Respondent		
25-34	11.0	17.9
35.44	27.5	17.9
45-54	29.8	35.7
55 or older	31.7	28.6
Study in Foreign Country		
Never	33.8	22.2
1-2 times per yr	51.0	56.6
3 or more times per yr	15.2	22.2
Number of Foreign Pubs Read		
None	51.8	55.6
1-2	34.8	40.7
3 or more	13.4	3.7
Exp Responsibil Other Firms	16.2	3.7
Personal Export Experience Prior to Current Position	32.1	6.7

Table 3: Perceptions of Exporting Related Concepts

	Mean	Std Dev	t Val	p Val
Size of U. S. Market 1=very small 5=very large				
IL	3.79	1.60		
BE100	4.28	.96	-2.41	.02
U.S. Gov't Support for Exp 1=very neg 5=very pos				
IL	3.55	2.03		
BE100	3.20	1.16	1.30	.20
Exp Capability Relative to Compet 1=much less capable 5=much more capable				
IL	3.19	1.78		
BE100	2.96	1.18	.88	.38
Exp Activ Comp to Compet 1=exp less; 3=exp more				
IL	2.25	2.18		
BE100	1.50	.78	3.49	.01
Exp Activ Comp to Last Yr 1=sig decr; 5=sig incr				
IL	3.15	2.03		
BE100	4.23	2.22	-2.71	.01
Imp of Co Growth Strat for Exp				
IL	3.83	.95		
BE100	4.32	.72	-2.40	.02
Imp of Compet Strat for Exp				
IL	2.82	1.00		
BE100	3.53	1.08	-3.22	.00
Imp of Compet Advan for Exp				
IL	3.16	.91		
BE100	3.24	1.20	-.37	.77
Import of Mgt Commit for Exp				
IL	3.28	1.07		

Table 4:
Countries/Regions Firms Exporting Activity and Potential

	%Currently Export		%Potential Export	
	Illinois	BE 100	Illinois	BE 100
Cntry/Region				
Africa	10.3	6.7	4.5	20.0
Canada	58.9	13.3	45.4	30.0
Europe	46.4	10.0	42.4	30.0
Far East	39.7	10.0	25.0	20.0
Latin America	35.3	13.3	30.8	13.3
Middle East	20.5	6.7	14.3	13.3
Caribbean	2.2	0.0	0.9	0.0
Australia	5.8	0.0	0.9	0.0

a greater percentage of their sales and profits from these export markets than BE 100 firms. As such, BE 100 firms, as well as other small- and medium-sized firms, could enhance their profit potential through greater efforts directed at exporting.

Given the findings of the present research with regards to commitment to exporting, approaches to enhance the firm's/individual's commitment appear to be worthwhile. To say that a firm is "export capable" when in fact there are perceptual blockages within the firm implies a refocusing of efforts to dismantle these blockages. If small- and medium-size firms in general, and minority-owned firms in particular, are to partake of the export marketplace opportunities, current U.S. export assistance for these firms should be modified.

The task then becomes how to enhance the opportunities and ease with which BE 100 firms can enter the international arena. One obvious way to accomplish this would be to hire individuals with appropriate export experience into these firms. A second means would be to enhance the education of BE 100 corporations with regards to the mechanics of exporting. For example, the adoption of an interactive approach in which firms experienced in exporting exchange information and/or personnel with firms that have no experience may be more useful. Perhaps this interactive process could be mediated by a third party such as an export consultant or representatives from the federal or state overseas commerce agencies. Given the higher educational level of the participating BE 100 firms and their interests in expanding into the international marketplace, a mentoring program as outlined above or one aligned with successful exporters may be effective in providing the necessary experience for BE 100 firms in the interim to more easily enter the international arena.

Several issues deserve mention for future investigations into exporting by minority-owned firms. First, caution should be exercised in generalizing the findings of this study to all U.S. exporters and all minority-owned organizations. More research is needed to compare the export activities of other minority segments such as Hispanic and Asian American firms. The notion that experience in exporting is an evolutionary phenomenon that increases over time would suggest the need to conceptualize and design longitudinal studies, however challenging this might seem. Finally, future studies may be conducted in which several industry segments could be identified and results presented to compare export activities across these industry groups.

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SUCCESSFUL INTERNATIONAL STRATEGIC ALLIANCES

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Abstract

International strategic alliances are long-term, collaborative agreements in which two or more companies of different nationalities work as partners in one or more markets while competing in others. Strategic alliances have become quite popular for companies that are aspired to expand their marketing efforts internationally. Not all of these strategic alliances are successful. The purpose of this study is to identify the success factors for firms involved in international strategic alliances in high-technology industries. It is found that three factors "need" for the marketing, financial, management or technological resource which each partner is able to provide; the relative amount of resources each partner "commits" to the alliance; and the consequence of failure to the partners are important factors in determining the success of alliances.

Technology sharing issues as motives for entering into alliances and as exit barriers were also studied. Technology in product development was found to be an important long term partner contribution in successful alliances. Technology sharing, willingness to adapt products/ technologies to those of partners in the alliance and significant commitment of technical personnel to the alliance, all showed positive correlation to the success of the alliance. Finally, the loss of advanced proprietary technology was found to be a significant factor contributing to the success of alliances, perhaps serving as an exit deterrent.

CONTRACT STRATEGIES IN HOTEL INDUSTRY: SWEDISH HOTEL FIRMS ABROAD

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INTRODUCTION

In the Post War years there has been a general increase in international production and trade and the structure of the economy changed. This created demand for hotels. Several hotel companies established hotels abroad and contract arrangements were negotiated. In 1982 in the hotel industry management contract and franchising were the two most widely used mechanisms to operate abroad (Dave' 1984). For what reasons hotel firms internationalise their operation? Which channels are used for the purpose? What strategies are pursued and for what reasons? What are the advantages respective disadvantages of these strategies?

Few of these issues have been researched in the past. Most of the past research have investigated domestic firms and their domestic operations Eyster (1977 a; 1977 b; 1977 c; 1977 d) researched management contracts in the U.S. based hotel industry, the equity participation by the foreign hotel firms (operator), modes of fee payments, the relative bargaining power of the parties and change therein, and the areas of conflicts. He found that a number of management contracts were valid for a short time period (2-3 years) and that over time there was a change in the bargaining power of the contracting parties. It was also discovered that the management contractors were paid a combination of fixed and variable management fees. These studies covered management contracts between individual hotel operators, and between hotel chains and the differences were elucidated. Dunning and McQueen (1982 a, 1982 b) examined the reasons why hotel firms go international and their advantages in the international market. They detected that the advantages of the international hotel chains lie in their ability to offer a whole package of standardised offerings to their clients. Dave (1984) examined the international hotel industry and Littlejohn (1985) examined the economic aspects of foreign operations. Gunnar (1973) and Gunnar and Burkhart (1977) described the legal aspects of management contracts in the condominium hotels. Udell (1972) studied franchising as the distribution channel in the hotel industry. The advantage as well as the disadvantages of franchising were elucidated. All the above mentioned studies, with the exception of the study by Dunning and McQueen are limited to the U.S. based hotel firms. In addition, all the past studies have been based on a (bargaining) power perspective. Implicit in this approach is a conflict of interest between the local hotel owners and those of the operator.

PURPOSE AND METHODOLOGY

None of the research explicitly touched upon the issue of strategy that companies in the hotel industry adopt in their international operation. This is the purpose of the present paper. What strategies hotel firms (operators) pursue in their contract relationships in the international market and for what reasons? By strategies is implied consistent patterns of behaviour (Mintzberg and McHugh, 1985). We investigate the realised strategies and these deviate from the planned strategies. In addition, as will be discussed soon, this paper is based on a network perspective.

The paper is analytical, based on the experience of the Swedish hotel companies. The hotel firms, five in number, covered in this paper are responsible for around 80% of the foreign operations of the Swedish hotel industry. Two executives in each hotel operator were interviewed to collect information on strategy. The executives interviewed are responsible for the foreign operations of their hotel chain. In all, but one, of the studied operators either a separate executive or a separate department looked after the foreign operations. In the smallest chain no such separate position or department existed. In all the chains I interviewed the person who looked after the foreign operations of the firm. Secondary sources of data were also used. The materials presented below are reliable and representative. However, the same may not be representative of strategies adopted by the hotel firms from other countries. It is possible that in their operations abroad the non-Swedish hotel chains adopt a different strategy. The five operator chains differ in a variety of ways. The largest chain is operating no less than one hundred hotels in nine different countries. The smallest chain operated only one hotel outside Sweden. The average size of the hotels run by the operators also vary. Some of the hotels operated by these firms are large with over 400 rooms. The smallest hotel outside Sweden has only 70 rooms. Finally, the youngest hotel operator was established in the 1960s, whereas three chains were established before the Second World War.

The paper starts with a theoretical presentation. Based on network approach a typology of international contract strategies is developed. In the following section the

contract arrangements by the Swedish operators are analysed. Finally, some concluding remarks are presented.

FIRMS, RESOURCE EXCHANGE & NETWORKS

Exchange of resources among firms has been discussed in the literature on (strategic) alliance. The purpose behind such exchange and alliance, their dynamics, strategies and management have been discussed (Harringan 1986; Contractor and Lorange 1988; Ross 1989; Doz 1991). Alliance characteristic have been discussed by Borys and Jemison (1989) and alliance complexity by Killing (1988). Macneil (1974) and Williamson (1975; 1985) also examined co-operative exchange relationship. The perspective adapted in this literature is exclusively of a single firm. The interconnectedness of exchange relationships are not analysed. In this literature it is presumed that firms singularly examine their resources, assess strength and weaknesses, scan the environment to detect opportunities and dangers, and finally evolve strategies. These strategies are, then, implemented.

In this paper the above approaches are not used as 'no business is an island' (Håkansson & Snehota, 1990). Drawing a boundary line between a firm and their environment is hardly feasible. Moreover, firms seek resources from the outside. This holds for the firms in the hotel industry as well.

The analysis in this paper is based on the premises that actors in the hotel industry engage in international exchange (contract) relationship in order to seek critical resources. The resources within the hierarchical control of hotel firms are insufficient to sustain international expansion. Contract relationships or alliances are a means to acquire critical resources. The premises of the above approach- the network approach- are that firms (actors) must perform activities to survive and grow and for this purpose actors require resources. However, actors rarely ever control all the resources to perform activities (Håkansson 1987; 1989). By resources is implied means and facilities that are potentially usable by firms. Resources are acquired through traded and exchange with other actors but this is problematic (Håkansson 1982). Also, the resources contributed by an actor in an exchange could be more or less specific to that exchange. The more relationship specific the resource the more difficult to find an alternative use of that resource. The more generalised the resource the more readily are its alternative uses.

The individual exchange relationships are, moreover, embedded in a wider and interconnected network structure (Mattsson 1990; Sharma 1991; Johanson and Mattsson 1992). Through resource exchange companies establish a position in the network. Naturally, actors through their own actions and strategies partially influence their strategic position in a network. A vital issue is how are the exchange relationships co-ordinated.

FORMS OF EXCHANGE

Actors in a network exchange resources through a variety of arrangements. On the one extreme are the totally internalised exchange relationships like establishing a wholly or majority owned foreign subsidiary.

In the hotel industry the internalised exchanges imply that all the resources to construct hotels and then operate the same are contributed by one and the same firm, e. g., the operator. A heavy capital investment will follow. In reality the overwhelmingly large number of exchanges, in general as well as in the hotel industry, are externalised. The internalised and the externalised means are different as operators achieve their aims in different ways. Internalised exchange relationships are co-ordinated through fiat by the internal hierarchy of firms. One basic reason for choosing the equity or the internalised mode for exchange means to operate hotels is that then the operator can sell the property at the going market rate. This has been a profitable strategy in times of inflation[1]. The reliance on the internalised decision making may reduce the transaction cost involved in co-ordinatining the resource exchange (Williamson, 1975). However, not all the relationships can be internalised as hierarchy involves its own costs and problems. Maintaining hierarchy is expensive. Others exchange relationships are partially or fully externalised and co-ordinated through either contract relationships or by the market. Some exchanges are limited to the domestic market, others are international.

In the hotel industry the most widely used contract arrangements are franchising, management contracts and leasing or renting hotel premises (Dave 1984). In franchising one person grants the rights to another to exploit an intellectual property right involving perhaps trade names, products, trade marks and equipment distribution (Udell 1972; Mendelsohn 1979). The local owners of the hotel contribute financial resources to erect and furnish the hotel. They also seek all the licenses and permission from the local authorities. The foreign firm contributes marketing resources such as the booking and the reservation system, and the brand-name. The local hotel owner must posses the administrative expertise to operate hotels. In management contracts an operator acquires the managerial responsibility of another (local) firm (Pugh 1961 p. 49 ; Sharma, 1983). In leasing or rental agreements operators hire hotel premises for a pre-determined duration in return for a fixed rent. In management contracts and hiring the local owners of the

Figure 1: The Nature of the Alternative Contract Arrangements

	Wholly Owned	Management Contracts	Franchising
Motive of the Operator	to cahs on tangible & intangible assests	to cash on intangibles & skills	to cash on intangibles & skills
Resource Contribution by the Operator	financial & non-financial	non-financial & skills	brand-name & image
Nature of Dependance Between the Parties	none	mutual; balanced to unbalanced	mutual; balanced to unbalanced

premises erect the building. But the operational responsibilities are borne by the operator.

Contract arrangements are favoured when operators are interested in a 'sure' earning. Contracts are also preferred when the operator is short of financial resources. Contracts could also be a more rapid means to internationalise operations. In contractual arrangements operators sell their knowledge and skills. This is lucrative as the same skills can be sold to a number of different local firms or investor. This strategy requires, however, that the operator have an established marketing organisation, reputed brand-name, image, and an established administrative routines and organisation structure. Indeed, this also requires that there are local firms willing to finance the construction of hotels (figure 1).

DEPENDENCE & CONTROL

As actors engage in resource exchange power and dependence relationship evolve (Pfeffer & Salancik, 1978). As argued above, the resources contribution made by the operator in the different arrangements to operate abroad vary. This determines the power and dependence relation that develop in the exchange. The power of actor X over actor Y is contingent upon the dependence of actor Y on actor X (Emerson, 1962). In the analysis of power relationship only the critical resources are relevant. Moreover, in evaluating power and control relationships the costs of seeking alternatives must be calculated. The less expensive to seek alternative sources of a resource the less dependent the resource seeking actor and the more its power. Feasibility to seeking alternative usage of a resource are contingent upon on resource specificity. The less specific the resources the easier are their alternative utilisation's. As a consequence of resource exchange and the subsequent power relationships that evolve between actors the actual control exercised by the powerful actor may be as good as the control exercised by the same actor in totally internalised resources exchange (Sharma, 1983). The control exercised by the actors can be distinguished along two dimensions, namely,

1. Time dimension. For how long time the control exercised by the operator is valid.

2. The scope dimension. The number of different functions on which the control is exercised by the actor.

In totally internalised transactions along the time dimension the control exercised by the owner is unlimited. The same holds for the scope dimension. In externalised exchanges actors engage in resource transactions with other actors. Dependence evolves and control and power are shared. In externalised exchanges power and control are related to the ability of the actors to reduce uncertainty (Sharma, 1983). Those who reduce uncertainty are able to gain power and exercise control. Important is, therefore, that along both the above mentioned control dimensions the real control exercised by an actor deviate from the one mentioned in the formal written contract between the actors.

In wholly owned foreign hotels no locals are engaged. In contractual arrangements the dependence between the actors is of a reciprocal nature as both the actors contribute resources. The local investors are dependent on the operator as their current revenue depends on the efficiency with which the hotel is operated. As interest and amortisation charges are significant a continuous cash flows is vital for the survival of the local firm. The operator, on the other hand, needs the local firm to expand their international operations. A failure of a single hotel unit in a contract relationship may cause conflicts with the local firm. Firstly, in the short run the operator looses the revenue. Secondly, in the medium and long-run this may jeopardise the operators chances to seek more similar contracts abroad. Conflicts generate bad will for the operator.

Figure 2. Contract Strategies in the Hotel Industry

Type of resources exchanged			
		production	marketing
Geographical scope of resources	regional	*regional production*	*regional marketing*
	global	*global production*	*global marketing*

A TYPOLOGY OF CONTRACT STRATEGIES

In networks, as we pointed out in the previous section, a variety of actors are involved and a variety of resources are exchanged, e.g., finance, information, know-how, and skilled labour. But not all the resources are equally critical. In the hotel industry two actors are vital, namely, operators, and the suppliers or owners of hotel premises. The resources exchanged between the network actors can be distinguished along two dimensions, namely,

1. the kind or the nature of the resource, and

2. the geographical scope of the resource.

Along the first dimension resources are either production related or marketing related. Production related resources are hotel premises and hotel rooms. To construct hotel and furnish the premises capital resources are required. Marketing resources are the image of a firm, the distribution network, the routines and the decision making routines, the administrative systems, and the brand-name. The supply of the production resources and the marketing resources can be de-coupled. The various individual elements of the marketing resources such as the image, brand-name and the managerial resources to operate a hotel firm are, however, tightly coupled. Along the second dimension- the geographical scope - resources are either global or regional. Thus, four different contract strategies emerge (figure 2).

Regional Production Strategy

These operators enter into contract arrangements abroad with the purpose to secure production resources owned or controlled by the local counterpart. The operator possesses marketing resources and combines these resources with the resources supplied by the local investors. Within a limited geographical area- generally the domestic market- the operator commands a developed distribution network and a recognised brand-name. However, the operator lacks hotel premises abroad. Operators enter in contract arrangements with the idea to diversify their offerings within a region.

Regional Marketing Strategy

The operator owns several hotel premises in different regions but lacks marketing resources and distribution channel to serve a market. The operator contributes production resources whereas the local counterpart contributes the marketing resources. The target is a particular region. Similarly, the operator may lack an established brand-name. Through contracts the offerings by the operator cover an entire region.

Global Production Strategy

These are established operators and they command marketing expertise and resources. The operator contributes marketing resources in the venture and they enter in contract relationships with the purpose to acquire production resources on a global scale. The local firm contributes production resources. These operators distribute their operations on a global scale but manage only a limited number of hotel premises at each location or region. The geographical dispersion of the hotels is large without penetrating the individual markets.

Global Marketing Strategy

In this strategy operators control hotel premises at various locations in the world without a corresponding access to or control over marketing resources to offer services. The production resources are contributed by the operator. The operator, however, lacks marketing resources. Operators enter in contract arrangements with another firm with access to world-wide distribution channel and brand-name.

SWEDISH HOTEL FIRMS

As stated in the methodological section we studied five Swedish hotel operators. Four of these showed a high

degree of similarity in their contract strategies. In order to avoid repetition we shall not present all the cases separately.

SAS International Hotels

SAS International Hotels operates five star hotels in Scandinavia, Austria, Germany, the Netherlands, Belgium, and Kuwait. In addition, up to very recently SAS Hotels owned 40% equity shares in Inter-Continental Hotels chain with over 100 hotels in around 45 countries. SAS Hotels are engaged in several management contracts and rental contracts. SAS Hotels lack financial resources to construct hotels at several locations outside Sweden. Occasionally SAS Hotels have acquired minority shares in foreign hotels.

SAS Hotels are exclusively responsible for managing local hotels, recruiting staff and marketing services. The duration of these contracts vary between 10-15 years with the option for prolongation. SAS hotels is paid a management fee for their services which is a fixed percentage of the revenue of the local firms. In addition, the cost of training the local people, and the other operating costs are covered by the local firm.

SARA Hotels

SARA Hotels have a sales of slightly less than 1.5 billion SKr. SARA operates around 20 hotels in Sweden, five in the U.S., two each in Norway and Denmark, and one in China. Around half of these hotels are operated under management contracts and the others are located in rented premises. Like SAS Hotels, a basic reason for entering in contract arrangements is that SARA lacks its capital resources to finance hotels abroad. For the services rendered under the management contract SARA is paid a fixed fee (3-8.25% of the annual sales) and an incentive fee contingent upon the profits of the local venture. The normal period for management contracts or rental contracts are around ten years. These can be prolonged.

RESO Hotels

RESO operates 35 hotels. The company operates five hotels in Norway under contract, one joint venture cum contractual arrangement in Leningrad and another in Berlin. In the last two hotels RESO owns a minority equity holding. The foreign operations of RESO started in 1989. The preference for contractual arrangement is due to the large capital outlay for construction hotels abroad. The contract arrangement signed by RESO last for no less than ten years, often the period is around fifteen years. In other respects the contract arrangements by RESO are identical to those of other operators. The entire management, marketing, and staffing responsibility of the local hotels are borne by RESO.

The other two cases are very similar to those of RESO and SARA.

ANALYSIS

In more or less all the cases mentioned in this paper the local owners of the hotel premises in general are real estate firms. They have financial resources to erect hotel facilities but lack marketing and managerial resources. The overwhelming number of the local investors are more interested in the value appreciation of the property as long as the current earnings are sufficient to cover the repayment obligations. Through management contracts and hiring premises local investors exchange resources with the operators as the resources possessed by the parties are complimentary.

There are similarities among the Swedish operators on issues such as the mode of payment and the duration as well as the scope of the contract arrangements. Also, the operators are either paid (management contracts) or pay (rental contracts) in a similar manner. The Swedish operators are exclusively responsible for operating, recruiting and deploying the local staff.

The five Swedish hotel chains have entered in contract arrangements in order to secure access to hotel premises abroad. They own and control distribution channels and have established brand-name in the domestic market. Acquiring marketing resources is not a purpose behind any of the overseas contract arrangements. All the other operators but SAS Hotels have adopted regional production strategy, SAS Hotels have adopted the global production strategy. Other studies have examined the remaining two strategies[2].

Global Production Strategy

SAS Hotels have adopted the global production strategy. The company runs several hotels in the major international cities and serves international executives.

The reason behind pursuing the global production strategy is that SAS Hotels is a part of the SAS Group with significant interest in the airline business. The strategy of the Group is to act not merely as an airline but to supply the passengers a customised, full travelling service, including flying, hotel and surface transportation. Passengers can book, alter, and pay the entire package at a single window. Through this strategy SAS is able to 'monopolise' the client. The client 'never' interact with the competitors. An

advantage of this strategy is that SAS is able to transform a discrete transaction with the customers into a 'continuous', long-term interaction. The above business strategy implies that the SAS ought to be able to arrange five star lodging in the major cities. This requires either ownership of or some sort of contract arrangement with the five star hotels. Owning hotels through out the world would require huge capital investment.

Contract relationship fit in this strategy. SAS Hotels owns a few hotels in the main European towns. These are combined with the contractual arrangement in which SAS either owns no equity share or merely a small post. Combining small equity shares with contract arrangements helps the company to gain a strong influence in the management of the local hotels. This happens partly due to the representation SAS Hotels gains in the local board of directors and partly because of the fact that SAS Hotels carries out the management responsibility in the local hotels.

The reason for adopting the global strategy is that SAS group serves international clients demanding standardised services through out the world. Adapting to local conditions is kept to a minimum. For this reason the globally scattered hotels may have little direct communication with each other. They are 'independent' units.

Regional Production Strategy

RESO, SARA and the other operators have adopted the strategy of regional production with the goal to seek a deep penetration in a limited number of countries. SARA, for example, enjoys a strong position in the domestic market and attracts primarily the Swedish business executives.

SARA, and RESO sell hotel services. In order to serve business executives even for these companies it is important to be located in several cities. This helps the client to book hotels in a number of different destinations in a single call. Moreover, these companies maintain a cader of managerial, administrative and marketing staff. The same staff and marketing organisation are employed to run hotels operated under contract arrangements. The brand-name is established. Economies of scale are achieved. The strategy of the operator is to concentrate its business operations in a single or a limited number of geographical regions. In each region several hotel premises are located in order to achieve a deep penetration of the market.

An advantage of this strategy is that the offerings in the various regions can be differentiated. The marketing strategy and the outlook of the hotels can be adapted to suit the needs of the region.

The Alternative Contract Strategies

None of the Swedish hotel operators have entered into franchising arrangements to operate in the international market. The favoured contract arrangements are either management contracts or hiring.

Although there are differences in the details between management contracts are hiring arrangements the strategies behind the contracts are similar. There are indeed no differences. In either of the two arrangements the operator contributes managerial resource, administrative resources, the image and the established brand-name. Moreover, either type of arrangements are valid for long time. The resources contributed by the operators along time dimension as well as the scope dimension are very identical. For this reason there is also a high degree of similarity in the nature of the power and control relationships between the operator and the local firm See below). The actual control exercised by the operator over the local hotels is independent of the nature of the contract arrangement. For this reason the same operator enters into both management contracts as well as hiring contracts abroad. Both the type of the arrangements co-exist in the same country or geographical area. Which of the two contract forms are accepted by the operator is more contingent upon the 'wishes' of the local investor. In their drive to internationalise operators adapt to the wishes of the local investor.

Resource Specificity, Stability & Dependence

Swedish hotel operators entered into contract based exchange relationships with particular aims and each operator have entered into several contract relationships. Each single contract has a bearing on the remaining contracts and the potential future contracts. In this respect the various individual hotel premises are interdependent. An integral part of the strategy is that no single premises should be lost.

In the hotel industry the contracting parties exchange resources on a long-term basis. As observed in the cases contracts extend into decades in the future. Such long-term exchange relationships cannot function through long-term relationships guided by written contracts. The future is too uncertain to be specified in written contracts and the decision makers have bounded rationality (Simon, 1967). The exchange relationship is guided more by the resource specificity and the resulting power relationships. In the hotel industry the dependence is mutual.

The resource specificity evolves for several reasons. The local owners of the premises invest capital resources to erect the building and to decorate the same. The capital

requirements are large and investments are relation specific. An alternative uses of the premises is limited. The same hotel premises cannot be hired to another operator without significant new investments. This is contingent upon the fact that the size of the hotel, its location, and its decoration are a part of the total image of a hotel chain which, in turn, are derived from the service concept of the hotel operator. The service concept evidently varies from one hotel chain to another. A local owner of a hotel premise, therefore, can hardly change partners. Also, introducing changes in an existing hotel premises is expensive and time consuming. During this period the local firm receives no financial revenues.

The investment made by the hotel operator are also relationship specific. First, a dispute with a local owner have an adverse impact on the operator firms image as a reliable co-operating party. A conflict will jeopardise the chances of the operator to engage in other similar contracts abroad. Secondly, in case conflicts arise the operator must seek new premises to continue with its operations in the same city or region. This is time and resource consuming. Before an operator selects a local firm to cooperage with the operator must seek extensive information on the reliability and the viability of the local partner. The operators analyse the financial weakness and strength and the credibility of the local firm. In addition, it takes time to erect a new hotel. Before a new hotel building is constructed the operator also supplies technical and other expertise and assistance to the local firm to erect the building. This is resource consuming for the operator. In case a contract is broken these investments are lost. Also, negotiating contracts are expensive. Finally, the operators and the local investors entertain goals which are not conflicting. As stated above, the local investors are interested primarily in the value appreciation of the real estate. The operators earn profits through running hotels.

On the above mentioned issues the contract strategies pursued by the Swedish contracts hardly differ.

CONCLUSIONS

In the preceding pages strategies behind contract relationships by the Swedish hotel operators were analysed. Based on a network perspective it is concluded that in the hotel industry relationships continues for a long term. Also a number of different contract forms co-exist. There are no differences in the contract strategies pursued by the operators. The various contract forms are similar to each other as regards achieving the goals of the operators. That operators enter into a number of different contract forms are explained more by the desire of the local firm.

NOTES

1. One example is the U.S. firm Marriott. The company first undertakes hotel construction and then sold a part of the equities to the market (Financial Time, 1992, 9 Oct., p. 17).

2. Eyster (1977 b; 1977 c) examined a few such contracts. Also a good example is the well known U. S. Hotel chain Holiday Inn. Local hotel owners have negotiated franchising agreements with Holiday Inn to get access to their international reservation system. Others have done the same to get hold of Holiday Inns brand-name (Financial Time, 1992, 9 October, p. 17).

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EXPORT PERFORMANCE: A META-ANALYTICAL INTEGRATION

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Abstract

Export performance has been a popular topic for research, especially during the last decade. Understanding the determinants of export performance has improved. However, in a recent summary of the literature, Bilkey (1987) suggests that to this date, research has not been able to explain the variance in export performance beyond fairly low levels. This paper uses a meta-analysis to examine the explanation of variance in studies of export performance. The analysis indicates that approximately one third of the variance in export performance has been explained. The paper identifies characteristics of prior research that enhance its potential to explain performance.

Introduction

Given the importance of export performance as a primary outcome measure to exporting firms the question arises as to our success in its explanation. Export performance might depend on a universal set of marketing strategies. the use of which will enhance performance. Alternatively, optimal marketing strategies may be situation-specific. Research is then needed to identify the sets under differing situations (Axinn 1988; Bilkey 1978; 1987; Douglas and Craig 1983; Kirpalani and Macintosh 1980). Two approaches can be used to examine explanation of variability in export performance. Studies can examine empirically whether optimal marketing strategies are situation-specific. This approach led Bilkey (1987) to reject the hypothesis that universal strategies exist. Other studies use literature reviews, which might result in inconclusive findings (Hunter and Schmidt 1990), but may provide a better inferences because they synthesize findings across settings and samples.

The use of meta-analysis has been offered as an attractive alternative to literature reviews (Hunter and Schmidt 1990). A meta-analysis can quantitatively synthesize across times, settings, and designs of diverse studies. It may also reduce subjectivity, as the decision about which prior research to include and how to weight it does not depend on the researcher(s). Meta-analyses incorporate the study of substantive and methodological characteristics of prior research (Guzzo, Jackson and Katzell 1987; Houston, Peter, and Sawyer 1982; Hunter and Schmidt 1990; Wolf 1986) and have been used in marketing for the study of issues such as: Fishbein's behavioral intentions model (Farley, Lehman and Ryan 1981), effect sizes in consumer behavior (Peterson, Albaum and Beltramini 1985), buyer behavior models (Farley, Lehman and Ryan 1982), and price and perceived quality (Monroe and Krishnan 1982). This paper uses meta-analysis to quantitatively synthesize prior research on determinants of export performance. We begin by describing the process of identifying the relevant literature and the analytic procedure used in this paper. Findings are then integrated and analyzed.

Identification Procedure

The major goal of the first phase of a meta-analysis is to identify as many relevant studies as possible. Only studies that reported an overall measure of the relationship between export performance and a set of its determinants were included (explained below). Major marketing and international business publications were scanned for export performance contributions over the last fifteen years including the Journal of Marketing, the Journal of Marketing Research, the Journal of International Business Studies, the Journal of the Academy of Marketing Science, and Advances in International Marketing. Managerial journals (such as Harvard Business Review) were excluded because they tend to omit some of the statistical and methodological information that is needed for a meta-analysis. As published sources tend to report studies with significant findings (Farley and Lehman 1986), two additional techniques were used. First, three computerized data bases (ABI/INFORM, SSI, and PAIS) which summarize articles from a large number of journals and magazines were searched. Papers that were identified as potentially relevant to this study were checked for inclusion. Citations in these papers were scanned to identify further articles that were published in other journals or in conference proceedings, which were then included in the analysis. Second to identify unpublished sources, four experienced export managers were contacted. and asked to name unpublished data sources (such as governmental agencies, trade associations, and private consultants' reports). Unfortunately, no new sources were identified at this stage.

The identification procedure yielded eleven studies that contained sufficient empirical information about export performance and its determinants. They included at least one measure of export performance, some predictors, and a measure of the strength of association between the two. Papers that reported zero-order correlation coefficients between performance and one independent variable at a time were excluded, as they did not allow an overall assessment of the influence of these determinants together. Eight papers reported multiple tests of the strength of relation between export performance and its determinants. They used multiple sets of predictors, multiple measures of export performance, or multiple countries and continents. Each of these was treated as a separate observation yielding forty data-points for analysis. While a large number of observations is preferred for meta-analysis, some previous studies employed it with few observations. Farley, Lehman and Ryan (1981) used 37, Monroe and Krishnan (1982) 28, and Reilly and Conover (1982) used 20 observations. Table 1 provides information about the studies utilized in this analysis based on 40 observations.

TABLE 1
Descriptive Sample Characteristics

Dependent Variables:	Observations	%
one	8	20.0%
two	30	7.5%
three	1	2.5%
five	1	2.5%
total:	40	100.0%
Independent Variables:	Observations	%
three-four	6	15.0%
seven-ten	21	52.5%
eleven-seventeen	13	32.5%
total:	40	100.0%
Sample Size:	Observations	%
up to 50	8	20.0%
51-100	19	47.5%
Over 100	13	32.5%
total:	40	100.0%
Study Location:	Observations	%
North America	36	90.0%
Europe	4	10.0%
total:	40	100.0%

Findings

Sample sizes for the forty observations varied considerably. Since the debate about whether reported R-squares should account for sample sizes is not resolved (Hunter and Schmidt 1990), two separate analyses were done. One utilized sample-size-weighted R-square values and one used non-weighted ones. R-square values were not always reported as adjusted or not. If non-adjusted values were reported, Cohen and Cohen's correction formula (1983) was used. When R-square values were reported in a way that did not allow an assessment of whether an adjustment was used, two values were included in the analysis. One assumed that the value was adjusted, the other that it was not. Mean reported R-squares are moderate under all four combinations of assumptions, varying between 0.223 and 0.314. At best, on the average, 31.4% of the variance of the reported performance measure was accounted for by the independent variables used. These findings refute, to some extent, Bilkey's (1987, p. 173) report that only "...a small proportion of export marketing mix components, perhaps 10%, is not clearly 'situation specific'..." Many of the studies used different sets of independent variables, which were not nested. As a result, tests of specific relationships between marketing strategies and performance could not be performed without an unacceptable reduction in the remaining degrees of freedom (Hunter and Schmidt 1990).

In line with Bilkey's (1987) call to strengthen the level of limited generalizability of optimal marketing-mix, the observations were further separated based: sample location, number of independent variables, sample size, exporters' size, and the number of industry groups in the sample. Since some of these variables are continuous and some are categorical, all were converted to the latter. The number of independent variables, sample size, and the number of industries were divided into three, the location of the sample into two, and the number of industries into four groups.

TABLE 2
One-Way ANOVA Findings

SOURCE	DEGREES OF FREEDOM	F-VALUE	P-VALUE
MODEL	10	6.45	.0001
LOCATION	1	3.52	.0203
NUMBER OF INDEPENDENT VARIABLES	2	9.67	.0044
SAMPLE SIZE	2	1.64	.8784
EXPORTER SIZE	3	9.84	.0005
NUMBER OF INDUSTRIES	2	4.44	.0209

The model is significant (F=6.45 with 10 and 29 degrees of freedom, p=0.0001) and more than two thirds of the

variance in R-square values across studies is explained by the five characteristics (69.0%). These results remain virtually unchanged when the second set of R-square values is used instead. The four factors which were significantly related to reported R-square values (sample location, the number of independent variables used, exporters' size, and the number of industries sampled) are analyzed next.

TABLE 3
R-square Means Across Study Characteristics

FACTOR	N	MEAN	S.D.
LOCATION			
North-America	36	.3044	.1389
Europe	4	.3950	.1636
INDEPENDENT VARIABLES			
Few	6	.3933	.1872
Medium	21	.2533	.1273
Many	13	.3738	.1019
SAMPLE SIZE			
Small	8	.3237	.2111
Medium	19	.3205	.1117
Large	13	.2969	.1424
EXPORTER SIZE			
Small	4	.4800	.1683
Medium	17	.3035	.1054
Large	10	.2040	.1153
Mixed	9	.3800	.1277
INDUSTRIES SAMPLED			
Few	6	.4467	.1412
Medium	19	.3089	.1066
Many	15	.2660	.1559

Location of Sampled Exporters: Most observations were from North America with only 10% from European samples. The trend of mean R-square values is intriguing. Studies of European firms are associated with higher reported R-squares. We suggest three possible explanations for this difference. First, it could be that research in Europe is better executed than in North America. If this is the case, sample location is a proxy for improved designs or methodologies in European studies. However, there is nothing in the surveyed papers to substantiate this claim. A second alternative is that North American exporters are more diverse than their Europe counterparts. Two of the four European observations originated in single-country studies. If optimal marketing is country-specific, the European sub-sample will have a higher probability of yielding high R-square values. Another plausible explanation that is the outlier phenomena. Only four observations were based on samples of European exporters. Such a small sub-sample is may be unstable and sensitive to outliers.

The Number of Independent Variables: The data indicate that small and large sets of independent variables are correlated with higher values of R-square than medium-sized sets. These results are difficult to explain. Improvements in R-square values can be expected as models include larger sets of independent variables. This could explain the improvement from a medium to a large number of independent variables, but such an explanation fails to account for the decrease in R-square values when studies incorporate a medium number of such variables. Two explanations for these findings are suggested. First, only six observations (15%) are available with a small number of independent variables. The relatively high R-square values could be an artifact of these studies. Alternatively, one paper reported very high values of R-square again suggesting a potential outlier phenomena.

Size of Sampled Exporters: Excluding the "other" category, R-square values appear to decline as the exporters size increases. One possible explanation is that optimal marketing policies exist and are consistent only for small exporters. As firms grow, the number of available strategic alternatives increases. As a result, many more combinations of these alternatives exist. For example, the number of product lines increases in many cases. As a result, larger firms have more choices between lines for export purposes. The probability of identifying different successful combinations of marketing strategies will increase with a subsequent decrease in reported R-square values for any specific combination. Alternatively, large exporters are faced with more complex environments than small ones. As a result, successful strategies might be more difficult to isolate. Another possibility could be tied to the key informant within exporters. It is probable that key informants in small exporting firms know more and come from a higher level of management than their counterparts in large companies. If that is the case, and assuming existence of optimal strategies, such key informants might have a higher probability of providing accurate responses.

The Number of Industries Surveyed: The relationship here is strong and inverse. When the number of industries in study samples is small (not more than three), reported R-squares are high. They diminish as more industries are sampled. This finding lends some support to Bilkey's formulation (1987) of situation-specific optimal mixes (local maxima). The results support the view that export performance can best be explained within a small number of industries. The reason for this finding seems to arise

from the higher level of uniformity, which is typical within industries. As the number of industries increases, their joint diversity increases. Consequently, the probability of identifying universally successful strategies diminishes.

Summary And Conclusions

The first important implication of the meta-analysis reported in this paper is that explaining export performance is neither impossible nor irrelevant. Some authors argue that very little of the variance in export performance can be explained by marketing decisions (e.g., Bilkey 1987). Others have been searching for optimal mixes (Axinn 1988; Bilkey 1982; Craig, Douglas and Reddy 1987; Dichtl, Koeglmayr and Mueller 1990; Douglas and Craig 1983; Fraser and Hite 1990; Reid 1987; Ryans 1988; Walters and Samiee 1990). Based on this paper's findings, prior research explains 22.3%-31.4% of the variance of export performance. While some might argue that this is a low percentage of variance explained, this level is obviously higher than that reported by Bilkey (1987). Researchers can hope for further improvement as they gain more knowledge.

The results reported here have several implications. Foremost, the mean R-square values reported here could serve as benchmarks for future research. This approach can take two routes. One approach is to use the global mean R-square to gauge overall progress in explaining and predicting export performance. Studies that achieve at least this mean level enhance our understanding of export performance. Another option is to use the mean R-square values at specific combinations of study characteristics as more specific benchmarks. This paper provides a pool of yardsticks for alternative study characteristics, including location of the sample, the number of independent variables, the size of sampled exporters and the number of sampled industries. Future studies can utilize these yardsticks depending on their specific set of characteristics. It will provide them with a base-line R-square for comparison to their results.

Another possible use for the results of this meta-analysis is as a basis for planning future studies. As the results here indicate, some studies have a higher probability of yielding higher values of R-square. The findings suggest that the use of a geographically concentrated sample, a large number of relevant independent variables, small scale exporters, and a small number of homogenous industry groups could increase the probability that a high percentage of the variance in export performance is explained.

This paper leaves many questions unanswered. Because of the small sample size (eleven studies and forty observations) interactions of study characteristics could not be evaluated. As a result, we do not yet know if and how much impact choices of combinations might have on researchers' ability to explain performance in exporting. Additionally, this meta-analysis concentrated on five design characteristics. While this set accounts for a substantial proportion of the variance in export performance results (69.0%), there might be other characteristics, which might help explain a significant part of the remainder. For example, it could be useful to distinguish between sample location in a more refined way (by countries). Such an approach might improve our understanding of export performance results. Another important issue not discussed in this paper is the measure of export performance. Some studies use single measures, while others use multiple measures. Additionally, many measures are used to assess export performance (Madsen 1987). Inclusion of all combinations used in the surveyed papers would have resulted in the loss of too many degrees of freedom in the ANOVA. Measuring export performance, however, is a very important topic if we are to further our understanding of its determinants (Shoham 1991). In this analysis, all measures were treated as equally valid, and no effort was made to separate them based on the type(s) used in the studies. Lastly, as discussed earlier, this paper does not assess the actual strategic marketing policies reported by the different studies and their relationships with export performance. Since the number and composition of independent measures varied widely, they could not have been analyzed without an unacceptable loss of degrees of freedom (Hunt and Schmidt 1990).

While the level of understanding of the relationship between export strategy and performance has improved, this paper points out some limitations of the state-of-the-art knowledge about this relationship. To the extent that it furthered our understanding of differences in reported R-square values and the role of design characteristics in determining these values it will serve as a useful step forward in improving our understanding of export performance.

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AN EXPANDED RESEARCH AGENDA FOR EXAMINING COUNTRY OF ORIGIN EFFECTS

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Abstract

The authors propose a research agenda which moves beyond the perceptual studies which dominate the country of origin literature. Three areas are discussed which warrant investigation: 1) examining the objective quality-country of origin relationship, 2) measuring consumer awareness of and search behavior with respect to country of origin, and 3) estimating elasticities of substitution via product demand functions. This stream of research will offer researchers a more complete context within which to understand country of origin effects.

Introduction

In the general media, political arenas and promotional campaigns of the early 1990s consumers have been repeatedly urged to "Buy American". Many retailers are taking advantage of this patriotic mood by promoting their selection of American-made products (e.g., Wal-Mart, and Chevrolet). Recent import figures, however, indicate that the U.S. merchandise trade deficit was over $70 billion in 1992, up from around $60 billion in 1991 (Federal Reserve Bank of Cleveland 1992). The auto industry is one example of where the U.S. market share for domestic producers has declined over the past 20 years in the face of foreign competition (Federal Reserve Bank of Cleveland 1992). Thus, it appears that while currently the popular theme is to "Buy American", a silent majority of U.S. consumers continue to exhibit, via their behavior, preference for foreign-made goods and services in certain product markets.

What remains to be determined is the origin and manifestation of preferences in some markets for products produced in a specific country. Are country of origin effects based on a biased perceptual process without objective knowledge of actual product performance? Are such preferences based on knowledge of the origin of the product, its actual performance, and a conscious decision process incorporating this knowledge? Or, are the effects simply the result of product evaluation and choice behavior based on product performance without attention to or even knowledge of the country of origin? Finally, are country of origin preferences actually exhibited in the marketplace?

Much of the country of origin literature has explored consumers' evaluations of products based on country of origin introduced as an extrinsic cue without thoroughly understanding market performance and consumer knowledge of and use of such information. The country of origin literature is dominated by empirical studies in which country of origin is manipulated via product information provided to subjects and then subsequent evaluations of product quality and preference are observed (e.g., Cordell 1991; Erickson, Johansson and Chao 1984; Eroglu and Machleit 1988; Hooley, Shipley and Krieger 1988; Nagashima 1977; Thorelli, Lim and Ye 1989; Wall, Liefeld and Heslop 1991).

It is our contention that three critical issue areas deserve increased attention in the country of origin literature: 1) examining the country of origin-objective quality relationship, 2) measuring consumers' awareness of and search patterns with respect to country of origin information, and 3) identifying market behavior via the estimation of demand functions for products distinguished by country. All three areas offer great potential for expanding our knowledge base for further exploration of consumers' use of country of origin information in choice processes. This research stream should be a priority in advancing the literature in this area.

Research Agenda

Country of Origin and Objective Product Quality

Although much has been written on the influence of country of origin on perceived quality, little has been written on the relationship of country of origin to objective measures of product quality (Cordell 1991). As Johansson (1989) suggests, marketers have treated country of origin primarily as an extrinsic product cue with no intrinsic consequence to the actual performance or quality of the product. In fact, some authors have purported that misperceptions or stereotyping has unfairly penalized developing countries (Gaedeke 1973, Nagashima 1977). It is our contention, however, that before we can begin to understand and explain consumer perceptions, accurate or not, with regard to product quality and country of origin,

we must first determine where relationships exist between country of origin and actual product quality. Our perceptual models must incorporate this important input variable for consumers. What may then prove interesting is consumers' awareness of and use or nonuse of such information.

In examining the relationship between country of origin and product quality, marketers will need objective measures of product quality. Although multiple data sources should be accessed for such studies, the price-quality literature offers insight into a possible starting point. Quality ratings (both aggregate and dimension specific) from objective sources such as Consumer Reports have been used to examine the price-quality relationship (e.g., Gerstner 1985; Reisz 1978; Sproles 1977;). Although the use of this type of "objective" data does present limitations (Geistfeld 1982), it offers a starting point for developing a stream of research expanding our knowledge of real product performance by country of origin. Models relating country of origin to objective quality, however, must also include other relevant explanatory variables (e.g., price).

In addition, the use of the term "country of origin" in objective comparisons must be precise. The researcher must determine if country of origin should refer simply to the locale of the manufacturers' headquarters, or to more substantive indicants such as where a product is assembled or where a majority of the parts originate. For example, much of the recent loss in market share for the U.S. auto industry is not to imported automobiles, but to foreign-owned autos built in the U.S. (Federal Reserve Bank of Cleveland 1992). Investigations into the objective quality-country of origin relationship need not be limited to a single operationalization of country of origin. Identifying variations in the objective quality-country of origin relationships for different levels of country of origin for a single good has implications both in the production process as well as the promotion and distribution arenas.

An additional methodological issue which must be considered is the level of measurement of objective product quality. Johansson, Douglas and Nonaka (1985) propose that country of origin effects may occur in the evaluation of specific attributes rather than overall evaluations of products. This suggests that objective quality-country of origin studies should include individual attribute performance data as well as overall quality ratings.

Understanding the nature of the objective quality-country of origin relationship should guide investigations of whether and how consumers use country of origin information. As Johansson (1989) suggests,

> "...when the country of origin cue is placed in its proper behavioral context, there is no need to view it as unwarranted, and neither is it purely extrinsic," (p. 49).

For example, if consumers observe real relationships between country of origin and product quality, one could argue that in certain markets the made in label will increase in importance in choice decisions. Further, a generalized belief may develop about a country's products based on superiority in one or a few product areas. The critical question remains, "Where do we see country of origin related to actual product performance?" Once this issue is addressed for a particular product category, it provides a more complete context for 1) examining consumer awareness of the country of origin of a brand and its performance and 2) the source of such awareness (e.g., marketing generated information, general media, product use).

Consumer Awareness of Country of Origin

Perceptual studies examining the effect of country of origin on product evaluations suffer inherently from demand characteristics. Artificially introducing country of origin information assumes that consumers are aware of and use such information in their choice processes. For example, the emphasis on the use of country of origin as an extrinsic cue has led to the assumption that consumers with lower product familiarity are more likely to use country of origin in place of other information (Bilkey and Nes 1982).

It is our contention, however, that marketers are, perhaps, overestimating consumers' use of country of origin in general. This is particularly true for consumers who are unfamiliar with a product purchase. Are they even aware of the country of origin (however this is defined) of various brands? Do they actually consider such information in a purchase decision? In our typical perceptual studies, we may be exploring the intricacies of a judgment process which doesn't even exist in real settings.

Results with respect to consumer awareness of country of origin are equivocal and limited in scope (Gipson and Francis 1991; Hampton 1977; and Reierson 1966). Externally valid studies of consumers' search behavior and awareness levels with respect to country of origin information are needed. Marketers must combine observational methods with self-report measures to begin to describe consumer search patterns and choice processes with respect to country of origin. We may find that for many purchases country of origin information is not actively pursued because of either a lack of awareness that many/any brands are manufactured elsewhere or a perception that it does not

alter product performance. Both areas must be examined if we are to understand the effect of country of origin on product choice.

Recent "Made in the USA" promotions may have indeed altered the salience of country of origin information in consumers' product choice decisions. Additionally, such publicity may have affected consumer awareness levels for the country of origin of products. Given the lack of attention to measures of awareness in the country of origin literature and the possibility of dramatic changes in consumer search and choice patterns, researchers must add studies of consumer awareness to the country of origin literature.

Examining Market Behavior

Laboratory experiments examining consumer behavior too often ignore the economic aspects of a consumer's decision-making process. While asked "point-blank" if s/he prefers "American-made", the consumer may provide strictly an emotional response rather than one in which economic well-being is a factor (Johansson, Douglas and Nonaka, 1985). When the actual purchase occurs, however, the consumer's income constraint and perceived return on expenditure may be major factors in the purchase process. If country of origin effects truly exist for a specific consumer good, changes in its relative price (i.e., the price of the domestic product relative to the price of the potentially substitutable foreign product) will have little effect on trade flows. Examining the elasticity of substitution between a U.S. made product and a foreign made product will provide needed evidence for identifying the degree of ease with which consumers substitute the two.

The elasticity of substitution for a good is determined by the U.S. consumers' aggregate behavioral decisions concerning the desired country of origin mix. An elasticity of substitution near zero indicates highly distinguishable products with little or no substitutability. That is, any percentage change in the relative prices of a product results in little or no percentage change in market share. As the elasticity of substitution increases, however, consumers substitute between the foreign and domestic product more freely. A high elasticity of substitution, therefore, would indicate little or no country of origin effect (i.e., trade flows are determined primarily by transportation costs and the law of one price is observed). A low elasticity of substitution would then indicate consumers differentiate the good by place of origin.

A model for estimating trade flows and subsequently the elasticity of substitution for a good produced both domestically and abroad is presented here in its simplest form. The model discussed here was developed by Armington (1969) for use in estimating trade flows for different kinds of goods (e.g., tennis shoes versus cars) as well as for products potentially differentiated by place of origin (e.g., Italian made tennis shoes versus U.S. made tennis shoes). Much of the literature involving empirical use of the Armington Model has focused on agricultural trade (Haniotis 1990; Sarris 1983; USDA 1986). This is likely due to the fact that most commodities studied (e.g., corn, wheat, soybeans, etc...) are seen as fairly homogeneous products within a country, but are arguably differentiated by country of origin due to intense government involvement. Non-agricultural products, on the other hand, often entail some heterogeneity within a country's borders (e.g. high quality running shoes versus general purpose tennis shoes). To confront this potential problem, our model assumes that the good of interest is characterized by as much heterogeneity (within the product itself) in the foreign-made product as is characterized by the competing domestic-made product (i.e., foreign products compete across the spectrum characterized by domestic products and vice versa). In this case quantity demanded is aggregated across all items identified as a single product and a weighted average is computed for the price of the product. In cases where data availability allow, however, a simple redefinition of the good is appropriate (i.e., the good may no longer be tennis shoes, but high quality running shoes). Generally, data availability will dictate goods being defined by the Standard Industrial Trade Classification (SITC numbers). In either case, time series data (typical sources include UNCTAD, U.S. Department of Commerce, and other government agencies) can be used to estimate market shares and the elasticity of substitution between a foreign product and a U.S. product.

Armington introduces a two-stage process in which an importer's linearly homogeneous utility function is maximized under the assumption of weak separability. The first stage involves estimating the demand for a good, X_i, such that utility (as a function of n goods) is maximized subject to the importer's budget constraint. The second stage then entails estimating the demand for a product, X_{ij} (i.e., good i from country j) by minimizing the cost of purchasing the quantity X_i. The resulting demand functions are then and

$$(1)\quad X_i = X_i(Y, P_1, P_2, \ldots, P_n),$$

$$(2)\quad X_{ij} = X_{ij}\left(X_i, \frac{r_{ij}}{P_{i1}}, \frac{r_{ij}}{P_{i2}}, \ldots, \frac{r_{ij}}{P_{im}}\right),$$

where the variable Y represents the importer's total expenditure, P_i represents a price index for good i and P_{ij}

represents the price of a product defined as good i from country j given m competing exporters.

To identify potential country of origin effects, we define the importer as the U.S. consumer and the exporters as U.S. and foreign manufacturers. If X_{ij} is the demand for a good made in the U.S. and the relative price variables represent the U.S. price to foreign prices, estimated coefficients for the relative price variables represent or can be transformed into (depending on the functional form of equation 2 used in OLS regression) elasticities of substitution between the U.S. product and the competing foreign products. Since the separability assumption for this model allows for the first and second stage equations to be estimated separately, equation 1 can be ignored if concern is only on estimating elasticities of substitution. Finally, to further simplify the model and address some collinearity concerns among the relative price variables, managed aggregation of several foreign competitors may be appropriate.

Some priorities for analysis within this demand function approach can be identified. Perhaps the most meaningful analysis of country of origin effects within this framework should involve goods that are seen "objectively" as substitutable and of similar quality. If country of origin effects exist in the marketplace for such goods, awareness studies identifying consumer preferences and perceptions become much more insightful. In addition, goods that are targeted via "Buy American" campaigns (e.g., textiles, vehicles, etc...) should be examined. That is, one should estimate the demand model in different time periods to test if the elasticity of substitution for a targeted product was lowered significantly by the campaign. A third focus should be on country of origin effects in other countries. Government intervention, cultural differences, national pride, etc... may well be creating an even stronger country of origin effect in foreign countries. All three areas have profound implications for marketing strategists and policymakers.

It should be noted that the approach described here will only provide long-run elasticity estimates. It does not identify current changes in market behavior, regardless of the motivating factors. Corporations and industries are no doubt interested in long-run trends when addressing future production and marketing strategies; however, current changes in attitudes may reflect new trends for the future. To estimate current elasticity of substitution measures, one could conduct cross-sectional surveys (or laboratory experiments) aimed at identifying prices at which consumers would be willing to substitute goods. Such a procedure, however, can provide somewhat dubious results and may not represent any more than a short-term attitudinal change.

Identifying country of origin effects through market demand models is only a single component of understanding country of origin effects. If country of origin effects exist for certain goods, it is incumbent on the researcher to also identify the source of the product differentiation occurring in the marketplace. Assuming little or no heterogeneity in the competing product's final use, the differentiation could be a result of legitimate quality differences, misperceptions with respect to product performance, or a deliberate boycott of the product due to its country of origin. Thus, if general country of origin effects are discovered in the marketplace for specific goods it is necessary to examine or re-examine objective differences and perform perceptual studies to identify specific causes. Supported by such demand studies, surveys and perceptual studies aimed at identifying consumer attitudes toward foreign and domestic made goods then take on greater validity.

Summary and Conclusion

The authors describe a research stream which offers significant potential for expanding our understanding of consumers' use of country of origin information in product choice. The agenda for further research proposed here includes: 1) examining the objective quality-country of origin relationship, 2) measuring consumer awareness of and search behavior with respect to country of origin, and 3) estimating elasticities of substitution via product demand functions. The combination of results from these analyses will provide a useful context within which to explore consumer choice processes for product categories including alternatives from various countries. Where marketplace behavior indicates country of origin effects, researchers must identify any objective performance differences, consumers' awareness of such differences and whether or not they are using this information in their product choice decisions.

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PRODUCT QUALITY PERCEPTIONS OF ASIAN AND U.S. FIRMS IN THE ELECTRONICS INDUSTRY

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Abstract

Survey data obtained from both U.S. and Asian firms in the electronics industry were analyzed using factor analytic methodology. The result was development of a "quality inventory" indicated by a set of factors which best represents the quality perceptions. Among the factors, communication among different departments and levels within an organization, managerial commitment to quality, responsiveness to both external and internal customers demands were found to be significant. Next, firms were classified in two groups (U.S. and Asian) using the condensed quality dimensions (factors) as the set of predictor variables to shed light into the importance of these variables in the two groups. Discriminant analysis results indicate that American and Asian managers differ in terms of different dimensions of quality. Again, such variables as commitment to quality, communication, control and responsiveness are found to be important in discriminating between the two groups.

Introduction

Quality has received increasing attention in the literature. It is argued that the Japanese manufacturers' success in the last decade was primarily due to their ability to convert their quality focus into a competitive advantage (Belcher, 1987; Imai, 1986). It has also been argued that the decreasing share of United States manufacturing in the global market is due, in part, to the neglect of quality in the U.S. (Deming, 1982; Crosby, 1979; Tenner & DeToro, 1992). Readers of recent management books might have gotten the impression that in order to compete with Asian countries, U.S. should adopt a different style of management, particularly mentioned is the Japanese style of management (Kolchin, 1987; Ohmae, 1982).

Reitsperger and Daniels (1990) have shown that American and Japanese managers do not differ significantly with respect to quality-cost trade-off philosophies. Miller and Roth (1988) and De Meyer et al. (1987) found that attitudes in the U.S. and Japan about quality in the 1980's are converging. Indeed, De Meyer argues that the Japanese manufacturing, having largely solved quality problems, may be moving toward cost containment.

In a different vein, Derrick, Harsha and O'Brian (1989) and Yavas (1991) explored the differences in perceptions of quality within the same firm (in the U.S.) among different levels of organization and among different departments and discussed how these perceptions may be aligned. This paper continues along similar lines. It utilizes factor analytic methodology like Derrick et al (1989) and Yavas (1991), but it extends their research to cover both U.S. and Asian firms. The sample includes Asian firms based in Japan, Singapore, Taiwan and Hong Kong. This paper seeks first to develop a "quality inventory" with variables representing the perceptions of different dimensions of product quality. Second, to reduce these variables to a set of factors which best represents the quality perceptions. Finally, to classify firms in two groups using the condensed quality dimensions (factors) as the set of predictor variables to shed light into the importance of these variables. The study, therefore, attempts to provide insights into both American and Asian managers attitudes toward quality. Since "quality" seems to be associated with products originating from Japan and the newly industrialized countries of Asia (Hong Kong, S. Korea, Singapore and Taiwan) the research reported in this study concentrates on those countries as constituting the Asian countries of the sample. The electronics industry, characterized by rapid technological changes, is thought to be a good candidate for this comparison. The United States' share of the world electronics market is now about 10 percent, down from about 35 percent less than a decade ago (Reitsperger & Daniel, 1990). Gainers in the industry have been Japan and now, the four tigers are rapidly rising to become contenders, particularly in consumer electronics.

Methodology

According to the "product-based" approach, quality reflects differences in measurable attributes of the product (Tenner & DeToro, 1992). In this view, quality is measured by the conformance of the product to a predetermined set of specifications. Departures from these specifications reflect a lower level of quality.

Recently, quality has taken a broader meaning to embrace customer (both internal and external) satisfaction. Viewed from this angle, quality becomes a basic business strategy in a increasingly competitive global marketplace (Kotler,

1991). Following this broader definition of quality, such principles as "customer focus", "managerial involvement at all levels" become critical in addition to the concept of "process improvement" which has received considerable attention in the past. Also, the Total Quality Management (TQM) literature frequently refers to the following as the supporting elements of quality: Leadership (Deming, 1982), education and training, supportive structure, communications, reward and recognition and measurement (Crosby, 1979; Garvin, 1988; Juran, 1988; Tenner & DeToro, 1991).

The instrument used in this study to collect information was a questionnaire containing 33 opinion statements. In developing the instrument TQM literature was carefully reviewed, similar earlier empirical research was studied and both business and academic experts were consulted for the purpose of capturing what they perceived to be relevant in their industry.

The questionnaire was administered to a sample of U.S. electronics manufacturing firms based in the United States, and to Asian companies within the same industry. The Asian companies were based in Japan, Taiwan, South Korea, Singapore, and Hong Kong. Respondents were asked to indicate their perceptions regarding different attributes of quality. Five-point Likert scales were used to measure the responses.

280 questionnaires were mailed or hand-delivered to the companies in the sample, followed up by telephone and fax inquires regarding responses in the United States, Japan, Hong Kong, Singapore and Taiwan. 191 fully usable questionnaires were returned representing a 68% response rate. Table 1 below details the participant characteristics. The companies chosen for this study represent a cross section of those producers that were all involved in the manufacture of electronics systems or components. These products contain semiconductor components, hybrid circuits and soldering procedures. Although the participants in the survey vary greatly in terms of size and range of products produced, production processes, fabrication and testing of products used were very similar.

It should be noted that the sample of respondents was not random but efforts were made to include a representative number of companies in the electronics industry. Therefore, the results are to be interpreted with this limitation in mind. On the other hand, for exploratory research purposes, the sample used should be appropriate.

Research Findings

Data were analyzed using principal component factor analysis. The decision to use a factor-analytic approach was

TABLE 1

PARTICIPANT CHARACTERISTICS		
	US	Asia
No. of Firms	12	17
Total No. of Participants	95	96
Responses by Job Title:		
Director	10	14
President	1	1
Vice President	3	1
Department Mgr.	20	7
Program Mgr.	7	3
Production Mgr.	5	5
Business Dev. Mgr.	5	9
Manager	25	13
Supervisor	4	19
Engineer	3	11
Other/Unknown	12	13

made to examine the relationships among large number of variables, and to determine if the information can be summarized in a smaller set of components that are relatively independent and interpretable. The idea was that "quality" is not a single measurable entity but a construct which is derived from measurement of other, directly observable variables, such as ratings by managers of different attributes of what they perceive as quality in a survey. A large number of variables can be used to describe quality. However, the description of quality might be greatly simplified if it were possible to identify underlying dimensions, or factors, of quality.

The analysis included 33 variables which represented quality attributes identified previously. First, the correlation matrix for all variables computed. Bartlett's test of sphericity resulted in the rejection of the hypothesis that all diagonal terms are unity, and off diagonal terms are zero (i.e. the correlation matrix is an identity matrix) thereby supporting the use of factor analysis model. A principal component factor analysis with varimax rotation (orthogonal solution) extracted ten factors which met the minimum eigen value of 1.0 criterion. The ten factors accounted for 64% of the variance observed in the data. In Exhibit 1 below, the factors and the variables with highest loadings are indicated. The communalities of each variable indicate how much of the variance associated with each variable is present in each factor.

EXHIBIT 1 : Quality Inventory

Factor 1 (Communication)

1. There is adequate communication between departments in the company (.70)
2. Concept of quality is the same throughout all departments (.84)
3. Concept of quality is the same throughout all organizational levels (.73)

Factor 2 (Commitment)

1. Top management is strongly committed to quality (.70)
2. Middle management is strongly committed to quality (.72)
3. Commitment to quality of the employees I personally work with is high (.70)

Factor 3 (Rework and Warranty)

1. Rework should be made at the stage mistakes occur (.64)
2. Products are warranted from failure due to workmanship or material quality (.57)
3. Use of statistical process control techniques helps to enhance product quality (.58)

Factor 4 (Control)

1. Frequent checks/inspections help improve quality (.74)
2. Quality is the responsibility of manufacturing (.67)
3. Participating in quality circle workshops would help to understand quality related issues (.66)

Factor 5 (Current Status)

1. Quality is a problem in my company (.70)
2. There are occasional complaints about the quality (.73)

Factor 6 (Quality Standards)

1. There are quality standards in the industry to which the company adheres (.67)
2. The government sets the quality standards for our products (.79)

Factor 7 (Measurement)

1. Product quality is measured by its performance (.80)
2. Product quality is determined by its durability (.79)

Factor 8 (Responsiveness)

1. Responsive to employee suggestions (.63)
2. Responsive to customer complaints (.60)

Factor 9 (Improvement)

1. Automation improves quality (.69)

Factor 10 (Yields v. zero defects)

1. Zero defects is not necessary, focus should be on yields (.80)

As shown in Exhibit 1, commitment to quality, adequate communication, control and responsiveness related variables appear to explain most of the variance observed in the data. Similarly, variables such as measurement of quality and quality improvement contributed about 10% of the variation in the data.

One objective of this study was to identify and condense variables into a set of factors representing perceptions of quality. Having identified 10 factors with the help of factor analysis, the attention is now turned to the issue of whether the two groups (U.S. and Asian) differ with respect to the factors identified previously. For this purpose, discriminant analysis is utilized. The main objective of discriminant analysis is to identify the variables that are important for distinguishing between the U.S. and Asian based companies. Instead of choosing the variables with the highest loadings as surrogate representatives of the set of variables representing perceptions about different dimensions of quality, a decision is made to average the variables for each factor. This way one keeps much of the meaning for the factors. A two-group discriminant analysis is used to test the group separation between U.S. based firms and the Asian firms.

Stepwise discriminant analysis (Wilks Method) is utilized. This method enters independent variables one at a time on the basis of their discriminating power.

As can be seen from table 2, the overall test of group separation indicated that the groups do differ in terms of different quality attributes. The discriminant function is significant at the .0000. Furthermore eigen value of .7825, and canonical correlation value of .6626 indicate the ability of the discriminant function to differentiate between the groups. The Wilks Lambda of .5610 shows that the variables used have been significant in separating the two groups. Finally, standardized discriminant coefficients indicate that communication and control variables contribute most to separation of U.S. and Asian samples.

There is not much overlap among the groups classified. Table 3 shows that the discriminant function correctly classified 83.25% of the cases as members of the groups to which they actually belong.

Discussion

A short discussion on how American and Asian managers differ with respect to two of the questions is thought to be

informative. These questions solicited information on quality at the company and at the industry level. It is interesting to note that American managers show surprisingly high level of satisfaction with their company's level of performance. Higher proportion of Asian than American managers indicated that quality is a problem in their companies. On the other hand, lower proportion of Asian than American managers indicated that quality is indeed a problem in the industry. In short, while American managers think quality is a problem in the industry, they also believe their companies are doing better than others in the industry. Asian managers' position is exactly the opposite: they think other firms in the industry are better than their own.

One likely explanation is that they lack clear global standards to which they can refer while domestic comparisons are easier. Asian managers may consider quality as critical for their firm's future because they do not operate in a large and arguably insular market as do American managers; they have to export to survive. Therefore, it is difficult for them to be satisfied with moderate levels of performance.

Yet another explanation might be based on short versus long term orientation. It is well known that some Japanese firms are willing to lose money for a period time to establish market presence. This long term orientation contrasts with the American bottom-line commitment. It may be that job security reinforces emphasis on long term goals (Yoshida, 1992), while the lack of job security may result in focusing on short term objectives. If that argument is confirmed, then American managers with short term orientation would be expected to paint a better picture of their achievements than their Asian counterparts because their livelihood depends on immediate accomplishments.

Summary and Conclusions

Using a factor analytic approach, this study first identified an inventory of variables (factors) representing both American and Asian managers' perceptions of quality. Among the variables, communication among different departments and levels within an organization, managerial commitment, responsiveness to both external and internal customers demands are found to be significant. Second, two-group discriminant analysis results indicate that American and Asian managers do differ in terms of different dimensions of quality. Once again, commitment, communication, control and responsiveness are found to be important in discriminating between the two groups.

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Exhibit 2: Common Factors				
Factor	Communality	Eigenvalue	Pct of Var	Cum Pct
1	.62027	5.93512	18.0	18.0
2	.54560	3.04495	9.2	27.2
3	.71184	2.72393	8.3	35.5
4	.64435	1.85006	5.6	41.1
5	.51331	1.65007	5.0	46.1
6	.79717	1.36279	4.1	50.2
7	.74311	1.26452	3.8	54.0
8	.59142	1.15392	3.5	57.5
9	.52076	1.11055	3.4	60.9
10	.67686	1.03349	3.1	64.0

TABLE 2 - Discriminant Analysis

Variable	Group Means		F-Ratio (partial)	Sig. Level	D-Coeff (Standardized)
	1	2			
Group Centroids	.87583	-.8845			
Independent Vars.					
Communication	3.42	2.79	4.91	.0000	.2896
Commitment	3.80	4.02	3.47	.0000	-.2489
Warranty	3.89	4.37	21.45	.0000	-.5836
Control	3.87	3.14	33.44	.0000	.6738
Standards	3.01	3.71	29.21	.0000	-.6039
Measurement	3.86	3.74	3.25	.0000	.2110
Responsiveness	3.18	3.02	2.14	.0000	.1775
Automation	3.58	3.34	6.97	.0000	.3187

TABLE 3 - Classification Results

Actual Group	No. of Cases	Predicted Group	Membership Group
		1	2
Group 1 (Foreign)	96	80	16
		83.3%	16.7%
Group 2 (U.S.)	95	16	79
		16.8%	83.2%

POLITICAL RISK ASSESSMENT: A REVIEW AND A NEW APPROACH

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Abstract

With the trend toward globalization, political risk assessment has become an essential task for international marketing managers in making decisions with regard to whether and how to enter a foreign market. Although the interest in political risk assessment surged and the corresponding assessment techniques proliferated following the international political chaos in 1970s, it is surprising that up to date, knowledge of political risk analysis is still fragmented. Given the uncertain nature of current international political environment and its potential influence on foreign investment projects and collaborations, it is worthwhile to reevaluate the existing knowledge of political risk assessment and identify a direction for future inquiry. The purpose of this article is of twofold. First, a critical review of the political risk assessment methods is presented. Second, a new direction, i.e., the potential of case research approach, for political risk assessment is elaborated.

A Critical Evaluation of the Existing Methods for Political Risk Assessment

Political risk can be defined as the likelihood that political forces will cause drastic changes in a country's business environment that affect the profit and other goals of a business enterprise (Robock 1971). Political risk can affect international business in three ways (Schmidt 1986): (1) it can affect the ownership of assets through expropriation or confiscation; (2) it can affect the transfer of funds through regulation; and (3) it can restrict business operations and ultimately affect profitability. Methods for political risk assessment can be classified into three broad categories: conceptual and descriptive models, composite quantitative risk indices, and statistical models.

1. Conceptual and Descriptive Models

The conceptual and descriptive models that have been developed for political risk assessment suffer from several problems. (a) There has been little agreement as to what constitutes political risk, how and why political risk occurs, and when political risk takes place. Though political, sociocultural, and economic factors have been believed to be linked to political risk, the theory which explains these linkages has been underdeveloped. (b) With few exceptions, most studies have attempted to conceptualize and measure political risk at the country-level, thus ignoring the difference between macro and micro political risks (Robock and Simmonds 1989) as well as the impact of political risk on a specific foreign direct investment project. (c) While implied in some studies is an aspiration-frustration-aggression model, the key theoretical concepts, the linkages between the concepts, and the measurement of the concepts have not been substantiated. As a result, the conceptual foundation of the political risk phenomenon remains very weak and the theoretical maturity of the field of political risk assessment remains to be low (Akhter and Lusch 1987; Sethi and Luther 1986). (d) Most conceptual and descriptive models focus on institutional factors such as government, political parties, labor unions, and economic system to identify key variables impinging on political risk. They have generally ignored the behaviors and characteristics of key politicians that may well be the key determinants of political risk in a nondemocratic political system.

2. Composite Quantitative Risk Indices

Composite political risk indices (e.g., BI, BERI, WPRF) also suffer from a number of problems. (a) These indices basically rely on expert-generated "soft data". As such, they are subjective in nature and can be biased as the experts respond guardedly to sensitive questions, or as different experts attach different meanings or importance to the indicators depending on their background, perceptions, and experiences. (b) Each indicator is treated equally for every country surveyed, ignoring the subtle political and sociocultural differences among countries, which may be vital to forecasting political risk. (c) The weights applied to compute the composite indices lack justification. The arbitrary assignment of weights often results in conflicting risk rankings of countries by different indices. (d) There is no consensus among the indices with regard to the definition of political risk and the key variables impinging on political risk. (e) In terms of forecasting drastic political changes like the ones occurred in eastern Europe and former USSR, these indices are of very limited use, since only the ordinal rankings of countries' riskiness are given. (f) These indices usually fail when it comes to assess the political risk specific to a foreign direct investment project, because they are calculated at the country level.

3. Statistical Models

Statistical models are designed to explain and predict political risk based on past experiences. One strength of these models is that they avoid the problem of arbitrary assignment of weights to the indicators. Instead, the coefficients of the indicators are estimated by the data. Thus, they are more objective than those used in computing the composite risk indices. Another strength of the statistical models is that they allow significance test on the model coefficients, which offer insight into the relative explanatory power of the individual indicators.

Unfortunately, there are several problems associated with the statistical models that undermine their ability to forecast political changes. (a) There has been a lack of a uniform conceptualization of the dependent variable (i.e., political risk) across models, and political risk has been simplistically measured by indicators such as expropriation of foreign assets or restriction on repatriation. (b) The number of independent variables which can be included in the model is very limited due to the underlying statistical properties of these models. Thus, the validity of these models is generally low. (c) Reliable measurement for some independent variables that are unobservable (e.g., national aspiration and frustration) has not been well developed, and some political and cultural variables are simply not quantifiable. (d) The assumptions underlying the models (e.g., linearity, normality, homogeneity) are usually violated in practice.

Case Research Method for Political Risk Assessment

Several conclusions can be drawn from the preceding discussions. First, the conceptual foundation for political risk phenomenon remains very thin. Key concepts lack coherent definitions and there has been no agreement as to how to measure political risk. Second, political risk is a very complex phenomenon which is deeply rooted in a country's history, culture, and politics. But little is known with regard to the mechanisms by which various political, sociocultural, and economic variables cause political discontinuity. Third, the existing methods for assessing political risk have been designed for country-level risk (macro-risk) rather than for investment-specific risk (micro-risk) assessment and, thus, are less suitable in assisting managers in making specific investment decisions. Fourth, political risk assessment must be sensitive to the context in which political process takes place. The subtle contextual differences across countries must be preserved if the ability to predict political discontinuity and its consequent impact on a specific foreign investment is to be enhanced.

Since so little is known about political risk phenomenon and so complex is the phenomenon, a new direction should be sought in order to develop better methods for political risk assessment.

1. Case Research Method

Defined here, a case research is a systematic analysis and description of a phenomenon of research interest aimed at gaining an in-depth understanding of the phenomenon and developing theory for the phenomenon. As such, it is analogous to the physician's clinical examination, and relies on multiple data sources for reliable diagnosis (Leenders and Erskine 1978). All cases share some common features such as being a description, directly obtained based on interview, archive, naturalistic observation, and other data, and being constructed to be sensitive to the context in which the phenomenon takes place and to the temporal dimension through which events unfold. They go beyond providing a static snapshot of events, and cut across the temporal and contextual dimensions of situations. The critical difference between case research and other legitimate, but nonscientific, uses of cases is that the research objective of the investigator should guide a coherent application of case method across numerous cases for theory development and testing (Bonoma 1985).

For reasons of both knowledge accrual and practical application, case research method is considered a potentially fruitful direction for political risk assessment.

2. Case Research as a Knowledge Accrual Tool in Political Risk Assessment

The two key desiderata defining "good research" in social sciences, i.e., data integrity and high currency, often place conflicting operational demands on researchers (Bonoma 1985). Thus, tradeoffs must be made in employing any method to investigate a phenomenon. As a consequence of these inevitable tradeoffs, a broader rather than narrower method set becomes appropriate for investigating social phenomena.

There are at least three rationales for using case research as a knowledge accrual tool in political risk assessment. First, the current knowledge of political risk phenomenon dictates that researchers' objectives are to build sound theory of political risk. According to Bonoma (1985), McGrath (1982), and Simon (1978), when researchers' interests or phenomenon requirements dictate theory building rather than verification, case research method becomes relevant. Thus, case research method should be applied to provide a deeper understanding, a fuller contextual sense of the political risk phenomenon, and an explicit provocation toward theory building in political risk assessment that is often missing from both simple conceptual and descriptive work and most cause-and-effect research (e.g., statistical modeling). Presumably,

researchers armed with a deep understanding of political risk so gained may then seek to move up the hierarchy of study types toward causal disconfirmation, since relevant concepts, variables, and the theoretical linkages among the variables can be properly defined and put in a sound theoretical framework through the applications of case research.

Second, political risk phenomenon is very sensitive to the context in which it takes place. It can not be studied outside its political, historical, sociocultural, and economic contexts. When a phenomenon of interest requires a contextual sensitivity and thus can not be usefully studied outside its natural setting, methods that maximize data integrity becomes inappropriate (Bonoma 1985; Geertz 1973). Therefore, statistical models which emphasize data integrity are less suitable for assessing political risk, especially when the theory of political risk is still inadequate for specifying the model. Furthermore, since some aspects of political risk phenomenon, because of their complexity or breadth, can not be operationalized meaningfully in quantitative terms, clinical judgment based on qualitative data is required. Thus, case research method, being an inductive theory-building tool, can be particularly useful in political risk assessment, given that some historical and cultural factors are simply not quantifiable.

Third, the lack of attention to the behavior and characteristics of the key politicians in the existing methods of political risk assessment also poses opportunities for the application of case research method. Case research method, which usually implicates multiple data sources, is particularly flexible in incorporating the behavior and characteristics of the key politicians into political risk assessment. A better understanding of the characteristics of the key politicians could immensely improve the knowledge of the mechanisms by which political, historical, sociocultural, and economic factors influence political risk.

3. Case Research as a Practical Tool for Political Risk Assessment

There are also two reasons for applying case research method as a practical tool for assessing political risk. First, the nature of political risk assessment task faced by companies involved in international business calls for the assessment of not only the macro political risk at the country level but also the micro political risk which affects individual investment projects (Daniels and Radebaugh 1989). Case research, by properly specifying the research objectives and the relevant research contexts, can be tailored to the needs of companies for assessing micro political risk as well as macro political risk. Furthermore, case research method, being contextually sensitive, can be effectively tied to the investment decision process of multinational companies. Second, the decision making process of multinational companies and the key participants in the process dictate the information needs for assessing political risk. The existing conceptual and descriptive frameworks, composite indices, and statistical models have generally ignored the decision aspect of an investment project. With case research method, specific cases can be constructed to provide information needed at different stages of the decision process and by different participants in the process. Thus, case research can facilitate the application of political risk information in investment decision process.

Case Research: An Implementation Process

The process of implementing case research approach to political risk assessment consist of several phases. First, researchers must establish a clear research objective which will guide subsequent case development and define the scope and depth of research. Second, researchers must learn the key concepts, variables, and the contexts to get a better perspective on modifications necessary to the basic research objective. This is a phase of situation analysis in which literature on political risk and the contextual variables in the country are analyzed and integrated. Third, researchers should attempt to construct a preliminary model to provide a tentative explanation or prediction for the political risk and its potential impact on the project being studied. The critical skill for the researchers is to be willing to let further data to reformulate his/her thinking about the phenomenon. Fourth, researchers should begin to evaluate the tentative prediction of political risk by further case construction. The key viewpoints in this phase are the openness to the fact that a prediction is usually circumscribed to particular settings, and the willingness to treat disconfirming knowledge as a stimulus for further case development. Finally, researchers should apply the refined prediction of political risk to another set of cases. The contexts of these cases should be characterized by extreme conditions where the validity limits of the prediction might be expected.

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RETAILING

MACHIAVELLIANISM AND ETHICAL PERCEPTIONS OF RETAIL SITUATIONS

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The honesty and integrity of business personnel have come under increasing scrutiny over the past several decades. There appears to be an increasing belief that the ethical character of society is declining (Zinkhan, Bisesi and Saxton 1989), a belief which is furthered by the visibility of a number of recent questionable business practices (Lysonski and Gaidis 1991).

In the overall business environment, marketing practices are especially visible to the general public, particularly those which may be of an unethical nature. Indeed, Murphy and Laczniak state "the function within business firms most often charged with ethical abuse is marketing" (1981, p. 251). Along this vein, Hunt and Chonko state "critics perceive marketing to be Machiavellian in nature" (1984, p. 31), where Machiavellian involves the manipulation of others for one's own purposes (Christie 1970b). The realm of marketing which has the highest visibility to the general public is retailing, or more specifically, retail sales. Indeed, retail sales appears to be especially susceptible to the development of troublesome ethical situations and for the exhibition of Machiavellian activities.

This susceptibility toward Machiavellian activities found in retail sales arises from a number of sources. Retail salespersons play a critical "boundary-spanning" role through which the satisfaction of both customer and management are sought (Donnelly and Ivancevich 1975). Furthermore, in spite of this role and the fact that salespeople are responsible for a wide variety of tasks, (Crissy, Cunningham and Cunningham 1977), they are likely to receive little formalized training (Burstiner 1975-1976). Finally, management pressure to produce results tends to create an atmosphere which can foster questionable activity (DeConinck and Good 1989).

This study explores the relationship between one's Machiavellianism and one's ethical perceptions of potentially ethically troublesome retail sales situations.

MACHIAVELLIANISM

Machiavellianism is the name given to the belief that manipulative, persuasive behaviors are permissible to use to accomplish one's personal objectives (Gable and Topol 1989). Although it is unknown whether Machiavelli truly espoused these ideas or whether he was a satirist (Christie 1970b), Machiavelli has come to be synonymous with the use of guile, deceit, and opportunism in interpersonal relations since the publication of The Prince in 1513 (Christie 1970b).

Individuals exhibiting a relatively high level of Machiavellianism "do not take a moralistic view of themselves, others, or interpersonal relations" (Geis, Christie and Nelson 1970, p. 76). Indeed, they have been found to exhibit significantly greater number and variety of attempts at manipulation than those individuals exhibiting relatively lower levels of Machiavellianism (Geis, Christie and Nelson, 1970), and that individuals who exhibited high Machiavellianism were also more successful in these attempts (Geis 1970).

Machiavellianism has been examined in several areas of business activity. For instance, the relationship of Machiavellianism and job satisfaction (Chonko 1982; Hunt and Chonko 1984), the relationship between Machiavellianism and retail job performance (Gable and Topol 1988), and the relationship between Machiavellianism and income and job title (Hunt and Chonko 1984; Gable and Topol 1988) have been investigated. Interestingly, however, little research has been undertaken to examine the relationship between Machiavellianism and one's ethical perceptions. Since one's ethical perceptions can be expected to be reflected in one's actions (Gifford and Norris 1987), this appears to be an important area of study.

RETAIL ETHICAL PERCEPTIONS

The ethical perceptions of retail personnel on potentially ethically troublesome retail sales situations have been investigated, but few of these studies have been reported until relatively recently (Gifford and Norris 1987). Ethical perceptions of store managers were examined by Dornoff and Tankersley (1975-76); those studies, replicated by Gifford and Norris (1987) used several retail ethical vignettes. The Gifford and Norris results suggest that store managers are more "consumer-oriented" today than were

their counterparts a decade ago. When investigating the ethical perceptions of retail salespeople on a number of potentially ethically troublesome retail situations, Dubinsky and Levy (1985) found that retail salespeople do not consider a large portion of those situations to reflect problems of ethical concern.

Many more studies have been reported which examine the ethical perceptions of business students on potentially ethically troublesome retail sales situations. For example, a longitudinal study by Norris and Gifford (1988) of senior-level marketing students at one midwestern public university investigated the students' ethical perceptions of a number of questionable retail practices using the retail ethical vignettes of Dornoff and Tankersley (1975-76). The results of that study suggest that students' perceptions of ethical issues have changed little over the past decade. The students in the study appear to hold perceptions which are significantly "less ethical" than those held by retail managers. Furthermore, a number of studies have been reported which compared the ethical perceptual differences of various groups of students based on religion (Burns, Lanasa and Fawcett 1990) or culture (Burns and Brady 1992). Again little research has been undertaken to examine the relationships between Machiavellianism and one's ethical perceptions.

THE STUDY

The objective of the study was to investigate the relationship between Machiavellianism and ethical perceptions of potentially ethically troublesome retail sales situations. Since individuals holding a Machiavellian view hail the use of guile and deceit to accomplish their objectives (Machiavelli 1513, 1531), it can logically be expected that individuals exhibiting high levels of Machiavellianism will hold "lower" ethical perceptions than individuals exhibiting lower levels of Machiavellianism. Individuals exhibiting higher levels of Machiavellianism can be expected to less constrained by morality, or discernments regarding what is right and what is wrong, and more interested in pursuing their own desires, regardless of the effect on others.

Hunt and Chonko (1984) suggest that Machiavellianism and ethical perceptions may not be merely related. Instead, they imply that one's Machiavellianism may be a source, if not the primary source, of one's ethical perceptions.

HYPOTHESIS

Individuals exhibiting higher levels of Machiavellianism will hold "lower" ethical perceptions regarding potentially ethically troublesome retail sales practices than will individuals exhibiting lower levels of Machiavellianism.

METHODOLOGY

The sample was drawn from undergraduate business students attending three state universities in separate regions of the country. In each instance, the students were asked to complete a questionnaire during class time. The resulting sample size was 381 with a virtual 100 percent response rate.

The questionnaire used in the study consisted of two parts. The first part consisted of thirty-eight retail situations and practices expected to present issues which are potentially ethically troubling for retail salespeople. Items on the questionnaire were developed by Levy and Dubinsky (1983) and Dubinsky and Levy (1985). For each situation or practice, subjects were asked to answer the following question: "Does the situation present an ethical question for you? (Do you feel that the situation pressures you into taking actions that are inconsistent with what you feel is right?)." As in the instrument development studies, subjects in the current research effort were asked to respond to each question using a seven-point scale on which "1" represented "definitely no" and "7" represented "definitely yes." Burns (1992) observed that this scale measures five factors; job performance/store operations, self-centeredness, availability of service and products to customers, intrafirm interpersonal relations, and product pricing.

The second part of the questionnaire consisted of the Mach IV scale, a 20-item scale which purports to measure the Machiavellianism orientation of an individual (Christie 1970a). For each item, the subjects were asked to indicate their level of agreement with that item using a five-point scale on which "1" represented "strongly agree" and "5" represented "strongly disagree." The scale consists of three types of items, or three factors, representing Machiavellian tactics, views of human nature, and abstract morality (Christie 1970a).

Students' scores on each scale and each factor were determined. Correlation analysis was used to determine the existence of significant relationships.

FINDINGS

The sample had a mean score of 86.4 (s.d. 11.2) on the Mach IV scale which was significantly lower that the "expected" mean score of 100. It was comparable to past administrations of the scale to similar populations,

however. The sample had a mean score of 159.4 (s.d. 46.9) on the Dubinsky and Levy instrument.

The correlation coefficients for the entire sample and for each university are presented in Table 1. For the entire sample, a significant (at the .05 level) relationship was not observed between the overall scales. When the relationships between the factors were observed, a significant (at the .05 level) relationship was observed in one instance -- between the second factor of the potentially ethically troublesome retail sales situation scale (self-centeredness) and the second factor of the Mach IV scale (views of human nature). The relationship was in the direction of the hypothesis.

When the respondents of the students for the three universities were viewed separately, similar findings were observed. In only one instance was a significant (at the .05 level) relationship observed. This was between the second factor of the potentially ethically troublesome retail sales situation scale (self-centeredness) and the second factor of the Mach IV scale (views of human nature) for university 2. This relationship was also in the direction of the hypothesis.

These results, at best provide very limited support for the hypothesis.

DISCUSSION

Results consistent with the hypothesis were observed for only one of the relationships which were examined, providing very limited support for the hypothesis. Furthermore, given the number of relationships examined, the probability of observation of spurious relationships is somewhat high. Hence, the support observed for the hypothesis is indeed limited.

These findings are surprising for they are contrary to what would be logically expected. As discussed earlier, individuals exhibiting high levels of Machiavellianism are seen to welcome the use of guile, deceit, and other similar means to accomplish their objectives. Clearly, the perspective of these individuals can be expected to be the justification of means, whatever they may be, in order to achieve the desired ends. It would reasonably be expected then, that these means would likely include ethically questionable actions which will aid in the attainment of desired personal goals.

These expectations would appear to be consistent with past research which have indicated that individuals with high levels of Machiavellianism are more likely to lie when caught cheating and are less likely to admit guilt (Exline, Thibaut, Hickey and Gumpert 1970). Furthermore, Forgas states that such individuals "are more willing to employ devious tactics such as lying or cheating if this leads to success" (1985, p. 182) than individuals with lower levels of Machiavellianism. Finally, Guterman explicitly states that an individual with high levels of Machiavellianism can be identified by "his lack of commitment to conventional moral norms" (1970, p. 4), and Geis, Christie and Nelson states that these individuals "would not be subject to the ethical qualms which presumably restrain low scorers from interpersonal manipulation" (1970, p. 76). The findings of this study, however, seemingly conflicts with this line of thought.

A likely explanation of the findings observed in this study can be found in the results observed by Exline, et al.

TABLE 1
CORRELATIONS

Entire Sample

Overall Correlation -.0380

Factor Correlations		Ethical Perceptions Factors				
		1	2	3	4	5
Mach	1	-.0326	.0163	-.0605	-.0214	-.0640
Factors	2	.0254	.1421*	.0009	.0428	-.0018
	3	-.0915	-.0074	-.0449	.0369	-.0680

University 1

Overall Correlation -.1463

Factor Correlations		Ethical Perceptions Factors				
		1	2	3	4	5
Mach	1	-.1059	-.0163	-.0337	.0385	-.0593
Factors	2	.0584	.2204	.0914	.0603	-.0626
	3	-.1541	-.0357	.0043	.2300	-.1375

University 2

Overall Correlation -.0495

Factor Correlations		Ethical Perceptions Factors				
		1	2	3	4	5
Mach	1	-.0015	.0843	-.0536	-.0473	-.0661
Factors	2	.0812	.1616*	.0083	.0838	-.0349
	3	-.0311	.0228	.0002	.0051	-.0089

University 3

Overall Correlation -.2305

Factor Correlations		Ethical Perceptions Factors				
		1	2	3	4	5
Mach	1	-.0261	.1821	-.1630	-.0260	-.0546
Factors	2	-.2450	.0295	-.1102	.1378	-.1003
	3	-.2112	-.0482	-.2652	.0620	-.1524

* $p < .01$

(1970). In this study, an individual's tendency to perform an unethical act (in this instance cheating) was examined in relation to the individual's level of Machiavellianism. Interestingly, "consistent differences in moral conduct between high and low Machs were not found" (Exline, et al. 1970, p. 73). A closer examination of this study may illuminate these findings.

In the Exline, et al. study (1970), subjects were exposed to a confederate who attempted to implicate them in cheating. Subsequently, the individuals were interrogated after being accused of engaging in the cheating activity after doing so. It was found that individuals with high levels of Machiavellianism were found not to be more likely to engage in the cheating activity. They were, however, found to be significantly more likely to lie during the post-accusation interrogation. In response to these findings, Exline, et al. state "the above results suggest that the behavior of the high and low scores (on the Mach IV scale) may be more fruitfully considered in terms of ability to withstand another's influence attempts than in terms of adherence to abstract ethical beliefs" (1970, p. 71).

The results of this study, therefore, appear to be consistent with the conclusions of Exline, et al. (1970). The results of this study, then, conflict with the beliefs of Hunt and Chonko (1984). This study provides no evidence that Machiavellianism is the primary source of one's ethical perceptions. In fact, at most there appears to be only a limited correlation between the two. This suggests that there may be a need to reconceptualize Machiavellianism in terms other than one's propensity toward ethical or unethical activity as was suggested by Exline, et al. (1970).

Since the results of the study appear to be consistent with the conclusions of Exline, et al. (1970), there is a need to further investigate this line of thought. Specifically, research which examines the effect which the presence of explicit rewards for engaging in potentially ethically troubling behavior would have on an individual's tendencies to engage in such activities would be beneficial. It would be expected that the presence of such explicit rewards would increase the likelihood that individuals with higher levels of Machiavellianism would engage in such activity, but would have a negligible effect on individuals with lower levels of Machiavellianism.

Furthermore, if the conclusions of Exline et al. (1970) are true, that it may be more fruitful to consider Machiavellianism in terms of the ability to withstand another's influence attempts than in terms of the adherence to abstract ethical beliefs, it would be logical to expect that external attempts to regulate potentially ethically troublesome activity will be greeted differently by individuals with different levels of Machiavellianism. Individuals with higher levels of Machiavellianism would be expected to be less affected by attempts of individuals or organizations to regulate such activity than individuals with lower levels of Machiavellianism. Hence, an individual's level of Machiavellianism may have the potential to affect how he/she would react to an organization's code or policies which regulate unethical activities.

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ELECTRONIC SHELF LABELING: AN EMPIRICAL INVESTIGATION OF CONSUMERS' ATTITUDES TOWARD A NEW TECHNOLOGY IN RETAILING

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Abstract

The supermarket industry is under intense pressure to be more efficient and yet service oriented. One solution may be electronic shelf labeling systems. This study reports the results of an awareness and attitude study conducted with 261 supermarket shoppers with respect to electronic shelf labeling. The data indicate this new technology may be a profitable investment from a financial and consumer attitude perspective.

Introduction

Today's recessionary pressures, combined with a tough competitive environment, are squeezing supermarket industry profit margins. The Wall Street Journal recently reported flat or declining supermarket sales over the past two years, and noted that a portion of this decline is due to intense competition from nontraditional stores (e.g., warehouse stores and mass merchandisers) that have become increasingly more attractive to price conscious consumers (Deveny 1992). Indeed, the results of a recent poll cited by The Wall Street Journal indicated that 72 percent of supermarket shoppers see price as their primary consideration. This fundamental shift in consumer attitudes toward value may be here to stay, as consumers have come to realize that they can do without (Deveny 1992). The combination of consumer economic pressures and the shift toward value consciousness is leading supermarkets to undertake more aggressive tactics, using price as a primary weapon (Progressive Grocer 1992). In order to remain competitive in an environment favoring shrinking margins and declining market share, supermarkets need to focus on lowering operating costs and increasing consumer satisfaction. One way to accomplish this is through the effective use of technology.

This article summarizes the results of a study designed to determine the reaction of consumers to a technology relatively new to the supermarket industry - Electronic Shelf Labeling. While previous studies have been conducted on this topic, these prior investigations focused on the benefits to stores rather than on consumer reactions. Before examining the study, however, it is important to review the role technology has played in the history of the supermarket industry, as well as the history of electronic shelf labeling.

Background

Supermarkets have a tradition of experimenting with and implementing new technologies, seeking to improve both labor efficiencies and levels of customer satisfaction. The supermarket industry was a leader in the utilization of automatic identification technology through the implementation of bar codes and scanners (Chain Store Age Executive 1991). Universal Product Codes (UPC) have been a supermarket industry standard since 1973 (Benedetti 1989). Today, UPC labels appear on almost all grocery store items, providing invaluable information from the checkouts.

According to the Food Marketing Institute (Benedetti 1989), supermarkets continue to be innovative users of technology. Self-scanning checkouts, electronic coupons, and automatic replenishment (EDI) systems all represent technologies that are becoming more mainstream (Benedetti 1989; Francett 1989). Shulman (1992), however, feels that the supermarket industry's edge on technological leadership has weakened. The mergers and buyouts of the late 1980s caused a shift in managerial focus. Supermarkets have become less concerned with technological development, and more concerned with internal financial developments. The result has been a loss of momentum by supermarkets concerning the use of technology, and a gain by other retailers, such as mass merchandisers, who have adopted supermarket technology standards and built on them to leap ahead of the supermarket industry in terms of technological sophistication (Shulman 1992). While supermarkets have theoretically agreed with new concepts in recent years, they have not been prepared to make the necessary internal investments required to make these concepts materialize (Shulman 1992). Moreover, supermarkets are not fully utilizing their current technology. Francett (1989) asserts that retailers are just beginning to see the power of scanning data. For example, the clues to ever changing consumer preferences are available within a day's scanning data (Francett 1989). Hence, supermarkets will need to expand their use and development of technology in order to remain competitive.

Electronic Shelf Labeling

One of the newer technologies available to the supermarket industry is Electronic Shelf Labeling (ESL). The electronic labels themselves are actually small liquid crystal display (LCD) units. Each individual ESL unit, or "module", is used to represent the pricing of a single SKU. Different module designs are available from some vendors for special situations, such as refrigerated cases (Garry 1991). ESL modules are mounted on store shelves to display current pricing and/or other information transmitted by PC via a two-way FM radio frequency link. The interface between the modules and the point-of-sale (POS) system results in price changes that show up on the shelves at the same time they are entered into the price look-up file (Chain Store Age Executive 1990).

The key to success for ESL is a single pricing data base for both the POS system and ESL, as it is the single pricing data base that eliminates the opportunity for price discrepancies between the shelf and checkout. With the single pricing data base, product price information is entered into one price look-up file and then transferred simultaneously to both the ESL and POS systems. Conversely, maintaining two data bases requires pricing information to be entered twice; once into a price look-up file for the ESL system, and once into a price look-up file for the POS system. This substantially increases the probability of price discrepancies. Given that the reduction of price discrepancies is a primary benefit of ESL systems, the single pricing data base is of utmost importance.

ESL utilizes wireless LAN (Local-Area Network) technology involving (FM) radio frequency signals (Brodsky 1990). The use of both LAN and FM technology is becoming increasingly popular. Francett (1989) examines the acceptance of LANs, citing A & P and Giant Foods as two examples of companies turning to LAN systems. For ESL, LAN technology offers an appealing alternative to wiring shelves and aisles (Brodsky 1990). LAN technology and adaptive ESL module designs mean that ESL can be easily installed throughout the store.

According to Chain Store Age Executive (1990), ESL was first put to use in 1985, when Telepanel Systems tested the first supermarket prototype at a Pick 'n Save store in the Milwaukee area. In 1989, Anderson Consulting included examples of ESL in its SMART (Super Marketing through Applied Retail Technology) Store 2000, a test bed and demonstration lab for state-of-the-art retail technologies (Booker 1989).

Benefits of ESL

ESL was designed to help retailers build on their current automated POS technology (Chain Store Age Executive 1990). Garry (1991) quotes Fred Schneider of Anderson Consulting, Chicago, who feels that ESL is a powerful merchandising tool offering retailers the chance to experiment with the effects of price changes and the opportunity to react immediately during a price war. Furthermore, Garry (1991) asserts that ESL can be used to alert stock clerks to the number of facings a product should have. This type of "...individual store shelf management..." is not always workable with the standard planogram system (Garry 1991).

Garry (1991) feels that the most important role of ESL might be as a "...hedge against legislation." Many states are concerned about price discrepancies between the shelves and the checkout. Some states are considering item-pricing laws, while others have already implemented such laws. These laws require supermarkets to individually price each item to ensure price consistency. Because ensured price consistency is a primary benefit of ESL, it is possible that ESL utilization could prevent and/or repeal item-pricing laws (Garry 1991).

There have been several articles regarding ESL, primarily focusing on the cost savings and benefits to stores. Chain Store Age Executive (1990) reports on a proprietary study conducted by Deloitte & Touche, who defined hard, contingent, and soft benefits associated with ESL. Hard benefits are those realized through the automation of price tag maintenance, including significant savings in shelf audit costs. One hour each week was enough to ensure 100 percent accuracy between shelf and scanner prices at the test store. This compared to the control store, where employees spent 12 to 15 hours per week performing shelf audits at 95 percent accuracy (Chain Store Age Executive 1990). Thus, labor hours previously spent making, changing, and auditing the traditional shelf labels can now be allocated to achieve greater efficiencies (Garry 1991). The reduction of shelf audits was estimated to result in annual savings of $.7075 per module (Chain Store Age Executive 1990). Consequently, a supermarket carrying 25,000 SKUs would enjoy annual hard benefits of approximately $17,688 due to the greater shelf audit efficiencies attained with ESL.

The contingent benefits identified by Deloitte & Touche included the elimination of the cost of item price marking (where applicable), and the reduction of losses resulting from time lags in promotional price changes. When a store utilizes paper shelf tags, time lags in promotional price changes occur because store clerks are required to go into

the aisles and physically change each shelf label. Hence, the price changes are not immediate, and the store may lose business because sale items are improperly marked. Furthermore, the store effectively loses the time of the stock clerks who change the tags. ESL eliminates these problems, due to the single pricing data base. The minute promotional prices are determined and entered into the pricing data base, they are transferred to the ESL modules on the shelves. Consequently, there is no time lag in changing promotional prices in stores utilizing ESL. The Deloitte and Touche study calculated the annual savings from contingent benefits by comparing a test store utilizing ESL to implement promotional price changes to a control store utilizing paper shelf tags to implement the same price changes. The resultant annual savings were calculated to be $.6147 per module (Chain Store Age Executive 1990). Thus, a supermarket carrying 25,000 SKUs would enjoy annual contingent benefits of approximately $15,368 due to ESL.

Soft benefits represent intangible benefits not easily measured or calculated. These include the overall improvement in store image and the creation of goodwill among consumers (Chain Store Age Executive 1990). Although dollar value savings cannot be assigned to soft benefits, they have the potential to translate into increased store patronage.

There has also been some study of consumer reaction to ESL. Garry (1991) discusses focus group research conducted by Willard Bishop Consulting of Barrington, Illinois. Their findings showed that consumers acknowledged several key benefits associated with ESL - the price consistency from shelf to checkout, the ease of price comparison, and the legibility of the modules. The Deloitte & Touche study mirrored these results. Consumers named the easy-to-read display and improved pricing accuracy as the reasons they favored ESL (Chain Store Age Executive 1990).

As we have shown, competitive pressures are requiring supermarkets to make more effective use of technology. Electronic Shelf Labeling systems offer the benefit of reduced price discrepancies between the shelf and checkout, as well as reduced shelf audit times and costs. Additionally, ESL offers retailers a variety of merchandising opportunities, including instantaneous shelf price changes. Ideally, ESL should also enhance customer service efforts by reducing price discrepancies, improving shelf tag legibility, and facilitating easy price comparisons. Determining the nature of consumer attitudes toward ESL is an important step in ascertaining actual ESL customer service benefits. Consequently, the purpose of this study is to describe the awareness and attitudes of shoppers toward Electronic Shelf Labeling.

Methodology

The study was conducted in the first supermarket application of electronic shelf tag labels in the Southeast United States. At the time of the study, the store being analyzed had been open 3 months, with only 3 of the aisles wired for electronic shelf labels. The store in the study was a Beta site (experimental) for the chain evaluating ESL.

The interviews were conducted over a 3 day period of time during the following times:

Thursday between 4 through 7 p.m.
Friday between 12 through 2 p.m. and 4 through 7 p.m.
Saturday between 9 a.m. through 4 p.m.

This yielded a sample of 261 completed interviews. All interviews were conducted at the checkout stand while the shoppers were waiting for their turn. The questionnaire could be completed in under 5 minutes. The interviewers were all experienced and trained in this type of personal intercept research.

At the outset of each interview, respondents were questioned to make sure they understood the ESL concept. Specifically, each shopper was asked if he or she had noticed anything different about the store. Seventy six percent of all shoppers noticed the electronic shelf labels. If a respondent had not noticed the electronic shelf labels, or had perceived something else to be different about the store, the interviewer proceeded to specifically ask about the electronic shelf labels. If there was still no evidence of recognition, the respondent was read educational material concerning Electronic Shelf Labeling by the interviewer. This process ensured that all members of the sample were aware of the electronic shelf labeling system.

Results

Half of the shoppers included in the study were from the two zip code areas immediately surrounding the store site, while the remaining customers traveled a substantial distance to shop at this store. Seventy five percent of the shoppers were between ages 20 and 45. Twenty six percent of the sample had children with them on this shopping occasion. Couples shopping represented 22 percent of the sample, lone males represented 20 percent, with lone females representing the remainder.

Table 1 presents the descriptive results of the study. Cross tabulations were run on the data to detect possible

TABLE 1

	Disagree	Disagree	Neither	Strongly Agree	Strongly Agree
Electronic shelf pricing will allow (name) to have lower prices	2.2%	21.2%	24.2%	51.1%	1.3%
Electronic pricing assures me of the correct price at the checkout	n/a	10.3%	5.0%	78.1%	6.6%
Electronic shelf pricing is confusing to me	6.1%	80.6%	4.9%	8.1%	.4%
Electronic pricing will not have an impact on my buying habits	2.0%	23.8%	8.6%	62.3%	3.3%
I would like to see other stores use electronic shelf pricing	.4%	6.6%	21.7%	68.6%	2.7%
I like stores such as (name) that use new technology to bring me better service	n/a	2.9%	5.0%	82.9%	9.2%
I am concerned that electronic shelf pricing will lead to higher prices at (name)	.9%	61.2%	12.1%	25.0%	.9%
I prefer electronic pricing to paper shelf tags with prices painted on them	.9%	10.3%	21.4%	61.6%	5.8%
While shopping, I saw information on the benefits of electronic shelf pricing	.8%	76.8%	7.2%	14.8%	.4%
(Name) provides shoppers with adequate information on electronic shelf pricing	.4%	46.2%	7.1%	45.0%	1.2%
I plan to return to (name) for future shopping trips	n/a	4.1%	2.0%	87.3%	6.6%

differences among respondents (such as age, sex, etc.). However, due to the small sample size of the study, the results in most cases were meaningless. The subsequent section will address the results of each statement individually. Following this, conclusions and implications will be presented.

Electronic shelf pricing will allow (name) to have lower prices. The data reveal that the majority of shoppers feel that the new electronic pricing will allow the store to lower prices (51 percent), with 24 percent of the people neither agreeing nor disagreeing.

Electronic pricing assures me of the correct price at the check-out. Importantly, 78 percent of the shoppers indicated that electronic shelf labeling assures them of the correct price. These results demonstrate the customer service benefits attainable by reducing price discrepancies. Although management knows that prices will be accurate, consumers echoing this concept is a major benefit for the store implementing ESL.

Electronic shelf pricing is confusing to me. The data suggest that there is very little confusion about electronic pricing. That is, 87 percent felt that there was no confusion about the new technology.

Electronic pricing will not have an impact on my buying habits. Sixty six percent of the respondents felt that electronic shelf labeling would not affect their buying habits. Twenty six percent indicated the new system may have an impact on their buying habits. The data do not provide any information on what the impact might be.

I would like to see other stores use electronic shelf pricing. The vast majority (71 percent) of respondents would like to see other stores use the electronic shelf labeling system. Consequently, being the first store with ESL technology has the potential of becoming a strategic advantage in a very competitive market.

I like stores such as (name) that use new technology to bring me better service. The data reveal that nearly every one of the shoppers like the use of technology to bring them better service. This positive response suggests that the store employing ESL will enjoy a positive effect from being the first in the market place to introduce electronic shelf labeling.

I am concerned that electronic shelf pricing will lead to higher prices at (name). This statement serves as a validity check of one of the key issues (pricing). The statement was reversed to indicate that electronic shelf labeling will lead to higher prices. The shoppers were very clear on this with 62 percent disagreeing, while another 12 percent were not sure either way.

I prefer electronic pricing to paper shelf tags with prices painted on them. This statement compares electronic shelf labeling with paper shelf tags. The data indicate that 67 percent of the shoppers prefer ESL to the traditional paper tags.

While shopping, I saw information on the benefits of electronic shelf pricing. This statement addresses the question of whether the customers saw any information on electronic shelf labeling while shopping. Eighty five percent reported seeing no information on electronic shelf labeling at the time of the study. There was, in fact, no information available during the study time. Prior to the study, however, in-store fliers were available on the ESL system. The remaining 15 percent might have been repeat shoppers who had seen the ESL material on a previous shopping trip.

(Name) provides shoppers with adequate information on the electronic shelf pricing. The results show that shoppers would like to see more information on electronic shelf labeling. About half of all shoppers indicated an interest in seeing more information on ESL.

I plan to return to (name) for future shopping trips. The data reveal that 94 percent of all shoppers plan to return to the study store for future shopping trips. This result must be tempered by the vast majority of responses being in the agree category rather than a strong intention which strongly agree represents.

Conclusion

The results are extremely encouraging with respect to Electronic Shelf Labeling. Superior results would be hard to attain for any new technology, service, or concept. Shoppers were very positive about ESL compared to paper tags. Shoppers like the new technology and wish other stores would follow suit. Importantly, shoppers think the new system will lead to accurate pricing and not raise prices. Respondents did want more information on the ESL system, which can be accomplished very inexpensively. These results suggest that the electronic shelf labeling system could be used as a competitive advantage in the grocery industry.

The limitations of the study are mostly related to its timing. The study was done in a new store where only three of the aisles were utilizing electronic shelf labeling. This calls for future research on stores that are completely converted to ESL. There is also the possibility that consumers could change their attitudes over time. That is, as the concept of ESL gets older and more common, shoppers might not evaluate it in such a positive light.

Important managerial implications stem from the ability of ESL to be incorporated into shelf management and inventory control systems. As noted earlier, ESL can potentially allow for individual shelf management by alerting stock clerks to the number of facings a product should have (Garry 1991). Additionally, ESL has potential as a powerful marketing and merchandising tool. Some vendors offer programmable ESL modules that facilitate special consumer messages, such as nutritional or promotional information (Garry 1991). Future research should focus on the effectiveness of ESL in terms of shelf management, inventory control, and merchandising.

The utilization of technology will help supermarkets remain competitive. The technology of Electronic Shelf Labeling is an exciting concept because it offers stores the opportunity to gain a competitive advantage while at the same time saving money in the long run. Stores can benefit from reduced price discrepancies and increased customer service benefits. Obviously, a capital investment is required to implement ESL, but the payoff appears to be quite positive.

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CHARACTERISTICS OF SUCCESSFUL TELEMARKETING ASSOCIATES

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Abstract

This study focuses on the characteristics of successful telemarketing sales associates that contribute the most to their success. Telemarketing associates from a large Midwestern telemarketing corporation were observed and their sales tracked in relation to six other variables assumed to be related to success in telemarketing. The results indicate that aggressive and persistent associates have considerably better sales records than consultative and friendly associates.

Introduction

Telemarketing has been one of the fastest growing industries in recent years. Much of the growth has been due to the simplicity by which a sales call can be made by telephone versus sending an actual representative out to a client's place of business. The industry has also experienced growth due to the realization by many companies that telemarketing really works and that it can be used as a vehicle to sell almost any product or service.

In spite of this rapid growth, not much research has been done in the field of telemarketing. This study examines one of the most important aspects of a telemarketing organization: its people (telemarketing associates). The study specifically examines six characteristics of telemarketing associates to determine which characteristics contribute the most to their actual success or failure.

Literature Review

The American Telemarketing Association reports that more than $55 billion is spent annually on telemarketing operations. Telemarketing sales are increasing at the rate of about 20 percent a year, and sales revenues for the early 90's are nearing $500 billion (Bencin 1992). Part of this growth has been due to the simplicity by which a sales contact can be made over the phone versus other methods such as personal selling (Greenburg 1991). Many sales organizations are now using the telephone as the chief vehicle by which they reach their customers due to simplicity and cost. This trend has led to the replacement of many field sales representatives (Frichtl 1990).

The recent growth of the telemarketing industry has been visible to everyone that has a phone. However, research in the area of examining characteristics and skills of successful telemarketing associates has been very limited. A recent article in the Journal of Direct Marketing alluded to the lack of research in this area by noting that no published empirical studies could be found on even a simple subject such as telemarketing salespeople and job satisfaction (Brown and Saunders 1990). The lack of research in the area of telemarketing may explain why many organizations that use telemarketing still do not fully understand how to get the most out of their telemarketing associates. Maximizing a telemarketing associate's ability involves not only training the associate to do the job correctly, but also hiring the correct person for the job in the first place.

The research that does exist on telemarketing identifies several important variables that must be considered in the training and selection of telemarketing associates. From the referenced studies and articles on successful telemarketing, a good telemarketing associate has generally been found to have certain specific characteristics and skills:

1. Good product knowledge (Weltzen 1990)
2. Brief in presentation (Kerin 1990)
3. Good scripting skills (Falvey 1991)
4. Persistent and not affected by rejection (Domanske 1990)
5. Manages use of time effectively (Smith 1991)
6. Masterful at collaborative negotiation (Smith 1991)
7. Can aid customers in visualizing self and product over the telephone (Schlossberg 1991).
8. Emphasizes benefits of product or service to customers, not just features (Lauderbaugh 1991)
9. Good vocal quality
   a. Rate of speech slightly faster than customers but no more than 40 words per minute faster (Bond, Feldstein and Simpson 1988)
   b. Speaks fluently with few pauses (Ketrow 1990)
   c. Normal voice quality - not nasal, tense, or throaty (Ketrow 1990)
   d. Volume moderately loud (Ketrow 1990)
   e. Adjusts slowly to the rate of speech of the customer if too fast or slow (Bond, Feldstein and Simpson 1988)

Of the characteristics and skills listed above, good vocal quality requires further explanation. Research in this area has shown that listeners "have been found to make judgments of

speakers within 10-15 seconds into the call (based upon voice quality)" (Harms 1961). Also, content of the introduction has been shown to have less effect upon the success of the call than does vocal quality (Ketrow 1990). Thus, a telemarketing associate that possesses all of the above characteristics and skills but lacks effective vocal quality might not get past his or her introduction before the consumer terminates the call. Also, vocal quality has been shown to have an effect upon the credibility of the speaker (Ketrow 1990). This is important in an industry which must be viewed as ethical and trustworthy in order to survive.

Purpose Of The Study

The purpose of the study was to examine the characteristics of telemarketing associates that contribute most to their individual success. The justification for the study comes from the lack of research in the rapidly growing area of telemarketing. There have been a lack of articles published in marketing journals in the past two years on the subject of success factors of telemarketing (this study lists ten such articles in the References section).

Variables and Hypothesis

Everything explained in the literature suggests that the independent variables chosen for the study (sex, close percentage, sales attempts per hour, level of aggression, voice tone and level of consultation) might be positively related to the dependent variable, sales. A working hypothesis was developed:

HA = Significant positive relationships exist between sales and the independent variables.

The study was limited to only six independent variables because of the inability to measure additional variables by survey method due to management stipulations (restrictions). The selection of the six variables was made based upon a thorough examination of the literature regarding variables which appeared to have an effect upon sales, and which could be measured by either observation methods or by simple data collection procedures.

Methodology

Subjects

The telemarketing associates that participated in this study were randomly selected from a total pool of 800 employees of a large telemarketing center. The company's standard procedure selected at random 70 associates to work a two month shift based on their chosen hours. In terms of sales, the associates selected historically represented both successful, unsuccessful and average telemarketing associates. The study involved observing and tracking sales statistics of sales associates for a period of approximately two months. For the reader's interest, the product being marketed during the observation period was an incentive program to join a major-brand long distance telephone service.

At the end of this period all the data were compiled and analyzed to determine validity of the data and to check for significant relationships between sales and six other independent variables.

Data Collection

Sales, sex, close percentage (total sales divided by total number of calls), and attempts per hour (number of calls made per hour) were collected from a Data General computer system at the telemarketing firm. Aggression, voice tone, and level of consultation were collected by observational methods.

Measurement of personal characteristics variables always provide a challenge for research. Because of the subjectivity of these types of variables, creative thinking and attention to scientific/expert measurement techniques are required to provide a convincing defense to empirical argument. A method of expert judgeship regarding these variables was therefore developed.

Operationalization of Observational Data Collection Methods for Aggression, Voice Tone, and Level of Consultation

A panel of three expert judges (two Consumer Behaviorists and one Psychologist) were assembled to define each of the three observed independent variables. A test sample of 25 telemarketing sales associates were then observed by these judges in an attempt to assure standardization of their responses to the defined criteria.

During the actual study, the three judges observed each telemarketing associate on three different occasions. If the results of the judges' observations (during each of the three separate observation periods) did not match exactly with one another, they were discarded.

During each of the three calls observed, the judges monitored each associate from a remote phone that tapped into their respective sales calls without the associate being aware of it. This helped prevent any bias from participants knowing that they were being observed. Also, to prevent any observer bias, the three calls that were monitored from each associate were spaced at least one week apart. This helped to prevent any second-guessing of what to expect from an associate.

During each call, the associate was rated on a three-point scale (0-2) that showed how closely the telemarketing associate's calls fit the prescribed definition of each variable. Individuals who were difficult to classify on either extreme of a variable were grouped in the middle section.

For example, the rating scale for aggression had the following appearance:

Level of Agression-(low =0, neither high nor low =1, high =2)

Call (observation) # 1._____
2._____
3._____

TOTAL _____

A telemarketing associate who exhibited aggressive and nonaggressive patterns on the same call, would receive a rating of one (on a scale of 0 [non-aggressive] to 2 [aggressive]). This would indicate that they did not clearly demonstrate an abundance or lack of an attribute. Only individuals who consistently demonstrated an lack or abundance of an attribute would receive a zero or a two rating. This method was employed to reduce as much subjectivity as possible in the ratings scale by placing borderline cases into the middle category.

Each subject was monitored for three calls (observations) by the three judges and the score on each variable was summed for all observations. The total for each variable would range from zero (a low attribute score) to six (a high attribute score).

Definitions of Observed Variables

The first of the variables collected by observational methods was aggression. An aggressive telemarketing associate was defined in the study as an individual who is 'exhibiting driving, forceful energy, edge of the seat, phone clutched in hand, waiting to respond with speed to opposition by a customer - pushy at times, but not necessarily rude.'

The second variable measured by observational methods was voice tone. Voice tone was defined as the 'fluctuation of a voice.' A monotone voice would be one with little or no fluctuation, keeping the same pitch regardless of responses of a consumer or changing situations. A voice with extreme fluctuation would be one that responds to customer emotion and at times influences a customer's emotion through the tone of the voice.

The third variable collected by observational methods was the level of consultation. A consultative telemarketing associate would be defined as someone who is 'advising, listening to a customer's needs intently and responding in a friendly manner - as if talking to a friend and giving them advice on an important decision.'

Due to physical and managerial constraints of the telemarketing center, a maximum of 70 telemarketing associates were observed. Of these, 36 percent (25) received differing responses from the judges during one of the three observation sessions and according to the stringent agreed upon procedure were therefore discarded. This reduction left a total of 45 net observations for study.

Results

The instrument used to measure the first four variables (sales, close percentage, and attempts per hour) was the mainframe computer system at the company. The data was metrically scaled and represented precise accuracy due to the fact that sales, close percentage, and attempts per hour were tabulated electronically as the telemarketing associates made sales calls and sold the services and products.

After the data were collected, summary statistics were calculated for each variable, and multiple regression was run to determine which of the independent variables contributed the most to the dependent variable (sales). An alpha of .95 was used to ensure the proper degree of significance for the results.

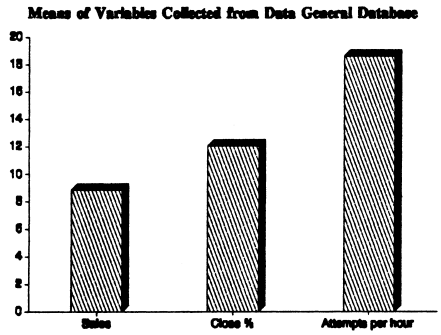
Findings

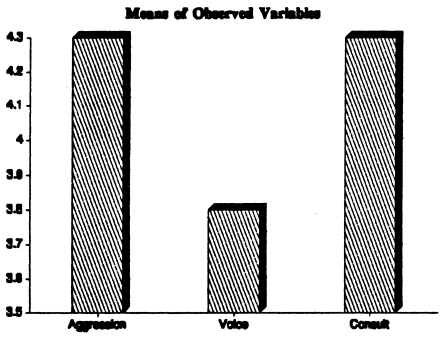
The first step in the data analysis stage was to look at the means and standard deviations of the variables (see Table I and Exhibit I).

TABLE I
MEANS AND STANDARD DEVIATIONS
OF THE VARIABLES

Field	N	MEAN	STD	SEM	MIN	MAX
Sales	45	8.85	2.23	0.33	5.4	15
Sex	45	0.644	0.484	0.58	0	1
Close %	45	12.06	4.1	0.61	5.1	21.9
Attempts	45	18.6	5.36	0.8	10.2	29.1
Aggression	45	4.3	1.5	0.2	0	6
Voice	45	3.8	1.5	0.2	0	6
Consulting	45	4.3	2	0.3	0	6

EXHIBIT I





The differences in the means and standard deviations of the independent variables indicate the wide variety of selling approaches that were used by the temarketing associates in the study. Exhibit II illustrates the differences between two highly successful telemarketing associates who had similar sales results but rated very differently on each of the six independent variables.

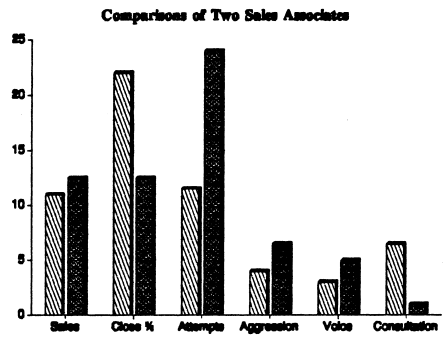
The differences in the means and standard deviations of the data can also be attributed to the different scales upon which the variables were placed. In order to correct this problem and improve the validity of the results, a standardization procedure was run on the data before multiple regression was used.

After examining the differences in the summary statistics of the variables, a correlation matrix was constructed to determine if any serious problems of correlation existed between the independent variables, and also to see which independent variables were most highly correlated with sales. Table II reveals that no serious problems of correlation between the independent variables existed. Exhibit III shows the high correlation of close percentage and level of aggression with sales.

TABLE II
CORRELATION BETWEEN
THE INDEPENDENT VARIABLES

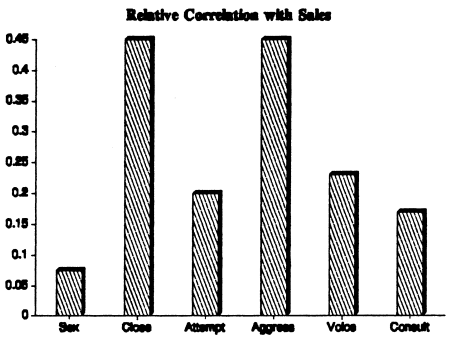
	Sex	Cls %	Attmpt	Aggr.	Voice	Cons.
Sales	0.09	0.45	0.203	0.45	0.23	0.18
Sex		0.118	0.102	0.001	0.047	0.009
Close %			0.19	0.35	0.075	0.11
Attmpt				0.18	0.009	0.17
Aggr.					0.47	0.067
Voice						0.22

EXHIBIT II



After the data had been standardized, multiple regression was run to determine if any significant relationships existed between sales and the independent variables.

EXHIBIT III



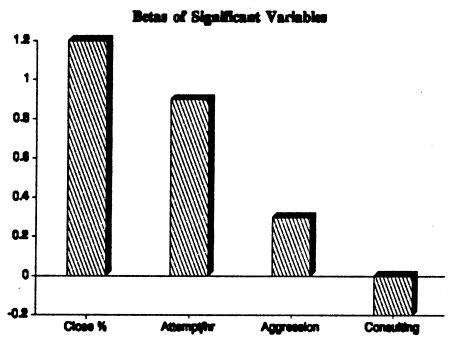
The independent variables sex and voice tone were found to be not significant at the .05 level and were discarded from the model. By eliminating these two variables R squared was minimally affected and still remained 0.82. The final model is shown as Exhibit IV.

EXHIBIT IV
STATISTICAL MODEL (HYPOTHESIS)

Ind. Variable					
	Coefficient	St. error	T-value	P(2 tail)	Beta
Intercept	(-0.00)				
Close %	1.058	0.1011	10.46	0	1.058
Attempt/hr	0.971	0.097	10.01	0	0.971
Aggression	0.261	0.073	3.58	0.0009	0.261
Consulting	-0.143	0.069	-2.08	0.044	-0.143
					0.799
R-square	R-eq.	0.817		Adj. R-s	
					P-Value
Source	Sum Sqs	df	Mn Sq	F	(+0.00)
Regression	35.93	4	8.98	44.5	
Error	8.07	40	0.21		
Total	44	44			

Exhibit V displays the betas of the significant variables. From this, it can be seen that close percentage, aggression level, and a high sales attempts per hour have a positive effect upon sales, while a high level of consultation has a negative effect upon sales.

EXHIBIT V



Discussion

The findings of the study have helped to develop a composite picture of the characteristics that a successful telemarketing associate possesses. The study has also given indication that hard-sell techniques may be more effective than soft-sell techniques since the results showed a negative relationship between sales and level of consultation and a positive relationship between level of aggression and sales.

Telemarketing agencies may in fact want a very different type of telemarketing associate than one that fits the composite picture given in the study. To understand why, one should look at the advantages and disadvantages of scoring high on each of the four significant variables.

Level of Aggression - The advantages of having telemarketing associates with high levels of aggression is that sales levels will probably be high. The disadvantage to having a highly aggressive telemarketing sales force is that often the aggression level of telemarketing associates can annoy customers who do not want the product. This may in turn lead to a negative view of the company and the product being sold. Also, due to the large amount of legislation pending on the telemarketing industry, telemarketing firms may want to focus upon a higher code of ethics in which the telemarketing associate is less aggressive and abusive to the customer.

Close Percentage - Telemarketing associates with a high score on the independent variable 'close percentage' bring only advantages to an organization. A telemarketing associate with a high close percentage score was often observed to be characteristically persistent with customers. This trait might help to explain the successful closing of most sales contacts. The advantage of having a telemarketing associate with a high close percentage is two-fold. Not only do telemarketing associates make a lot of sales, but they also let very few good sales contacts slip past them, thus conserving the company's database. Currently, a good industrial sales lead costs around $85 (Durall 1990). The high cost of data may eventually force many telemarketing sales organizations to look carefully at close percentage as well as sales in order to break telemarketing associates of the habit of 'skimming the records' for a good contact.

Attempts per hour - A high score on the independent variable 'attempts per hour' may indicate that a telemarketing associate is 'skimming' through the records and not handling resistance to any customer complaints about the call or the product being offered, thus wasting valuable sales leads. The advantages to scoring high upon this variables are that it does seem to increase sales levels and it also may indicate that the sales associate is brief in presentation skills and is quickly eliminating sales contacts that are not interested.

A high level of consultation among telemarketing associates can be an advantage to an organization since these telemarketing associates come across as friendlier and perhaps portray the company in a better light. The disadvantage to possessing a high level of consultation is obvious - it appears to have a negative effect upon sales.

Limitations of the Study

Two main limitations of the study were the difficulty in surveying participants discretely and finding telemarketing firms that are more willing to work with researchers.

Another limitation of the study was the method by which voice tone was measured. Ideally, an instrument that measures the

pitch and fluctuation of the voice should be used in future studies, if possible. Due to limitations of equipment availability and technology, such an instrument was not available for use.

A final limitation of the study was the geographic scope of the study. The study was limited to a single Midwestern telemarketing corporation. While very large, it cannot be assumed that the firm is representative of all telemarketing agencies throughout the U.S. Ideally, a representative sample of several telemarketing agencies throughout the U.S. should be used.

Implications

The study has shown that aggressive and persistent (high close percentage) telemarketing associates are more successful in terms of sales than consultative and less persistent associates. Reasons for this may be that due to the intrusiveness of the call, a consultative telemarketing associate may end up being hung up on before he/she can even pitch the product. An aggressive and persistent telemarketing associate on the other hand, will get through the initial resistance and thus be able to present his or her product or service.

This study may point to problems that telemarketing organizations will face in the future if much of the legislation that is pending passes. New legislation may bring about a stricter code of ethics in the industry and in turn force telemarketing organizations to train employees to be more consultative and less abusive on their calls. This may bring about a decline in sales in the industry as milder, less aggressive sales techniques are introduced.

Future Research

The rapid acceptance of telemarketing by many mainstream firms has increased the need for research in this area. Future studies may want to consider using a survey method in which sales associates and their managers are surveyed to determine more in-depth characteristics of sales associates which were not brought out in this study. Also, as was mentioned earlier, future studies may want to consider using a large sample base which includes telemarketing associates from all across the United States. Voice tone may also need to be measured by an electronic instrument which measures pitch and fluctuation in order to maintain a more accurate measurement of this variable.

Summary

The study has provided telemarketing managers with a profile of the skills and characteristics that make a successful telemarketing associates. The profile that is provided should not be used as a hard and fast guideline in deciding upon whether or not to hire an associate, but rather as general guideline. Hopefully, future studies will be done in this area to further reinforce the findings and also look at the ethical implications of hiring a telemarketing associate who fits the profile described in the study (i.e. aggressive and persistent).

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COMPARATIVE ANALYSIS OF PERCEIVED INDICATORS OF SUCCESS BY WOMEN ENTREPRENEURS IN A TRADITIONAL VERSUS A NON-TRADITIONAL BUSINESS

Sandra D. Skinner, Western Carolina University

Abstract

The purpose of this project was to compare perceived indicators of success by female entrepreneurs who had chosen a traditional (apparel retailing) versus a nontraditional female business enterprise (real estate). Findings suggested there were select attributes perceived as very important by all respondents. However, there were a number of significant differences between responses of female entrepreneurs who had chosen traditional versus nontraditional business enterprises, and the former with male entrepreneurs of these same business sectors. The study also revealed the nontraditional female business owners responses were similar to the males in their business sector.

Introduction

The increasing number of women venturing into their own business is one of the most important phenomenons to affect small businesses today. Women are starting new businesses at two to five times the rate of men. Twenty years ago only 5% of the small businesses were owned by women. Yet despite the many obstacles for self-employed women, the number of women-owned firms in the United States increased appreciably and by the early 1980's women owned 32% of the small businesses. By the year 2000 women are expected to control 40 to 50% of all businesses (Bureau of Labor Statistics, 1981).

According to government statistics, between 1980 and 1986 the number of women-owned sole proprietorships rose from 2.5 million to 4.1 million, a 62.5% increase during a period when the number of male-owned businesses increased only 33.4%. However, these figures do not reflect the number of women owners of other types of companies which suggests these figures are even greater.

Traditionally female business ventures have been in business sectors involving low overhead that are extensions of the homemaking role and often have women as their primary customers (Birley, 1989, Chagnati, 1986, Gregg, 1985). Examples include beauty salons, small grocery stores, gift shops, fabric shops, restaurants, child care services, and apparel, accessory, and craft shops. However, a growing trend over the last two decades has been for women to enter traditionally male entrepreneurial endeavors. According to the Bureau of Labor Statistics, from 1977 to 1982, the highest annual growth rate of female entrepreneurial ventures has been in non-traditional female business sectors such as real estate, computer technology, finance, insurance, manufacturing, and construction. A comparison of women-owned businesses from both the 1977 and 1987 Economic Censuses of Women-Owned Businesses revealed a 560% increase in the number of firms in the finance, insurance, and real estate category (from 66,257 firms in 1977 to 437,360 firms in 1987) compared to a 277% increase in the number of firms in the retail trade category (from 211,723 firms in 1977 to 798,692 firms in 1987).

Such undertakings by women are expected to increase as women become more educated and experienced in these areas, yet are not given equal opportunities and compensation to men in corporate environments. By far the most common reason cited by women entrepreneurs for venturing out on their own is control: of their time, their future, and their financial destinies. Many working women today are the primary, if not sole, caregivers for children or elderly parents, or both, making flexibility a priority issue in the workplace. An increasing number of women have gotten MBA's, gained management experience, business acuteness and confidence to better their chances of success for a rapidly changing, high-tech world. As a result of their career preparedness, many women are being hired into entry-level corporate management positions; yet only 15% of the middle managers and 3% of the top executives are women (Capowski, 1992). Widespread downsizing of corporations has further reduced the number of jobs available. Additional impetus for the increasing number of women venturing into their own businesses is the fact that women have more resources available to them today: banks, venture capitalists, new technology, mentors, significant others, small business counseling and training seminars. Also, the shift from a manufacturing base economy to a service-oriented economy has opened avenues for female entrepreneurial endeavors since typically less startup capital is required.

As female entrepreneurial ventures increase so does the research in this area. Yet the majority of the research to date has dealt with descriptive characteristics about women entrepreneurs and their similarities/differences with entrepreneurial men. Studies have focused on the entrepreneur's childhood background, adult family and non-work environment, personality traits, education and business profiles, motivations for business ownership, and support from mentors and significant others. Very little focus

has been given to the women's perception of the characteristics needed to succeed as an entrepreneur. As Fagenson and Marcus (1991) have observed "research of this kind is needed because individuals make career choices based upon their perceptions of and personal fit with a given profession."

Purpose of the Study

The purpose of this study was to investigate attributes perceived by female entrepreneurs as important to possess to be a successful entrepreneur. Previous research suggests women in traditional female business endeavors may differ from women in nontraditional female business enterprises and from male entrepreneurs, both in their entrepreneurial characteristics and their perceptions of what constitutes a successful entrepreneur (Chagnati, 1986; MacDonald, 1985; Neider, 1987; Skinner, 1990). A study undertaken by Moore and Rickel (1980) revealed that women in nontraditional managerial career roles were more achieving and saw themselves as having self characteristics more like male managers. Therefore, female entrepreneurs representing both a traditional female business sector and a nontraditional female business sector were included in the study. The nontraditional business sector selected for the study was real estate since women have significantly penetrated it in terms of business startups. The traditional business sector selected was apparel retailing. Male entrepreneurs representing both business sectors were included in the study to investigate similarities/differences between genders.

Method

A mail survey was sent to a random sample of 240 female entrepreneurs in a non-traditional female-owned business sector (real estate) and 240 female entrepreneurs in a traditional female-owned business (apparel retailing). In order to investigate gender similarities/differences in survey responses, the questionnaire was also sent to a like-sized random sample of male entrepreneurs for the same business fields. Retailers were selected from buyer registration listings from regional apparel marts. Real estate subjects were obtained from the membership directory of a state board of realtors. Of the 960 questionnaires mailed out, the response rate was as follows: female realtors, 32.5%; female retailers, 37.9%; male realtors, 33.3%; and male retailers 50.4%.

A survey instrument was designed which included 50 descriptive questions and the rating of 60 attributes related to business success on a 5-point Likert scale (1 = not important, 5 = crucial). This paper will concentrate on the results obtained from the latter. The Likert scale instrument was developed by MacDonald (1985) and was used in its entirety, except that it was reduced from a 7-point scale to a 5-point scale since respondents in the present project's pilot study had difficulty differentiating seven points of gradation for each of the 60 attributes. MacDonald developed and tested this instrument as part of a research project in which she studied traits and characteristics of successful women entrepreneurs to determine criteria for predicting success in business management. The extremely high Cronbach alpha internal consistency scores when tested by MacDonald indicated high reliability of the Likert scale instrument.

The survey design and implementation procedures followed Dillman's Total Design Method for Mail and Telephone Surveys (1978). Individually signed cover letters were sent with each 12 page questionnaire booklet. First class postage was used on all mailings, including a postcard follow-up one week after the first mailout, and a second reminder two weeks later. The final certified mail follow-up was omitted due to financial limitations. Dillman's Total Design Method is a systematic survey procedure which was developed to maximize response rates, by paying detailed attention to questionnaire design and format, as well as a timed implementation process.

Frequencies and percentages were computed for each survey question. In addition, chi-square tests were performed on the descriptive questions and t-tests were used to identify statistically different means for each of the 60 Likert scale attributes for the following group comparisons: (1) nontraditional female business owners (realtors) with traditional female business owners (retailers), (2) female realtors with male realtors, and (3) female retailers with male retailers.

Results

A profile of personal characteristics defined the mean age for the female retailers at 48.3 years and the female realtors at 50.1 years. Over 90% of both groups were Caucasian. Nearly all of the female respondents had a high school degree. More female realtors in the study had college degrees (36.5%), when compared with the female apparel retailers (28.1%). For the respondents who did have college degrees half of those were business degrees. Approximately, 75% of all females were currently married; over half had no current responsibilities for children.

Upon initial analysis of the 60 attributes, it was obvious there were certain qualities perceived by both female retailers and realtors as very important to possess to be a successful entrepreneur. Table 1 shows those attributes which ranked among the top 10 for both groups of female respondents. The least important attributes as seen by both female retailers and realtors are given in Table 2. These same attributes were given high and low ratings respectively for both groups of male respondents.

Table 1
Attributes Perceived Most Important to Possess

Attribute	Retailer (mean)	Realtor (mean)		
Ability to get along w/people			4.753	4.566
Honesty	4.607	4.616		
Ethicalness		4.239	4.616	
Integrity	4.240	4.438		
Sincerity		4.371	4.356	
Takes responsibility			4.337	4.370
Ability to handle finances		4.337	4.274	

Table 2
Attributes Perceived Least Important to Possess

Attribute	Retailer (mean)	Realtor (mean)		
Adventuresome			3.080	3.176
Business background			3.261	3.118
Curious		3.225	3.587	
Money to invest			3.596	3.054
Challenged by difficult jobs			3.528	3.589
Sensitive		3.682	3.486	
Direct		3.573	3.635	

When a t-test was conducted on the responses of each of the attributes comparing female retailers with the female realtors, 11 of the 60 attributes revealed significant differences at the .05 level (Table 3). Through a factor analysis MacDonald (1985) was able to group the majority of the 60 attributes into four categories: creative traits, self-actualization traits, analytical traits, and human relations traits (10 of the attributes did not factor into these categories for which this author designated them as "other business management traits" category; 3 attributes fell into two of the categories). When analyzing the two groups of female entrepreneurs regarding these categories, 7 of the 11 significantly different ratings were in the self-actualization category. Those 7 attributes included confident, independent, self-reliant, self-motivator, strong self-esteem, persistent, and persuasive. In each case the realtor's mean rating was higher than the retailer's.

When female respondents were compared with their male counterparts in similar businesses, 18 of the 60 attributes were rated significantly different for the retailers, whereas only 6 of the 60 attributes were rated significantly different for the realtors.

Table 3
Differences Between Retailers and Realtors Attribute Ratings Perceived Necessary to Possess

Attribute	mean	t-test	df	p value
Confident				
retailer	4.0562	-2.54	161	.012
realtor	4.3514			
Independent				
retailer	3.7528	-2.85	161	.005
realtor	4.1486			
Self-reliant				
retailer	4.0341	-2.17	160	.031
realtor	4.2973			
Self-motivator				
retailer	4.2022	-2.68	162	.008
realtor	4.5067			
Strong self-esteem				
retailer	3.8989	-2.45	161	.015
realtor	4.2027			
Persistent				
retailer	3.8876	-2.89	162	.004
realtor	4.2667			
Persuasive				
retailer	3.5506	-2.08	161	.039
realtor	3.8514			
Ability to get along with people				
retailer	4.7528	2.14	163	.034
realtor	4.5658			
Ethical				
retailer	4.2386	-3.12	159	.002
realtor	4.6164			
Money to invest				
retailer	3.5955	3.19	161	.002
realtor	3.0541			
Curious				
retailer	3.2247	-2.28	162	.024
realtor	3.5867			

Discussion and Conclusion

The aim of this study was to focus on the female entrepreneur's perception of the characteristics needed to succeed as an entrepreneur. Findings from a number of previous studies have placed emphasis on such traits as high risk takers, adventuresome, high achievers, challenged by difficult jobs, having a lot money to invest, and having a business background (Clayton, 1981; Schwartz, 1976; Western Reserve University Research as cited in Lownes, 1981). Interestingly, these were not seen as the most important traits by the respondents of this study as necessary for success as an entrepreneur. That is not to negate them as factors worthy of

consideration if one is planning to undertake an entrepreneurial venture, but it merely points out that the entrepreneurs of this study did not consider them to be crucial in order to be successful in a small business venture. Rather, the traits that were given the highest ratings for success were human relations traits - being honest, ethical, sincere, having integrity, getting along with people, and taking responsibility. Such findings are worthy of consideration for educators or consultants of entrepreneurial and small business management classes since being less quantifiable, less tangible traits, they are less apt to be given attention. It is important to note both the retail and real estate profession are very people-oriented businesses and these traits may not be rated as high in other industries.

The results of this study do support previous studies that suggest women in nontraditional female business endeavors may differ, in their perception of what constitutes a successful entrepreneur, from women who own traditional female business enterprises (Chagnati, 1986; Moore and Rickel, 1980; Skinner, 1990). The literature also suggests that women who venture into non-traditional female business endeavors have business perceptions more similar to male entrepreneurs than women in traditional female business endeavors. When respondents in the Fagenson and Marcus study (1991) were asked what personality characteristics best profiled a successful entrepreneur, masculine traits (based on Spence and Helmreich's Personal Attributes Questionnaire) dominated the responses, or what MacDonald (1985) categorized as self-actualization traits in her study. Findings in the present study revealed the majority of statistical differences in attribute ratings between the two groups of females were self-actualization traits. Each of the traits in the self-actualization category were rated significantly more important by the females in nontraditional female business enterprises than those in traditional female business enterprises, suggesting a more masculine orientation of the former in their perception of what constitutes a successful entrepreneur. This finding also concurs with Freeley's study (1986) of 151 small business owners (93.4% males) and Kieser's study (1989) in which self-actualization traits were rated highly as important predictors of success for entrepreneurs to possess.

These differences in ratings may be industry specific, that is, what is perceived important criteria for entrepreneurial success in retailing versus real estate, or it may be a reflection of changing women's roles in society and professional preparedness. In the past women typically began businesses in traditional female industries which could be seen as outgrowths of home responsibilities associated with being a wife and mother. These women drew heavily on their experience as homemakers for ideas and for managerial experience and lacked the business networking associated with prior employment (Birley, 1989; Chaganti, 1986; Gregg, 1985). Over the last decade, not only has the number of women-owned startups increased, but also the number of women choosing business sectors previously dominated by men has increased. This trend is in part due to the rise in women obtaining college degrees, specifically in professional business and technical fields, which is a reflection of the overall changing lifestyles of women and opportunities for women in society (Birley, 1989; Gregg, 1985; Bloom, 1985). As women continue to acquire the business skills, commercial networks, and financial resources that have long been available to their male counterparts, it is expected their entrepreneurial profiles, whether in traditional or nontraditional female businesses will continue to move even closer to that of their male counterparts.

This study arose out of the growing trend of business startups by women and the lack of data on them. Such factors as demographic profiles, motivations for going into business, and previous business experience can influence an individual's decision to undertake an entrepreneurial endeavor. However, it is also important to realize that individuals typically select occupations for which they perceive they have suitable personality characteristics and therefore provide them opportunities to be successful. As stated by Fagenson and Marcus (1991) "Individuals who see a fit between success in a given profession and their sex-role personality characteristics are more likely to perceive themselves as viable candidates for that profession."

Entrepreneurial success is not accidental. It is the result of having a clear vision of who one is and seeing oneself as having the viable personal and professional characteristics that fit one's profession. Through the results of this study and others like it, it is hoped business, government, and educational institutions will be better able to help women select, establish, and attain appropriate career goals; and effectively compete in the marketplace.

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PERSONAL SELLING AND SALES MANAGEMENT

TOWARDS THE THEORY OF SELF CONCEPT IN SELLING

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Introduction

"Nothing is so practical as a good theory."
-Shelby Hunt (loosely interpreted)

For fifteen years the dominant research paradigm in the personal selling and sales management literature has been the Walker, Churchill, and Ford (1977) model, Determinants of Salesperson's Performance. This model is an adaptation of Vroom's (1964) Expectancy Theory. The model has proved to be very effective in helping sales researchers frame many of their research questions. However, it has not proven to be able to explain a large proportion of variance in the important job outcomes of salespeople (Churchill, et al. 1985).

The concepts of self-esteem, self-efficacy, and task specific self-esteem have been used by many researchers in organizational behavior (e.g., Bandura 1977; Bandura, et al. 1980; Brief and Aldag 1981; Gist, 1987; Korman 1970) and in a more limited amount by some sales researchers (e.g. Lucas, et al. 1987; Ellen, Bearden, and Sharma 1991; Kohli 1985; and Bagozzi 1978 and 1980). These authors highlight the attraction of these variables: individuals who possess high levels have been shown in sales and non-sales contexts to exhibit higher levels of performance. These concepts have been identified at the 1992 AMA Faculty Consortium (Ingram 1992) as being useful constructs to study in sales and are perhaps on the horizon in future sales research. These three constructs can be classified as being part of the broader notion of self concept (Sullivan 1989). Because of the potential value of these concepts to sales researchers, it is important to develop a fully integrated theoretical behavioral model of the self concept in selling that incorporates the three aforementioned constructs.

The purpose of this paper is to take the approach to theory construction that has been outlined by Hunt (1991) and develop a theory of self concept in selling. Such a theory may aid future sales researchers in framing research dealing with such topics as the selection, training, socialization, and performance (both general and task-specific) of salespeople. Also, it is hoped that practicing sales managers will gain insight through this theory that will help them better understand some causes of salespeople's behavior. This theory is not offered as a panacea or cure-all. However, it is believed that this theory, when combined with existing knowledge and other theory, can help aid in filling existing explanation gaps in sales management research.

Theory Construction

"A theory is a systematically related set of statements, including some lawlike generalizations, that is empirically testable. The purpose of theory is to increase scientific understanding through a systematized structure capable of both explaining and predicting phenomena," Rudner (1966).

Throughout his monograph, Modern Marketing Theory, Hunt (1991) uses this definition of theory as a central tenet in discussing how to construct and evaluate theories in marketing. This definition, along with Hunt's suggestions will serve to guide the development of the proposed theory of self concept in selling.

As Rudner's definition of theory suggests, there are three criteria that must be met before a set of related ideas can be classified as a theory. These ideas must 1) be a systematically related set of statements, 2) include some lawlike generalizations, and 3) be empirically testable. Hunt (1991) develops a "how to" approach for developing marketing theory from synthesizing much of the work done in the vast philosophy of science literature. Table 1 shows a conceptualization of Hunt's approach to theory development and will be adhered to in developing the theoretical content, as well as guiding the organization of this paper.

Hunt divides the theory development process into two major parts, the context of discovery and the context of justification. In the context of discovery there is no set path that a researcher must follow. The researcher may observe the world about her/himself and eventually come to induce generalizations. Also, the researcher may speculate about some phenomena, make assumptions, and at some point deduce generalizations. These generalizations may lend themselves to the development of a model or framework.

In the context of justification the demands become much greater. Generalized conditionals (if...then statements) must be formally developed into a language system. This language system starts with axioms, which are assumed to be true for the purposes of the theory. These axioms may be empirically testable, but they serve as the starting place and a foundation for the theory and, thus, are true in terms of the theory in an analytical sense. Derivative laws or theorems are deduced from the more

fundamental axioms. In order for the impact of the theory to be observed in some phenomena, bridge laws must be developed. These laws "indicate how the processes envisaged by the theory are related to empirical

TABLE 1
THEORY DEVELOPMENT PROCESS

D	**Step One -> Discovery**
I	Speculation about an idea or observation
S	of regularity
C	**Step Two -> Definition**
O	Statement of systematic relationships
V	- Define all elements involved
E	(nominal definitions)
R	- Model conceptualization
Y	- Generalized conditionals
J	
U	
S	**Step Three -> Formalization**
T	Develop formal language of the theory
I	- Fundamental laws or axioms
F	- Derivative laws or theorems
I	- Bridge laws or guiding hypotheses
C	- Research hypotheses or propositions
A	**Step Four -> Testing**
T	- Collect data
I	- Analyze results (confirmation or
O	falsification)
N	

Source: Hunt (1991)

phenomena," (Hempel 1966, pg. 72). Research hypotheses or propositions are derived from the bridge laws and are context specific statements that are directly testable. Next, a formal test of the theory is conducted with the results being analyzed to determine the confirmation or falsification of the theory.

In this paper we only address Step One (Discovery), and begin to build Step Two (Definitions), and to a lesser extent, also build Step Three (Formalization). Future similar theoretical work will need to focus on both Step Two and Step Three before empirical work (Step 4) can be expected to give the most insight based on a fully formalized theory.

Step One (Discovery)

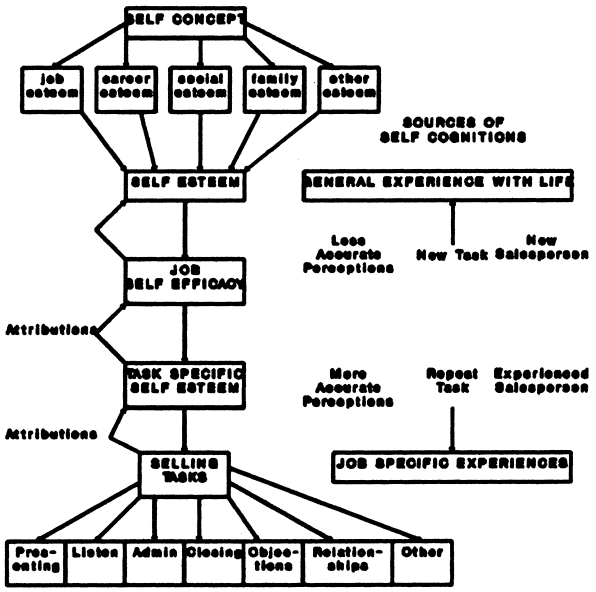
The process of theory development begins with the discovery of an idea or the observation of certain regularities. Insight gained from relevant experience, literature reviews, and discussions with fellow sales researchers spawned the process of developing ideas about the usefulness of a theory of self concept in selling.

In this particular instance, the regularity observed is that sales people who appear more confident in their sales abilities tend to be better performers (c.f., Ellen, et.al. 1991). The challenge to theorists is to determine what, if anything, is responsible for this phenomena. For example, does this confidence come from having previously been successful at performing the various sales tasks? Or, are successful salespeople confident before they begin their careers as salespeople?

Step 2 (Definition)

In Step 2, the domain of the theory is defined. This includes identifying and giving definitions to all of the pertinent elements of the theory, stating each of the constructs' relationships, conceptualizing a model, and developing generalized conditionals. Table 2 contains the nominal definitions of each of the constructs contained in the theory. Figure 1 is a conceptual model of the theory of self concept in selling which illustrates the relationships between the constructs contained in the theory.

FIGURE 1
SELF CONCEPT IN SELLING MODEL



The starting point of this model is self concept. It may be viewed as either static or dynamic. If viewed as a static construct, one believes that the self concept is something that an individual is seeking to unc over. The self concept doesn't change, but the individual tries to discover more and more about the self (c.f., Super 1963). If viewed as a dynamic construct, the individual's self concept changes as s/he is exposed to more diverse experiences. The changes may occur slowly as the individual, through life experiences, begins to re-define the self and choose to add roles that give meaning to the self concept(c.f., Sullivan 1989).

The self-esteem is the qualitative measuring system that individuals use to determine where they stand in actualizing the ideal self. It is based on cognitions about how the various roles and activities define their ideal self (Super 1963). In this model, individuals use the job as one manner of defining themselves. The arrows in the model flow both directions indicating that job esteem is part of total self-esteem and that job esteem is one way individuals have of defining their self concept.

It is theorized that job self-efficacy (JSE) cognitions occur when the salesperson asks questions such as, "Can I perform all of the tasks necessary to become a good salesperson?" or simply, "Can I sell?". It is also theorized that JSE is initially determined, to some degree, by individual levels of self-esteem. They draw upon their general experiences in life to determine if they believe that they can perform the sales job successfully. For example, if they have been successful in their social or family life, they may use this to draw the conclusion that they will be successful in their sales career. According to the theory, these perceptions tend to be less accurate and are made when faced with a new task or when they are new to the sales profession. Conversely, more accurate perceptions of JSE occur when the salesperson makes the assessment of their self-efficacy on the basis of job specific experiences. The experienced salesperson draws from this source as well as when repeat tasks are performed. High levels of JSE lead to an increase in self-esteem via increases in job esteem.

Task specific self-esteem (TSSE) cognitions occur when the salesperson asks such questions as, "Can I do this task?" or "How well can I perform this task?" (c.f., Ellen, et al. 1991). It is theorized that when job self-efficacy leads to TSSE, the perceptions that cause this are less accurate. However, when individuals answer TSSE cognitions by drawing upon their specific experiences with the selling tasks, the perceptions are more accurate.

As shown in Figure 1, feedback loops are theorized to lead from selling tasks to TSSE and from TSSE to JSE. These are attributions concerning their job specific experiences (Teas and McElroy 1986). For example, if the salesperson perceives that they have been successful in performing a certain task but that this success was due to something beyond their control, then an external attribution has taken place. The effect of this on the salesperson is either neutral or a reduced TSSE state. On the other hand, when the salesperson has been successful in their sales job by performing the numerous tasks required and they attribute the success to themselves, an internal attribution has occurred and this increases their JSE. In general, internal attributions of successful performance increase JSE or TSSE and external attributions of successful performance have either no effect or a negative effect on JSE or TSSE. In dealing with unsuccessful performance, internal attributions decrease JSE or TSSE and external attributions are either neutral or increase the JSE or TSSE states.

Table 2

NOMINAL DEFINITIONS

self concept-Understanding of who and what we are. Global term to include all the ways an individual defines their core being. Generally, a picture of the self in some position or role, performing a set of functions or involved in a set of relationships. Each individual may define their being differently depending on how they use these activities to define themselves. Consequently, individuals may use some sub-set of the following to define their self concept: job, career, social life, family life, or other activities.

self esteem-Based on a qualitative assessment of how well one feels s/he has done in each area or dimension that the individual uses to define the self concept. A dimension of self esteem is some aspect which contributes to value of the self in the eyes of oneself. There are several dimensions of self esteem. They depend on each individual and what they consider relevant in defining the self. Each dimension is not equally important in defining the self. For example the work dimension (if one exists) may be more important than a persons social dimension. Examples of different dimensions of self esteem are job esteem, career esteem, social esteem, family esteem, and other relevant esteems.

job self efficacy-Internal belief that one has the competence to perform a combination of behaviors necessary to achieve some desired or expected outcome of the job. This belief may come from previously successfully performing these behaviors or from successes in one or more of the areas that make up the individuals total self esteem. For example, an individual may determine their job self efficacy for sales from having previously experienced success in sales, or from being successful in their social life.

task specific self esteem-Internal belief that one has the competence to perform a particular task. This is a less global construct than job self efficacy. In the sales job, many tasks must be performed (i.e., closing the sale, overcoming objections, presentation skills, listening skills, technology skills, etc. Individuals have a task specific self esteem for each task and collectively these tasks help form the individuals self efficacy for the sales job.

selling tasks-An assortment of all of the tasks a salesperson must perform in the course of the sales job.

internal attributions-Individual's belief that they alone were responsible for the achieved success or failure.

external attributions-Individual's belief that forces outside themselves were responsible for the achieved success or failure.

The above definitions were formed with the help of the following: Bandura (1977), Brief/ Aldag (1981), Gist (1977), Korman (1970), Super (1963), Teas/ McElroy (1986), and Tharenou (1979).

Step 3 (Formalization)

The following are statements partially developing the formal language of the theory of self concept in selling:

Axiom 1- When evaluating overall performance or task performance salespeople either form, change, or confirm their current JSE or TSSE.

A2- Some salespeople use job esteem to define their self concept.
A3- If job esteem is important to the salesperson in defining their self concept and if the salesperson has low current perceptions of JSE or TSSE when compared to their initial perceptions, then they will seek to change their behavior or surroundings to better enhance their self-esteem.
A4- High JSE or TSSE lead to increased salesperson performance and extended tenure in the sales profession.
A5- There are two sources of cognitions used for evaluating JSE and TSSE; general experience with life and job specific experiences.
A6- Perceptions of JSE and TSSE based upon cognitions concerning general life experiences are less accurate than perceptions based upon job specific experiences.
Derivative Law 1- Salespeople have cognitions about JSE and TSSE to determine if they contribute to their self-esteem.
DL2- For experienced salespeople, JSE and TSSE is enhanced through job specific experiences.
DL3- For new or inexperienced salespeople, initial levels of JSE and TSSE is driven by general experience with life, which manifest themselves in social esteem, family esteem, or some other type of esteem.
Bridge Law 1- When formally evaluating their performance, salespeople will determine their JSE and TSSE.
BL2- If salespeople perceive their JSE and TSSE to be low, and if job esteem is important in forming their self concept, then either they will take some action in an attempt to improve JSE and TSSE or they will attempt to leave the sales career or their current organization.
BL3- If salespeople change behaviors in an attempt to improve low JSE and TSSE and are unsuccessful, then they will attempt to leave the sales career or selling organization.
BL4- If contingent feedback is given to the salesperson, then it will result in more accurate perceptions of JSE and TSSE.
Proposition 1- For salespeople who have high levels of JSE and TSSE, there is a negative relationship between both JSE and TSSE and propensity to leave the selling profession.
Prop 2- For salespeople who use job esteem as an important part of their self concept and have low JSE or TSSE, there is a negative relationship between both JSE and TSSE and effort.
Prop 3- For salespeople who use job esteem to define self concept, there is a positive relationship between both TSSE and JSE and intrinsic job satisfaction.

Step 4 (Testing)

The testing of this theory is beyond the scope of this paper. However, before this theory can be assessed as to the extent it represents real world phenomena, it is necessary to construct the theory in such a way that it is empirically testable. Hunt (1991) suggests testing for three reasons: 1) enhances objectiveness through intersubjective certifiability, 2) enables theory to be capable of explaining and predicting, and 3) ensures that theory avoids being purely analytical.

Conclusion

Some authors in the organizational behavioral literature have questioned the differences, if any, that exist between self efficacy and task specific self esteem (c.f., Gist 1987, Gist and Mitchell 1992, Sullivan 1989). The discussion has not been framed in a theoretical context, but rather has been framed strictly as a comparison of definitions of constructs. The definitions are sufficiently vague such that each side can claim victory. Important distinctions can be made between the two constructs by integrating them in a theoretical framework. This will hopefully short-circuit a definitional debate and lead to meaningful pursuit of the research questions suggested by the theory.

The usefulness of a theory can be evaluated based upon the understanding it allows of real world phenomena. While the purpose of this paper is not to compare self concept theory with expectancy theory, a brief discussion of one difference may be fruitful in evaluating the incremental understanding gained from the proposed theory of real world phenomena.

One aspect of expectancy theory proposes that if a salesperson understands what tasks they are expected to perform (role clarity), they logically determine the amount of effort they will spend on those tasks depending on the nature of the reward (valence), the link between effort and performance (expectancy), and expectations that performance leads to rewards (instrumentality). This implies that motivation is a decision to expend effort at different points in time rather than across time.

The theory of self concept proposes that a salsperson's intensity of effort on the job will depend on the role that job esteem plays in the self concept. If job esteem is important, the salesperson will have a relatively higher intensity of effort in trying to successfully perform the selling tasks. Attributions based upon the manager feedback or job specific experiences will form, solidfy, or change the given level of JSE and TSSE of the salesperson. The level of effort will vary for these individuals depending upon their cognitions of JSE and TSSE. For example, low cognitions of JSE and TSSE will lead them to increase their effort. Effort, as seen in the self concept theory, is less time specific and is a more enduring process than effort which is turned on or off depending upon a specific situation.

While space limitations prohibit a more complete discussion of issues relevant to the proposed theory, it is hoped that sales researchers will see the value this theory offers. Also, for practitioners, the theory allows insight regarding salespeople's willingness to expend effort and ways that sales managers (through better feedback) can enhance both TSSE and JSE.

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ACHIEVEMENT MOTIVATION ON THE SALES FORCE: AN EXPLORATION INTO THE APPLICATION OF THE WORK AND FAMILY ORIENTATION SCALE TO SALESPERSONS' MOTIVATION

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This paper presents the results of three studies investigating achievement motivation, as measured by the Work and Family Orientation Scale (WOFO), in the sales force context. The WOFO (Helmreich and Spence 1978) is a paper and pencil measure of achievement motivation that has been found to relate to measures of achievement in businesspersons. Scores on three sub-scores are of interest: "work," "mastery," and "competitiveness."

The first study examined the relationship between scores on the three WOFO sub-scales and valence for intrinsic and extrinsic rewards associated with selling positions. The scores of students of personal selling and sales management on all three sub-scales were found to correlate positively and significantly with the valence they assigned to extrinsic rewards. Their scores on the "work" and the "mastery" sub-scales also correlated positively and significantly with their valence for intrinsic rewards, but the relationship was not statistically significant in the case of "competitiveness" scores.

Study two was designed to extend the investigation into the association between the achievement motivation of students and their intrinsic enjoyment of a series of selected selling tasks. Scores of students of sales management on the three WOFO sub-scales were positively correlated with their anticipated enjoyment ratings, as predicted.

Study three replicated and extended the findings of study two to the sales force setting. Salespersons representing a wide variety of selling jobs (n = 177) indicated how much they actually enjoyed performing the selling tasks of interest. Analysis by MANOVA confirmed that salespersons who scored above the median on the "work," "mastery," and "competitiveness" sub-scales reported significantly greater enjoyment of selling tasks involving work, mastery, and competitiveness, respectively, than those who scored below the median.

The findings are suggestive of a relationship between salespersons' motivation on the job and their achievement motivation. Since persons who have strong achievement motivation value both intrinsic and extrinsic rewards more than do those who are weak in such motivation, they should work harder to earn them. Since salespersons with strong achievement motivation apparently derive more intrinsic pleasure from performing specific selling tasks on the job, their managers should find them easier to motivate. Taken together, these findings suggest that managers' efforts to motivate their salespeople would be facilitated when salespersons have strong achievement motivation. Further research should be conducted to (1) better understand the relationship between salespersons' enjoyment of selling tasks and their selling performance, and (2) evaluate the potential of the WOFO scale a predictor of selling effectiveness.

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PERCEPTIONS OF PERSONAL SELLING: IS THERE A TREND?

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ABSTRACT

The perception of personal selling as a career choice by college students is examined. Previous research indicates that while college students generally believe that personal selling offers opportunities such a promotion and higher earnings, it frequently is not a preferred career choice. This paper extends existing literature by including a description (although in vague terms) of the sales position under consideration. Previous research has used a general statement about a sales career that does not define a personal selling career. A randomized block design is used to assign students to 1 of 4 possible selling situations. Contrary to previous research, MANOVA did not reveal a significant difference between gender, race, or major in the students' perception of personal selling. The results did confirm earlier research in that the students sampled did perceive personal selling as offering positive career opportunities but again students were not desirous of a career in sales. Implications for management are offered.

Introduction

Perception of Personal Selling

The topic of personal selling as a career for women has received a great deal of attention in recent years (Muehling and Weeks 1988), with most of the research using university students as the sample. These studies have focused primarily on the difference between male and female perceptions of personal selling as a career choice. Muehling and Weeks note that women generally have a more favorable perception of personal selling and may therefore be more predisposed to enter a sales career. However, there appears to be a contradiction. Despite a more favorable perception of personal selling as a career choice by women, and an increase in the number of women who receive a business degree, women are not well represented in nonretail sales.

A more favorable impression of personal selling by women is not surprising given that she was recognized as the purchasing agent in the 1900-1940 typical household (Zuckerman and Carsky 1990). This situation is reflected in the early writings. Such works as Bailey, Journal of Home Economics (1922); Kyrk, A Theory of Consumption (1923); and Frederick, Selling Mrs. Consumer (1929) were directed toward women through home economics and from a consumer perspective, particularly in retail sales (Zuckerman and Carsky 1990).

Muehling and Weeks (1988) concluded that although the female's perception of personal selling as a career choice has been increasingly favorable, simple answers to successful personal selling recruitment programs do not exist, and stereotyping continues to be a concern for sales managers. Comer and Jolson (1991) concluded that the female salesperson effectiveness does vary by organization type and selling function, and women are judged to be less effective if they are perceived as acting in a stereotypic fashion. They concluded that while sales managers generally agree that individuals (both men and women) can be taught selling skills, motivation and human relationship characteristics are nebulous and more difficult to identify and teach. Russ and McNeilly (1988) studied the effects of stereotyping in different selling situations, i.e., jewelry and diesels. They concluded that placing individuals in traditional roles will make the elimination of stereotyping difficult because of the reinforcement of traditional attitudes.

According to Cook and Hartman (1986), both male and female students generally perceive personal selling as an opportunity for personal growth, as a good route to top management, and as a method for personal satisfaction. However, they do not desire a career in personal selling. The view of personal selling as a challenging profession with the opportunity for high rewards based on individual effort results in an ambivalence to personal selling as a career option. Cook and Hartman (1986) concluded that lack of interest was the primary reason women did not choose a career in nonretail sales. Several earlier studies have had similar results, i.e., an unfavorable predisposition to a career in personal selling (cf. Dubinsky 1980; O'Connor and Dubinsky 1983; Dubinsky and O'Connor 1983). The suggested reason for the lack of desire for a personal selling career was the student's untested skills. That is, other positions/careers may not spotlight failure as brightly as personal selling does. Muehling and Weeks (1988) found that women have a more positive attitude toward personal selling than do men, and that women perceive personal selling from a macro stance, i.e., not product or company specific. Muehling and Weeks

determined that women had a higher mean level of contact with "retail sales clerks" as a basis for judging a personal selling career. Specifically, the mean score for contact limited to retail sales clerks was 2.89 for women, versus 2.51 for men.

Recruitment for Retention

Women will have a greater role in the future success of firms which would suggest that sales organizations design their recruiting efforts to account for the influence (Muehling and Weeks 1988; Dubinsky 1980; Cook and Hartman 1986). A study by Sager (1991) noted that because recruiting and training costs have continued to increase ($22490 in 1982 to $27659 in 1987), sales managers will attempt to maximize the return on new-hires, either males or females, by effective selection methods. In his commitment/turnover study, Sager (1991) concluded that age was negatively related to commitment, and the turnover rate for married/unmarried salespeople was similar. That is, the martial status did not effect the turnover rate of salespeople. Surprisingly, the number of children negatively related to commitment. Sager concluded that age, marriage, children, and home ownership had only minimal effect on sales organization commitment. Job satisfaction and promotion, rather than demographics, were the primary distinguishing characteristics between those who left the firm and those who stayed (Fern et al. 1989). These conclusions would seem to reinforce the belief that gender per se would not preclude a successful sales career.

Need for Research

Cook and Hartman (1986) concluded that further study was needed to determine why college men and women avoid personal selling as a career choice and instead opt for other marketing jobs that may not offer the rewards and challenges of personal selling. Fern et al. (1989) argue that additional research "...has the potential for saving many firms millions of dollars in salesforce recruiting, hiring, and training costs" (p. 9). It appears that, although several studies have been done and voluminous research statistics have been compiled, we have yet to find an adequate method of selecting successful salespeople who will be committed to the firm. The challenge to a sales organization is to develop a program that effectively recruits and trains the most qualified applicants, and to retain those qualified college graduates, particularly women, who will be committed to the organization. This challenge becomes crucial as costs, both implicit and explicit, increase. Organizational commitment of an ill-fitted employee is not likely to rise if it is low in the beginning (Sager 1991).

Purpose

A review of the literature suggests that previous research has not examined an industrial (i.e., organizational or nonretail) sales situation but rather has focused on the perception of personal selling in a retail context. To increase the understanding of students' perception of personal selling, the present study has a two-fold purpose.

First, to determine if the desire for a career in personal selling by college students varies with the situation. Or stated differently, is the student's perception of personal selling dependent upon a description of the selling situation. This description may include situational factors such as the product or industry, company (or an implied company), and geographic area.

The second purpose of this study is to test the perception of a personal selling career among different groups of students differentiated by race, sex, major, and if that perception has increased, decreased, or remained unchanged from previous studies.

Methodology

Focus Group

An informal discussion was conducted with a business college class that was deemed to be representative of the male-female and white-black population of a southern university. This focus group served to support the applicability and appropriateness of the survey instrument.

Sampling

A convenience sample of upper level marketing classes was conducted. To reduce demand effects, an attempt was made to disguise the nature of the research. A randomized block design was employed to sample students (N = 155). The sample was blocked on sex and race, and the subjects were then randomly assigned to one of four selling situations. The situations were described in vague terms so as not to confound the responses with gender bias (or at least minimize the effects of any bias).

Survey Instrument

The first section of the questionnaire requested demographic information and college major. The responses for college major were collapsed into three categories: (1) marketing, (2) other business, and (3) all others not included in category 1 or category 2. A third category for race was dropped from the data because of the small number of respondents (N = 3).

Respondents were asked a total of 19 questions on their perception of personal selling career attributes. The questions used were selected from the instruments used by Comer and Jolson (1991) and Muehling and Weeks (1988). All responses were on 5-point Likert scales: "Strongly Disagree" (1) to "Strongly Agree" (5). The complete questionnaire is available from the author upon request.

Statistical Analysis

Summated means were generated for each respondent to produce the scores to be analyzed. This procedure was selected based on the results of previous studies (Cook and Hartman 1986; Muehling and Weeks 1988).
Multivariate analysis of variance (MANOVA) was the first step in the analysis to determine if a difference existed between the groups distinguished by gender, race, and major. After MANOVA, a technique which considers all variables simultaneously, any suggested differences are examined by analysis of variance (ANOVA). All statistical analysis was performed by the SAS computer program.

FINDINGS

After the initial analysis was performed by MANOVA, the decision was made to drop "major" as a variable because of the small sample size. The initial analysis also revealed respondent errors in the data which resulted in eliminating 12 questionnaires from the analysis. The procedure was run a second time and the results from 143 total usable responses are reported in this paper.

From the MANOVA procedure for Sex and Race, the Wilks' Criterion statistic is reported in Table 1. Because of the lack of significant difference by the MANOVA procedure, the ANOVA results are not reported. The findings of the study, i.e., summated mean scores of the perception of Career, Opportunity, and Disadvantages for all selling situations, are reported in Table 2.

DISCUSSION

The MANOVA results indicate that there is not a significant difference in the perception of personal selling as a career by race or gender. That is, race and gender did not make a significant difference in the respondent's attitude toward seeking a career in personal selling. Using the Wilks criterion for an exact F test, the overall significance level of this study is 0.16 (F = 1.46). These results are in contrast to previous research on this topic.
Cook and Hartman (1986) had a significant difference in the mean score for men versus women on the question "I would personally prefer a career in Sales." Wilks' criterion: F = 7.29, (prob > F 0.0001). Mean scores (on a range of 1 - 5): women 2.28 and men 2.84.

The research by Muehling and Weeks (1988) also found a significant difference in mean scores for men versus women on their attitude toward personal selling as a career choice. Reported Wilks' criterion: F = 1.47, (prob > F .037). The mean scores (on a range of 1 - 7): women 4.54 and men 4.16.

These results would suggest confirmation of the earlier argument that students may not be willing to attempt a sales career because of the individualism required and the fear of failure.

CONCLUSION

Although the particular situation will effect different mean scores for gender and race, the overall conclusion is the same: students perceive personal selling as an opportunity for personal growth but choose not to enter the field. The perception by females of personal selling is higher than males, which is a confirmation of earlier studies. The present study did have two situations where males rated personal selling higher: white males in pharmaceutical, and black males in fashions.

The results indicate a better, or more favorable, "Perception of Personal Selling Career", and a lower, or less favorable, "Opportunity for Personal Growth" than previously reported. These results are interesting in that, although both genders in the current study have a better (more favorable) perception of a sales career, they perceive less opportunity for personal growth than did the respondents in the previous study.

MANAGERIAL IMPLICATIONS

The present study should provide sales managers with insights into effective recruiting practices. Specifically, how the selling situation is framed has an impact on the perception of career opportunity. The sales manager would want to discount the disadvantages by educating the prospect about the "reality" versus the "perception" of a career in nonretail personal selling.

LIMITATIONS

Two limitations in the study design should be noted. The generalizability of the study is limited because it is a convenience sample of students who may or may not have job experience. Secondly, the oil and mining selling situation may have unduly effected the responses of students. The student sample was collected in a major oil

producing region whose economy swings with the oil industry. The oil industry, and consequently the geographic region, is currently in a continued long recession.

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TABLE 1
Comparison of Three Studies

		Present Study	Cook & Hartman	Muehling & Weeks
MANOVA: Wilks' Criterion	F value	1.46	7.29	1.47
	p > F	0.16	0.0001	0.037
Perception of Personal Selling Career, Mean Score	male	3.08	2.84	*
	female	3.12	2.28	*
Opportunity for Personal Growth, Mean Score	male	3.55	3.89	*
	female	3.74	3.95	*

* Muehling and Weeks used a 7-point whereas the present study and Cook & Hartman used a 5-point scale

TABLE 2
Mean Score for Career (C), Opportunity (O), Disadvantage (D), Each Selling Situation

		Black Female	Black Male	White Female	White Male
Total Respondents		52	43	29	19
Situation #1, Computer, (p > F = 0.432)					
C	Range 1-5	3.40	2.83	3.58	3.28
O	4-20	15.80	13.66	14.35	14.85
D	8-40	17.40	15.33	20.35	16.71
Situation #2, Oil and Mining, (p > F = .13)					
C	Range 1-5	3.00	2.75	2.76	3.28
O	4-20	16.33	15.00	14.17	14.85
D	8-40	18.50	18.75	21.64	16.71
Situation #3, Fashionable Clothing, (p > F =0.75)					
C	Range 1-5	2.25	4.00	3.43	2.66
O	4-20	13.88	13.60	13.94	13.17
D	8-40	21.88	16.20	18.43	18.66
Situation #4, Pharmaceuticals, (p > F = .76)					
C	Range 1-5	3.30	2.75	3.33	3.46
O	4-20	15.70	14.25	15.11	15.61
D	8-40	15.80	20.25	15.77	17.84

SELF-MONITORING THEORY AND SALES CAREER CHOICES

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Introduction

The purpose of this exploratory study is to investigate the relationship between self-monitoring and the choice of a sales career, utilizing the situational strategy for the study of personality and behavior (Snyder and Ickes, 1985). A fundamental premise of the situational approach is that people will choose to be in situations consistent with their personal attributes.

High self-monitors have superior adaptive and self-presentation skills, better suited to sales (Snyder 1987). In comparison, accounting is identifiable as an occupation not particularly conducive to high self-monitoring traits.

H1: High self-monitors will evaluate industrial selling positions more favorably than low self-monitors.

H2: A significant effect will be found between self-monitoring orientation and career choice.

Study

Two groups of subjects participated in this exploratory study: a group of upperclass students majoring in accounting and marketing (n=42) and a group of accounting professionals and sales managers (n=84).

Two indications of career choice, college major and selling position evaluation, were used for the student group, while occupation was used to indicate career choice for the professional group. The analyses indicated a significant positive relationship for both measures of career choice for the student group as well as the professional group, supporting both H1 and H2.

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THE INFLUENCE OF COGNITIVE STYLE ON CUSTOMER ORIENTATION

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Abstract

Cognitive style, the ways in which we take in information from the environment and process that information, has been shown to influence interactions in various behavioral fields. This paper investigates whether cognitive style would impact an individual's orientation toward the customer or toward the sale, as measured by the SOCO scale. The results suggest cognitive style can influence one's customer orientation.

Introduction

Saxe and Weitz (1982) developed the SOCO scale to measure the customer or sales orientation of sales people. Several subsequent studies have investigated the customer orientation construct. However, little research has focused on identifying the antecedents of customer orientation.

Previous research has established that cognitive style can influence an individual's behavior. Since the processes investigated in previous studies all impact interpersonal interactions, and since interpersonal interactions affect a salesperson's customer relations, it seems likely that cognitive style will influence an individual's orientation toward the customer or toward making the sale.

Since several authors state that thinkers focus on the task while feelers focus on the relationship it would appear that the thinking-feeling dimension may prove the most influential on customer orientation. Also since sensors tend to live in the present and focus on the here and now, while intuitives focus on possibilities for the future, sensors may prove less inclined to forego present sales for the possibility of building a more profitable relationship for the future.

Comparing the characteristics of sensing-intuiting and thinking-feeling produces a hierarchy of customer orientation. Taken together, these characteristics suggest that feelers in general will prove more customer oriented than thinkers, that NFs will prove more customer oriented than SFs, and that STs will exhibit the lowest level of customer orientation.

Methodology

Since our interest here focused more on theory testing than on application, a student sample proved appropriate (Calder, Phillips, and Tybout 1981). Of the 218 completed questionnaires, 202 were usable, or 92.7%. The average age was 22.64 years, with a range of 20 to 47. There were 92 males and 110 females

Respondents completed the SOCO scale, which consists of 24 items. Saxe and Weitz (1982) developed the scale and demonstrated its reliability and validity, which was reinforced by Michaels and Day (1985) with industrial buyers. Respondents also completed the sensing-intuiting and thinking- feeling portion of the MBTI (Myers and McCaulley 1985) to allow determination of their cognitive style.

Results

Differences in customer orientation were tested using a one-way ANOVA. Cognitive style in four levels served as the independent variable and respondents' values on customer orientation was the dependent variable. Cognitive style was used as the independent variable since several researchers have claimed that cognitive style is inherent and would therefore be an antecedent to customer orientation. The F value of 5.74, with 3 degrees of freedom, was significant at $p = 0.0009$. Thus, the contention of that cognitive style would influence an individual's stance on customer orientation received support.

The order of cognitive styles were tested with Tukey multiple comparisons tests. While the order of the cognitive styles from low to high customer orientation was as predicted, the NT- SF, NT-NF, and NF-SF differences were not significant. Only the comparisons between STs and each of the other three styles were significant.

REFERENCES AVAILABLE UPON REQUEST

BIASES INHERENT IN SELF-RATING MEASUREMENT SCALES--A POTENTIAL SOLUTION: THE CASE OF CUSTOMER ORIENTATION MEASURES

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Within a sales management context, measurement scales are often used in support of a variety of sales management decisions. Since the results of aptitude, personality, or behavior-based measures will often influence sales management decisions, it is important to strive for accurate measures. There is a critical link between good measures of these important constructs and the ability to make accurate managerial decisions concerning issues such as recruitment, motivation, and training. This paper has two objectives; to contribute to our understanding of the measurement of customer orientation and to improve the measurement of salesperson behaviors and attitudes.

Specifically, this paper examines biases in self-report measures. Data are collected on a modified version of the SOCO scale from three perspectives: a direct self-report by salespeople, a projective technique by salespeople, and a customer orientation measure completed by retail buyers. In psychological research it has long been observed that individuals tend to answer self-rating questions in a way to indicate how well they fit culturally prescribed norms (Frank 1965). This study attempts to reduce the biases of the respective applications of the SOCO scale and to get a better estimate of the "true customer orientation score." Specifically, the two traditional approaches to measuring SOCO (salesperson self-ratings and buyer ratings of the salesperson on the same items) will be compared with projective responses (salesperson ratings of the "typical" salesperson in his company) to the SOCO scale. In psychology, projective techniques have been used to remedy biases resulting from the raters' propensity to provide responses indicating conformity to norms. The technique has also been successfully implemented in marketing studies (e.g., Cox, Cox and Moschis 1990).

Comparisons of the scores among the three groups are made. The results provide support for the projective technique. As expected the mean from the projective scale was between the mean for the direct scale and the mean for the buyer scale, with the projective scale mean closer to the buyer scale. The difference between each set of means is significant at an alpha of .05.

Also, the direct measure produces a very small variance (.2) while the projective scale has produced a considerably larger variance (.55) and therefore provides a potentially better alternative. The projective technique appears to provide the best results for measuring customer orientation. Its mean score falls between the salespeople's direct mean and the retail buyers' mean. Given previous published arguments for an upward bias in salespeople's direct ratings, and a downward bias in buyers' ratings, the projective ratings appear to provide a better estimate of the "true score." This result is also strengthened because the comparison of the various scores is made within a single study, thereby limiting potential confounding effects due to variations across studies and industries.

NEW PRODUCT DEVELOPMENT UNDER CHANGING ECONOMIC CONDITIONS: THE ROLE OF THE SALES FORCE

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Abstract

An increasing role for the sales force in the new product development process is proposed. The sales job itself has been evolving toward one of relationship building with customers. Marketplace and economic changes such as globalization and large debt have caused firms to look much more carefully at the allocation of their resources, including expenditures on the new product development process. These and other factors, such as the disenchantment with marketing research and personnel downsizing, suggest that the sales force might begin to play an expanded role in new product development. The pros and cons of this strategy, along with its implications for sales force management, are discussed.

A copy of the complete paper is available upon request from either author.

SALESPEOPLE'S EMOTIONS: AN INITIAL THEORETICAL INQUIRY INTO THE EMOTIONS OF INDUSTRIAL PRODUCTS' SALESPEOPLE

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Abstract

Consumer behavior literature about moods and emotions has grown over the last few years (Gardner 1985), but advances in understanding the importance of moods and emotions in industrial settings has lagged. This paper applies the findings of research about emotions to salespeople. It synthesizes the literature and provides direction for future research.

Introduction

Consider the following situation. A salesperson has just concluded a transaction for the sale of a new production system to a large manufacturer. As the details of the deal are worked out, the issue of installation is brought up by the salesperson. The customer declines, as (s)he perceives that they can handle it internally. The salesperson reluctantly agrees to sell the system without installation and start-up services. Two weeks after delivery, the customer urgently requires assistance to overcome production problems, which are blamed on the new equipment. Supplier's service personnel are dispatched at considerable cost, only to identify and correct a minor problem, which could have been avoided if the customer had utilized the previously offered installation service. What emotions would most salespeople experience and would those felt emotions be exhibited? For example, would the salesperson feel and/or exhibit anger, frustration, or displeasure? And, if they do (or do not) exhibit their felt emotions, what might the personal and interaction consequences be?

Emotions in industrial sales have been given scant attention, mostly in conceptual industrial buyer behavior models (Sheth 1973; Weitz 1981). This paper argues that emotions are central to human interactions (in business or elsewhere) and that they influence subsequent behavior (Lazarus 1991). The first part of the paper reviews the literature on moods. The second part reviews the management literature as it relates to emotions in selling situations. The third part describes psychological models of emotions. Finally, directions for future research are proposed.

The Impact of Moods

The difference between moods and emotions is one of degree. Both are generalized temporary affective states (Forrester and Locander 1990). Emotions are more intense, last longer than moods, and are more often than not focused on specific objects (Gardner 1985). Emotions are also more attention getting (Gardner 1985) and may interfere with ongoing tasks and activities (Frijda 1986). Additionally, An additional appraisal of impact or importance distinguishes emotions have higher impact than moods (Roseman, Spindel, and Jose 1990). While moods and emotions differ, research about the former might provide meaningful directions for future research.

Gardner's (1985) comprehensive assessment of the mood literature focuses on consumer behavior, but provides a basis to understand antecedents and consequences of emotions. Based on her synthesis, consumers' mood states are determined by three factors, namely, prior mood states, point-of-purchase stimuli, and advertisements. Service encounters may be affected by a consumer's prior mood. For example, "consumers in good moods may be more likely to be helpful and easy to please..." (Gardner 1985, p. 290). Point-of-purchase stimuli might affect mood states, which may in turn affect search for information and brand evaluation. Finally, advertisements may evoke positive feeling (e.g., by use of humor) that influence viewers' memory for product information and subsequent behavior.

Several studies (e.g., Schwarz and Clore 1983; Veitch and Griffitt 1976) provided support for the link between moods and evaluation or subsequent behavior. Isen and Shalker (1982, p. 91) discussed the relationship between experiences, moods, and interpretation of ambiguous stimuli: "Affect can substantially influence social behavior and cognitive processes such as memory, judgment, decision making and problem solving." Research about moods and their effect on buyers' evaluation of salespeople parallels that discussed above. Decision-makers in a good mood tend to rate salespeople more favorably than when they are in a bad mood (Forrester and Locander 1990).

If moods have an impact on the evaluations of salespeople, it is logical to expect the more intense emotions to have a stronger effect. Because moods are less intense, buyers and sellers might be unaware of mood effects, whereas the more obvious emotional responses will be a part of the salesperson conscious experience, and may be associated with self-control attempts. Attempts at control ("display rules") vary across individuals (Buck 1984; Hochschild 1983), types of relationships (i.e., co-workers vs. boss vs. employees, exchange relationship vs. a communal one (Clark and Taraban 1991), and cultures (Ekman 1984).

Emotions In The Management Literature

Goodsell (1976) addressed the issue of differences in expressed emotions between Costa-Rican and U.S. postal clerks. Support for differences between the two countries in expressed emotions was reported. Clark and Taraban (1991) reported that in business interactions people are less willing to express emotions and react to expressed emotions more negatively than in friendly or family interactions. Rafaeli and Sutton dealt with expressed emotions in retail settings (Rafaeli 1989 a; b; Rafaeli and Sutton 1987; 1989; 1990; Sutton and Rafaeli 1988). They started by studying the relationship between expressed emotions and organizational performance with the central hypothesis being that expressing warm feelings toward customers will enhance store performance (Sutton and Rafaeli 1988). Based on the authors' model (Rafaeli and Sutton 1987) they expected a positive relationship between positive expressed emotions and store performance, measured by total store sales. Store pace (how busy it was) and customers demands on cashiers' time were sources of further variations in expressed emotions (Rafaeli and Sutton 1990; Sutton and Rafaeli 1988).

The Psychology Literature on Emotions

Given the extent of the literature about emotions in psychology, we chose to focus on research that is grounded in social psychology theories. Although there is no universally accepted theory of emotion, an approach labeled "appraisal theory" has been productively adopted by a number of researchers (Frijda 1986; Lazarus 1991; Oatley 1992; Roseman 1984; Scherer 1984; Smith and Ellsworth 1985). We chose to ground our research in the work of Scherer and his associates (e.g., Scherer 1988; Wallbott and Scherer 1989) because of the extensive theoretical and empirical development that their program of research provides, and because their model can be adapted to fit industrial sales settings.

Appraisal theory takes into account three types of variables: antecedent conditions, such as the preceding event, the people involved, and the location; personal characteristics, such as the biography of the individuals, their socioeconomic and family background, and their personality traits; and response outcomes, such as subjective feelings of the individual, the duration of the felt emotion, physiological symptoms, and control characteristics, (verbal and non-verbal). Based on this paradigm, a research stream was undertaken with the following major findings:

Emotions Antecedents (see the Table). Gehm and Scherer (1988) studied six antecedents of emotions. *Situation Novelty* was measured as the expectedness of the causal event. *Intrinsic pleasure* was assessed by the pleasantness of the antecedent event. *Emotion's conduciveness to the goals and needs of the individual* was assessed by the importance of the antecedent event to the attainment of goals. *Norm-compatibility* was a measure of the improperness of the event-causing behavior. Finally, *self-compatibility* tapped the effect of the event on self-esteem.

Table
Antecedent Conditions and Consequent Emotions

Antecedent Conditions	Emotion
Pleasantness of preceding event.	Joy
Low degree of control over preceding event. Escape was the only possible reaction.	Fear
Unexpected and hindering / improper / immoral events. Changeable events.	Anger
Events that make individuals feel dominated or powerless.	Sadness
External / environmental events differing from expectations and associated with improper behavior.	Disgust
Improper / immoral behavioral events causing a deviation from internal standards of behavior.	Shame
Improper / immoral behavioral events causing a deviation from internal standards of behavior.	Guilt

Pleasantness of the event was the most distinguishing antecedent for joy. In contrast, fear arises when respondents have little power over the event, and escape is the only reaction possible. Anger was mostly caused by unexpected events, which were "hindering, and improper or immoral events" (p. 73). Positively changing the situations was mentioned as a coping mechanism. Sadness was mostly the result of events which make individuals feel dominated and powerless. Moral and internal standards were considered inapplicable by the subjects. Disgust events were seen as external and imposed by the environment. Disgust inducing events tended to divert

from expectations and were associated with improper behavior. Both shame and guilt were invoked by improper or immoral behavior. Furthermore, both necessitate a deviation from an individual's internal standards of behavior. Shame situations were mostly coped with by a denial mechanisms, whereas in guilt situations individuals try to positively influence the event or its outcome.

Frequency, Duration, Intensity, and Control. Emotions form two groups in terms of felt frequency (Wallbott and Scherer 1988). Joy and anger are the two more frequent emotions, while guilt, shame, fear, disgust and sadness are less frequently felt. The most intense emotion was sadness, followed, in decreasing order, by joy, fear, anger, disgust, shame, and guilt. Shame was subject to most control attempts, followed by guilt, sadness, fear, disgust, anger, and joy.

Emotions in Industrial Sales Settings--Future Research

An initial goal of this paper is to identify felt and expressed emotions in industrial settings. The first hypothesis pertains to the incidence of different emotions in these settings and extends Scherer's findings to sales situations. Other hypotheses pertain to situations under which these emotions might arise.

Only pleasantness of the event was a precedent for felt joy (Scherer et al 1988). Roseman et al (1990) report that felt joy was associated with events very highly consistent with an individual's motives and reward motivation, both of which are applicable to sales situations. Felt fear was associated with events that people felt low control over and escape was perceived to be the only reaction (Scherer et al 1988). Roseman et al (1990) report that such situations are also typified by low consistency with an individual's motives and when the individual perceives the outcomes to be undeserved. With the exception of the "escape reaction", these conditions can be typical of sales interactions. Anger was associated with unexpected events that are hindering to goal attainment, and in reactions that are perceived to be immoral or improper (Scherer et al 1988). In Roseman et al's (1990) study, anger was also associated with low consistency with an individual's motives and when the outcomes were perceived to be undeserved. It appears that all of these antecedents are typical of sales situations. Sadness was related to events that make people feel dominated or powerless (Scherer et al 1988). It is also associated with circumstantial events (Roseman et al 1990). While we could envision sadness inducing sales situations (such as the loss of a relative of a contact person), we feel sadness is less typical in exchange relationships than in communal ones.

External events which differ from expectations and which are associated with improper behavior are antecedents of disgust (Scherer et al 1988). These events are also characterized by low consistency with an individual's motives, low perceptions of control over the situation, and expectations of positive outcomes (Roseman et al 1990). Such conditions can be reasonably expected in sales situations. Improper behavior is the antecedent of shame (Scherer et al 1988). Low consistency with an individual's motives, low perception of control over the situation, and expectations for negative outcome also contribute to shame (Roseman et al 1990). Guilt is also associated with improper or immoral behavior (Scherer et al 1988). Low consistency with an individual's motives, low perception of control over the situation, and expectations for negative outcomes also contribute (Roseman et al 1990). Such conditions are satisfied in sales situations. In summary of the preceding section, it is proposed:

H1: Salespeople experience joy, fear, anger, disgust, and shame in sales interactions. Sadness is experienced in sales interactions very rarely.

Two methods are available to identify antecedent conditions of emotions. One is observational, and centers on expressed emotions (e.g., Rafaeli 1989; Rafaeli and Sutton 1987; 1989a; 1989b). The second is the survey approach used by Scherer(1988). Its use provides an opportunity to accumulate knowledge across settings. Using the set of antecedent conditions (Scherer et al 1988) makes it possible to identify antecedent-events-profiles for emotions in sales. We adapted Scherer's (1988) original instrument (a copy is available from the first author). Changes from the original were mostly in adapting the examples to industrial selling. A second issue for future research is self-control and self-modification of emotional behavior (Blankstein and Polivy 1982; Van Maanen and Kunda 1989). Its importance in industrial sales situations is due to the imperative to maintain cordial relations with customers. The Figure illustartes conflicts between felt and expressed emotions (Rafaeli and Sutton's 1987).

Figure
Interactions of Felt and Expressed Emotions

Expressed Emotions / Felt Emotions	Positive	Negative
Positive	Emotional Harmony	Emotional Deviance
Negative	Emotional Dissonance	Emotional Harmony

The situations when good cheer is expected of salespeople but felt emotions are different, are most important, because they are emotional-dissonance situations. Under such conditions, some people will fake emotions (Rafaeli and Sutton 1987), while others will deviate from prescribed display rules. Even within the former, some will fake because they believe they should--in good faith--while others will even though they believe they should not--in bad faith (Rafaeli and Sutton 1987). Under both situations of dissonance, burn-out might occur. Van Maanen and Kunda (1989) reported that in some cases, Disney employees revert to punishment of visitors, especially when felt and expressed emotions vary. Dissonance is avoided by breaking the rules governing expressed emotions.

Coping behavior includes assignment of blame or credit (which and toward whom), coping potential, and formation of future expectations. Blame and credit assignments depend on two attributions: accountability (responsibility for the emotion) and control (whether whoever is responsible could have controlled the event). In sales, if a salesperson perceives a buyer is responsible for an emotion and that the buyer's actions were controlled, the salesperson will assign credit or blame to the buyer. Therefore, it is hypothesized that:

H2: Salespeople attribute credit and blame for their felt emotions to the buyer if they assign responsibility for the event and its control to the buyer and to themselves if they assign responsibility for the event and its control to themselves.

Coping potential depends on an individual's perception whether that individual can influence and direct the relationship in which the emotion occurs for the better (Lazarus 1991). For example, if a salesperson is about to lose an account (a negative event), control of outcomes, such as authority to change prices, will lead to higher coping potential. It is therefore proposed that:

H3: As salespeople perceive higher levels of influence and control over the emotional event, they will experience a higher level of coping potential.

Future expectations involve perceived outcomes of coping behavior (Lazarus 1991). If coping behavior will not improve the situation, less coping can be expected. If expression of anger will be perceived to lead to loss of future sales, the salesperson will avoid such expression. It is hypothesized:

H4: Salespeople who perceive the outcomes of coping behavior to be negative will engage in such behavior less than salespeople who perceive the outcomes of coping behavior to be positive.

To sum, the purpose of this paper was to apply theory and findings about emotions to industrial sales settings. It is hoped that future research on emotions can advance knowledge across settings and situations.

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AN EXAMINATION OF ADAPTIVE SELLING: ANTECEDENTS AND OUTCOMES

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Abstract

Adaptive selling appears promising as a strategy to increase sales effectiveness because it requires salespeople to develop and continually assess their presentations based upon the encountered selling situations and the needs of the individual customers. Although the desirability of practicing adaptive selling strategies appears readily apparent, little research has been conducted in examining how differences in adaptive selling orientations are related to selected personal and work variables, and job attitudes and performance.

This study investigates how differences in selling experience, education, functional flexibility, number of sales accounts, and number of hours spent in selling activities affect the degree to which adaptive selling is practiced. Specifically, the mean adaptive selling score is hypothesized to be greater for those salespersons with more years of selling experience, more education, high functional flexibility, a high number of sales accounts, and a high number of hours engaged in selling (versus non-selling) activities. Further, differences in adaptive selling orientations are examined as to their effect on levels of perceived role conflict, organizational commitment, and performance. In other words, the mean role conflict and performance scores are hypothesized to be higher, and the mean organizational commitment score is hypothesized to be lower for those salespersons with high adaptive selling scores.

Data was collected via multi-item scales found in the extant literature from sales personnel within the information and image management industry. Two mailouts resulted in a response rate of 18.6 percent or 306 observations.

The first five hypotheses involving experience, education, functional flexibility, and the work variables were independently investigated using univariate ANOVAs with adaptive selling as the dependent variable. The remaining hypothesized relationships, with role conflict, organizational commitment, and performance as dependent variables and adaptive selling as the independent variable, were examined using multivariate analysis of variance. For the purpose of these analyses, the constructs under investigation were split at the median.

The data analysis provided support for four of the eight hypotheses. Selling experience ($F = 6.37$, $p = .012$), functional flexibility ($F = 7.86$, $p = .006$) and the number of hours per week the salesperson spends in selling activities ($F = 8.90$, $p = .003$) were positively related to adaptive selling. In other words, the mean adaptive selling score was higher for those salespersons with greater experience (mean = 5.47 vs. 5.26), higher functional flexibility (mean = 5.47 vs. 5.26), and more hours spent in selling efforts (mean = 5.49 vs. 5.23). The relationship between adaptive selling and performance was also significant ($F = 7.18$, $p = .008$). Additionally, a fifth relationship was significant, but the result was contrary to the hypothesis. Adaptive selling was found to be positively related (not negatively related as hypothesized) to organizational commitment ($F = 6.88$, $p = .009$). Education and the number of sales accounts appeared to be unrelated to the practice of adaptive selling. Moreover, adaptive selling did not appear to be related to role conflict.

These results indicate that facilitating the practice of adaptive selling within the sales force is beneficial to the firm. Indeed, salespeople practicing adaptive selling are higher performers and more committed to remaining with the organization. Management can encourage adaptive selling by minimizing the amount of non-selling activities the sales force are required to perform, and by providing greater exposure to diverse selling environments. Further, sales managers can assess the ability of the potential recruit to practice adaptive selling by administering the Functional Flexibility Index prior to the selection process.

References provided upon request.

MORAL PHILOSOPHIES, ETHICAL PERCEPTIONS AND THE ETHICAL JUDGMENTS OF SALES PROFESSIONALS

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Abstract

This study examines the relative influences of two basic dimensions of moral philosophy, *relativism* and *idealism*, along with perceptions of an ethical problem, on the ethical judgments of sales professionals. The results from a mail survey of American Marketing Association members indicate no relationship between a salesperson's relativism and his/her ethical judgments, a weak positive relationship between idealism and a salesperson's ethical judgments. The survey results also indicate that perceptions of an ethical problem have impact on the salespeople's ethical judgments in a positive way.

In their review of marketing ethics, Murphy and Laczniak (1981) pointed out that the ethics of sales personnel is an area that draws constant criticism. In their words, "almost every consumer has been pressured to buy something that she/he didn't intend to buy" (p.257). Consistently, Andreasen (1982) cited the ethics of salespeople as one of the major "historical" concerns that have confronted marketing. Referring to the work of Magnuson and Carper (1968), Andreasen (p.8) portrays the criticism surrounding the sales profession with this question: "Are *salespeople* too often deceitful, overly manipulative, and/or intrusive?"

The competitive nature of salespeople appraisal systems has been cited as a reason why some salespeople may "deviate" from ethical norms or ethical behavior. As reviewed by Boedecker, Morgan, and Stoltman (1991, p.70), "sales management usually stresses objective or productivity-related performance measures (Churchill *et al.* 1985), such as sales volume or calls, or other output measure (Churchill, Ford, and Walker 1990; Ingram and LaForge 1989)." Boedecker, Morgan, and Stoltman cautioned that the pursuit of such short-run objectives could threaten the important long-run goal of "establishing ongoing relationships with buyers." This scenario was given as an example (p.70):

> a salesperson "stretching the truth" in an effort to sell might alienate prospects and others who become aware of that behavior, yet would be rewarded if quotas are met.

The potentially negative impact of short-run oriented appraisal systems is evidenced in a study of sales manager's supervision of unethical salesforce behavior by Bellizzi and Hite (1989). In particular, Bellizzi and Hite report that sales managers are less than uniform in their controlling of unethical salesforce behavior. As they concluded, sales performance (i.e., if they are a "top sales performer") is a factor that "can affect supervisory reaction and lead to a reduced sanction" (p.45).

According to his framework for the analysis of ethical behavior in sales organizations, Wotruba (1990) points to the nature of the sales work as another potential factor of ethical problems among sales professionals. In particular, citing Nichols and Day's (1982) finding that group decisions are more likely to consist of higher levels of moral reasoning than individual decisions, Wotruba asserted that ethical problems among salespeople may result from the fact that salespeople often work in isolation with little socialization with supervisors, subordinates, or peers.

The above review highlights some of the potential ethical problems surrounding the sales professionals. Given the nature of the sales work, the "ethical" sales manager will not have an easy task. If the policy makers of sales organizations are to be successful both ethically and in terms of sales, it is important that they first develop a better understanding of how sales professionals make decisions in situations involving ethical problems. The purpose of this study is to help increase our knowledge about sales professionals' ethical decision making. In particular, it examines the impacts of two basic dimensions of moral philosophy, relativism and idealism, along with perceptions of an ethical problem, on the ethical judgments of sales professionals. (A detail discussion of these constructs will be given in the next section.) Such an undertaking is an important one since it has been demonstrated that individual differences as predictors of moral judgment may be described most parsimoniously by taking into account idealism and relativism (e.g., Forsyth 1980, Schlenker and Forsyth 1977). Furthermore, in their general theory of marketing ethics, Hunt and Vitell (1986) depict perceived ethical problem as the catalyst of the whole ethical decision making process.

Given the numerous studies conducted on sales professionals ethics (e.g., Singhapakdi and Vitell 1991; Bellizzi and Hite 1989; Caywood and Laczniak 1986), there has been no empirical work that directly examines the impact of moral philosophy and perceptions of ethical problem on the salespeople's ethical judgments. Therefore, this empirical work is needed to overcome this shortcoming.

Research Hypotheses

The independent variables of this study are: moral philosophy (i.e., idealism and relativism) and perceived ethical problem. In this section, each of these independent variables is examined in terms of the rationale for their inclusion as well as the underlying basis for our research hypotheses.

Moral Philosophy

According to Forsyth (1980), individual differences must be accounted for when investigating moral judgments. This view is agreed upon by the modern marketing ethics models (e.g., Ferrell and Gresham 1985; Hunt and Vitell 1986; and Ferrell, Gresham and Fraedrich 1989). Also pointed out by Forsyth (1980, p.175), there are many valid approaches to "describe individual differences in moral thought." These approaches include those by Hogan (1970, 1973), Kelman and Lawrence (1972), Kohlberg (1968, 1976), Rest, Cooper, Coder, Masanz, and Anderson (1974). As pointed out earlier, it has been argued that individual differences as predictors of moral judgment may be described most parsimoniously in terms of *relativism* and *idealism* (Forsyth 1980, Schlenker and Forsyth 1977). In a recent article, Forsyth (1992) asserts that these two dimensions of moral philosophies can influence various aspects of moral decisions in business. That is, different combinations of these moral philosophy dimensions essentially reflect different approaches to moral judgment.

These two dimensions of ethical ideology were formalized by Forsyth (1980, p.175) who explained that relativistic individuals "reject the possibility of formulating or relying on universal moral rules when drawing conclusions about moral questions." Since relativistic individuals reject universal moral rules, they are likely to agree less with the societal norms as to what is right or wrong than less relativistic individuals. Therefore, we would expect those salespeople with a higher degree of relativism to agree less with societal norms in making their ethical judgments than their counterparts, thus leading to this hypothesis:

H_1: A more relativistic sales professional will tend to agree less with societal ethical norms, in making his/her ethical judgments, than a less relativistic sales professional.

According to Forsyth (1980, p.175), idealistic individuals "believe in and make use of moral absolutes when making judgments." Consequently, a more idealistic individual would be expected to agree more with societal choices of ethical actions in making their ethical judgments than a less idealistic individual. Accordingly, this hypothesis was formulated:

H_2: A more idealistic sales professional will tend to agree more with societal ethical norms, in making his/her ethical judgments, than a less idealistic sales professional.

Perceived Ethical Problem

As previously mentioned, Hunt and Vitell (1986) depict perception of an ethical problem as the catalyst of the whole ethical decision making process. Although the specific direction of the relationship between perceived ethical problem and ethical judgments was not delineated by them, a useful heuristic would suggest that individuals who perceive an ethical problem or who are more sensitive ethically would tend to be "more ethical" in their judgments than their less ethically sensitive counterparts. It should be pointed out that an ethics study of sales professionals by Singhapakdi and Vitell (1991) reveals that salespeople who are more ethically sensitive will be more likely to take some sort of action (vs. "do nothing") to remedy an ethical problem.

Accordingly, we would expect those who are more sensitive to an ethical problem to agree more with the societal judgments or norms with regard to what is right or wrong than their counterparts. This hypothesis concerning the effect of perceived ethical problem was formulated:

H_3: A sales professional who perceives an ethical problem to be more severe will tend to agree more with societal ethical norms, in making his/her ethical judgments, than a sales professional who perceives an ethical problem to be less severe.

Methodology

Operationalization

Moral Philosophy. The Ethics Position Questionnaire (EPQ) developed by Forsyth (1980) was used to measure the two dimensions of moral philosophy. The EPQ consists of two ten-item scales--one to measure idealism and a second to measure relativism. Typical examples of idealism items are "a person should make certain that their actions never intentionally harm another even to a small degree" and "it is never necessary to sacrifice the welfare of others." Examples of relativism items include: "questions of what is ethical for everyone can never be resolved

since what is moral or immoral is up to the individual" and "what is ethical varies from one situation and society to another." A nine-point Likert type scale (agree/disagree) was used.

The idealism score for each respondent was computed by totalling the scores of all idealism statements together; the relativism score was computed by totalling the scores of all relativism statements. Following Forsyth's (1980) conceptualization, a high *idealism* score indicates that the respondent tends to favor "moral absolutes" when making moral judgment and vice versa. A high *relativism* score indicates the likelihood that the respondent tends to rely less on universal moral rules. It should be pointed out that an assessment of the EPQ was carried out. The principal components analysis results (quartimax rotation) support the two-dimensional (i.e., relativism and idealism) moral philosophy as theorized by Forsyth (1980, 1992). Cronbach's coefficient alphas for the idealism and the relativism scales are 0.86 and 0.81, respectively.

Ethical Judgments & Perceived Ethical Problem. Scenarios are commonly used in marketing ethics studies (e.g., Chonko and Hunt 1985; Laczniak, Lusch, and Strang 1981; Singhapakdi and Vitell 1990). In a recent ethics study of sales professionals, Singhapakdi and Vitell (1991) adopted an ethical scenario developed by Hunt and Vitell (1986) as part of their research instrument. In this study, "perceived ethical problem" and "ethical judgment" were operationalized by means of three marketing ethics scenarios developed by Dornoff and Tankersley (1975, see Appendix). The scenarios represent various areas of marketing: sales management, retailing, and advertising.

"Ethical judgment" was measured by asking each respondent to express his/her agreement or disagreement with the action depicted in each of the three scenarios. A seven-point scale ranging from "strongly disagree" (score 1) to "strongly agree" (score 7) was used. Based on Dornoff and Tankersley 's (1975) study, the majority of people (71% or more) "disagree" with the actions depicted as part of the scenarios. Accordingly, we can assume that these actions were considered "unethical" by society. That is, relative to American societal norms, disagreeing with these actions means that one's ethical judgments are "more ethical," and vice versa. This interpretation is consistent with that of Jones (1991, p. 367) who defined *ethical decision* as "a decision that is both legal and morally acceptable to the larger community."

Similar to the studies by Singhapakdi and Vitell (1990, 1991), "perception of an ethical problem" was operationalized by asking the respondents whether they perceive the scenarios to have any ethical content or problem. Specifically, the following question was used: Do you think that the situation described above involves an ethical issue or problem? Responses were measured by a seven-point scale.

Sample

This study used a self-administered, paper-and-pencil questionnaire. The data were taken from a larger marketing ethics survey of U.S. practitioner members of the American Marketing Association (AMA). The response rate was 25.9% which is comparable to those of previous marketing ethics studies (e.g., Singhapakdi and Vitell 1990, Hunt and Chonko 1984). The total number of respondents were 63 sales professionals.

The majority of the 63 respondents (60.3%) were men. A large group (41.3%) were under 30 years old. More than half (54%) have graduate degrees or some graduate study. Regarding their business experience, 41.3% reported to have at least 10 years experience. Almost half of the respondents (48.4%) reported an annual income of $40,000 or higher.

Results

All hypotheses were simultaneously tested using multiple regression analysis. It should be noted that a correlation analysis was carried out to determine any possible multicollinearity problems. A high degree of correlation between idealism, relativism, and perceptions of an ethical problem could violate the assumption of multiple regression analysis concerning no linear relationship among the independent variables. The correlation analysis reveals that there are no significant correlations between the three independent variables of the study. The highest correlation was only -0.12 between relativism and idealism. Accordingly, we do not suspect that a multicollinearity problem exits.

Since the dependent variable, ethical judgments, was operationalized by means of three different marketing ethics scenarios, three regression models (one for each scenario) were estimated (see Table 1). As can be noticed from the analysis results, the standardized coefficients for relativism are not significant for any of the three scenarios examined. Accordingly, hypothesis H_1 was rejected--we can not conclude that a more relativistic sales person will tend to agree less with societal ethical norms in making his/her ethical judgments, than a less relativistic sales person.

The regression results for testing of hypothesis H_2 are mixed. Since the signs of coefficients for idealism are negative and significant only for scenario 2 and scenario 3 (.10 level), we can partly conclude that a more idealistic

sales professional will tend to agree more with societal ethical norms than a less idealistic sales professional.

Table I
Regression Analysis Results

(a) Dependent Variable: Ethical Judgment[a] (Scenario 1)

$R^2 = 0.1202$ F = 2.6865 Significant F = 0.0546

VARIABLES	BETA	T	Sig. T
Relativism	0.09659	0.785	0.4356
Idealism	0.00339	0.027	0.9782
Perceived Ethical Problem[b]	-0.33631	-2.740	0.0081

(b) Dependent Variable: Ethical Judgment[a] (Scenario 2)

$R^2 = 0.3475$ F = 10.4746 Significant F = 0.0000

VARIABLES	BETA	T	Sig. T
Relativism	-0.14088	-1.330	0.1887
Idealism	-0.24254	-2.290	0.0256
Perceived Ethical Problem[b]	-0.52591	-5.001	0.0000

(c) Dependent Variable: Ethical Judgment[a] (scenario 3)

$R^2 = 0.5846$ F = 27.6728 Significant F = 0.0000

VARIABLES	BETA	T	Sig. T
Relativism	-0.00732	-0.087	0.9313
Idealism	-0.14483	-1.713	0.0919
Perceived Ethical Problem[b]	-0.75335	-8.975	0.0000

The regression results from all three models support hypothesis H_3--that is, all coefficients for perceived ethical problem are significant and have negative signs. Therefore, we can conclude that a sales professional who perceives an ethical problem to be more severe will tend to agree more with societal ethical norms than a sales professional who perceives an ethical problem to be less severe.

Discussion

The results of this study should be viewed cautiously because of the fact that only 63 sales professionals were included in the sample. This poses a limitation as far as the generalizability of the study is concerned. Future studies should attempt to get larger sample sizes in order to increase the generalizability of findings.

This study found mixed relationships between personal moral philosophies and the ethical judgments of sales professionals. That is, there is no relationship between a salesperson's relativism and his/her ethical judgments. This study found a weak relationship between idealism and a salesperson's ethical judgments. The results suggest that idealistic salespeople tend to agree more with societal choices of ethical actions in making their ethical judgments than less idealistic salespeople.

Consistent with the Hunt-Vitell marketing ethics theory and the empirical work of Singhapakdi and Vitell (1991), the survey results support the proposition that perceived ethical problem can influence one's ethical judgments. The results indicate that perceptions of an ethical problem have impact on the sales professionals' ethical judgments in a positive way. In fact, this seems to be the clearest finding from this study. A possible implication from this finding is that sensitizing salespeople to the importance of ethical problems and issues (e.g., via ethics training, establishing and enforcement of code of ethics) would be a positive step to help bring about more socially acceptable judgments by sales professionals.

It is important to emphasize that this study only focused on a limited number of factors related to ethical decision making. A myriad of other important factors have been specified in the various theories of marketing ethics. Therefore, for future research, it would be interesting to look into the relative influences of these factors on the sales professionals' ethical judgments as well.

Appendix*

Marketing Ethics Scenarios

Ethical Judgment 1

A young man, recently hired as a salesman for a local retail store, has been working very hard to favorably impress his boss with his selling ability. At times, this young man, anxious for an order, has been a little over-eager. To get the order, he exaggerates the value of the item or withholds relevant information concerning the product he is trying to sell. No fraud or deceit is intended by his actions, he is simply over-eager.

Action: His boss, the owner of the retail store, is aware of this salesman's actions, but he has done nothing to stop such practice.

Ethical Judgment 2

A retail grocery chain operates several stores throughout the local area including one in the city's ghetto area. Independent studies have shown that prices do tend to be higher and there is less of a selection of products in this particular store than in the other locations.

Action: On the day welfare checks are received in the area of the city, the retailer increases prices on all of his merchandise.

Ethical Judgment 3

Sets of a well-known brand of "good" china dinnerware are advertised on sale at a considerable discount by a local retailer. Several patterns of a typical 45-piece service for eight are listed. The customer my also buy any "odd" pieces which are available in stock (for instance, a butter dish, a gravy bowl, etc.). The ad does not indicate, however, that these patterns have been discontinued by the manufacturer.

Action: The retailer offers this information only if the customer directly asks if the merchandise is discontinued.

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*Source: Dornoff and Tankersley (1975)

References Available Upon Request.

THE EFFICACY OF THE ' TECHNIQUES OF NEUTRALIZATION' AS A MEANS TO EXPLAIN UNETHICAL SALES BEHAVIOR: A PRELIMINARY INVESTIGATION

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Abstract

The sales profession represents an area of particular ethical concern within marketing because sales offers the opportunity for a wide range of unethical behaviors. This study applies the techniques of neutralization (Sykes and Matza 1957), a framework borrowed from the social deviance literature, as a possible explanation regarding how otherwise "principled" individuals may diminish their culpability for inappropriate sales behaviors. Recommendations regarding the means by which selling organizations might reduce the use of such excuses/rationalizations for unethical behaviors by salespersons are discussed.

* * * * * *

Marketing has been confronted with substantial criticism regarding the unethical practices of its constituents. Substantial opportunity to engage in unethical behavior exists for marketers due to the boundary spanning status of the marketing function (Ferrell and Gresham 1985). The sales profession is an area of particular concern because selling offers the opportunity to express a wide range of unethical behaviors.

Salespeople may feel certain pressures to act "unethically" when unscrupulous industry practices are accompanied by pressures to perform. Ethical problems may also result because salespeople are too loyal to their companies (Murphy 1989). Many sales managers may feel the best way to realize ambitious sales goals is to have salespeople "buy" sales through extravagant entertainment or gift giving practices. In a similar vein, it may prove difficult for sales representatives or managers to walk away from transactions that are ethically compromising, or to reject an opportunity to acquire a competitor's secrets (Gellerman 1989).

Most people do what they regard as the right thing most of the time. They generally do so because it is right, not so that they can claim credit for being ethical (Gellerman 1989). This paper addresses exceptions to this rule, in that it examines the behavior of "respectable" individuals who sometimes act unethically in their corporate lives. The paper does not consider organizational constraint systems, although such codifications generally encourage ethical business practice (Wall Street Journal 1988). It instead considers how salespeople, in an intuitive and private manner, may circumscribe such constraints. Business people may employ two sets of ethical standards -- a personal and a business set -- with the personal set the more rigid (Dubinsky and Gwin 1981). However, the self-justifications underlying how and why principled individuals sometimes engage in unconstrained behavior within their corporate lives remain largely unaddressed.

Research Objectives

The first objective is to investigate which among a set of excuses or justifications that might be invoked by salespeople when they commit an unethical act share common "neutralizing" properties. The second is to identify the neutralization techniques that are most likely to be employed by salespeople to self-justify unethical work behaviors.

The Techniques of Neutralization

The techniques of neutralization (hereafter: the 'techniques') posit several explanations of how individuals may soften the impact of their misconduct on their self-concepts and social relationships (Sykes and Matza 1957). Internalizing the techniques allows people to view their unethical behavior as acceptable under certain circumstances. Contrary to most theories originating from within the sociology of deviance literature, neutralization theory views norm violators as comparable to all other individuals, i.e., respectable individuals who typically subscribe to conventional norms. Rather than totally rejecting an ethical norm, the actor using the techniques occasionally distorts the norm by claiming conditions or defenses that render societal rules as inappropriate. The fact that one feels compelled to "neutralize" a misaction may actually indicate a basic support of the norm.

An individual may use one or more of techniques to diminish his/her culpability for inappropriate sales behavior. The framework provides a vehicle for understanding how sales employees develop and use self-arguments to exonerate themselves from the self-degradation resulting from an unethical act. The five techniques prescribed by Sykes and Matza (1957) are defined below:

Denial of Responsibility -- wherein individuals argue they are not personally accountable for their actions because factors beyond their control are operating.

Denial of Injury -- wherein individuals contend that their norm violating behavior is not really serious, since no party suffers because of it.

Denial of Victim -- wherein individuals counter any blame for their actions by arguing that the violated party deserved whatever happened.

Condemning the Condemners -- wherein individuals deflect moral criticism to those who would condemn them by pointing out that they engage in similar disapproved behavior.

Appeal to Higher Loyalties -- wherein individuals argue that their norm violating behavior is the by-product of their attempt to actualize a higher order ideal or value.

The five techniques capture a general set of excuses and justifications that may be employed by salespeople.

The opportunity to employ some or all of these neutralizations may exist within a corporate culture. Exploiting one or more of the techniques would permit salespeople to privately invoke widely accepted, but publicly unverbalized, values to reduce their accountability for actions that are publicly censured within the corporation. These "subterranean values" and their relevance as a means of rationalizing misconduct may be learned though interaction with other employees. These values may coexist with publicly articulated and esteemed values as a means of assuaging one's feelings of guilt. Akers (1977) suggests a "norm of evasion" exists for every overt behavioral norm. A salesperson might invoke these "norms of evasion" to avoid the self-recriminations that otherwise would accompany the violation of overt corporate norms. One or more of the techniques of neutralization could be **a priori** (and internally) specified as appropriate for use in particular selling circumstances and "carried" to the norm-violating situation.

Background to the Research Objectives

All internalized devices used to rationalize misbehavior to oneself can be categorized as an excuse or a justification (Riordan, Marlin and Gidwani 1988). Salespeople offering excuses are implicitly admitting an act is wrong/inappropriate while denying full responsibility. Assertions that one did not intend to produce harmful results even though they were warranted, or attempts to shift attention to the motives/behaviors of others who might criticize also represent excuses. Those offering justifications tacitly accept responsibility for their misactions but are striving to modify how the act or its consequences are perceived by framing their behavior in a more positive context. Justifications include denying that any injury resulted from the action, or arguing that the end justified the means.

The situational nature of behavior is consistently described in the social sciences. Role theory views people as actors who play many roles during a single day. Salespeople are likewise faced with the necessity to enact many roles. Sales managers confront each role faced by salespeople, in addition to job roles associated with hiring, performance evaluation, etc. Each role carries with it expected behaviors for particular situations. These expected behaviors are not always highly specific they do offer general guidelines for one's conduct.

For the techniques to facilitate unethical sales behaviors, the individual must first accept one or more of the techniques as viable and then perceive it (them) as appropriate for use when facing special circumstances (Agnew and Peters 1986). The first dimension (accepting the techniques) is a "predisposing factor" toward unethical behavior; the second a "situational contingency" that may incite unethical actions. The influence of these dimensions is implicit in any discussion of the techniques. Their presence implies the techniques will only be used when salespeople are provoked by distinctive circumstances that constitute some "special situation." Salespeople may embrace several neutralization devices, yet not feel they face a situation where their use is appropriate. Use of the techniques should be more likely when one encounters a situation deemed appropriate for the use of a particular technique. The relationship between acceptance of the techniques and unethical behavior would then be strongest. When salespeople do not consider a situation to be appropriate, prior acceptance of the techniques should not influence behavior.

The Study Measurement

Each subject read a vignette describing a sales manager's unethical action. The unethical action involved excessively expensive gift-giving in order to gain a sale. The use of scenarios improves data quality in questionnaires that address ethical behavior (Hunt and Vitell 1986). Vignettes standardize the social stimulus across respondents while making the decision-making situation appear more genuine.

The subjects then read thirteen items providing various situationally grounded rationalizations (the 'techniques') that potentially justified or excused the sales manager's action. Each statement addressed the circumstantial domain of one and only one of the techniques. The subjects provided their level of agreement/disagreement that the circumstances described in the items excused or justified the sales manager's action. A moral imperative statement was also provided to offer subjects a way to state that the action was unacceptable and could not be neutralized.

Table 1

Techniques of Neutralization Items and Scenario

SAMPLE ITEMS MEASURED	TECHNIQUE
No one is actually hurt by this; these transactions actually improve people's health.....	Denial of Injury
Powerful competition forces manufacturers to be generous with their customers.....	Denial of Victim
This is the type of behavior which results from the lack of ethic being taught today in schools.....	Denial of Responsibility
Under these special circumstances, the good of society is to be more highly valued over minor situations.....	Appeal to Higher Loyalty
S/he is only keeping pace with competitors who would be quick to condemn but who in fact do such things..	Condemning the Condemners

Moral Imperative
Actually, sh/he is to blame because under no circumstance is this action appropriate.

Vignette
A sales professional employed by a large health care manufacturing firm provides expensive gifts like free trips, cars, or TVs to certain buyers. S/he should not be blamed for this behavior because:_____...(Fill in the technique of neutralization rationalization statement).

How best to address the confounding effects of a basic lack of agreement among people concerning what is moral is a continual dilemma for those conducting ethical research. Subjects faced with evaluating another's morality inherently base such a decision on their own ethical system. Disagreements concerning morality automatically emerge when personal ethical systems differ.

Individual variations in approaches to moral judgements may be parsimoniously addressed by considering two basic dimensions (Schlenker and Forsyth 1977). The first is the degree to which one disregards universal moral rules in lieu of relativism. Some persons reject the possibility of constructing or depending on universal moral rules when developing conclusions about moral questions. Others accept and use moral absolutes when making similar judgements. The second dimension underlying individual differences in moral judgements involves the degree of idealism present in one's moral attitudes. Some individuals "idealistically" assume that desirable consequences can always be realized through the "correct" action. Those with a less idealistic orientation acknowledge that undesirable consequences often accompany desired ones. The sample was provided their agreement-disagreement with 20 items that comprise the Ethics Position Questionnaire (EPQ) (Forsyth 1980). The EPQ measures individual differences in idealism and relativism.

Individuals who identify themselves as either high or low in idealism and high or low in relativism can be classified into one of four ideological categories (situationist, absolutist, subjectivist, exceptionist). Sample items from the EPQ and the set of ideological categories are described in Table 2.

Table 2

Relativism and Idealism Scales/Taxonomy of Ethical Idealoties[1]

Relativism (Sample Items)
There are no ethical principles that are so important that they should be a part of any code of ethics.

What is ethical varies from one situation and society to another.

Idealism (Sample Items)
A person should make certain that their actions never intentionally harm another even to a small degree.

Risks to another should never be tolerated, irrespective of how small the risks may be.

	RELATIVISM	
IDEALISM	High	Low
High	**Situations** Rejects moral rules; individualistic outcome analysis of each act in each situation; relativistic.	**Absolutists** Assumes the best possible can always be achieved by following universal moral rules. advocates
Low	**Subjectives** Appraisals based on personal values and perspective rather than universal moral principals, relativistic.	**Exceptionists** Moral principals guide judgements but pragmatically open to these standards utilitarian.

[1]Adapted from: Forsyth, Donaldson R. (1980), "A Taxonomy of Ethical Idealogies," Journal of Personality and Social Psychology, 42(1), p. 176.

These categories were used to facilitate an analysis of differences across subjects. Segmenting the respondents into these ethical ideological categories permits insight into what type of salespeople would be more likely to bend ostensible rules, and how they would be likely to attempt to justify their norm distortions.

Subjects

Data were obtained from 154 junior and senior level marketing students at two major southern universities. Their ages ranged from 19 to 68 years with a mean of 22 years. The sample contained 85 (55%) males and 69 (45%) females. A student sample was used because of the difficulty in obtaining reliable responses from active salespeople about this sensitive topic. A student sample frame is also generally considered acceptable for exploratory research. The students were assured that their grades were in no way associated with this survey. Forty-four respondents (31.6%) were classified as situationists, 12 (8.6%) as exceptionists, 22 (15.8%) as subjectivists, and 61 (43.8%) as absolutists.

Analysis

In the first stage of the analysis the extent to which the excuses and justifications provided for the behavior described shared common dimensions with respect to their "neutralizing" properties was ascertained. This was achieved by subjecting the situational items to a principal components factor analysis (PCA) with orthogonal rotation. The procedure should reveal the nature of the latent dimensions that link the respective neutralization situations together in a meaningful way.

Next, the "situational contingency" of salesperson neutralization was addressed. Multiple discriminant analysis (MDA) permitted a test of differences regarding the situationist, exceptionist, subjectivist, and absolutist categories' perceptions of whether a neutralization technique could "properly" be used to absolve the sales manager from blame. Summated scales based on the items comprising the neutralization factors identified in the first stage provided the predictor variables.

Results

The PCA procedure produced four factors that each shared a common "neutralizing" dimension. The factors were labeled, respectively, as: the "denial of injury-appeal to higher loyalties," "condemning the condemners-denial of victim," "denial of victim," and a "denial of responsibility" neutralization components (see Table 3).

Table 3

Techniques of Neutralization

FACTOR NAME / Items	Factor Loading	Coefficient Alpha
DENIAL OF INJURY/APPEAL TO HIGHER LOYALTIES		.854
No one is actually hurt by this; these transactions actually improve peoples health	.757	
Under these special circumstances, the good of society is to be more highly valued over minor situations	.698	
In the long run such actions will improve the performance of organizations obtain the products	.684	
This sort of thing may be necessary to keep the company solvent, providing jobs and keeping the economy vibrant	.640	
Expensive gifts are considered as promotional items and really don't hurt anyone	.574	
CONDEMNING THE CONDEMNERS/ DENIAL OF VICTIM	.845	
S/he is only keeping pace with competitors who would be quick to condemn but who in fact do such things	.771	
Some competitors are offering their customers even more valuable items than these	.743	
Powerful competition forces manufacturers to be quite generous with their customers	.639	
The purchasing agents actually expect such treatment under the conditions prevailing in this industry	.501	
DENIAL OF VICTIM	.720	
There is no reason to single out the sales manager for blame under circumstances where the buyer actively sought such treatment	.775	
Augmenting one's customer base is rightful retaliation toward aggressive competition	.602	
DENIAL OF RESPONSIBILITY		.581
This is the type of behavior which results from the lack of ethics being taught today in schools	.908	
The sales manager is only going along with an industry norm which s/he had no part in creating	.589	

The first factor indicates the denial-of-injury and appeal-to-higher-loyalty techniques were judged as equivalent with respect to their "neutralizing" qualities. This suggests that were a sales manager to attempt to assuage guilt associated with unsavory gift-giving behavior these neutralization techniques would have a comparable ability to soften the impact of the practice on his/her self-concept. The second factor indicates that the denial-of-victim and condemning-the-condemners techniques are evaluated similarly regarding their ability to reduce one's feelings of culpability. The third and fourth factors, respectively, illustrate that the denial-of-victim and denial-of-responsibility neutralization techniques manifest a common dimension regarding their capacity to negate responsibility under these circumstances.

The loadings of the denial-of-victim items split between the second and third factors. The second factor was composed of the condemning-the-condemners items and two denial-of-victim items. While unexpected, it is intuitively comfortable: if circumstances ordain that those who condemn

should in fact be condemned themselves, logic suggests these same individuals can not simultaneously exist as victims. The split loadings also appear logical when one considers the direction in which the "fault" for one's misaction is assigned. Those denial-of-victim items loading with the condemning-the-condemners statements are outer-directed; that is, any extant blame can be more easily attached to exogenous factors such as the competition or industry conditions. The denial-of-victim items that loaded independently are more inner-directed; the item-statements suggest that even though no "injured party" is presumed to exist implicit blame remains more directly attached to the sales manager.

The items that constitute the first factor appear to be characterized by efforts to diminish the perceived wrongness of the unethical act. This factor represents an ethical *justification*. The statements contained within the second, third and fourth factors capture variations on an attempt to minimize responsibility and the perception that similar ethical misconduct would be repeated in the future. These factors represent attempts to construct *excuses* for the behavior.

Developing neutralization-based factors that share a common dimension is useful. However, the procedure fails to address the likelihood that the neutralization devices would be invoked by a salespeople when confronting circumstances that produce an ethical dilemma. MDA allowed investigation of whether differences exist across the groups regarding their agreement that the neutralization components could reduce self-blame associated with ethical misconduct.

The plausibility of perceptual differences among the situationist, exceptionist, subjectivist and absolutist subjects was supported. Differences were observed across the four categories regarding their perception of the suitability of three neutralization factors (denial-of-victim, condemning-the-condemners/denial-of-victim and denial-of-injury/appeal-to-higher-loyalties). No differences were observed across the groups with respect to the denial-of-responsibility neutralization factor or their beliefs regarding the appropriateness of the moral imperative.

The denial-of-victim and condemning-the-condemners/denial-of-victim factors contributed most to the discriminant function. The overall mean values indicate that the denial-of-responsibility component was viewed at the most acceptable rationalization by members of each ethical ideological category. With the exception of the subjectivists, denying the victim was the least favored rationalization. The mean values, discriminant loadings and significance tests associated with this analysis are shown in Table 4.

Table 4

Test of Differences Regarding
Sample's Agreement with the Use of Techniques of Neutralization
Components Across the Ethical Position Categories

Neutralization Component	Discriminant Loading	Situationist	Group Means* Exceptionist	Subjectivist	Absolutist	Univariate Significance Levels	Scheffe's Test Differing Groups
Denial of Victim	.984	3.25	3.54	4.84	3.26	.000	3 from 1, 2, &4 2 from 1 & 4
Condemning the Condemners/ Denial of Victim	.597	3.98	4.31	4.92	3.94	.009	3 from 1, 2, & 4 2 from 1 & 4
Denial of Injury/ Appeal to High Loyalties	.524	3.59	3.48	4.30	3.33	.015	3 from & 4
Moral Imperative	.335	3.93	3.50	3.47	4.00	.240	------
Denial of Responsibilities	.154	4.11	4.00	4.22	3.95	.629	------
MULTIVARIATE CHI SQUARE						.000	

Where differences are demonstrated, Scheffe's test indicates whether they exist across all 4 groups or only across 2 or three groups. The Scheffe test indicated that subjectivists were most likely to use each of the three significant neutralization techniques. Subjectivists differed from each of their ethical ideological counterparts regarding this propensity. Exceptionists were significantly more likely than situationists or absolutists to consider the denial-of-victim or condemning-the-condemners/denial-of-victim neutralization devices as an acceptable tactic. The results also revealed that situationists and absolutists failed to differ regarding their perceptions of the appropriateness of using any neutralization technique.

Managerial Implications

Apparently, individuals tend to use both justifications and excuses when attempting to rationalize their misconduct to themselves. It may be conjectured that the incidence of unethical sales behavior may actually increase if use of the neutralization techniques is "tacitly authorized" by virtue of their not being overtly disavowed within an organization. It appears that individuals trying to excuse unethical sales behavior would be most likely to argue that market factors

beyond their control were "forcing" them to act in this manner. This tendency was present within each ethical ideology category. An example of such market factors could include an environment where the perception exists that everyone "is doing it."

Subjectivists appeared relatively skeptical of moral principles. Exceptionists were likely to recognize occasions when exceptions to moral principles were justified. Subjects from each group shared the view that it is acceptable to break moral norms when faced with special situational circumstances. Subjectivist or exceptionist salespeople appear more likely to try to excuse their unethical actions though claims that the victim deserved whatever injury s/he/it received. Such claims implicitly constitute an argument against the existence of a victim. Denying the existence of a victim is a powerful excuse. A denial of victim specifies that, due to some special condition, those victimized are actually responsible for their fate. For example, if the selling firm is hurt by expensive gifts, the individual could maintain that the company should not assign unreasonably high sales quotas or market such mediocre products. Or, if a competitor is harmed by one's gift giving practices, subjectivist and/or exceptionist salespersons might counter that the competitor should not engage in similarly disapproved behaviors.

Subjectivists were also more likely than any other group to invoke the denial-of-injury/appeal-to-higher-loyalty justification. Individuals who possess this orientation and seek to justify unethical behavior are likely to assert that since no one is directly hurt by the activity, exorbitant expenditures on client gifts are acceptable. An appeal-to-higher-loyalties defense might involve circumstances in which the sales employee attaches greater allegiance to the values of some subgroup, such as one's family or the firm, rather than to overt societal or organizational norms. Similarly, subjectivists appear more likely to argue that such "extravagant" behavior is acceptable given their firm's desire to "move" inventory. Situationists and absolutists were each markedly less likely to engage neutralizing mechanisms. Situationists are, by definition, idealistic and likely to carefully consider the nature of the situation (e.g., the desirability of consequences, possible alternatives, and actual or tacit organizational constraints). Absolutists apparently share this idealism while also believing certain principles are so important as to be inviolable.

Subjects who possessed different ideological perspectives exhibited differing propensities toward use of the techniques. This tendency may affect the ethical decision making of individuals when they confront a given sales situation. Managers should attempt to influence the incidence of unethical sales behavior only after they begin to understand how and why sales employees behave as they do. These findings provide some initial insight into how sales people might accommodate the self-guilt while absolving the responsibility that otherwise would be associated with a decision to act unethically. The ability to neutralize the self-blame associated with unethical sales behavior likely increases the probability that similar behaviors will be repeated in the future.

Sales organization's long term interests should be served by publicly repudiating the techniques that are most likely to be used. For example, managers could allay use of the denial of injury rationalization by pointing out the identity of the party who is most directly and adversely affected by the unethical behavior. Of course, the party most likely to injured in the long run is the employing firm.

The results also suggest the denial-of-victim and condemning-the-condemners excuses should be simultaneously renounced. Removing either justification should largely negate the acceptability of the other. The selling firm could forward the logical assertion that would-be victims can never themselves be held accountable for a salesperson's ethical transgressions. The organization could stress that sales professional's decisions are by their nature autonomous, and should be executed independent of considerations of other activities. Organizations should strive to imbue within their salespeople a sense of accountability for their own actions. Such assertions would simultaneously repudiate the denial of responsibility defense.

The techniques may provide a partial explanation of how individuals determine their behaviors in sales situations that present ethical dilemmas. When a sales employee first elects to act unethically s/he may internally engage one or more neutralization devices. Utilization of these devices may eventually facilitate a successful post-decision rationalization. This post-decision rationalization allows one to self-justify actions that others may perceive as wrong. The original use of the techniques suggests the individual is, at that point, not completely desensitized to the inappropriate nature of the behavior in question. However, if their use proves effective over time and across situations, the techniques may become internalized. The justifications then truly represent neutralization devices.

The most effective way to prevent subjectivists from initially engaging neutralizing devices would be to argue that morality is actually <u>not</u> an individualistic matter (e.g., the misdeeds of a single employee can have ramifications for an entire organization). Conversely, exceptionists could be more effectively blocked from invoking neutralization devices through direct corporate arguments which state that

breaking moral norms is not an unavoidable consequence of a sales position. Naturally, these "corporate codes" must be strictly and consistently enforced. Codes that are not accompanied by enforcement will not effectively deter unethical behavior.

There is reason to believe that certain neutralization techniques could eventually be elevated by salespeople to a status where they are "summoned" prior to any unethical act. When neutralization techniques are invoked prior to decisions in sales situations involving ethical issues, their use almost certainly increases the likelihood of unethical behavior. In turn, selecting an unethical alternative should increase the probability that the individual will summon one or more techniques to justify/excuse similar actions in the future, assuming, of course, that the technique(s) were successful in the past (Vitell and Grove 1987).

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THE RELATIONSHIP BETWEEN PSYCHOLOGICAL CLIMATE AND SALES FORCE TRAINING

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Abstract

This research investigated the extent to which various levels in the proficiency of sales force training influence the components of the psychological climate within sales organizations and the extent to which the various components of psychological climate within sales organizations differ according to gender. Findings suggest salespersons, regardless of the level of training received, are most likely to perceive their organizations as *fair, cohesive, innovative* and that their sales units were not characterized by excessive *pressure.* In general, salespeople who felt their company was highly proficient in training the sales force (HPT) as opposed to salespeople who felt their company had a low proficiency in training the sales force (LPT) had higher perceptions of their organizations as being *fair, cohesive, innovative* and characterized by less *pressure.* Female LPTs seem to have a perception of being under more *pressure* than either male of female HPTs while male LPT did not differ form the HPT salespeople in their perception of *pressure.*

Introduction

One of the most valuable functional areas of a company is its sales force. According to Avlonitis and Boyle (1989), for a sales force to be effective and productive, the sales force must be carefully built and skillfully managed. The key activities in building and managing a sales force are: 1) organizing the sales force; 2) selecting sales personnel; 3) training salespeople; 4) motivating and directing the sales force; and 5) evaluation of sales force performance (Anderson, Hair and Bush 1988). As one of these key activities, sales force training is considered by some to be one of the most important. "It may be one of those summary statements, but it is true: Sales and increased sales will always go to the better trained people." This statement by Ed Flanagan, president of the Sales Executives Club of New York, sums up the prevailing attitude towards the importance of sales training (*Sales and Marketing Management* 1984). Proper sales force training is thought to provide the following benefits: 1) increasing sales productivity; 2) lowering turnover; 3) enhancing morale; 4) improved customer relations; 5) lowering selling costs; and 6) better understanding of the control mechanisms of the organization (Stanton, Buskirk and Spiro 1991). Salespeople operate in a environment which has an influence on their behavior.

It has been argued that performance of the individual within an organization is associated with the perceived *psychological climate* of the organization (Day and Bedeian 1991). Psychological climate has been defined as a set of attributes specific to a particular organization which influence member behavior (Forehand and Gilmer 1964). To date, little attention has been directed towards the relationship of psychological climate and training.

More and More women have entered the sales force since the 1980's (Kennedy and Lawton 1992; McNeilly and Goldsmith 1991). Approximately 20% of the industrial sales force is now female, and 60% of the retail sales force are women (Lagace 1988). Gender differences have been found in various job satisfaction dimensions (Larson et al. 1974) and gender differences lead men and women to interpret their surrounding conditions differently and react in different ways (McNeilly and Goldsmith 1991).

The objective of this research is to investigate the extent to which various levels in the proficiency of sales force training influence the components of the psychological climate within sales organizations and to determine if the various components of psychological climate within sales organizations differ according to gender.

Psychological Climate

Psychological climate is a multi-dimensional construct which can be conceptualized and operationalized at the individual level (Glick 1985; Koys and DeCotis 1991). Employees develop perceptions of how their organization functions based on their experiences (Schneider 1975) and their training (Hartley 1989). As a result, the psychological climate of a sales organization can be addressed through its employees' perceptions of their own experiences within the organization.

The psychological climate perceptions of employees share certain characteristics. First, perceptions of climate condense individuals' *description* of their organizational experiences rather than their affective or evaluative reaction to what has been experienced (Koys and DeCotiis 1991). While *description* can not be absolutely segregated from evaluation/affect, the difference between descriptive and evaluative/affective reactions to organizational experiences distinguishes the psychological climate construct from job satisfaction (Ashworth 1985). Second, climate perceptions are relatively stable over time (Campbell, et al. 1970). Third, climate perceptions are widely shared among members of a relevant organizational unit (Payne and Pugh 1975).

In an effort that coalesced over 80 measures derived in previous research, Koys and DeCotiis (1991) developed eight summary dimensions posited as the psychological climate of organizations. The first six dimensions were: *autonomy, cohesiveness, fairness, innovation, pressure* and *support.*

Within a sales organization, the *autonomy* dimension can be operationalized through subdimensions such as the (lack of) "closeness of the sales manager's supervision" (Joyce and Slocum 1984), "individual responsibility delegated to the salesperson" (Lawler, Hall and Oldham 1974) and "the absence of sales manager initiated structure" (Muchinsky 1976). The *cohesiveness* dimension captures "cohesiveness" (Payne and Pugh 1975), (absence of) "conflict" (James and Sells 1981), "esprit" (Jones and James 1979) and "work group cooperation" subdimensions (James and Sells 1981). The measurement domain of *fairness* addresses the "fairness and objectivity of the sales organization's reward system" (James and Sells 1981), and "egalitarianism" (Payne and Mansfield 1973). The *innovation* construct consists of "sales organizational flexibility" (Steers 1977), and "challenge and risk" (Gavin and Howe 1975) dimensions. *Pressure* can be conceptualized along "role overload" (Joyce and Slocum 1984), "time span orientation" (Morse and Lorch 1970), and "production emphasis" (Halpen and Crofts 1963). Table 1 provides a summary description of the individual salesperson perceptions associated with the psychological climate of sales organizations.

The final dimension of psychological climate offered by Koys and DeCotiis (1991) was *support.* However, *support* was not included in this research because it's conceptual domain was generally indistinct from the *autonomy* dimension.

The necessity to describe psychological climate in terms of multiple dimensions is evident in that organizational experiences can generally be characterized in multiple ways. For example, some salespeople may describe how they are supervised in terms of the *ethical/unethical* sales behavior their sales manager's supervisory style may foster, some may be more cognizant of the *fairness* with which their sales manager deals with them, while still others may focus on the *autonomy* their sales manager grants to them. Other examples include a psychological climate that is simultaneously characterized *as cohesive* and forthcoming with recognition. Finally, the salesperson-sales manager dyad could be described in terms of the excessive *pressure* imposed from above or management's receptivity toward employee creativity and/or flexibility in the performance of job tasks *(innovation).*

Hypothesized Relationships

Autonomy

Autonomy is a primary constituent of the psychological climate that prevails within any organization (Reisman 1986). Because of the nature of the sales role and the type of individual who generally occupies the role, salient needs of salespeople are probably satisfied through their receipt of greater autonomy. Further, the perception of having received proper training should enhance the feeling of being able to effectively operate in an autonomous climate.

H1: Salespersons with perceptions of proper training should have a higher perception of *autonomy* in the psychological climate of their organization.

Cohesiveness

The most immediate social classifications within business organizations are those present within primary work groups, i.e., the sales force itself. Consequently, patterns of cohesive group behavior may occur at the sales unit level. Patterns of cohesion can be extended to situations where proper training has successfully contributed to a psychological climate distinguished by the absence of conflict and presence of team spirit and cooperation. Breaches in sales group cohesiveness may occur when individual salespeople exhibit overly or inappropriately emotional reactions to a given event, do not like or at least respect their peers, and/or perceive a need for assistance they feel is not likely to be forthcoming.

Training programs are designed to enhance the sales persons ability to handle orders, communicate with other company employees and to assimilate salespeople into the organization (Anderson, Hair and Bush 1988) thereby enhancing the cohesiveness.

TABLE 1
SCALE DEVELOPMENT OF PSYCHOLOGICAL CLIMATE CONSTRUCTS[1]

Construct	*Sample Items*	α
Innovation	My sales manager encourages me to develop my ideas.	.83
	My sales manager likes me to try new ways of doing my job.	
	My sales manager encourages me to improve on her/his methods.	
	My sales manager "talks up" new ways of doing things.	
	My sales manager encourages me to find new ways around old problems.	
Autonomy	I make most of the decisions that affect the way my job is performed.	.80
	I determine my own work procedures.	
	I schedule my own work activities.	
	I set the performance standards for my job.	
Cohesion	In this company, people pitch in to help each other out.	.85
	People tend to get along with each other well at this company.	
	In this company, people take a personal interest in each other.	
	There is a lot of team spirit in this company.	
Pressure	This place has a relaxed working environment.[2]	.61
	In this company, too many people in my position get "burned out" by the job's demands.	
	I have too much work and too little time to do it.	
	At home, I sometimes dreaded hearing the phone ring for fear it might be someone calling about a work-related problem.	
Fairness	I can count on a fair shake from my sales manager.	.75
	The objectives my sales manager sets for the job are reasonable.	
	My sales manager does not play favorites.	
	If my sales manager terminates someone, the person probably deserved it.	

[1]Based on a seven-point, Likert-type scale ranging from (1) Strongly Disagree to (7) Strongly Agree. The midpoint (4) was labeled as a neutral point.

[2]This item was reversed scored.

H2: Salespersons with perceptions of proper training should have a higher perception of *cohesiveness* in the psychological climate of their organization.

Fairness

Perceptions of 'fairness' presuppose the presence of two forms of justice within organizational settings: procedural and outcome (Konovsky and Cropanzano 1991; Folger and Konovsky 1989). Procedural justice relates to the impartiality of the *means* used to determine the outcomes of conflicts, while outcome justice addresses the objectivity of the *ends* actually achieved. However, in contrast to Machiavelli's classic dialogue on the disparity between institutional means and ends, these two forms of justice must be present in equivalent amounts within organizations for employees to discern the presence of a "fair" psychological climate. The fairness of organizations' reward and/or corrective systems are unequivocal reflections of the organization's value and belief structures (Kerr and Slocum 1987; Williams and Sashkin 1990).

One of the objectives of sales force training is to inform the sales force of the policies of the organization and the consequences of failing to adhere to these policies (Stanton, Buskirk and Spiro 1991).

H3: Salespersons with perceptions of proper training should have a higher perception of *fairness* in the psychological climate of their organization.

Innovation

In a study of organizational climate, innovative employees experienced significantly more conflict than adaptive employees. The authors suggested this conflict resulted because their efforts at initiating creative work behaviors and responses to problems were frequently frustrated (Isaksen and Kaufmann 1990). It may be inferred from their observation that efforts aimed at facilitating an innovative" (e.g., open-minded) psychological climate should reduce the friction experienced by innovative and noninnovative salespersons alike.

Traditionally, the view of a salesperson is that of an order taker. Recently, many organizations have shifted their approach to selling from an "order taking" approach to the "problem solving approach" (Assael 1992). The problem solving approach necessitates the sales person develop a proper impression of the customer and his needs and then formulate a sales strategy accordingly. The problem solving approach to selling inherently requires the salesperson to be innovative.

H4: Salespersons with perceptions of proper training should have a higher perception of *innovation* in the psychological climate of their organization.

Pressure

Externally imposed constraints limit a person's opportunity for self-determination (Amabile, DeLong and Lepper 1976). When experiencing excessive pressure, individuals are less likely to initiate their own behavior, and the sense of choice is replaced by a sense of being coerced (DeCharms 1968). Salespeople are more likely to feel like "pawns" to the desired outcomes of their organizations if they are excessively pressured, even when they support the outcomes being pursued.

Many sales force training programs include modules which focus on time management (Stanton, Buskirk and Spiro 1991). Proper training in the area of time use and time management should help salespeople perceive less pressure.

H5: Salespersons with perceptions of proper training should have a lower perception of *pressure* in the psychological climate of their organization.

Method

Sample

A stratified random sample was used. A sample frame of 1500 organizations likely to have salespeople was obtained from telephone directories in two Primary Metropolitan Statistical Areas (PMSAs) located in the Southern U.S. Then, a systematic random sampling procedure was used to identify 460 sales organizations. One salesperson was chosen randomly from each organization with cooperation of the sales manager. Each salesperson was personally given a self-administered instrument which was to be returned by mail to the interviewer. Of the 460 instruments distributed, 223 were returned and 208 were deemed suitable for analysis. The large number of randomly chosen organizations used allows the ability to generalize the findings. Selected demographic characteristics of those sampled are provided in Table 2.

Operationalization of Measures

Psychological Climate Construct

Twenty-eight Likert-like statements were used to measure the psychological climate within the sales organizations. The salespeople were asked to evaluate the extent to which each statement appropriately characterized their organizations and/or their relationship with their sales

TABLE 2
SAMPLE DEMOGRAPHICS

Characteristic	*Scaling Dimension*	*Total*	*%*
Gender	Male	117	54.7%
	Female	97	45.3%
Marital Status	Single	82	38.3%
	Married	100	46.8%
	Separated	1	.4%
	Divorced	27	12.7%
	Widowed	4	1.8%
Age	Less than 30	90	42.0%
	31 to 40	72	33.6%
	41 to 50	40	18.5%
	More than 50	14	6.4%
Form of Compensation	Straight Salary	47	22.3%
	Straight Commission	36	17.1%
	Salary & Commission	83	39.4%
	Salary & Bonus	31	14.6%
	Other	14	6.6%

managers. The salespeople responded along a seven-point scale ranging from (1) Strongly Disagree to (7) Strongly Agree.

Each of the psychological climate item subsets were subjected to a confirmatory factor analysis. The factors extracted from this procedure could be appropriately labeled as *cohesiveness, autonomy, innovation, fairness, and pressure.* With one exception, only those items loading greater than .60 were included in the final solution. Two items were dropped because of their low loadings. Coefficient alpha (Cronbach 1951) ranged from .840 to .702, providing support for the internal consistency of the psychological climate factors.

Training Proficiency

The construct of training proficiency was based on a self assessed single item measure. The item was stated in the following manner, "How well does the company you represent conduct sales force training?" Salespeople responded along a seven-point scale ranging from (1) Very Poorly to (7) Very Well.

Four classifications were developed based upon gender and the measure of training proficiency (1. males who felt their company was highly proficient in training the sales force; 2. females who felt their company was highly proficient in training the sales force; 3. males who felt their company had a low proficiency in training the sales force; 4. females who felt their company had a low proficiency in training the sales force).

Analysis Procedure

The hypotheses were tested using the MANOVA procedure. MANOVA is appropriate where there are multiple intervally scaled criterion variables (the psychological climate measures) and one categorical predictor variable (gender and training classifications). Discriminant analysis was also used. Darden and Perreault (1975) demonstrated the value of using discriminant

TABLE 3
DISCRIMINANT ANALYSIS RESULTS

Variable[1]	*Rotated Canonical Loadings*		*Univariate F-Test*	*Group Means*[2]				*Scheffe Test*
	I	*II*		*A*[3]	*B*[4]	*C*[5]	*D*[6]	
INNOVATION	.8680	.4965	.0000	5.5418	5.5016	4.6389	4.2706	A,B dif. C,D
FAIRNESS	.6285	.0355	.0000	5.8814	5.8452	5.0694	4.8382	A,B dif. C,D
COHESION	.4474	.0252	.0000	5.6456	5.6905	4.8958	4.7868	A,B dif. C,D
AUTONOMY	.3052	.1359	.1090	5.4114	5.2381	5.0000	4.8676	N.A.
PRESSURE	-.5938	.8046	.0001	2.7437	2.8532	3.4097	3.7353	D dif A,B

Multivariate Significance	*Functions*		*Classification %*	
	I	*II*	*Analysis*	*Holdout*
F Significance	.0000	.9261	41.28%	35.24%
% Variance Explained	99.75	.25	Max. Chance Criteria:	28.17%

analysis in conjunction with MANOVA to determine the direction and intensity of any significant relationships. While the MANOVA tests for significant departure from a null hypothesis of no differences in the salesperson's

[1]responses were based on a seven-point, Likert-type scale ranging from (1) Strongly Disagree to (7) Strongly Agree. The median (4) was a point of neutrality.

[2]The "training proficiency" perception was measured via "How well does the company you represent conduct salesforce training?" It was based on a seven-point, Likert-type scale ranging from (1) Very Poorly to (7) Very Well.

[3]Group A represents those male respondents who felt that the company was highly proficient in training the salesforce.

[4]Group B represents those female respondents who felt that the company was highly proficient in training the salesforce.

[5]Group C represents those male respondents who felt that the company had low proficiency in salesforce training.

[6]Group D represents those female respondents who felt that the company had low proficiency in salesforce training.

perception of their organization's psychological climate, discriminant analysis determines the weights of the combination of criterion variables that optimize departure from the null. Examining the contribution of each psychological climate construct to the discriminant function facilitates interpretation of any differences in the perception of the psychological climate constructs between the salespeople who perceive their company as having a highly proficient training program and those who perceive their company as having a low proficient training program. Gender differences will also be interpreted by the examination of this function.

Results

The MANOVA analysis indicated an overall significant difference (Wilks p=.000) between the 4 classifications of gender and training proficiency based upon the 5 components of psychological climate. Four of the dimensions of the psychological climate, innovation, fairness, cohesion and pressure, were found to be significant while autonomy was found to be insignificant. Scheffe tests were then performed to determine where the actual differences exist.

The psychological climate perceptions exerting the most influence on overall group differences were, innovation (.868) followed by fairness (.629), pressure (-.594), and cohesion (.474). A summary of the findings are presented in Table 3.

The Discriminant analysis had an F significance of .000 with 99.75% of the variance explained. A Split-half approach was employed and the analysis was not found to be sample specific (analysis hit ratio=41.28% / holdout hit ratio=35.24%). The Maximum chance criteria, which provides an estimate of prediction accuracy by chance, was 28.17%. Thus, the discriminant function with a hit ration of 41.28% was able to predict group membership better than mere chance.

Hypotheses 2 through 5 were supported while hypothesis 1 was not supported. It may be stated that salespersons with a perception of proficient training tend to have a higher perception of innovation, fairness, and cohesion and a lower perception of pressure within the psychological climate of their organization.

Training Proficiency

Significant differences were found between salespeople who felt that the company they represented was highly proficient in training the sales force (HPT) and salespeople who felt that the company they represent had low proficiency in training the sales force (LPT). On each of these dimensions of the psychological climate, innovation (p=.000), the fairness (p=.000) and the cohesion (p=.000), HPT salespeople, whether male or female, were found to have higher scores than LPT salespeople. No difference was found between HPT and LPT on the dimension of autonomy. However, the mean values indicated that, regardless of the proficiency of training received, this sample was most likely to perceive their organizations were *fair, cohesive* and *innovative.* Conversely, those sampled were not likely to perceive that their sales units were characterized by excessive *pressure.*

Gender Differences

Male and female salespeople were not found to differ on innovation, fairness, cohesion or autonomy. However, female LPT salespeople differed in their perception of the *pressure* dimension with male and female HPT salespeople and LPT salesmen in that female LPT were experiencing more pressure.

Discussion

While it is obvious the buyer-seller dyad should continue to hold primary interest to selling organizations, Lagace (1991) illustrated the potential influence of intraorganizational relationships on sales organization's long-term success. The training proficiency perception of the sales force is associated with their perceptions of the psychological climate within the organization.

This research suggest salespersons, regardless of the level of training received, are most likely to perceive their organizations as *fair, cohesive, innovative* and that their sales units were not characterized by excessive *pressure.* In general, HPT salespeople as opposed to LPT salespeople have higher perceptions of their organizations being *fair, cohesive, innovative* and characterized by less *pressure.* Female LPT seem to have a perception of being under more *pressure* than either male of female HPT while male LPT did not differ form the HPT salespeople.

Training programs fulfill a necessary function in that they provide new salespeople with knowledge of the organization, its policies, and product specific knowledge that will help the salesperson to sell more effectively. This knowledge effects their perception of the psychological climate

in a positive manner leading to higher morale. This higher perception of the psychological climate and higher morale will ultimately result in lower personnel turnover and a higher level of sales.

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ANTECEDENTS, OUTCOMES, AND PERSONAL FACTORS USED BY SALES MANAGERS TO ASSESS THE PERFORMANCE OF SALESPEOPLE

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INTRODUCTION

How do sales managers assess the performance of salespeople? It appears from the considerable amount of research that has been done in this area that there is no clear-cut answer to this question. Much empirical research aimed at identifying explanatory variables related to the performance of salespeople has been done over the past 75 years. The cumulative results of all this research indicate that no single factor adequately explains the variations in selling effectiveness from salesperson to salesperson (Szymanski, 1988). It is therefore necessary to approach the question from the point of view of attempting to identify the key factors most likely to influence selling effectiveness and hence sales force productivity.

The need to address this issue is hardly open to dispute. A report which analyzed the productivity results in 19 key industries over the period 1977–1987 found that the average real compound annual growth rate was -0.9% although there were some significant variations from industry to industry (O'Connell, 1988). Selling costs were reported to have increased almost twice as fast as average sales volume per salesperson.

LITERATURE REVIEW

There can be little doubt that the topic of sales force productivity has aroused the interest of a very significant number of researchers. In the first ten volumes of *The Journal of Personal Selling and Sales Management,* for example, by far the greatest number of articles, 33 or 19.6% of the total, related to one or other aspect of this topic. (Source: Journal of Personal Selling and Sales Management, Vol. X #4, Fall 1990, pp. 91–95).

An article of major significance at the time was that of Jackson, Keith and Schlacter (1983), which studied the current practices in evaluation of selling performance. Their background literature survey identified eight conceptual and empirical studies which sought to establish methodologies for effectively evaluating the sales force. That of Behrman and Perreault (1982) presented a self-report performance scale developed for use in industrial sales jobs. Cocanougher and Ivancevich (1978) developed a procedure for developing a "BARS" (behaviorally anchored rating scale). Management by objectives (MBO) was advocated by Jackson and Aldag (1974). A model evaluating sales territory performance in terms of total unit sales was developed by Cravens, Woodruff and Stamper (1972). A method of analysis with which sales managers can compare a variety of dimensions of sales performance both within and between sales groups was presented by Cotham and Cravens (1969).

Some of the studies Jackson, Keith, and Schlacter (1983) analyzed included evaluation of the sales force as part of the broader issue of sales management or marketing practices. One such study was that of Dubinsky and Barry (1982) which examined tools and practices used by chief sales executives in industrial companies. A survey of industrial manufacturers by Jackson, Ostrom and Evans (1982) to ascertain measures used to evaluate control segment performance found that, with respect to the evaluation of salespeople, sales volume was the most frequently cited performance criterion. The use of MBO among sales managers of manufacturing, wholesaling, retailing and service firms was explored by Jackson and Schlacter (1980) who found that the most frequently used performance criteria were sales volume and qualitative factors such as attitude, product knowledge and selling skills. Only one prior study was found, that of Darden and French (1970), which focussed specifically on the sales force evaluation practices of sales managers. The finding of this research was that they did not discover a universal set of evaluation criteria which were weighted similarly by the sales managers polled.

Among the more important observations and conclusions resulting from Jackson, Keith and Schlacter's (1983: 50) research were that performance appraisal systems using only output factors (such as sales volume) may be misleading and that: "Sales managers should create performance bases to reflect the entire range of a salesperson's responsibilities." Furthermore, they emphasized that sales managers should identify all the activities inherent in a sales job and develop more quantifiable bases for evaluation of sales performance and place less emphasis on subjective, qualitative evaluation bases.

The use of time by salespeople and the effect this has on performance was studied by Weeks and Kahle (1990). They point out that salespeople have a number of varied responsibilities, one researcher having identified 121 sales activities, based on responses from nearly 1,400 salespeople employed by more than 50 industrial firms (Moncrief, 1986). Quoting Henry (1975) who maintains that three factors contribute to selling success: number of sales calls;

quality of sales calls; and allocation of sales effort, they suggest that since the first and third of these three factors relate to time allocation, greater allocation of effort will result in greater selling success.

Referring to the research of Churchill et al., (1985), which is also reviewed here, Anderson and Oliver (1987) pointed out that historically, outcomes have been emphasized mainly because of the ready availability of simple equitable measures of output such as sales volume. The main advantage of the outcome-based control system is that it provides a compelling individual motivation in that nonproducers receive no compensation. The main disadvantage of this system is the inherent lack of managerial direction over selling activities. Walker, Churchill and Ford's (1977) 'position paper' sought to emphasize the inadequacy of (then) current knowledge of the determinants of motivation and performance in industrial selling. They did not conduct any empirical research, but offered a conceptual model which hypothesized that a salesperson's job performance is a function of three basic factors: level of motivation; sales aptitude or ability; and perceptions about role performance. The model suggested that each of these three determinants of performance is influenced by a variety of antecedent variables, the most important of which were personal, organizational and environmental. Their model was used to generate a set of hypotheses specifically addressing questions relating to sales motivation and performance with which to stimulate future research in the sales management field. This present study responds to that challenge.

By far the most comprehensive study of the determinants of salesperson performance was that carried out by Churchill et al (1985) in which they used meta-analysis techniques to investigate the evidence that had been gathered up to that point on this subject. The results of their analysis revealed that the average *r* across the 1,653 correlations is 0.188 and, on average, less than 4% of the variation in salesperson performance is associated with a single predictor of that performance. This supports the notion that models of the determinants of salesperson performance must incorporate multiple causes. In sum, they concluded that the ability of the individual determinants to predict performance seems rather unimpressive. The highest average correlations were produced by the role perception, skill level and motivation measures, but they only accounted for 3% to 9% of the variation in performance with the results unadjusted for measurement error. Simply stated: "There is no one summary measure of sales organization effectiveness." (Ingram & LaForge, 1989: 608). Sales organizations differ considerably from one to another in terms of their overall goals, objectives and specific strategies, therefore multiple factors must be assessed.

SALES FORCE PERFORMANCE FACTORS

A study of the current sales management texts and published articles reveals that:

> "Most sales organizations employ combinations of input and output criteria that are evaluated by quantitative and qualitative measures. However, emphasis seems to be placed on outputs, with evaluations of sales volume results the most popular." (Ingram & LaForge, 1992:543)

The most frequently mentioned antecedents (inputs) and outcomes were found to be:

Antecedents (inputs):

- Time planning (selling time vs. non-selling time)
- Sales call planning (preparation; routing and scheduling)
- Number of sales calls made per day
- Prospecting activities
- Quality of sales presentations
- Sales closing
- Number of demonstrations conducted
- Number of service calls (i.e., follow-up calls) made

Outcomes:

- Achievement of sales volume targets (in $ and units)
- Achievement of gross profit targets
- Achievement of market share targets
- Ratio of selling costs to sales revenue
- Number of sales calls per order ratio
- Number of orders obtained daily
- Customer satisfaction level (e.g., repeat business)
- Number of new customers obtained
- Number of customers lost
- Number of accounts with overdue payment

The most frequently mentioned personal factors were:

- Analytical and decision making skills
- Personal motivation level
- Attitude
- Planning ability
- Communication skills (oral and written)
- Product knowledge
- Competitive knowledge
- Report preparation and submission
- Creativity
- Resourcefulness
- Empathy
- Self-improvement effort level
- Initiative
- Selling skills
- Judgement
- "Team spirit"

· Perseverance
· Time management ability
· Personal appearance and manner
· Willingness to accept responsibility

THE STUDY

Objectives

Considering the importance of the topic, the following specific research objectives were established for this study:

- To determine which of the identified antecedents (inputs) and outcomes are considered most important by the sales managers polled.
- To determine whether or not there was any significant difference in ranking of the various antecedents (inputs) and outcomes by the sales managers polled.
- To determine the frequency of use of the identified personal factors by the sales managers polled.

The study was conducted as part of a semester project by students enrolled in the Sales Management course at a prominent university in California. To provide for comparison, the study was repeated in two consecutive semesters, Fall and Spring. In each semester, the students were instructed to locate a specified number of sales managers, approximately half of whom were in distribution firms, and the other half in manufacturing firms.

Samples

The composition and size of the four samples selected was:

· Fall, Distributors (FD)	85
· Spring, Distributors (SD)	64
· Fall, Manufacturers (FM)	81
· Spring, Manufacturers (SM)	54

Research instrument

A questionnaire was developed which showed the eight antecedents (inputs) listed earlier, plus two optional lines, and the ten outcomes listed earlier, plus two optional lines. The questionnaire also listed the twenty personal factors listed earlier. The questionnaires were administered personally by the students to the selected sales managers. Respondents were asked to **RANK** at least five antecedents (inputs) and at least five outcomes in order of importance to them, where 1 = Most Important; 2 = Second most important, and so on. It was stressed that these were **RANKINGS**, not scores, particularly since several respondents protested that many of the factors were of equal importance. Respondents were also asked to **CHECK** those personal factors they personally took into consideration when assessing the performance of their salespeople.

Data processing

The returned questionnaires were edited, frequencies for each of the antecedents (inputs) and outcomes were determined, and the Kruskal-Wallis one-way analysis of variance was calculated for each factor between the four groups. Frequencies for each of the personal factors chosen were also determined.

RESEARCH RESULTS

The results from the statistical analysis of the data is given in the tables below.

Table 1
ANTECEDENTS CONSIDERED MOST IMPORTANT

FACTOR	Signif.	FD		FM		SD		SM	
		Rank	% freq.	Rank	% freq.	Rank	% freq.	Rank	% freq.
Sales closing	0.0619	3	21.2	1	24.7	1	25.0	2	25.9
Sales call planning	0.4645	2	22.4	4	19.8	3	21.9	4	22.2
Quality of sales present'n	0.3332	3	21.2	2	22.2	4	18.8	1	27.8
Time planning	0.0875	1	23.5	3	21.0	5	17.2	4	22.2
Prospecting activities	0.3372	5	15.3	5	17.3	1	25.0	3	24.1

Table 2
OUTCOMES CONSIDERED MOST IMPORTANT

FACTOR	Signif.	FD		FM		SD		SM	
		Rank	% freq.	Rank	% freq.	Rank	% freq	Rank	% freq.
Achieve sales volume	0.1411	1	30.6	1	33.3	1	46.9	1	42.6
Customer satis-faction	0.9423	2	29.4	1	33.3	2	23.4	2	25.9
# of new custom-ers	0.6449	3	20.0	4	19.8	3	21.9	2	25.9
Achieve gross profit	0.6623	4	17.6	3	28.9	4	20.3	4	16.7
Achieve market share	0.7244	4	17.6	5	14.8	5	17.2	5	14.8

It will be noted that there were several ties, and that none of the differences are significant in both Tables. In each of the two tables above, the factors with the highest ranking and the corresponding frequencies of the ranking are shown. The importance of each of the five antecedents (inputs) and outcomes identified in this study is supported by many other researchers. A brief review of some of the prior research follows.

ANTECEDENTS

· *Sales closing*

Sales closing skill is generally regarded as a qualitative input factor in the sales management texts, for example Anderson, Hair and Bush (1988: 519) and Stanton, Buskirk and Spiro (1991: 597), and was found by Jackson, Keith and Schlacter (1983) to be used by 85% of the respondents in their survey as a base for performance evaluation.

· ***Sales call planning***

Sales call planning is not only advocated in the sales management texts, for example Stanton, Buskirk and Spiro (1991: 597), but a study by Jackson, Keith and Schlacter (1983) found that 78% of firms surveyed used this factor as a basis for performance evaluation. A study by Johnson, Hair and Boles (1989) to establish why salespeople fail found that poor planning and organization are two of the most important 'failure' factors.

· ***Quality of sales presentations***

The sales management texts generally regard this as a key quantitative measure, for example Anderson, Hair and Bush (1988: 519), in which case the *number* of sales presentations made would be the critical factor. Quite clearly, the *quality* of sales presentations is equally important and some sales management texts regard this as a qualitative input factor (Stanton, Buskirk & Spiro, 1991: 597).

· ***Time planning***

Time planning is strongly advocated in the sales management texts, for example Churchill, Ford and Walker (1990), and is supported by the Jackson, Keith and Schlacter (1983) study which found that 73% of the firms surveyed used this factor as a basis for performance evaluation. In their study of salespeople's use of time and their performance, Weeks and Kahle (1990) concluded that time allocation is very instrumental in determining performance and should be given careful attention by managers.

· ***Prospecting activities***

While many sales management texts suggest measuring the *results* of prospecting in terms of the number of new accounts obtained, for example Anderson, Hair and Bush (1988: 519), it is submitted that the *activity* of prospecting is quite clearly the necessary precursor to doing business with the prospect. For this reason prospecting is regarded as a very necessary *input* factor. Jackson, Keith and Schlacter's (1983) study indicated that 71% of respondents used this factor as a basis for performance evaluation.

OUTCOMES

· ***Achievement of sales volume targets***

Dubinsky and Barry (1982) found that the most frequently used measure of salesperson performance was sales volume, with 72% of large firms and 66% of small firms polled using this measure 'extensively.' In their study, Jackson, Ostrom and Evans (1982) also discovered that the most frequently used salesperson performance measure was sales volume with 86.6% of respondents reporting its use. In the Jackson, Keith and Schlacter (1983) study, they reported that 81% of the respondents used sales volume as an output measure. Patton and King (1985) found that sales volume was the most important attribute to their respondents in making overall evaluations. The Anderson and Oliver (1987) study also confirmed that sales volume was the single most commonly used performance index in published research reports.

· ***Customer satisfaction level***

There is general consensus in the sales management texts that customer satisfaction is a desirable evaluation measure for salespeople (Anderson, Hair & Bush, 1988: 519; Churchill, Ford & Walker, 1990: 733; Futrell, 1991: 549; Stanton, Buskirk & Spiro, 1991: 597). The research study of Jackson, Keith and Schlacter (1983) reported 50% of respondents using this as a qualitative measure. This was corroborated by the investigation of Darden and French (1970) who found that this was one of the evaluation criteria used by sales managers.

· ***Number of new customers obtained***

Although mentioned in the literature, the number of new customers obtained does not enjoy the same level of prominence as some of the other outcomes. It was thus pleasing to see how many of the respondents in this study ranked this factor so highly. Perhaps it is a reflection of the new reality of the marketplace, and a recognition of how important new customers are to a firm. No matter how hard a company (or a salesperson) works at keeping its existing customers, the fact is that, over time, some of them will be lost. It is thus imperative to replace the lost customers with new ones.

· ***Achievement of gross profit targets***

Gross margin or gross profit is widely advocated in the sales management texts as a quantitative output evaluation measure (Anderson, Hair & Bush, 1988: 519; Futrell, 1991: 548; Stanton, Buskirk & Spiro, 1991: 596). Yet in the Jackson, Keith and Schlacter (1983) study, only 26% of respondents used net profit as an output measure and even less, only 14%, used gross profit as a measure. The Dubinsky and Barry (1982) study reported 40% of large firms but only 19% of small firms using profit as an evaluation measure. (They did not state whether this was gross or net profit). In their study, Jackson, Ostrom and Evans (1982) found that 32.1% of respondents used contribution to profit (which was defined as sales less direct costs) as an evaluation measure of salespeople. Despite the relatively modest use of profitability measures by practitioners, it is argued that this is a critical factor on which sales force productivity should be evaluated.

Achievement of market share targets

Achievement of market share targets is widely advocated in the sales management texts (Abratt, van der Westhuizen & Blem, 1989: 124; Anderson, Hair & Bush, 1988: 518;

Futrell, 1991: 548). The findings of this study support these recommendations.

PERSONAL FACTORS

The findings relating to the personal factors used by sales managers to assess the performance of their salespeople are summarized in Table 3 below.

Although generally regarded as subjective in nature, personal factors are also taken into consideration by sales managers when assessing the performance of their salespeople. While there was somewhat less consensus between the four groups of sales managers polled in this study in terms of the personal factors they used (as compared to the antecedents and outcomes), the results are nevertheless useful. Perhaps the most surprising finding of the study is that ***empathy*** was ranked absolutely **last** by all four groups, with less than one third of the sales managers polled saying they consider it when assessing the performance of their salespeople. It is generally accepted in the literature that salespeople should possess empathy to be successful (e.g., Comer & Dubinsky, 1985; Gaedeke & Tootelian, 1989; Greenberg & Greenberg, 1990; Stanton, Buskirk & Spiro, 1991). If this is the case, it seems rather surprising that so few of the sales managers polled in this study consider their salespeoples' empathy level when assessing their performance. This warrants further study, and researchers should be encouraged to further investigate this area.

SUMMARY AND CONCLUSIONS

In their seminal work in this area, Churchill et al (1985) summarized their comments by pointing out that determining the appropriate measure of performance in a given situation is a complex issue. But simply because it is complex is insufficient reason for sales managers to abdicate from their responsibility to their firms and their salespeople to develop an objective, fair and operationally sound measurement instrument with which to discharge their obligations. And in order to apply such an instrument, it is essential to know which antecedents (inputs), outcomes, and personal factors are the most important. A phrase which sums up the whole issue of measuring productivity was restated recently as follows: "What gets measured gets attention, particularly when rewards are tied to the measures." (Eccles, 1991: 131). When addressing the performance of the sales force specifically, it is imperative to know precisely *what* to measure.

This study has determined the five most important ***antecedents (inputs)*** and ***outcomes*** used by a number of sales managers in distribution and manufacturing firms. There was no significant difference between the four groups of respondents in terms of their ranking of each of the ten factors they chose. The study also established the frequency of use of the main personal factors used by the sales managers polled when assessing the performance of their salespeople. Surprisingly, empathy was found to be the personal factor considered least relevant by the respondents in this research study. Sales managers seeking guidance in setting up sales force productivity measurement programs, for example, could use the results of this study as confirmation of their own perceptions of the relative importance of the various antecedents (inputs), outcomes, and personal factors.

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Table 3
PERSONAL FACTORS CONSIDERED BY SALES MANAGERS TO ASSESS SALESPERSON PERFORMANCE

PERSONAL FACTORS	Average		Fall, D		Spring, D		Fall, M		Spring, M	
	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%
Communication skills (oral and written)	1	89.6	2	90.6	1	92.2	2	79.0	1	96.3
Attitude	2	83.5	1	96.5	3	81.3	3	76.5	5	79.6
Selling skills	3	83.4	3	85.9	2	85.9	4	72.8	3	88.9
Product knowledge	4	83.2	4	83.5	6	73.4	1	81.5	2	94.4
Personal motivation level	5	71.0	4	83.5	4	78.1	6	59.3	15	63.0
Personal appearance and manner	6	70.9	4	83.5	8	67.2	5	60.5	9	72.2
Initiative	6	70.9	10	72.9	5	75.0	8	54.3	4	81.5
Competitive knowledge	8	69.1	8	74.1	7	71.9	7	58.0	9	72.2
Willingness to accept responsibility	9	67.9	7	82.4	11	60.9	8	54.3	6	74.1
Perseverance	10	65.2	10	72.9	9	65.6	13	48.1	6	74.1
Judgement	11	62.6	13	71.8	13	59.4	10	50.6	11	68.5
Planning ability	12	60.9	10	72.9	15	51.6	10	50.6	11	68.5
Time management ability	13	60.6	15	65.9	10	64.1	12	49.4	15	63.0
"Team spirit"	14	58.9	13	71.8	13	59.4	16	39.5	14	64.8
Analytical and decision making skills	15	58.7	18	57.6	11	60.9	14	42.0	6	74.1
Resourcefulness	16	53.6	15	65.9	18	42.2	16	39.5	13	66.7
Creativity	17	52.5	15	65.9	17	48.4	14	42.0	17	53.7
Self-improvement effort level	18	52.0	9	74.1	16	50.0	18	35.8	18	48.1
Report preparation and submission	19	35.7	19	43.5	19	32.8	19	29.6	19	37.0
Empathy	20	32.6	20	42.4	20	31.3	20	19.8	19	37.0

A COMPARISON OF PERCEIVED TRUST IN THE BUYER-SELLER DYAD FOR GOODS AND SERVICES

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Introduction

The question of how salesperson attributes affect selling success is an important issue in sales management research. The research described here investigates a model of salesperson attributes and their relationship to buyer perceptions of salesperson trustworthiness. Further, this model is compared across two different sales contexts, that of consumer goods and consumer services.

Salesperson Attributes and Buyer Trust

A significant portion of the resources many companies devote to sales training are devoted to development of appropriate salesperson attributes. As demonstrated in Schurr and Ozanne (1985), development of trust influences the attitudes of consumers and affects their willingness to discuss their needs with the salesperson. Further support for salesperson attributes as an influence on buyer trust can be found in a recently proposed model of buyer trust which includes the personal attributes of the salesperson as important factors in building trust with the buyer (Swan and Nolan 1985). Based on previous literature, four salesperson attributes were selected for inclusion in the model; 1) salesperson patience with the buyer, 2) product knowledge, 3) problem solving ability and 4) salesperson dishonesty.

The Effects of Selling Context

Previous research has provided evidence that the marketing of services varies substantially from the marketing of goods along four major dimensions, 1) intangibility, 2) inseparability of production and consumption, 3) heterogeneity of output and 4) perishability. The research described here investigated the impact of selling context on the model.

Scope of the Research

To investigate the factors that influence buyer perceptions of trust, a research project was undertaken to develop and test a model of salesperson attributes and their relationships to buyer trust in each of the two contexts. To do this, a questionnaire was administered to 550 members of the Arkansas Household Research Panel. To test possible relationships, a model was constructed and analyzed though the use of a system of simultaneous equations, analyzed under the LISREL 7 software.

Results

Salesperson patience with the buyer, product knowledge, and customer problem solving ability were found to have a positive impact on perceived trust in the seller in both models. However, the predicted negative impact of salesperson dishonesty on perceived trust was confirmed only in the goods context, supporting the idea that selling contexts for goods and services are different. This was determined by comparison of the final goods and service models which resulted in significantly different models.

Discussion

The results of this study provide evidence that the buyer's perceptions of different salesperson attributes do impact the levels of perceived trust in the salesperson. Differences in the goods and services models provide evidence that these attributes, particularly the level of perceived dishonesty, impact goods salespeople more than services salespeople. As a result, this research supports the idea that the marketing of goods and services are different and results from the goods context may not generalize to the services context.

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YOU'RE FIRED! THE IMPACT OF PERSONAL AND SITUATIONAL CHARACTERISTICS ON THE EVALUATION OF ETHICALLY QUESTIONABLE SALES BEHAVIOR

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INTRODUCTION

Bellizzi and Hite (1989) found that sales force supervisors' reactions to unethical behavior were influenced by factors beyond the act itself, including the organizational consequences of the act and posed several questions for future research addressed in this study.

THE STUDY

Data for this exploratory study was collected by administration of an in-class questionnaire to 57 business students, utilizing modified scenarios developed by Bellizzi and Hite (1989) and the Revised Self-Monitoring Scale (Snyder 1987).

Three research propositions were tested:

(i) Scenario 1, deliberately misstating plant utilization will be judged more inappropriate than Scenario 2, which deals with potentially over-recommending a product,

(ii) The more positive the consequences, the more lenient the reaction will be to the behavior, and

(iii) High self-monitors are less critical than low self-monitors in their reaction to ethically questionable behavior.

RESULTS

Proposition One-A two way (scenario by consequences) ANOVA confirmed significant main effects for both scenarios (sig. of F=.023) and consequences (sig. of F=.006), supporting proposition one.

Proposition Two-A two way (self-monitoring by consequences) ANOVA found significant (sig. of F=.002) main effects for consequences in scenario one, but not scenario two. Including proposition one's results, two of three analyses found significant main effects for consequences in support of proposition two.

Proposition Three-Significant main effects for self-monitoring were found in the two way (self-monitoring by consequences) ANOVA for both scenario one (sig. of F=.016) and scenario two (sig. of F=.048), supporting proposition three.

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RESEARCH METHODOLOGY

FURTHER COMPARISONS OF SEMANTIC DIFFERENTIAL SCALES AND MONOPOLAR SCALES: TEST-RETEST RELIABILITIES AND ORDER EFFECTS

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Abstract

Self-concepts were measured at several points in time using semantic differential scales and monopolar scales. The subsequent analysis of test-retest correlations, using the same and different item sequences, indicates that semantic differential scales may have higher test-retest reliabilities only when identical sequences of items are used. When different item sequences are used, no difference in reliability was found between scale formats. The heightened reliability of the semantic differential scales under the identical sequence condition suggests the scale draws meaning from the item sequence (an order effect), and thus may be systematically biased.

Introduction

Several comparisons have been made over the years between semantic differential scales and monopolar scales (Vidali 1973, Hawkins, Albaum, Best 1974, Menezes and Elbert 1979, see the Appendix for examples of scale types). The results of these studies generally indicate that semantic differential scales and monopolar scales achieve convergent validity with respect to each other. As a result, most researchers continue to use the semantic differential scales (cf. Sirgy 1982, 1985), while some researchers continue to use monopolar scales to measure the same phenomena (Niedenthal, Cantor and Kihlstrom 1985, Sirgy and Danes 1982). Finding that two measures are highly correlated, however, does not tell us they are equivalent. One of these measures may reflect more measurement error than the other.

The present study re-examines the question of scale choice by comparing two measurement properties not previously contrasted: test-retest reliability and the magnitude of order effects (bias in responses related to the sequence of items used). Reliability issues are sometimes neglected because low reliability can be overcome with a larger sample size. Order effect bias is often overcome with a larger sample size and a split ballot technique or randomized order (Churchill 1991, cf. Hawkins, Albaum, Best 1974). Even though order effects are commonly considered a source of systematic error (order bias), if the researcher uses several different forms (sequences of items) of the instrument, the order bias is counterbalanced and treated as random variation. Then, if the sample size is large enough, this bias does not have a large impact on the final results. Multiple forms and large samples are not always feasible, however, and so the discovery of a scale format with higher reliability and smaller order effects would have practical, cost-savings implications. By re-examining semantic differential and monopolar scale formats on these previously unexamined dimensions this paper sheds new insight on the scale format selection decision.

Previous Research

Previous research comparing semantic differential and monopolar scales has focused on convergent validity. Several researchers have found no difference between semantic differential and monopolar scores (Vidali 1973, Hawkins, Albaum, and Best 1974, Menezes and Elbert 1979).

To date, however, no research has been done to compare the reliabilities of semantic differential scales and monopolar scales, although some research has been done to compare the reliabilities of different types of semantic differential scales (Albaum and Golden 1991, Jaffe and Nebenzahl 1984). When two measures achieve convergent validity, we have evidence that they both share variance with the same construct (Nunnally 1978). We don't know which of the measures shares more variance with the underlying construct, and which measure includes more measurement error. To help resolve the question of which is the higher quality measure, a reliability analysis is helpful.

Reliability analysis alone might be deceiving, however. If a measure contains a large amount of systematic error, the reliability may be high, but the validity low (Peter 1979). Therefore, the reliability analysis presented here is supplemented with an analysis of order effect bias, a systematic error frequently observed in repeated measurements. Previous research has found effects related to the order of objects rated on semantic differential scales (Landon 1971, Munson and Spivey 1980), but general (as opposed to more content-specific, see below) effects related to the order of the items have been small to non-existent

(Bradburn and Mason 1964, Sudman and Bradburn 1974), especially for familiar objects (Kumar and Gaeth 1991). Although Sudman and Bradburn do report response effects related to open-ended versus closed-ended formats, the effect of scale format on order effects has not yet been examined directly.

The literature on context effects is certainly closely related to the present research, but research in this paradigm tends to focus on the mechanism by which the content of one particular question may have an effect on the response to a later question, which often involves assimilation and contrast effects (e.g., Schwarz, Strack and Mai 1991). Research on response-order effects focuses more on the effect of the order of alternatives in a closed-ended format, and often studies primacy and recency effects Krosnick and Alwin 1987). In contrast, the research presented here suggests that question format is related to the strength of the effect items have on each other. In both formats studied here, the content of the items is as similar as possible, and the order of the items is the same (within comparison groups). The major difference in the instruments used is the format of the items.

The research reported here involves measurements taken with semantic differential scales and monopolar scales at different points in time, using two sequences of items in each scale format. This design allows the examination of two research questions. The first question is: How reliable are semantic differential scales relative to monopolar scales? The second question is: Do semantic differential scales lead to greater, lesser, or equal order effects than monopolar scales?

Method

A total of 130 undergraduate student subjects in four junior/senior level marketing classes participated in the study. The data were collected in class at the beginning of the class period. Each subject was surveyed four times (assigned to two conditions), with each observation separated by two weeks (Peter 1989). The sequence of scale instruments (semantic differential or monopolar, identical test-retest or alternate item order test-retest) was balanced.

Measures

Self-concept was selected as the concept to be evaluated because of the subjects' high familiarity with the concept (themselves) and its importance to consumer research (Sirgy 1981, 1985, Malhotra 1988). This high familiarity was also thought to reduce any halo effect (Cooper 1981), which might inflate item correlations. In addition, the self-concept was expected to be fairly stable over time, allowing for more powerful analysis of test-retest reliability.

The items selected for the semantic differential scales were gathered from several published and well cited marketing studies, including Malhotra (1981) and Ross (1971). A total of 26 pairs of adjectives were selected. A 7-point semantic differential format was used, as this appears to be a commonly used number of response alternatives in previous research, and is consistent with Cox's (1980) recommendations of "seven plus or minus two" (p. 420). A 7-point scale was also used with the monopolar scales, with response labels ranging from "extremely characteristic" to "extremely uncharacteristic." The monopolar items used consisted simply of the individual adjectives used on each pole of the semantic differentials. A total of 51 adjectives were thus selected. This total would have been 52, but one adjective, "liberal," was used in two semantic differential items (Orthodox/liberal, Conservative/liberal), and it was not considered necessary to repeat the item twice on the monopolar instrument. Note that the monopolar instrument was longer than the semantic differential instrument. This is a necessary consequence of creating a complete test of all the adjectives used in the semantic differential.

Two different sequences of items (forms) were generated for each scale format. In the monopolar format, the items appearing in the first half of Form 1 also appeared in the first half of Form 2, although the item sequence within the half was randomized. A similar procedure was used for the second half. This was done to allow for a separate reliability analysis on the first and second halves without being confounded by item content.

Results

The data were regarded as being intervally scaled (cf. Vidali 1973, Menezes and Elbert 1979), allowing the use of Pearson correlation coefficients as the measure of consistency across time periods.

Evaluation of Research Questions

Assuming there is some order effect, the test-retest reliability of either of the scales tested would depend on whether the reliability was measured using two instruments having identical item sequences or two instruments having different item sequences. The former approach measures stability along with absence of measurement error, while the latter captures stability, absence of measurement error, and equivalence. To thoroughly examine the first research question, the reliability comparison was done both ways:

using identical item sequences and using different item sequences. To quantify reliability, the correlation between the semantic differential scores observed first and those observed two weeks later were calculated, and similarly for the monopolar scores. When appropriate groups were combined, the usable sample size was 58 for the identical item sequence semantic differential, 60 for the different item sequence semantic differential, 53 for the identical item sequence monopolar, and 60 for the different item sequence monopolar. After a Fisher's r to z transformation, the semantic differential and monopolar reliability vectors generated for the two item sequence types were compared using a paired t-test. Each semantic differential item was compared to two monopolar items, corresponding to the two adjectives in the semantic differential.

In answer to the first research question, the findings here (see Table 1) suggest that the semantic differential scales were slightly more reliable than the monopolar scales when identical item sequences were used ($z(51) = 1.86$, $p = .062$), but that when different item sequences were used, the difference in reliability was not significant ($z(51) = .54$, $p = .590$).

TABLE 1
DESCRIPTIVE SUMMARY OF RESULTS[a]

		Average Two-Week Test-Retest Reliabilities			
		Semantic Differential	Monopolar	Difference	Significance of Difference (p-level)
(1)	Using Identical Item Sequences	.647	.590	.057	.062
(2)	Using Different Item Sequences	.557	.572	-.015	.590
(3)	Identical-Different	.090	.018	.072	.007

[a]Average correlations are shown in the table for descriptive purposes only. The p-values shown were calculated from tests with transformed correlations.

To test for the existence of order effects, test-retest reliabilities from identical item sequences were compared to test-retest reliabilities from different item sequences for each scale format. A vector of reliability differences was calculated by subtracting the normalized correlation coefficients for identical form and alternate form for each item. The reliability difference vector for the semantic differential scale was found to be significantly different from zero ($z(25) = 2.96$, $p = .002$). The difference vector for the monopolar scale was not found to be significantly different than zero ($z(50) = .50$, $p = .308$), although the direction of the difference was the same as that observed for the semantic differential scale. The magnitude of the differences in reliabilities are reflected in Table 1, line 3, in untransformed, summarized form. As shown in the Table, the average item test-retest reliability was .090 higher for the identical sequence semantic differential instruments than the different item sequence instruments. This difference was only .018 for the monopolar instruments.

To directly address the second research question, a paired t-test was used to test for the difference in the size of the order effect across the two scale formats. The results of this test suggest the loss in reliability was significantly greater for the semantic differential scale than for the monopolar scale ($z(50) = 2.46$, $p = .007$, see Table 1, line 3).

Additional Analyses

To explore the possibility that the difference in the lengths of the scales lead to differences in reliability, the reliability of the first 26 monopolar adjectives was compared to the reliability of the last 25. The difference was not found to be significant for either the identical sequence comparison or the different sequence comparison. For identical forms, the mean reliabilities for the first 26 and the last 25 were .576 and .605, respectively ($z(49) = .680$, one tailed $p = .25$). For the different forms, the mean reliabilities for the first 26 and the last 25 were .560 and .584, respectively ($z(49) = .393$, one tailed $p = .35$).

Discussion

The results presented here offer valuable insight into the proposed research questions. The semantic differential scales appear to be somewhat more reliable than monopolar scales when identical sequences of items are used, but are just as reliable when different sequences of items are used. In addition, the semantic differential format was found to be more prone to order effects. This latter finding is consistent with that of Jaffe and Nebenzahl (1984), who found that the reliability of their semantic differential scales dropped off significantly when different item sequences were used.

The effect of format may be due in part to the task the subject is implicitly asked to complete. In the semantic differential format, the subject is implicitly asked to define each word in part by a word nearby. For example,

consider the two adjective pairs "conservative/sporty" and "conservative/liberal." The meaning of the word conservative in the first pair differs slightly from its definition in the second pair. In the monopolar format, words are not as strongly implicitly defined by other words. Taking this one step further, one explanation for the findings of this study is that each word becomes not only defined by the other word in the adjective pair, but by preceding words not in the adjective pair. The subject may learn a "define the first word in part by the second" processing rule, and then extend this intra-pair rule to a similar inter-pair rule, e.g., "define each word in part by the words nearby." This offers a more complete definition of all adjectives, thus reducing the variability in the subject's understanding of the item and increasing reliability. When different sequences are used, however, the combination of adjectives used to define each item differs from one administration to the next. Thus, the operational definition on one form is different than the definition on the next; the two forms are not entirely equivalent. Measures of test-retest reliability are therefore lower, although the drop is not truly due to lower reliability, it is due to a systematic bias. The process described above might be termed "overlearning" (Steele 1972), in that the subject learns a pattern or skill and then extends the skill into inappropriate applications.

This explanation of the findings is conjectural. Further research will be necessary to test specific elements of this explanation. In addition, this research may have implications for other scale formats which prompt a particular processing rule, such as constant sum scales.

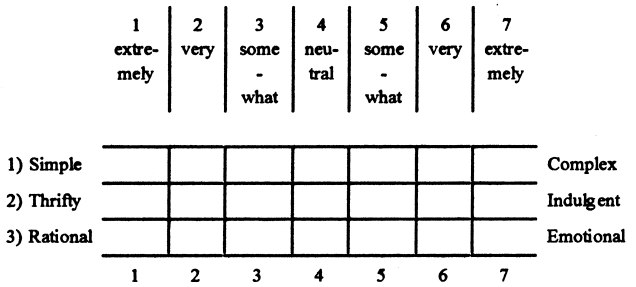
Conclusion

In finding a significant difference between the scale formats, this study demonstrates the limitation of convergent validity as the sole means of scale format comparison. The empirical findings themselves should be of interest to practitioners and academics. When identical item sequences are used in an instrument, semantic differential scales appear to offer higher reliability than monopolar scales, but at the expense of added systematic bias. Therefore, choice of format will depend on the task at hand. When multiple forms of an instrument can be used, semantic differential scales and monopolar scales appear to provide the same reliability. If, however, the researcher is constrained to using only one questionnaire form, the monopolar scale may be preferred because of its lower systematic bias. Such a constraint might arise in aggregate market studies due to budget constraints, or in studies of individual differences, where each individual is given only one form. If, instead, the researcher is mainly interested in measuring the stability of attitudes over time, or the similarity between objects (such as in self-concept/product-image congruity), with less concern for the precise definition of each item, the semantic differential format would be preferred, as long as the same sequence of items was given at each time period and for each object rated.

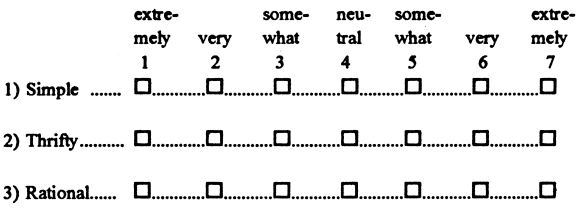
Two limitations of this study are important to note. First, although the use of student subjects is common in this field of research (Albaum and Golden 1991, Menezes and Elbert 1979, Vidali 1973), the student population may exhibit different behavior than the general population. Other subjects, perhaps less familiar with test-taking (Burnett and Dunne 1986), or who differ in cognitive sophistication (Krosnick and Alwin 1987), might exhibit different effects. Second, only one-word adjectives were used. In many studies using semantic differentials, phrases or short sentences are used (Mindak 1961, Dickson and Albaum 1977). The question of whether the same pattern of reliabilities would emerge from these types of scales is left to future research.

APPENDIX
EXAMPLES OF SCALE TYPES

Semantic Differential Scales



Monopolar Scales



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RESEARCH ON MARKETING SEMIOTICS: IN SEARCH OF THE APPROPRIATE RESEARCH METHODOLOGY

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ABSTRACT

In relatively affluent societies, consumer activity has moved beyond basic survival-orientation. These consumers seek the fulfillment of more abstract, higher-order needs through the meaning ascribed to the activity (Burns 1989). Levy suggested that "people buy products not only for what they can do, but also for what they mean" (1959, p. 118). The ascription of meaning to such domains as consumer activity falls within the realm of semiotics. Unfortunately, the inconsistency of the meaning ascribed to products and activities across individuals and over time, and the confusion over the appropriate research paradigm(s) for understanding semiotics, have hampered research efforts in this area (Levy 1971). Also, the abstract nature of the subject has hindered semiotic research (Mick 1986). By examining the objectivist and subjectivist approaches to the study of semiotics, this paper addresses the issue of determining the appropriate paradigm(s) for researching semiotics in marketing.

SEMIOTICS AND CRITICAL PLURALISM

The most reasonable and appropriate framework for research into semiotics in marketing and consumer research may be critical pluralism. Here, both objectivism and subjectivism are utilized. However, each is used independently at a different level of analysis. This is consistent with Olson who suggested that different approaches may be required at different levels of analysis (Peter, et. al. 1983).

The idea of different levels of analysis may be seen in the examination of product meaning. Hirschman (1980) described a taxonomy of product meaning in the minds of consumers, layers which vary in level of tangibility and degree of meaning commonality among members of a society. In addition to products, these levels reasonably appear to apply to other marketing entities (e.g., advertising and store design).

Two levels of analysis for research into semiotics in marketing appear to be appropriate. The first concerns the motive behind ascribing meaning to marketing entities. Semiotics is an avenue by which individuals can satisfy abstract, higher-order needs through ascribing meaning to such entities. It has been shown that higher-order needs exist, and that many of these needs can be measured in a reasonably objective manner (Snyder and Fromkin 1980; Zuckerman 1979). Thus, since the existence of many of these needs may be determined outside an individual's frame of reference, and since several of these needs are not psychologically or socially constructed phenomena, the objectivist approach would appear to be an appropriate approach at this level of analysis.

The second level of analysis concerns the actual ascription of symbolic meaning by an individual to individual marketing entities. The meaning which is ascribed to marketing entities, although at least in part motivated by a desire to fulfill higher-order needs, is not consistent across individuals nor is it constant over time (Hirschman 1981; Turner 1974). Instead, ascribed meaning is contingent upon a specific individual and/or their existing circumstances (e.g., family, religion). Barthes states "Every image is polysemous; it implies, subjacent to its signifers (the physical traces of the image), a 'floating chain of signifieds (the meaning associated with the signifier) of which the reader (or observer) can select some and ignore the rest (1985, p. 28). Thus, a subjectivist approach seems appropriate at this level of analysis.

CONCLUSION

Using both the objectivist and subjectivist paradigms (each applied at a different level of analysis and consistent with the critical pluralism perspective) should improve research into the phenomenon of semiotics in marketing. What remains unrealized, however, is the importance of utilizing the approach which can produce valid and usable results. The appropriate paradigm to utilize in a particular study is that approach which can better generate knowledge given the object level and goal of the analysis.

TASK EFFECTS ON DECOMPOSITIONAL UTILITY ESTIMATION

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ABSTRACT

This paper examines the effects of two different conjoint data collection tasks moderated by the degree of task complexity on the performance of conjoint analysis. Performance of conjoint analysis was evaluated with respect to its use as a tool for the estimation of the dimensionality of individual preferences. The literature on behavioral decision making was examined and used as a basis to develop hypotheses regarding expected performance differences between conjoint data collection tasks under conditions of increasing task complexity.

Since being introduced to the marketing literature in the early 1970's, conjoint analysis has evolved into a family of procedures and techniques (Green & Srinivasan 1978, 1990). Reibstein et al. (1988) state that one of the basic decisions that a researcher must make when conducting a conjoint study is the selection of a data collection procedure. Marketing researchers have used a number of different approaches to collect conjoint data. Some of these approaches include the full-profile, trade-off, paired-comparison approaches, as well as hybrid (combining conjoint and self-explicated data) and bridging approaches. All of these approaches have some advantages and disadvantages. However, the literature does not give clear guidance when to use these different approaches. This is due in part because there have been so few published studies that have evaluated these approaches systematically (Reibstein et al. 1988).

This research selected two conjoint data collection approaches based on the degree of difficulty of the mental tasks used by subjects in their evaluation of product attributes. The trade-off method was selected because when using it subjects only evaluate two attributes at a time, although they may have to make many such evaluations. The full-profile method of data collection was also selected because it represents the other extreme--subjects must evaluate multiple attributes at one time. It was hypothesized that these two methods would vary with respect to their sensitivity to increased numbers of attributes used in the conjoint design and produce conjoint parameter estimates of differing levels of quality. Previous research has not compared the quality of conjoint parameter estimates, other than test-retest reliability, and has not compared these approaches with large (greater than five) attributes.

The research used a 2x2 factorial experimental design to measure the effects of these two conjoint data collection tasks that require subjects to use different mental tasks, moderated by the degree of task complexity (measured by the number of product attributes evaluated, five or eight) on the estimation of part-worth's and attribute importance weights. Additionally, conjoint derived attribute importance measures were compared to a self-explicated criterion.

This study found main and interactive effects due to the type of conjoint data collection task and the degree of task complexity on the different measures of conjoint performance. The authors concluded that the researchers should consider how conjoint results are to be used when making their decision to use a particular conjoint data collection method. For example, if the primary objective of the research is to use conjoint parameter estimates as data for a market segmentation analysis these data suggest that the trade-off approach to collecting conjoint data may produce better preference estimates than the full-profile approach.

In conclusion the authors recommend that, based on these data, the selection of a conjoint data collection method should be conditioned, in part, on the objectives of the study. Additionally, the authors recommend that future research should more systematically explore the behavioral basis of how and why subjects make multiattribute evaluations. A better theoretical understanding of the linkage between different conjoint procedures and behavioral-based decision making would help researchers choose the procedure most appropriate to their objectives.

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ARROW'S GENERAL IMPOSSIBILITY THEOREM AND FIVE COLLECTIVE CHOICE RULES: PARETO, CONDORCET, PLURALITY, APPROVAL VOTING, AND BORDA

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Abstract

Collective choice rules are used to aggregate individual preferences among alternatives in order to determine group preference. Marketers frequently measure and aggregate customer preferences for product design. They have traditionally used aggregation rules like the plurality method, the Condorcet method, approval voting, the Borda method, and the utilitarian method. While marketers have extensively utilized these rules, only recently have they paid some attention to the strengths and weaknesses of these rules. Arrow has investigated the desirable properties of aggregation rules. This article presents Arrow's conditions that a desirable preference aggregation method should satisfy and his "General Impossibility Theorem." Five methods of preference aggregation are then evaluated in the light of Arrow's theorem.

Introduction

Viewer's Choice: During October 1992, Public TV Channel 21 in New York City advertised that one of the following alternative programs will be played on October 28, 1992 based on the viewer's choice. This ad was also displayed in the *Television* section of the *New York Times* circulated in New York City. The viewers were asked to use a particular telephone number and indicate which one of the four programs they would most prefer to watch on October 28, 1992. Each phone call would cost $2.00. The four alternative programs were as follows: 1. Brooklyn Bridge, 2. Rediscovering Rachmaninoff, 3. Turning Points of the Second World War, and 4. Jerry Lewis: I Am What I Am.

Individual preferences could be measured and aggregated in several different ways. If the callers indicate only their most preferred program then the plurality method may be utilized to combine individual preferences. If the callers rank order all four alternatives then the Borda method may be utilized to aggregated preferences. Similarly other aggregation methods like the Condorcet, approval voting, or the utilitarian method may also be utilized. However, it can be shown that different aggregation methods may yield different results for the same data set. Therefore, there is a need to identify the desirable properties of an appropriate aggregation method and to investigate the strengths and weaknesses of the various aggregation methods.

Arrow (1951, 1963) described four desirable characteristics of a preference aggregation method. These characteristics will be presented shortly. He proved a theorem called "General Impossibility Theorem" which states that if there are three or more alternatives and three or more individuals then each and every method of aggregation suffers from one or more of four "defects." These "defects" arise due to a failure to meet one or more of the four desirable conditions specified by Arrow.

Aggregating individual preferences is frequently encountered in designing new products or redesigning existing products where customer preferences are obtained about various product concepts in order to choose the most preferred alternative to be produced and marketed (Parker and Srinivasan 1976; Kuehn and Day 1962). Several methods of aggregating individual preferences are available (Gillett 1991; Gupta and Kohli 1990). Each method has its strengths and weaknesses. Marketers have typically used the plurality method (Gillett 1991) or the utilitarian method (Gupta and Kohli 1990) in obtaining group preferences based on individual preferences. Gillett (1991) discusses two methods of collective choice - plurality and Condorcet, while Gupta and Kohli (1990) discuss eight different methods of aggregation - plurality, Condorcet, Copeland, Approval Voting, Rawls, Borda, utilitarian, and Nash. Also see Fishburn (1973, 1986), Richelson (1981), and Moore (1980).

The purpose of this article is to extend the works of Gillett (1991) and Gupta and Kohli (1990) by discussing five aggregation methods - Pareto criterion, Condorcet criterion, plurality, approval voting, and Borda - in the light of Arrow's theorem. The significant contribution of Arrow's theorem is that it tells us that every aggregation method violates one or more of Arrow's four conditions of "reasonableness" for some data set. Next, three axioms of preference relations will be discussed before Arrow's theorem is presented.

Axioms of Preference Relations

Following Sen (1984) the following relations are defined. Let x R y represent a binary relation between x and y, e.g., "x is at least as good as y," or "x is greater than y." Relation R represents "weak preference." We can define relation of "strict preference" as x P y iff [x R y & ~(y R

x)]. The relation of "indifference" can be defined as x I y iff [x R y & y R x]. Let S be the set of all alternatives to be evaluated. Three properties that a binary relation may or may not satisfy are as follows. (1) Reflexivity: ∀ x ∈ S: x R x. (2) Completeness: ∀ x, y ∈ S: if (x ≠ y) then (x R y or y R x). (3) Transitivity: ∀ x, y, z ∈ S: if (x R y & y R z) then x R z. Following Arrow (1963) and Sen (1984) an "ordering" is reflexive, transitive, and complete.

Let X be the set of alternatives available to each individual in a group. The preference relation of the i-th individual is Ri and let there be n such individuals, i = 1, 2,..., n. The individual preference orderings represent individual rational choice behavior. Let R refer to the group preference relation. We assume that each individual has an ordering, i.e., for each i, Ri is reflexive, transitive, and complete. However, we do not demand that the group preference relation R must be an ordering since that is a very stringent requirement

A Collective Choice Rule: A collective choice rule maps a given set of individual orderings R1, R2, R3,..., Rn into a single group preference relation R = f(R1, R2, R3,..., Rn).

Next, Arrow's General Impossibility theorem is presented without proof.

Arrow's General Impossibility Theorem

Arrow's four conditions (axioms) can be described as follows (Arrow 1963; Sen 1984):

Condition U: (Unrestricted domain): The domain of the collective choice rule must include all logically possible combinations of individual orderings.

Condition P: (Weak Pareto Principle): For any pair of x and y in X, if every individual prefers x to y then so does the group.

Condition I: (Independence of Irrelevant Alternatives): The collective choice between any two alternatives x and y depends only on the individuals' orderings of x and y.

Condition D: (Non-dictatorship): There is no individual i such that whenever i prefers x to y so does the group irrespective of the preference orderings of the other individuals in the group.

General Impossibility Theorem: There is no collective choice rule satisfying conditions U, P, I, and D for three or more alternatives and three or more individuals.

Each of these conditions individually looks very reasonable. Most people would agree that these four conditions are the minimum requirements that an aggregation method should satisfy in order to be considered "reasonable." However, collectively these four conditions are impossible to be satisfied by any aggregation method. The significant finding is that the search for a "perfect" aggregation method is futile. Therefore attention must be focused on the "defects" that each aggregation method suffers from. In this regard the theory helps in identifying what type of conditions should be checked for each aggregation rule. Also, research effort should focus on identifying under what circumstances a particular aggregation method is superior to other aggregation methods.

Next, five aggregation methods - Pareto criterion, Condorcet criterion, plurality, approval voting, and Borda's method - are discussed using three data sets of individual orderings. Three alternatives x, y, and z are considered. These alternatives could be three different TV programs, or three different brands, or three different versions of a product for which individual preferences are obtained and aggregated. For simplicity, only preference relationships, >, among alternatives are considered at the individual level (the indifference relationships are ignored). These data sets are as follows.

Data Set 1: There are three individuals who order three alternatives x, y, and z as follows: two individuals' orderings are x > y > z while the third individual's ordering is y > x > z.

Data Set 2: There are three individuals who order three alternatives x, y, and z as follows. The first individual's preference ordering is x > y > z, the second individual's ordering is z > x > y, while the third individual's ordering is y > z > x.

Data Set 3: There are seven individuals who order three alternatives x, y, and z as follows: Three individuals' preferences are x > z > y, two individuals' preferences are z > y > x, while two individuals' preferences are y > z > x.

The Pareto Criterion

Pareto (1897, 1906) proposed this rule for aggregating individual preferences: If every one in the group is indifferent between two alternatives then the group should also be indifferent between the two alternatives. If at least one individual strictly prefers x to y, and every individual regards x to be at least as good as y then the group should prefer x to y (the strong Pareto principle).

Consider data set 1. Everybody prefers x to z, and everybody prefers y to z. However, two people prefer x to y while one individual prefers y to x. In this case using the Pareto criterion, the group prefers x to z and y to z. However, the group is indecisive between x and y. The Pareto criterion is a very mild rule of aggregating individual preferences. It can fail to order all alternatives from the viewpoint of the group. The group preference function is: x > z, y > z, and x ? y. Therefore, the strong Pareto principle violates condition U - specifically the completeness axiom.

If one individual prefers x to y, and another prefers y to x, then using the Pareto principle the group will be indecisive irrespective of the preferences and the number of all other individuals in the group. The extent of completeness of the Pareto criterion depends on how unanimous the individuals are. At one extreme, if all individuals have identical preference orderings then the group preference will be complete. At the other extreme, if two individuals have opposite preference orderings between every pair of alternatives then no alternatives could be compared with each other. Most situations will lie somewhere in between these two extremes and therefore at least some pair-wise comparisons can be made from the viewpoint of the group. The weak Pareto principle states that if everyone prefers x to y then the group prefers x to y. This criterion says less than the strong Pareto criterion since it ignores the case where someone prefers x to y and everyone considers x to be at least as good as y.

The Condorcet Criterion

The Condorcet criterion (Condorcet 1785) is more general and it subsumes the Pareto criterion. The Condorcet criterion compares each pair of alternatives and determines the group preference based on the majority's choice. Applying the Condorcet criterion to the data set 1, all three people prefer x to z and y to z therefore the group prefers x to z and y to z. Also, two people prefer x to y while only one individual prefers y to x, therefore the group prefers x to y. Therefore, the group preference function is x > y > z.

However, the Condorcet criterion can lead to cyclical majorities for the group preference function which violates condition U (specifically the transitivity axiom). This can be seen by applying the Condorcet criterion to the data set 2. Two individuals prefer x to y while one individual prefers y to x therefore the group prefers x to y. One individual prefers x to z while two individuals prefer z to x therefore the group prefers z to x. Also, two individuals prefer y to z while one individual prefers z to y therefore the group prefers y to z. This gives the group preference function x > y > z > x. This is a majority cycle and it violates the transitivity condition. To state it differently, the Condorcet criterion provides a "reasonable" group preference function for some data sets while it fails to provide a "reasonable" group preference function for other data sets. Therefore, the Condorcet criterion violates the axiom of completeness and hence the condition U (Arrow 1963; Plott 1976).

Plurality Method

This method is based on one-person-one-vote. Only the first-choice data is used for each individual. Consider data set 3. Three people choose x as the most preferred, two people choose z as the most preferred while two people choose y as the most preferred. Therefore, using the plurality method, the group preference function is x > y = z. However, it can be shown that the group preference function based on the plurality method may not reflect the majority's preference.

This can be seen by applying the Condorcet criterion to the data set 3. Three people prefer x to y while four people prefer y to x. Therefore the group prefers y to x. Three people prefer x to z while four people prefer z to x. Therefore the group prefers z to x. Also, two people prefer y to z while five people prefer z to y. Therefore the group prefers z to y. The group preference function can be written as z > y > x. This shows that a majority of individuals prefers z to y and y to x therefore x is in fact the least preferred alternative (the choice of a minority).

Approval Voting

Approval voting method assumes that individuals divide alternatives into two groups - acceptable and unacceptable. All acceptable alternatives are assigned a score of one while all unacceptable alternatives are assigned a score of zero. Scores are summed over all individuals to obtain the total score for each alternative. These total scores are used to derive the group preference function (Felsenthal and Maoz 1988).

One way to use the approval voting method is to assume that individuals divide alternatives into two groups on the basis of utility. Alternatives with above average utility are acceptable and are assigned a score of one while alternatives with below average utility are unacceptable and are assigned a score of zero (Merrill 1979; Bordley 1983). To illustrate we consider data set 1. This is rank order data. Assume that people consider an alternative with a rank of one or two as acceptable while an alternative with a rank of three is considered unacceptable. Therefore all alternatives with a rank of one or two are assigned a score of one while all alternatives with a rank of three are assigned a score of zero. Score are summed over all individuals. Both alternatives x and y get a total score of three while z gets a zero score. This gives the group

preference function x = y > z. Approval voting is used in choice simulators in conjoint analysis to predict market shares for different product alternatives (Gupta and Kohli 1990). It should be noted that if the acceptable alternatives are only the ones which are ranked the highest by each individual then approval voting method coincides with the plurality method which is based on first-preferences only.

It can be shown that approval voting violates condition I. Consider data set 1. Drop alternative x and recalculate scores for alternatives y and z. Both alternative y and z get a total score of three. Therefore the group preference function is y = z. This shows that if x is available then the group prefers y over z however when x is not available then the group is indifferent between y and z which violates condition I.

Borda's Method

Borda's method (Borda 1781) uses more information about individual preferences than any of the methods considered so far. Young (1974) formulates Borda's method in axiomatic terms. Borda's method assigns scores to each alternative according to the inverse rank for each alternative. The inverse ranks are summed over all individuals to obtain the group preference function. This is illustrated using data set 1. Two individuals assign an inverse rank of three to alternative x while one individual assigns an inverse rank of two to alternative x. Therefore, alternative x gets a total score of eight (2x3 + 2 = 8). Similarly, two individuals assign an inverse rank of two to y while one individual assigns an inverse rank of three to y. Therefore alternative y gets a total score of seven. All three individuals assign an inverse rank of 1 to z therefore z gets a total score of three. The group preference function is obtained by ranking alternatives according to the total score for each alternative. Therefore the group preference function is x > y > z.

It can be shown that the Borda method violates condition I. This can be illustrated by using data set 2. First, calculate the total score for each alternative. Each alternative gets a total score of six. Therefore the group preference function is x = y = z. Next, drop alternative z and recalculate the total score for x and y. Alternative x gets a total score of five while y gets a total score of four. Therefore the group preference function is x > y. This shows that if z is available then the group is indifferent among the three alternatives. However, if z is not available then the group prefers x to y which violates condition I.

Tables 1 and 2 summarize the findings of this study. Table 1 shows the group preference functions for each collective choice rule. Table 2 shows the axioms of Arrow's theorem which are violated by each aggregation method.

Conclusion

Frequently marketers need to evaluate the most preferred product among the various alternative products under consideration. For this purpose customer preferences are typically sought and aggregated. An appropriate aggregation method is required to satisfy certain minimum conditions if it is to be considered "reasonable." Arrow describes four conditions that a "reasonable" collective choice rule should satisfy. He proved that every collective choice rule violates one or more of these four conditions for some data set. Three different data sets are used here to illustrate five collective choice rules and their strengths and weaknesses.

Future researchers should investigate the strengths and weaknesses of other collective choice rules and identify under what circumstances a particular rule is most suitable. The need for preference aggregation arises in both the private sector and the public or non-profit sector. Future researchers should also investigate what rules are most appropriate in providing public goods and in formulating public institutions like schools, libraries, public transportation, public health care facilities etc. Future researchers should also investigate the properties of aggregation methods which use ratings of alternatives and thus consider preference intensity for the various alternatives under evaluation.

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TABLE 1
Group Preference Functions

Rule	Data Set 1	Data Set 2	Data Set 3
Pareto	x > z, y > z, x ? y		
Condorcet	x > y > z	x > y > z > x	z > y > x
Plurality			x > y = z
Approval Voting	x = y > z		
Borda	x > y > z	x = y = z	

TABLE 2
Axioms of Arrow's General Impossibility Theorem

Rule	Condition U	Condition P	Condition I	Condition D
Pareto	Incompleteness			
Condorcet	Intransitivity			
Plurality				Violates
Approval Voting			Violates	
Borda			Violates	

AN EXAMINATION OF TELEPHONE SURVEY RESPONSE RATE, SPEED, COST, AND RESPONSE BIAS USING A LIVE VERSUS AN AUTOMATED INTERVIEWING DEVICE

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Abstract

The most widely used survey approach, telephone interviewing, has been bolstered through automation. This study tests the use of an automatic dialing and announcing device to contact potential respondents, pose questions, and record voice responses. Comparisons with live telephone interviews are made with respect to response rate, sample and response biases, and time and cost per completed interview. The automated interviews took more time per completed interview, but cost less. The two modes of data collection resulted in similar samples and responses to both sensitive and nonsensitive questions.

Introduction

Survey researchers have long utilized telephone interviewing as a mode of data collection. In fact, the telephone has become the most widely used survey approach (Kinnear and Taylor 1991) and new research designs and technologies continue to be developed (Donsbach and Brosius 1991; Hahlo 1992; Schmidt and Jansen 1992). The popularity of telephone interviewing can be attributed to the many advantages it possesses: 1) low cost as compared to personal interviews; 2) speed of survey administration; 3) close interviewer supervision; 4) ease of data coding; 5) flexibility (e.g., ability to use elaborate branching patterns, explain questions, recontact, etc.); and 6) all interviewing can be completed from one location.

Further, a review of many studies shows that data collected by telephone is comparable to data collected through personal interviews (e.g., Churchill 1991; Klecka and Tuchfarber 1978; Liefeld 1988; Sudman and Ferber 1974; Quinn, Gutek and Walsh 1980). Finally, the potential of sample bias brought about by unlisted telephone numbers has been effectively overcome by the use of either random digit dialing or plus-one sampling (Blair and Czaja 1982; Churchill 1991; Frey 1988; Kinnear and Taylor 1991; Lavrakas 1987; Moberg 1982; Winters 1990). The present study examines the use of an automatic dialing and announcing device (ADAD), a recent development which simplifies the use of telephone surveys.

Computer Assisted Surveys

Techniques to improve the quality of survey research continue to evolve. For telephone survey administration and data collection, microcomputers have been used in the form of electronic surveys, computer assisted telephone interviews (CATI), and, most recently, automated telephone interviews.

Electronic Surveys

The electronic survey is an interactive survey administration and data collection procedure. The respondent sits at a terminal, touch screen, or other interactive device and responds to prompts or questions directly from the computer. Electronic surveys are generally administered in public places, such as shopping malls, which limits their ability to generate random samples. However, this method does provide for consistent administration of the survey instrument and the elimination of the need for a live interviewer.

Computer Assisted Telephone Interviews

In the standard CATI survey the computer and interviewer work together. A randomly generated telephone number is dialed by computer and a human interviewer is led through the interview by prompts on a computer screen. The interviewer enters responses directly into the computer or onto an answer sheet. The computer, in essense, manages the interview process. The advantages generally cited for CATI are that it speeds up the interview process, reduces interviewer error, reduces survey costs, and minimizes interviewer fatigue.

Automatic Dialing and Announcing Devices

The automatic dialing and announcing device (ADAD) represents an advance beyond CATI. The ADAD consists of two tape players and a computer attached to a telephone. The computer randomly generates telephone numbers and "hears" the receiving phone being answered. One tape player presents a message, followed by a request for a response to be given after the sound of a tone. After the tone, the first tape drive stops and the second begins

recording the response. The two tape machines alternate between message giving and receiving until the questionnaire is completed.

The ADAD offers many potential advantages to the survey researcher. These include: (1) every sample member hears the same recorded voice with no tonal variations due to fatigue or discouragement; (2) every respondent hears the same questions asked in the same way; (3) every response is recorded exactly as given and can be replayed if not clearly understood in the first listening; (4) the survey administrator has complete control over the entire survey process; (5) interviewer cheating or error is virtually eliminated; (6) the respondent has a greater sense of anonymity and may respond more openly to sensitive issues; (7) ADADs are relentless in making callbacks while a live interviewer might give up on a number; and (8) interviewer-respondent interaction effects should be eliminated or minimized.

Past Research

Due to the newness of ADADs, very little related past research exists. Havice (1989) was the first to present results comparing the use of a live interviewer with an ADAD. The questionnaires used in the two surveys were different, however, and only selected comparisons could be made. Importantly, the demographics of the respondents to the two surveys were nearly identical, suggesting that an ADAD is capable of generating a sample similar to a live interviewer. As well, Havice reported that the ADAD generated more calls over the same calling period, completed more interviews, and collected data at a lower cost than the human interviewer.

Havice and Banks (1991) used a simple version of the ADAD to compare live and computer generated interviews in a second study. The ADAD used, however, required respondents to provide answers by pressing the numbers on their touch-tone telephones. Respondents with dial telephones who could not give a touch-tone response to the first question asked were treated as hang-ups by the computer. In comparing the samples generated, there were significant differences ($p<0.05$) in age and education between the ADAD and live interviewer respondents but no differences in household income, size of household, or sex of respondents. An examination of the survey responses showed that there were significantly different responses to nine of the twenty-one questions. The authors concluded that automated interviewing devices are able to survey a representative sample and that response differences were the result of "...respondents to human interviewers giving more socially desirable responses than respondents to an automated interview technique." (p. 100)

Purpose And Hypotheses

The purpose of the present study is to evaluate the automatic dialing and announcing device as a surveying tool in comparison with a live telephone interviewer. The study makes live-ADAD comparisons with regard to data collection costs and speed, response and refusal rates, nonresponse bias, and response bias.

H1: An ADAD survey results in less time per completed interview than a live telephone survey.

H2: An ADAD survey costs less per completed interview than a live telephone survey.

H3: An ADAD survey results in a lower interview completion rate than a live telephone survey.

H4: Respondents to an ADAD survey give less socially desirable answers to sensitive questions than respondents to a live telephone survey.

H5: The demographic characteristics of a sample of respondents generated through an ADAD survey will be similar to the demographics of a sample of respondents generated through a live interviewer survey.

H6: Interview completion rates are more consistent over time when using the ADAD format than with live telephone interviews.

H7: Responses to issues of a non-sensitive nature from the ADAD sample are similar to the responses from the live interviewer sample.

Methodology

The sample used for this study was drawn from a city of approximately 200,000 population. The sampling frame used was a cluster RDD frame as described by Cummings (1979) and Groves (1978). The city cross directory was used to eliminate institutional numbers and to eliminate numbers that did not exist. As this process still left in excess of 2,000 telephone numbers, additional numbers were randomly eliminated until a sample of 2,000 household numbers remained. The 2,000 telephone numbers were then randomly divided into two groups of 1,000 each. One group of numbers was assigned to the ADAD and the other to the live telephone interviewer.

The introductory remarks and the questionnaire used were identical for the ADAD and live interviews with one exception. The ADAD interview included the instruction to respond after listening for a tone. In both cases, the survey sponsor was identified as a major university located in the city. The questionnaire administered included

twenty-one questions of a dichotomous, multiple-choice, and open-end nature.

A t-test for independent samples was used to examine H1 and H2. A 2x3 factorial ANOVA was used to test H3 and H6 while H4, H5, and H7 were tested by MANOVA.

Results

All telephoning was undertaken over a three day period. Of the 1,000 telephone numbers in the sample for each test mode, nineteen ADAD and eight live interviewer numbers were duplicates. The live interviewer required 19 hours, 7 minutes to complete the calls to the 992 numbers remaining while the ADAD placed calls to its 981 numbers in 17 hours, 30 minutes. The live interviewer achieved 96 completed interviews (36.6 percent of the 262 households reached) while the ADAD completed 66 interviews (26.3 percent of the households it reached). Complete survey call results are shown in Table 1.

Survey Speed and Cost (H1 and H2)

While the ADAD was able to complete the calling to the numbers assigned to it faster than the live interviewer, the important issue is time per completed interview. Contrary to expectations, the ADAD required more time than did the live interviewer. Average time per interview was 15.91 minutes for the ADAD and 11.95 minutes for the live interviewer. This difference is significant ($p<.03$, see Table 2) and H1 is rejected.

Table 1
ADAD AND LIVE INTERVIEW DIALING RESULTS

Result	ADAD	Live	Total
Household numbers reached	251	262	513
No answer after seven rings	211	270	418
Institutional/ business number	58	67	125
Answering machine	5	2	7
Busy signal	69	81	150
Nonworking number	361	310	671
ADAD dialing error	26	0	26
Duplicate numbers in original list	19	8	27
Total	1,000	1,000	2,000

Table 2
T-TEST RESULTS FOR H1 and H2

	ADAD	Live
Completed interviews	66	96
H1:		
Mean minutes per completed interview	15.9091*	11.9479*
Standard deviation	18.108	14.308
Standard error	2.229	1.460
H2:		
Cost per completed interview	$0.37**	$1.20**

*$p<0.03$
**$p<0.001$

The costs of an ADAD will vary depending on whether it is purchased or leased. As well, payment to a live interviewer will vary depending on the interviewer's experience. Assuming that the ADAD can be used for five hours each evening and twelve hours on each of Saturday and Sunday, an ADAD can be used for approximately 212 hours per month. In the present study, this resulted in an ADAD cost of $1.39 per hour based on a lease rate of $295 per month. The interviewer for this survey was paid $6.00 per hour.

The ADAD completed the calling of its sample numbers in 17 hours, 30 minutes. This resulted in an ADAD cost of $24.33 (17.5 hours x $1.39) or $0.37 per completed interview ($24.33/66 completed interviews). The live interviewer required 19 hours, 7 minutes to complete the calling for a total cost of $114.72 (19.12 hours x $6.00) or $1.20 per completed interview ($114.72/96 completed interviews). This difference is significant ($p<.001$) and H2 is supported.

Survey Contacts (H3 and H6)

Refusal rates in the present study were measured as the average number of contacts required per completed interview. A contact was considered to have been made whenever a household telephone was answered by a person. An interview was considered complete if a majority of the instrument's 21 questions were answered. Interview completion rates (H3) and consistency of interview completion (H6) were tested via a 2x3 factorial analysis of variance. On average, the ADAD required 3.79 contacts per completed interview while the live interviewer required 2.72 contacts. This difference is significant ($p<.03$), supporting H3. An ADAD survey does result in a lower interview completion rate than a live interviewer survey (see Table 3).

Table 3
ANOVA RESULTS FOR H3 AND H6

Source of Variation	Sum of Squares	DF	Mean Square	F
Main Effects:				
Survey Mode	40.258	1	40.258	5.383*
Survey Day	11.760	2	5.880	0.786
Interaction	32.029	2	16.014	2.141**
Residual	1,166.647	156	7.749	

*p<0.03
**p<0.13

H6 was tested by the interaction effect in the ANOVA. A significant interaction between contacts per interview and survey day would indicate greater consistency for the ADAD than for the live interviewer. While the differences in interview completion rates over time were in the direction hypothesized, the interaction effect was not significant (p>.10, see Table 3). Therefore, H6 is not supported.

Response to Survey Questions (H4 and H7)

H4 hypothesized that respondents to the ADAD survey would give less socially desirable responses to sensitive questions while H7 suggested that there would be no difference in responses to non-sensitive questions. The survey contained five sensitive questions covering voting behavior, alcohol consumption, and driving after drinking. These questions were used to test H4. Eight questions of a non-sensitive nature from the questionnaire were used to test H7.

Multivariate analysis of variance and univariate test results for H4 and H7 are shown in Tables 4 and 5, respectively. The MANOVA results for H4 suggest that the responses to the ADAD and live interviewer on the sensitive questions do not vary. In the univariate tests, one dependent variable differed significantly between the ADAD and live interviewer responses (see Table 4). Fewer respondents to the live interviewer indicated that they would vote in the next election. This difference is significant but is in the opposite direction as that hypothesized. Thus, H4 is not supported.

Table 4
MANOVA AND UNIVARIATE TESTS OF H4

MANOVA Results

Test	Value	F-Value	DF	P-Value
Pillais	.05015	1.46779	5,139	0.204
Hotellings	.05280	1.46779	5,139	0.204
Wilks	.94985	1.46779	5,139	0.204
Roys	.05015			

Univariate Tests

Variable	F-Value	DF	P-Value
Voted in last election	0.47907	1,143	.490
Will vote in next election	5.54112	1,143	.020*
Frequency of alcohol con- sumption	0.70677	1,143	.402
Average drinks per drinking occasion	0.16539	1,143	.685
Drive after drinking	0.05536	1,143	.814

*p<0.10

As shown in Table 5, the MANOVA and univariate tests revealed no significant differences in responses to the non-sensitive survey questions between the ADAD and live interviewer. Thus, H7 is supported. Respondents provide similar responses on non-sensitive issues to an ADAD and a live telephone interviewer.

Respondent Demographics (H5)

Four demographic variables were used to compare the respondents to the ADAD with those to the live interviewer. H5 hypothesized that the two samples would be similar. Neither the MANOVA results nor the univariate tests revealed any significant differences (see Table 6). The samples are, therefore, similar and H5 is supported.

Discussion And Conclusion

While the ADAD was able to complete a single call to all numbers on its sample list in nearly two hours less time than it took the live telephone interviewer, the live interviewer completed over 40 percent more interviews. Thus, the average time per completed interview was significantly less for the live interviewer than for the ADAD.

Data collection costs were clearly lower for the ADAD than for the live telephone survey. This agrees with findings generally for electronic survey formats. Of

Table 5
MANOVA AND UNIVARIATE TESTS OF H7

MANOVA Results				
Test	Value	F-Value	DF	P-Value
Pillais	.05190	0.47899	9,70	.867
Hotellings	.05474	0.47899	9,70	.867
Wilks	.94810	0.47899	9,70	.867
Roys	.05190			

Univariate Tests			
Variable	F-Value	DF	P-Value
Strongly punish impaired drivers	0.02426	1,77	.877
Alcohol should be sold in regular retail outlets	0.22041	1,77	.640
Set higher quotas on imports	0.00905	1,77	.924
Support free trade	0.69402	1,77	.407
Outlaw postal strikes	0.57788	1,77	.449
Importance of federal deficit	0.50900	1,77	.478
Outlaw animal experiments	1.18157	1,77	.280
Support funding for private schools	0.22041	1,77	.640

Table 6
MANOVA AND UNIVARIATE TESTS OF H5

MANOVA Results				
Test	Value	F-Value	DF	PValue
Pillais	.02480	.97281	4,153	.424
Hotellings	.02543	.97281	4,153	.424
Wilks	.97520	.97281	4,153	.424
Roys	.02480			

Univariate Tests			
Variable	F-Value	DF	P-Value
Sex	2.67809	1,156	.104
Age	0.63481	1,156	.427
Size of household	0.05693	1,156	.812
Home ownership	0.28970	1,156	.591

significance to survey researchers, the cost advantage of an ADAD should increase in relation to the quantity of interviewing undertaken.

On average, the ADAD required approximately 42 percent more contacts per completed interview than did the live interviewer. While the significant difference in refusal rates could have left the ADAD survey open to serious nonresponse bias, the findings of this study showed few differences in actual survey results between the ADAD and live interviewer.

Similarly, it was not known until the study was completed if sample members who did respond to the ADAD would give answers that differed systematically from those given to the live interviewer. A comparison of the responses to the ADAD and the live interviewer revealed no response bias from using the ADAD. Multivariate analyses of variance showed no significant differences among the two data gathering modes in respondent demographics, general attitudes, or in the social desirability of answers to sensitive questions. Demographic similarities among both sets of respondents suggest that both survey modes reached members of the same population.

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CONTENT ANALYSIS OF BUYER-SELLER COMMUNICATIONS
ACADEMY OF MARKETING SCIENCE

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ABSTRACT

Data collected by content analysis of buyer-seller interactions is examined to determine whether content analysis can be a viable means for collecting data suitable for structural equation modeling. The researchers report a rigorous method of measurement development to collect the data and to evaluate the validity of the indicators.

This study reports the content analysis of 100 videotaped buyer-seller interactions. The focal behavior in this study was self-disclosure. All self-disclosures uttered by both the buyer and the seller were recorded using an instrument that permitted the researchers to determine the number of disclosures, the duration of the disclosures, the number of categories of disclosures, and the intimacy level of the disclosures. The self-disclosures are believed to be indicative of two constructs, task related disclosures and personal disclosures.

The measures were assessed by factor analysis, coefficient alpha and maximum likelihood confirmatory factor analysis. Results indicate that the personal and task related disclosures form two distinct constructs and that data collected through content analysis can be used for rigorous analysis such as structural equation modeling.

BUILDING FRACTIONAL FACTORIALS: A METHODOLOGY FOR SYMMETRIC AND ASYMMETRIC DESIGNS

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Introduction

Statisticians have introduced a new class of designs called fractional factorials in which all experimental combinations are neither required nor constructed (e.g. Cox and Enis 19-69; Box and Hunter 1961; Banks 1965; Cochran and Cox 1950; Kempthorne 1952; Hicks 1982; Cox 1958). Using fractional factorials, the researcher chooses to trade off information about higher order interactions so as to minimize the costs of research and effectively analyze the remaining fewer combinations (Green 1974; Green and Rao 1971).

To date, marketing researchers have concentrated on fractional factorials for 2^n designs (for e.g, Holland and Cravens 1973; Louviere and Woodworth 1983; and Green, Carroll, and Carmone 1978). These designs can be used for screening the important effects and estimating them (Holland and Cravens, 1973), for reducing the information required by a researcher in a testing situation (e.g. Kempthorne, 1952), for use in Trade-off analyses (e.g. Wittinck and Cattin, 1989), and as repeated measures designs.

The purposes of this paper are to (1) introduce a simpler approach to fractional factorial development, (2) apply the approach illustratively to 2^n, 3^n, and higher symmetric factorials, and (3) discuss the application of the approach to asymmetric factorials where the factors do not all have the same number of levels. These topics have not been fully addressed in the marketing literature. The concepts and the methodology will be discussed in a 'cookbook manner' to enable researchers to build their designs easily. Further material on fractional factorial designs can be found in Cochran and Cox (1950), Kempthorne (1952), Hicks (1982), and Cox (1958), to name a few.

Understanding Fractional Factorials

In order to build fractional factorials, the researcher needs to be familiar with certain basic concepts: confounding, aliases, and modulus arithmetic. These will be discussed in detail in the following sections.

Confounding

The concept of confounding is explained in Holland and Cravens (1973); Green, Carroll, and Carmone (1978); and in detail elsewhere (e.g. chapter. 6 in Cochran and Cox, 1950). This concept will be reviewed briefly.

Consider the 2^3 factorial, where each factor A, B, and C, is at two levels. Representing the low level of the factor with a zero and the high level of the factor with a one, we can identify the 8 possible cells or combinations as 000, 100, 010, 001, 110, 101, 011, and 111. We always read the combinations from left to right, so in combination 001, factors A and B are at their low levels and factor C is at its high level. Suppose we are interested in using one half of this factorial. We can derive two blocks with 4 cells in each and then pick one of the blocks to use. One form of blocking is shown in Table 1.

Table 1
2^3 factorial with ABC confounded

Block 1	Block 2
000	001
011	010
101	100
110	111

The interaction of the highest order is ABC. This interaction can be estimated from the comparison,

[111 + 100 + 010 + 001 - 110 - 101 - 011 - 000].

As the interaction ABC is estimated by the difference between all the '+' signs and the '-' signs, and since all combinations with a '+' are in one block and with a '-' in the other, we can say that the blocking is confounded with the ABC interaction. In this context ABC is called the defining relationship. The essence of a fractional factorial is that we can now run just one of the two blocks, at a cost of being unable to estimate the ABC interaction. The rules for the construction of two blocks for a 2^n experiment are

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then fairly simple. One picks an effect to confound with blocks, writes the effect as a sequence of pluses and minuses, and then identifies one block with pluses and one with minuses. In general practice researchers confound the highest-order interaction with blocks. The logic here lies in the premise that higher order interactions are less likely than simpler main effects or lower order interactions. In this paper, we proceed by always confounding the highest-order interaction.

Generalized Interaction

Suppose now that we wanted to create four blocks rather than two. To create 2 blocks, ABC was confounded with blocks, so that both ABC and blocks have 1 degree of freedom. Now in order to derive 4 blocks, 3 degrees of freedom are needed for blocks. To provide a realistic example, suppose we have a 2^5 factorial, which has 32 combinations, and we wish to create 4 blocks of 8 combinations each. The interactions ABCDE and BCDE might be used for confounding. Barnard (1936) introduced the concept of the "generalized interaction". He showed the generalized interaction between the 2 interactions above to be the A effect. This is found easily by multiplying all letters to get ABCDE X BCDE = $AB^2C^2D^2E^2$. Since this is a factorial with all factors at 2 levels, by canceling all letters with an exponent of 2, we get A. Cochran and Cox (p. 187, 1950) generalized this to state, "If a replicate of a 2^n factorial is arranged in blocks of 2^{n-2} units, 3 factorial effects are confounded with blocks. Of these 2 may be chosen at will, the 3rd is their generalized interaction." Thus in the above example, the main effect A was also confounded with the blocks. Here A provides the third degree of freedom for the 4 blocks. The concept of confounding will be further discussed in the section on modulus operation. In order to create 8 blocks for a 2^n factorial, we need only pick three effects, each with 1 degree of freedom. The remaining 4 degrees of freedom would come from generalized interactions produced from three two-way, and one three-way combinations of the chosen effects.

To summarize what we have presented so far, some effect (usually of the highest-order) is confounded to define blocks. The degrees of freedom of the effect become the degrees of freedom for blocks, and confounding 2 effects with blocks will also confound their generalized interaction with blocks.

Aliases

Consider a 2^3 factorial again. The blocks are as defined by the interaction ABC shown in Table 1. ABC cannot be estimated as it is confounded with the blocks. Suppose block 1 is to be run. With the information available from the run, how can the main effects and the two-factor interactions be estimated? For a main effect such as C, we compare observations in which C occurs at its high level with observations in which C occurs at its low level:

$$[001 + 111 - 010 - 100]$$

Even if A or B or both of them have main effects, it will not pose a problem as both A and B in the above comparison have different levels within both levels of C. But consider the estimation of the two-factor interaction AB. If C were not part of the design, the comparison:

$$[00 + 11 - 01 - 10]$$

could be used. But since C is part of the design, based on the available information we try equation (1). The same quantity is being used to estimate both C and AB! Here C and AB are aliases of one another. In fact A and BC, and B and CA are also aliases of one another. A simple way (which is discussed in Holland and Cravens, 1973, for example) to identify aliases begins with identifying the defining relation and labeling this I, for example:

$$I = ABC$$

Then multiply all the experimental effects with both sides of this equation to determine their aliases as below.

$$AI = A^2BC$$
$$A = BC$$
$$BI = AB^2C$$
$$B = AC$$
$$CI = ABC^2$$
$$C = AB$$

Note that any letter multiplied by I reproduces that letter. In this case we have covered all the effects. Again, note that any letter squared vanishes for a two-level factor. If there is more than one defining relation, the procedure works the same. For the 2^5 example, we confounded ABCDE and BCDE and inferred that A was confounded by determining the generalized interaction. In that case we have

$$I= ABCDE = BCDE = A$$

This leads to the following alias relations:

$$B = ACDE = CDE = AB$$
$$C = ABDE = BDE = AC$$
$$D = ABCE = BCE = AD$$
$$E = ABCD = BCD = AE$$
$$BC = ADE = ABC = DE$$
$$BD = ACE = ABD = CE$$
$$BE = ACD = ABE = CD$$

When all effects are multiplied by the defining relations, these seven sets of relations emerge.

Modulus Operation

Kempthorne (1952) is generally cited for the use of modulus operators in generating blocks for the fractional factorial applications. Hicks (1982) uses this method mostly for the 2^n designs, but to some extent for 3^n factorials also. The Mod operator returns a remainder from division. For example, $Mod_3(4)$ is 1, since 4 divided by 3 has a remainder of 1. A Mod_2 operator is used where 2^n factorials are involved, and a Mod_3 operator is used where 3^n factorials are involved, and so on. Using the 2^2 factorial we can put the four combinations into 2 blocks by putting all combinations with a modulo of 0 in one and all with a modulo of 1 in the other. This will now be illustrated.

Since the design involves the factors at 2 levels, the Mod_2 operator can be applied as follows: For the combination 00, we add the 2 levels, 0 + 0 = 0. For 10, we have 1 + 0 = 1 and for 01, we have 0 + 1 = 1. For 11 we take 1 + 1 = 2, but since $Mod_2(2) = 0$ we assign this to block 0. Thus we have 2 blocks.

Block 1	Block 2
00	10
11	01

Note that here we have created the same blocks that we would have by confounding blocks with AB. In fact either confounding or the modulus operator can be used to develop fractional factorials.

Let us consider an example where a factorial is further divided to get more than the usual 2 blocks. With a 2^4 design there are altogether 16 combinations: 0000, 1000, ..., 1111. Confounding the highest order interaction will define 2 blocks only (the Mod_2 operator will produce only values of 0 and 1). If the researcher wishes to get 4 blocks, 3 degrees of freedom will be necessary for blocking. Assume that the interactions ABC and BCD are negligible or not of interest. ABC and BCD can then be confounded with the blocks. But ABC x BCD = AB^2C^2D = AD, Mod_2. The generalized interaction AD has 1 degree of freedom. Now we have our 3 degrees of freedom for blocks. To determine block membership for a cell, we could use our two chosen interactions in the following scheme. Define

$$M_1 = A + B + C$$
and
$$M_2 = B + C + D$$

Here the capital letters A through D are either 0 or 1 depending on the cell value. Block membership is given by the expression "M_1M_2". As an example, consider the cell 1100. We get $M_1 = 1 + 1 + 0 = 2$ which we set to zero, Mod_2. $M_2 = 1 + 0 + 0 = 1$. Thus cell 1100 is in block 01.

In fact the only sets will be 00, 10, 01, and 11. All combinations with the same set of modulus values will be put in the same block. Thus 4 blocks are defined, with each consisting of 4 combinations out of the total 16.

Fractional Factorials of 2^n Designs

The general rules for 2^n designs are as follows:

a) Decide on the number of blocks you want, say 2^r, where $1<r<n$.
b) Pick r interactions to confound with blocks.
c) Calculate the generalized interactions that will also be confounded with blocks.
d) Use the r interactions to create the r defining relations for the plan.
e) Multiply all experimental effects by the defining relations to identify aliases.
f) For each cell, create a modulus sum M_i, for each of the r interactions chosen in step 'b'.
g) Combine the r sums to assign each cell to blocks using the expression "$M_1, M_2, ..., M_r$."
h) Pick one of the blocks to actually run as the experiment.

One plan of a 2^n design where n = 3 was shown in Table 1. Another plan for a 2^n design is given in Table 2.

Table 2
2^4 factorial with ABCD confounded

Block 1	Block 2
0000	0001
0011	0010
0101	0100
0110	0111
1001	1000
1010	1011
1100	1101
1111	1110

We might note that the plans in Tables 1 and 2 are similar to the plans 6.1, and 6.2, respectively, in page 234 of Cochran and Cox (1957).

Fractional Factorials Of 3^n Designs

The rules for constructing fractional factorials for 3^n designs follow those for 2^n designs. In step a), one would decide on 3^r blocks, $1<r<n$, rather than 2^r blocks. In step f), the modulus sum would be either 0, 1 or 2 since we must use the mod_3 operator. Rules for 4^n designs, 5^n and so forth, follow closely. We might also note here that when the base is not a prime number, as would be the case in a 4^n design, the researcher can treat it as a 2^{n2} design.

Table 3 shows the plan for a 3^3 design defined into 3 blocks of 9 combinations each. The interaction BC was confounded (it was assumed negligible).

Table 3
3^3 factorial with BC confounded

Block 1	Block 2	Block 3
000	010	020
112	122	102
221	201	211
021	001	011
100	110	120
212	222	202
012	022	002
121	101	111
200	210	220

Table 4
3 x 2 factorial with AB confounded

Block 1	Block 2	Block 3
00	01	11
21	10	20

Table 4 is a plan for 3^4 factorial in 3 blocks of 27 combinations each, defined by the interaction BCD. From this plan, it is easy to check that the modulus operation has not confounded any of the main effects with the blocking by seeing that all levels in all factors are represented equally in each block. A simple check shows this to be true for all factors in all blocks.

Asymmetric Factorial Designs

Asymmetric designs, also referred to as mixed series, are designs with factors represented at different levels. The development of fractional factorials for asymmetric designs is more complicated than it is for symmetric designs. Some general rules may still be applied for these designs, but ad hoc procedures become necessary.

Considering a 3 x 2 design, for example, the researcher's first decision should be concerned with deriving either 2 or 3 blocks. This means the 6 combinations can either be put in 3 blocks of 2 combinations each or vice versa. This decision is important because the researcher needs to pick an effect as the defining relation. If the effect of the highest-order, the AB interaction, is picked here, the 2 df associated with it will derive 3 blocks. But let us consider a more complicated design 2 x 3 x 3. The ABC interaction which has 4 df, wont work for us since the 18 cells are not divisible by 5 blocks. Thus, in order to follow the general rules, we must modify steps a) and b) to be careful to pick defining relations which lead to a number of blocks which can be divided into the total number of combinations.

Since ABC didn't work, we might pick the AB and BC interactions. The generalized interaction is AC. AB has 2 df, BC has 4 df, and AC has 2 df. There are 8 confounded df total, which leads to 9 units per block. But in step f), we produce modulus sums from AB which gives 0, 1 or 2 (Mod_3), and sums from BC gives 0, 1, 2, 3, or 4 (Mod_5). Thus the expression "M_1M_2" in step g) leads to 00, 01, ..., 24. We produce 15 different blocks, which does not divide into 18.

Instead, suppose we pick AB and AC to confound. These both have 2 df. The generalized interaction is BC which has 4 df. Adding up these degrees of freedom leads to 8 df producing 9 blocks. Now, producing the modulus sums for AB and AC will yield 9 blocks as we desire.

We can follow the steps a) through h) then with the following modification. The choice of effects to confound with blocks must be carefully chosen to produce degrees of freedom which correspond to a number of blocks which is divisible into the total number of combinations. Further, these effects must also produce the correct number of blocks when used in steps f) and g).

Conclusion

We have shown how fractional factorials can be built, using some basic concepts in confounding, and modulus operation. Researchers can use this methodology to build plans that include effects of interest. Where the previous literature in marketing has shown the method for mostly 2^n designs and discussed symmetric factorials, we have shown a method to build fractions of higher-order and asymmetric factorials. The use of modulus operation complements the much easier approach to build fractional factorials.

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REPLICATED WEIGHTS DETERMINATION IN THE SYNCLUS OPTIMAL VARIABLE WEIGHTS CLUSTERING PROCEDURE

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Abstract

Researchers of cluster analysis are becoming increasingly interested in methods that finds a set of variable weights that optimize some index of "clusteriness" such as the modified Rand index. This paper describes a sample replication method for finding a set of SYNCLUS-based variable weights for the practical case in which the weights are to be applied to large data bases constituting hundreds or even thousands of observations. A Monte Carlo simulation of synthetic data sets is used to test the replicated variable weights estimation procedure.

Introduction

Over the years cluster analysis has become very popular among marketing researchers as a tool for market and segmentation research (Green, Frank and Robinson 1967; Frank and Green 1968). A recent bibliography (Dickenson 1986) lists 17 pages of cluster analysis applications in marketing and segmentation research.

There are various approaches to clustering and numerical classification. Marketing researchers have applied block modeling (Arabie and Boorman 1982), hierarchical models (Blashfield 1976), combination of hierarchical and partitioning models (Milligan and Sokol 1980), overlapping clustering (Arabie, Carroll, DeSarbo and Wind 1981) and mixture models (Wolfe 1980; McLachlan and Basford 1988). But it is the k-means partitioning procedure that is most applied to market segmentation studies. Examples of k-means programs include SAS FASTCLUS, SPSS-X QUICK CLUSTER, BMDP KM, and the Howard-Harris clustering program (Howard and Harris 1966). The reasons are simple. First, managers are uncomfortable with the notion of overlapping clusters or hierarchical clusters of buyers. They want to make sure that each buyer is assigned to one and only one segment. Second, marketers often work with hundreds (or even thousands) of respondents. Also, they typically deal with a large respondents-by-variables profile data. K-means partitioning programs are capable of handling large sample sizes quickly and efficiently.

A major problem with the use of partitioning methods in market segmentation is how to weight the variables appropriately before starting the iterative partitioning process. Milligan and Cooper (1987) state that one of the most important decisions researchers have to make is selecting a set of correct/relevant variables to be included in the cluster analysis. They further point out that the addition of only a few irrelevant variables could seriously affect the recovery of "true" cluster structures.

DeSarbo, Carroll, Clark and Green (1984) have proposed an optimal variable weighting scheme (for k-means partitioning methods) called SYNCLUS (SYNthesized CLUStering). De Soete, DeSarbo and Carroll (1985) and Fowlkes, Gnanadesikan and Kettenring (1988) provide approaches to the optimal variable weighting problem for hierarchical clustering procedures.

Motivation for Current Study

While SYNCLUS provides some hope for the optimal variable weighting problem in market segmentation research, there are two important practical problems with the use of SYNCLUS. First, the SYNCLUS program is computationally very intensive and hence, very time-consuming to run. Second, its current array dimensions (250 objects by 60 variables), while maximal for the VAX 8700, are not sufficiently large enough for many industry segmentation problems.

Problems with SYNCLUS as a practical tool for obtaining a set of optimal variable weights in clustering large data sets motivated us to consider the idea of replicating the process of weight calculation. Since the program capacity of SYNCLUS is limited to 250 respondents, out approach is to select random subsamples (each without replacement) of size less than or equal to 250 from the initial, very large (N>>250) data base to obtain sets of optimal variable weights and use each set of weights to obtain a clustering of the whole data set. We then repeat this procedure **M** times and select a set of best weights from the **M** sets of weights.

Our Criterion for determining the best set of weights is to calculate an average correlation between each set of SYNCLUS weights with all other **M**-1 sets and then select the set with the highest average correlation. However, little is known about the gains produced by replicating weights compared to the traditional procedures in which one would compute only one set of SYNCLUS weights from the data set (the one-short case). The main objective

of this study is to evaluate the performance of replicated SYNCLUS weights determination by comparing it to that of one-shot weight clustering. We use Monte Carlo simulation of synthetic data to implement this objective.

Methodology

To implement the Monte Carlo simulation, a total of 72 artificial data sets with known cluster structures were first generated using Milligan's computer program (Milligan 1985). This program has several features:

1. The user can generate from 2 to 5 clusters per analysis
2. The clusters can be embedded in 4, 6, or 8 dimensions
3. A cluster can consist of 50, 100, 150, or 200 points
4. Noise can be added by perturbing the original (true) dimensions
5. Error can be also introduced by adding random noise dimensions -- one, two, or three dimensions

The program generates points by sampling from a truncated multivariate normal distribution. The process requires all points to fall within ±1.5 standard deviations of the centroid. In addition, a separation criterion insures that the clusters are non-overlapping. The program generates clusters that are essentially spherical.

Coordinates values can be error perturbed by using a random normal generator, yielding a variate e_{ij} with zero mean and standard deviation equal to that of the dimension on which a point *i* is located. If we let T_{ij} denote the error-free coordinate value for point *i* on dimension *j*, then the error-perturbed coordinate value is:

$$E_{ij} = T_{ij} + \lambda e_{ij}$$

where λ = the error level.

The addition of extra noise dimensions (one, two, or three) is done by random sampling from a uniform process whose range is set equal to the range of the first dimension in the "true" cluster space.

Experimental Design

Experimental design for the Monte Carlo simulation involves the following factors:

1. Sample size: 100 points; 200 points
2. Number of "true" clusters: 3; 4; 5
3. Number of Dimensions in which clusters are embedded: 4; 6; 8
4. Error Conditions
   a. Error perturbed dimensions:
      Low (λ=1); High (λ=2);
   b. Added noise dimensions:
      No; Yes

In factor 4b, three additional noise dimensions were introduced so that the total number of dimensions were 7, 9 or 11 rather than 4, 6, or 8. Since factor 4a and factor 4b cannot be completely crossed, they were treated as between-subject variates. The reference cases are known cluster structures of 18 data sets from factors 1, 2, 3, and the first level of factor 4b, against which performance of replicated SYNCLUS weight clustering is compared. The remaining data sets constitute error-introduced data sets that are subject to various weighting schemes.

Replicated SYNCLUS Weights Clustering

For each of the error-based data sets, two additional experimental factors were introduced.

5. Number of replications in the sampling:
   10; 20; 30
6. Percent of total data points sampled:
   10%; 20%; 30%

With six factors (1, 2, 3, 4a, 5, and 6), a total of 81 fractional factorial experimental conditions were generated that contained either low or high error perturbed coordinates. Again, with six factors (1, 2, 3, 4b, 5, and 6), another fractional factorial of 54 conditions was generated with three noise dimensions added (only the second level of factor 4b was included in this case).

For each of these 135 error-based conditions, a best set of replicated SYNCLUS weights was calculated. Since the role of SYNCLUS in this approach is limited to obtaining a set of optimal variable weights, we use another large scale k-means partitioning program (Howard-Harris 1966) to obtain the actual weighted clustering of the experimental data sets. Each of the weighted clustering results was then compared to the true clusterings.

Measure of Recovery

We used the modified Rand index (Hubert and Arabie 1985) as measure of agreement between the replicated weight clusterings and the true (known) cluster structures. The Rand index is a ratio of two frequency counts. The numerator is found by taking each pair of objects and determining whether the pair is consistent (e.g., clustered together) in both true and test clustering. The denominator is simply the total number of pairs of objects (e.g., N(N-1)/2 where N is the total number of objects in the data set). If the test clustering exactly matches the true cluster structure, the Rand index is 1.0. If no matching occurs, the index is 0. However, since the Rand index is biased upward, we use Hubert and Arabie's modified version of the Rand index that adjust for chance agreement.

One-Shot SYNCLUS Weights Clustering

In the same manner, one-shot SYNCLUS weights were computed for each of the 135 conditions and weighted clusterings were obtained using the Howard-Harris k-

means program. This time the number of replications was fixed at 1 but the percent of observations sampled to obtain a set of SYNCLUS weights, was varied across three levels as in the case of the replicated SYNCLUS weights. Modified Rand indexes were again calculated as agreement measures between the SYNCLUS weight clusterings and the true cluster structures.

Non-Sampling Cases

Next, SYNCLUS weights were obtained for each of the error-introduced data sets, using all observations (n=100 or n=200), and SYNCLUS weight clusterings of the data sets were obtained using the Howard-Harris k-means program. Modified Rand indexes were calculated as agreement measures between the weighted clusterings and the true cluster structures.

Finally, unweighted cluster structures were also obtained from the error-introduced data sets as a null case for evaluating the comparative performance of weighted clusterings. Modified Rand indexes were again calculated for each of these unweighted clusterings.

Research Questions

The research questions of primary interest are:

1. How well does replicated weights determination compare to SYNCLUS weights estimated on the entire data base?
2. How well does replicated weights determination outperform one-shot SYNCLUS weights estimation?
3. How well does replicated weights determination compare to the null case of equal variable weights?
4. In implementing the replicated SYNCLUS weights procedure, how many replications should be obtained? What percentage of the total data base should be sampled?

Other (secondary) questions are also addressed as we examine the results of the Monte Carlo simulations.

Results of the Experiment

First, modified Rand indexes from the four types of weighting schemes are compared. Table 1 shows the mean of each weighting scheme and the associated ANOVA table. As noted, replicated weights clustering performs significantly better than one-shot SYNCLUS weights clustering. Obviously, if we use all observations in the sample, cluster recovery is the best. However, by using replicated weights based on only a subset of the total sample, we can still obtain the results that are nearly equal to the performance based on the total sample. It is also interesting to note that even the performance of unweighted clustering is higher than one-shot weighted clustering.

Table 1

A Comparison of Mean Recoveries of Cluster Structure for Four Variable Weighting Procedures (Modified Rand Index)

Mean

Replicated	.84
One-Shot	.76
Total Data Set	.87
Unweighted	.81

Analysis of Variance

Source of Variation	SS	df	MS	F	p
Main Effect					
Weight	.635	3	.212	2.908	.035
Residual	27.219	374	.073		
Total	27.854	377	.074		

Table 2 shows the means of the modified Rand indexes (and associated ANOVA table) under the added noise dimensions condition. As shown in Table 2, as additional noise dimensions are introduced, recovery of true cluster structures drops significantly when we use equal variable weights. The replicated sample procedure, however, holds up relatively well in the presence of "masking" error dimensions.

Next, we considered the more detailed experimental design comparing the performance of replicated versus one-shot SYNCLUS weights determination. Table 3 shows these results. All experimental factors are significant. In particular, the percentage of observations sampled increases, recovery of the true cluster structures gets better. However, not much is gained beyond the 20% level.

Table 2

A Comparison of Mean Recoveries of Cluster Structure for Four Variable Weighting Procedures Under the Added Noise Dimensions Condition (Modified Rand Index)

Mean	
Replicated	.79
One-Shot	.70
Total Data Set	.83
Unweighted	.53

Analysis of Variance

Source of Variation	SS	df	MS	F	p
Main Effect					
Weight	1.150	3	.383	4.387	.006
Residual	12.229	140	.087		
Total	13.379	143	.094		

Table 3

A Comparison of Mean Recoveries of Cluster Structure for Replicated versus One-Shot Weights Estimation (and Related Factor Effects) (Modified Rand Index)

Mean		
WEIGHTS		
	Replicated	.84
	One-Shot	.76
PERCENTAGE		
	10%	.74
	20%	.83
	30%	.84
ERROR		
	No Noise Dimensions	.84
	Added Noise Dimensions	.74
CLUSTER		
	3-cluster	.73
	4-cluster	.82
	5-cluster	.85
DIMENSION		
	4	.59
	6	.87
	8	.95
SIZE		
	100 points	.78
	200 points	.86

Table 3 (cont.)
Analysis of Variance

Source of Variation	SS	df	MS	F	p
Main Effects	9.266	9	1.030	22.808	.000
WEIGHT	.455	1	.445	9.861	.002
PERCENT	.433	2	.216	4.795	.009
ERROR	.615	1	.615	13.624	.000
CLUSTER	.727	2	.364	8.057	.000
DIMENSION	6.644	2	3.322	73.600	.000
SIZE	.241	1	.241	5.349	.022
Residual	11.736	260	.045		
Total	21.002	269	.078		

Conclusions

Returning to the research questions stated earlier, the Monte Carlo simulations led to the following results:

1. The SYNCLUS replicated weights procedure produces cluster structure recoveries close to those found by using weights based on the total data set. This finding is supportive of the practical value of the approach. (since in large data sets one would never be able to include all observations in SYNCLUS).

2. It would seem that 20% of the total number of observations is generally sufficient (at least in relatively small data sets of 100-200 observations). Twenty replications appear sufficient to lead to good Rand index recoveries (again in the 100-200 data point range).

3. The replicated approach clearly outperforms the one-shot procedure under all of the three error conditions (as would be expected).

4. More importantly, the replicated approach outperforms the null case of equal weight assignment as error level and added noise dimensions increase.

Further research on the potential value of the replicated weights approach is needed. From a Monte Carlo standpoint, additional simulations could be carried out with much larger sample sizes, e.g., 800 to 1000 observations. One should also apply the approach to real world data sets in market segmentation and other business applications. While no "known" cluster structures exist in

these latter cases, one could still compare partitionings between equal weights and SYNCLUS weights cases in terms of their reasonableness and, particularly their relationship to other summary measures of the data sets.

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RESEARCH DESIGN CONCEPT: A NEW FRAMEWORK

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Abstract

The concept of research design is inconsistently defined by marketing research scholars. A selective review of marketing research textbooks illustrates the nature of the problem. This paper presents the Research Design Matrix (RDM) as an alternative framework for categorizing the different types of research projects.

Introduction

For marketing research scholars, the concept of research design has no clear cut definition. This lack of agreement has meant that many textbook authors have faced this issue by addressing it in a superficial manner or by completely ignoring it. As shown later in the paper, a survey of eight well-known textbooks unfolds a diversity of positions on this topic.

In this paper, we introduce the Research Design Matrix (RDM) in an attempt to clarify this concept. It is our contention that research design should not be considered a required step of the research process, but a form of classification of any study as a whole. Through the use of simple double-names any piece of research can be easily labelled.

Background

Two Different Approaches

Among marketing research scholars there is a co-existence of two lines of thought that has influenced the treatment of this topic. On one hand, is the scientific method or methodological thought applied to the social sciences and particularly to marketing research, and on the other, lies the decision-making approach derived from the management perspective.

The scientific approach pursues the application of valid and reliable methods. Exploratory designs are used to define research problems, but they lack methodological precision. Descriptive and causal designs, on the other hand, yield more valid conclusions.

According to the decision-making approach, different research designs suit different purposes in terms of the stages of the decision-making process. In this sense, exploratory designs are suited for the recognition and the definition of a decision problem and the identification of possible alternative courses of action. Conclusive studies are appropiate for later stages, when the manager is faced with the need to evaluate and select one way to go.

Even though one can easily identify the particular line of thought which guides any author's categorization, the explicit following of one line does not preclude an implicit consideration of the other. For example, the researcher with a methodological guiding perspective keeps in mind that his/her research is connected with a marketing decision. However, explicit consideration of both lines of thought simultaneously has proven to be a hard task to accomplish. Accordingly, the treatment of the topic has been both entangled and incomplete.

A Review of Marketing Research Textbooks

Marketing research authors have taken different approaches to deal with this topic. Table 1 summarizes the findings of the review of a sample of eight, well-known, marketing research textbooks.

This review allows us to identify three possible ways to deal with the issue of the treatment of research design. One is to abandon the concept. That is the case of Dillon et. al. (1990). In fact, these authors do not consider research design a marketing research concept at all. It is neither defined in the glossary nor is it explicitly employed as an overall framework or as a specific step in any research project. A careful review of the text allows us to realize that it is used in a loose manner, like "planning the research design" (p.65), but is never fully discussed later on. They mention experimental design (p.71), but ignore exploratory designs.

A second option is illustrated by those textbooks in which the concept is employed, but either is never defined or is used in an ambiguous manner. Such are the books by Parasuraman (1986) and by Aaker and Day (1983). In the first, besides giving no explicit definition of the concept, Parasuraman states that "strictly speaking, no single research classification has an unambiguous label for every research project" (p.132). More so, many times it appears

hard for him to justify whether a study is exploratory or descriptive, which makes him conclude that "research designs differ more in terms of degree that in terms of kind" (p.146). Besides, the concept as such has no place in the text's glossary.

Aaker and Day, in turn, do not help their readers when –although having a clear definition of the concept –they present two Figures with the same name, "The Research Process", but different in content (Figure 2-1, p.20 and Figure 3-1, p.48). The first Figure makes reference to the concept of research design as "design of the research" (fourth step); while the second distinguishes three Research Approaches (or three general categories of research, as shown in the following page of the book), as a required substep (with the Research Tactics), of a major "Research Design" phase!

Along these lines, other authors can be labelled ambiguous in their treatment of the topic. For Tull, [Tull and Hawkins (1990); Green, Tull and Albaum (1988)], having different co-authors has meant two different positions on the subject. With Hawkins, research design is equated with the research process. In fact, together they present the "research design process" as a series of distinct, but interrelated steps. "These... steps represent the general order in which decisions are made in designing a research project" (p.44 and Table 3-1, "Steps in the Research Design Process", p.45). However, with Green and Albaum, the definition of research design becomes a step within the overall research process (Figure 2-1, "The Research Process", p.30).

Finally, it can be said that Boyd, Westfall and Stasch (1989) also have an ambiguous position on this issue. In three different parts of their textbook, the same concept is given three different names. In fact, when describing the Plan of the Book, the first three steps of the marketing research process (to be dealt with in Chapter 3) are named "Research Objectives, Information Needs and Research Designs" (p.23). Later, when detailing the seven steps of the research process, step number three becomes "Designing the Data Collection Project", within which the researcher should ask himself whether the research should be exploratory or conclusive (p.43). And, when we check the name given to Chapter 3, we find that "Research Designs" has been substituted for "Types of Research" (p.65).

A third option is that taken by authors who explicitly choose to follow one or the other line of thought. That is the case of Churchill (1990), who clearly defines the concept and follows the methodological or scientific approach. For him, the definition of the research design constitutes the second step of the marketing research process. On the other hand, we find authors like Kinnear and Taylor (1991), who distinguish the research designs according to their appropiate usefulness in the different stages of the decision-making process. Thus, they identify the exploratory and conclusive designs and even add a new type, the performance-monitoring design.

Three Reasons for an Alternative Framework

Three basic ideas underlie our proposition of a Research Design Matrix: first, that this concept should not be considered a step of the research process; secondly, that the two basic lines of thought are not "either/or", but rather should be considered simultaneously; and, thirdly, that the implementation of a research project should be taken into consideration. We shall address each one of these ideas in turn.

Not a Required Step

As evidenced by Table 1, marketing scholars differ with respect to the inclusion of the research design notion as a required step in the overall research process. It is worth noting, however, that most authors coincide in its definition as a framework or plan with which to guide the research. Our contention is that it should not be a step, but rather way of classifying research according to its characteristics in terms of research objectives, information need, data collection procedures and sampling plan. In other words, each project, no matter how flexible or rigorous it may be, must go through the same stages. These are inevitable. What varies is their degree of formalization. For example, in an exploratory research project, even though, little is known about the marketing problem or opportunity, the project has a goal or objective, such as clarifying concepts; has a data collection method, such as a loose questioning guide; and is to be applied to some group of people, most probably, a convenience sample. Thus, the concept of research design becomes a label which names or summarizes a particular way of carrying out research.

The Approaches are Complementary

The second idea which underlies our proposition refers to the fact that the two basic lines of thought are not "either/or", but rather should explicitly be considered simultaneously. The above results from the fact that most of the times marketing research is applied research and not basic research; that is, it is done with a practical purpose in mind —in this case, a marketing decision. Therefore, the decision-making approach must be considered. At the same time, we know that these decisions are a combination of several inputs such as the managers' knowledge and experience on the marketing issue, his/her personal intu-

ition and the marketing research findings he/she has at hand. The first two are mainly subjective types of help. But, on the contrary, the specific contribution of marketing research to his/her decision-making process lies precisely in its objectivity and in its associated degree of methodological rigor. Thus, this line of thought must also be a part of the Matrix. It is worth anticipating, that we have substituted the "exploratory" type of research of the decision-making approach for the word "non-conclusive" to avoid confusion. In this way, it becomes clearly different from the "exploratory" type of the methodological approach.

A Third Criterion

The third idea refers to the need to consider the implementation of the particular research. We have labelled it the time-frame dimension, which breaks up into "before" and an "after" options, for the sake of classifying any research project in both instances –before the data gathering process and after its completion. Why this third criterion? First, because the end result should not be different from the planned one; but, many real-life situations call –in the end– for a change in the research design classification of the project. Second, the status of the project might change from non-conclusive to conclusive design or, vice versa. Therefore, the definition of research design is to be done not only *ex-ante* (that is, after agreeing upon —researcher and marketing manager— what particular objectives and procedures will be followed), but also *ex-post* (that is, after the data collection stage) faced with the actual findings, on one hand, and the decision to be taken, on the other. In other words, the research design must be labelled both, in the planning stage and later, when the project has ended.

The Research Design Matrix

According to these three dimensions or criteria, the Matrix of 12 cells is built (Figure 1). How does it work? Taking into consideration the initial project conclusiveness (the underlying decision problem) and the rigor of the planned research (the methodological approach) an initial or "before" classification is made. Later, when the project is completed, a re-examination of the methodological rigor, initially defined, as well as a re-examination of the decision purpose, must be done in order to determine a second or "after" classification of the research design.

All research designs are categorized by simple double names. Some examples of "before" research designs include exploratory/non-conclusive, descriptive/conclusive, and causal/conclusive. These, in an "after" stage, may become exploratory/non-conclusive or descriptive/conclusive designs.

The Matrix as a Unique Solution

In addition to the possibility of classifying typical research projects, this alternative framework offers a unique solution to the labelling of "anomalous" investigations. It allows the researcher to place them into a meaningful classification, something which could not be addressed through the previous approaches. Two illustrative examples of this use are discussed below. The first one deals with a decisional change between the "before" and "after" stages of a research project and the second, with a methodological change between these same stages.

Imagine a project which starts using focus groups (an exploratory/ non-conclusive research) beforehand, but, when finished, the marketing manager who asked for the study, considers that he/she lacks the financial resources to continue with a second step of some form of descriptive/conclusive research. Therefore, he/she makes up his/her mind and decides to carry along certain marketing tasks, in the absence of more conclusive findings. This is a risky decision. In this case, methodologically speaking, the study itself remains unaltered, but there has been a change in the conclusiveness given to the research findings as they are utilized for decision-making purposes when not appropiate. According to the Matrix, the same project, then, becomes afterwards, exploratory/conclusive research.

A methodological variation is illustrated by a descriptive/conclusive research project, in which the needed information is to be gathered through a probability sample (simple random, for example), but which encounters, at the end of the data collection process, a serious methodological problem —a very low response rate. The research findings, therefore, are drawn from a smaller sample, whose representativeness is, at least, questionable. According to our Matrix, in terms of methodological rigor, the project turned out to be something different from that which it was initially intended to be. Then, methodologically speaking, instead of being a descriptive research it should be considered exploratory. If the manager, in spite of the above, decides to go ahead and makes a decision, the study becomes –in a second stage– an exploratory/conclusive research.

Summary

This paper proposes an alternative framework for the purpose of clarifying the meaning of the research design concept. As discussed, by taking simultaneous consideration of three dimensions -the methodological, the decisional as well as the time frame- the categorization of any piece of research is easily obtained. The need to include a time frame responds to the recognition that real-life

situations have an impact on research projects, which cannot be ignored.

Also, the concept of research design should not be considered a step of the research process, but rather an overall label. In addition, besides categorizing usual studies, the Matrix offers a solution to the labelling of "anomalous" ones, which otherwise, remain unclear.

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TABLE 1

Treatment of the Concept of Research Design in a Sample Current Marketing Research Texbooks

	Churchill	Parasuraman	Aaker & Day	Dillon, Madden & Firtle
Text	Marketing Research: Methodological Foundations 5th Ed. (1991)	Marketing Research (1986)	Marketing Research 2nd Ed.(1983)	Marketing Research in a Marketing Enviroment (1990) 2nd Ed.
Use of the Research Design Concept	Yes	Yes	No	No
Definition	It is the framework or plan for a study used as a guide in collecting and analyzing data (p.127)	No blueprint used to guide	It is the detailed the implementation of a research study toward the realization of its objectives (p.47)	No
Types of Research	Exploratory research design Descriptive research design Causal research design	Exploratory research Conclusive research (Descriptive and Experimental)	Exploratory research Descriptive research Causal research	Qualitative research methods Quantitative research methods Experimental research methods
Step in the Research Process	Yes, Step 2	Yes, Step 5 (p.93), but No (p.122)	No, (p.20), but Yes as research approach (p.48)	No
Research Design as a Chapter	Yes, Ch 4 Research Design	No	Yes, Ch 3 Research Design and Implementation	No
Approach	Methodological (scientific)	Decision-making	Scientific	Scientific

	Green, Tull & Albaum	Tull & Hawkins	Kinnear & Taylor	Boyd, Westfall & Stasch
Text	Research for Marketing 5th Ed. (1988)	Marketing Research: 5th Ed. (1990)	Marketing Research: 4th Ed. (1991)	Marketing Research: Text 7th Ed. (1989)
Use of the Research Design Concept	Yes	Yes	Yes	No ?
Definition	It is the specification of methods and procedures for acquiring the information needed to structure or to solve problems (p.96)	It is the specification of procedures for collecting and analyzing the data necessary to help identify or react to a problem or opportunity (p.44)	and analysis phases of the	It is the basic plan thatNo guides the data collection research project (p.64)
Types of Research	Exploratory studies Descriptive studies Causal studies	Exploratoy research Descriptive research Causal research	Exploratory research Conclusive research (Descriptive and Causal) Performance Monitoring research	Exploratory research Conclusive research (Descriptive and Experimentation)
Step in the Research Process	Yes, Step 4	No	Yes, Step 3	No
Research Design as a Chapter	Yes, Ch 4 The Tactics of Marketing Research-Research Design	Yes, Ch 3 The Research Process and Research Design	Yes, Ch 5 Research Design and Data Sources	No
Approach	Methodological (scientific)	Scientific	Applied (decision-making)	Scientific

FIGURE 1

THE RESEARCH DESIGN MATRIX

		Time Frame			
		before		after	
		Decision-making criteria			
		Non Conclusive	Conclusive	Non Conclusive	Conclusive
Scientific Criteria	Exploratory				
	Descriptive				
	Causal				

ESTIMATION OF MEXICAN MARKET SEGMENTS (MEMS) COMPARISON OF ALTERNATIVE STRATEGIES FOR SEGMENT DEFINITION

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Introduction

In 1991, the Center for International Business and Environment Studies (CIBES) surveyed the Mexican market, making available appropriate data for the present study of the Mexican Market Segments (MEMS). This study followed the customary technique for defining market segments: that is to cluster a battery of psychographic variables. The goal is the recovery of clearly defined, distinctly separated clusters. However, this goal can be hampered by "noisy" variables which do not contribute to, and may actually mask, the underlying cluster structure.

The purpose of the MEMS's research, therefore, was to compare alternative strategies of clustering in an effort to recover not just *adequate* but *optimal* segments of the Mexican market. The variables were clustered using three different analysis strategies: the traditional methods of clustering (a) "raw" data and (b) factor scores plus (c) a new method of preprocessing "raw" data points with Heuristic Identification of Noisy Variables (HINoV).

The optimality of the three strategies was evaluated by (1) *predictive validity* as measured with the "confusion index" of discriminant analysis, (2) *external validity* as measured by the usefulness and meaningfulness of the demographic profiles of each cluster, and (3) *cross validation* as measured by the stability of profiles across split-half subsets.

Market Segmentation

Wendell Smith's article (1956) in the *Journal of Marketing* is often cited as the introduction of market segmentation. But Smith himself (1978) credited Wroe Alderson for having established the concept a quarter century before. Certainly by 1978, when Yoram Wind edited the now classic status report on segmentation research in the *Journal of Marketing Research*, all the bases of segmentation were in place.

The major work in market segmentation has been in the applied area. Marketing practitioners have used segmentation to target specific markets, position products, and predict group responses to new products or to changes in the marketing mix. In industry, two basic segmentation methods have been utilized (Wind 1978): *a priori* segmentation using geographic and demographic measures (age, sex, income, education, occupation, etc.) and *post hoc* segmentation using a battery of interrelated variables to create segments of necessarily unknown number and size. These variables relate to the respondents' activities, interests, and opinions and reflect their life style or psychographic profile.

Segmenting the market with psychographics has become increasingly popular (Wind 1978, Michman 1991). Psychographic segmentation assumes that similar purchasing motivations stem from a similar human value system. Values are useful for market segmentation because they have been shown to be a primary determinant of purchasing behavior and stable over time (Henry 1976). Rokeach (1973) defined values as "standards of desirability invoked in social interaction to evaluate the preferability of behavioral goals or modes of action."

Many different schemes of psychographic segmentation were spawned by the Rokeach model. The two most prominent were VALS ("Values and Life Styles") and LOV ("List of Values"). Since VALS is proprietary information, the method of classifying groups is not published. In both the Rokeach and LOV models, the groups are first determined by clustering. Individuals are then classified into the pre-specified cluster group simply on the basis of their top-ranked value. (Kamakura & Mazzon 1991). The predictive utility of the groupings is then evaluated with regression.

Clustering Strategies

While the framework of psychographic segmentation appears to have gained general acceptance, there is still considerable disagreement over the methods. The debate over clustering strategies concerns the issue of pre-processing the data or dealing directly with the raw data.

The first strategy implemented in the MEMS's study was the traditional clustering of the raw data. The clustering technique utilized was the same as for the other two strategies: namely, an iterative partitioning algorithm as opposed to a hierarchical technique. Iterative partitioning, specifically the K-means partitioning algorithm, has gained acceptance as the preferred method for handling the large data sets typical in marketing (Green, Carmone & Kim 1990). The K-means algorithm starts from K pre-deter-

mined cluster centers. Cases are assigned to the cluster with the nearest centroid. The centroid is then recalculated and cases reassigned until the variance within each cluster is minimized.

The second traditional strategy implemented in the MEMS's study was the clustering of factor scores as had been recommended by various researchers (Wind 1978; Punj & Stewart 1983). The value of factor analysis is that it removes the redundancy among the underlying attributes and reduces the number of variables.

The third strategy implemented was HINoV, a new strategy which has been developed in response to a problem inherent in both raw data and factor score clustering: the presence of outliers and noisy variables which can wreak havoc with the definition of clusters. Even one irrelevant variable can distort the cluster solution (Punj & Stewart 1983) and mask the underlying cluster structure (DeSarbo, Carroll, Clark & Green 1984). Irrelevant or "noisy" variables need to be identified and removed. As Green & Kim (1988) conclude, "the problem of variable selection remains of major importance in cluster analysis."

HINoV was developed to address this problem (Carmone 1991). It makes a pairwise comparison of cluster membership of every variable with that of every other variable. The amount of agreement between each pairwise comparison is measured with an adjusted Rand Index. The Rand Index gives the ratio (between 0 and 1) of agreement of cluster membership to disagreement. If two clustering solutions contain the exact same members, the Rand index would be 1.0. If they contain none of the same members, the Rand Index would be 0.0. The Index has been modified (Hubert & Arabie 1985) to remove the bias due to chance. This adjustment was documented as superior in the studies conducted by Milligan (1989). The Rand Indices for all pairwise comparisons are summed for each variable. This indicates how close that particular variable's clustering solution is to the clustering solutions of the other variables. It measures the contribution of that individual variable to the overall clustering solution. These summed Rand Indices are then ranked and plotted to give a visual indication of which variables can be removed.

Clustering Evaluation

Evaluating whether the results from one clustering strategy are "better" than those from another is difficult on at least two counts: (1) Clustering itself has been called a "fuzzy" concept, making some researchers conclude that clusters may not exist (Tryon & Bailey 1970). (2) Clustering, unlike other multivariate techniques, lacks statistical procedures for establishing external reliability and validity (Punj & Stewart 1983).

Monte Carlo studies using simulated data have been used to evaluate various clustering algorithms, preprocessing procedures, etc. (Milligan 1985, Kara 1991). However, Monte Carlo methods cannot be used with real data where the structure is unknown. For the MEMS's study, therefore, surrogates had to be used to evaluate predictive, external,and cross validation.

1. Predictive Validity: Several studies have recommended that discriminant analysis be used to evaluate predictive validity (Punj & Stewart 1983). Cluster membership is the dependent variable with activities, interests, and opinions as the predictor variables (Kamakura & Mazzon 1991). A randomly selected hold-out sample is used to test the model developed from the original sample (minus the hold-out). The percentage correctly predicted is an indication of the model's validity.

The percentage is expected to be generally high since the clusters and the discriminant model are determined from the same variables. However, in the MEMS's study a *comparatively* higher percentage correct was used as an indication that one clustering solution was "better" than another.

2. External Validity: In clustering, the term "external validity" is used in a more applied manner than in formal theory evaluation. Rather than referring to the generalizability of a causal relationship, it refers to how meaningful the information is to the end user. As Punj & Stewart point out (1983), "external validity requires a demonstration that the clusters are useful in some larger sense." The end user needs market segments which are identifiable, understandable, and actionable. In the MEMS's study, market segments which met this criterion were therefore considered "better" than those which did not.

3. Cross Validation: Stability across split sets of data is often used as a surrogate for the concept of reliability in classical test theory (Punj & Stewart 1983). Clustering is carried out on each randomly selected half of the data set. Descriptive statistics of each set are then compared to determine whether the segments hold up. When profiles across sets in the MEMS's study were more similar, the clustering solution was considered "better".

Methodology

The data source for the MEMS's study, CIBES, was founded at Florida International University in 1991 to provide academic and business-related marketing research in Latin America. The major emphasis for CIBES's initial, ground-breaking project was to establish an Index of Consumer Confidence in Mexico. To this end, personal interviews were conducted with a probability sample of 900

households in six geographic areas of Mexico. The data were collected using a questionnaire with a Likert-like 5-point scale. The instrument was developed and carefully pre-tested by the CIBES's staff.

The CIBES's survey questions related to psychographics, demographics, consumers' confidence, plus client-oriented and consumption-oriented proprietary sections pertaining to products of sponsoring companies. The MEMS's study used two subsets of the CIBES's data: 60 psychographic variables plus 32 client variables used to verify results In addition, 23 demographic variables were used to build segment profiles.

Prior to the MEMS's study, the data had been cleaned by the CIBES's staff to correct for input and/or coding errors. Missing data constituted only .3% of the responses with no more than .7% missing in any one variable. Because the clustering algorithms required complete data, the missing data were recoded to the rounded integer value of each variable's mean response. To identify "suspicious" interviewers or respondents, the data sets were transposed and the frequency of responses by respondent was counted. Respondents thought to be uninterested or unthinking because they answered all the questions with the same response were identified and discarded. This resulted in the removal of 10 psychographic cases and four client cases.

Preliminary analysis was done to determine the optimal number of clusters, an evaluation which is "more an art than a science" (Kamakura & Mazzon 1991). The MEMS's study consequently applied two different methods. First, the Wilks' Lambda and F-Value of each cluster solution from 2 to 12 clusters for the psychographic and the client data sets were calculated using MANOVA. Four subsets of each data set were then analyzed with hierarchical clustering to determine a "fusion index". Although the results tended to favor a four-cluster solution, they were not conclusive. Consequently, in comparing factor score vs. raw data clustering, all solutions for 2 to 12 clusters were reviewed.

Each of the two data sets was separated into two equal odd/even sets of 450 respondents each. Since the sequence of responses followed the geography of the interviews, an odd/even bifurcation was considered a legitimate means of maintaining the randomness of the sample. The split-half sets of both the psychographic and client data sets were analyzed by first raw data clustering and then factor score clustering for two to twelve cluster solutions.

The SPSS QUICK CLUSTER program was used to cluster both the raw data and the factor scores by the K-means iterative partitioning algorithm. The program selects well-spaced cases as initial centers or "seeds". In the MEMS's study the centroids of the solution were then used to "seed" a subsequent iteration of the program twice more as recommended by SPSS. Factor analysis was done with principal components and varimax rotation. Factor scores were determined via regression and used as the input for the clustering procedure.

1.Predictive validity was evaluated by using cluster membership as the dependent variable in discriminant analysis. 50% of the data (225 cases in each set) was withheld. The model was built from the initial sub-sample and then used to predict group membership of the hold-out sample. The "confusion matrix" compared the percentage of cases correctly classified.

2.External validity: The managerial usefulness of the solutions was measured by cross-tabbing group membership with demographic variables and finding how many demographic variables were significant. The assumption was that a greater number of significant differences in the clusters was potentially more useful to a manager than a fewer number.

3. Cross Validation was evaluated by comparing the cluster means and standard deviation for each of the key variables.

The comparison of HINoV and raw data clustering followed basically the same steps as the comparison of raw data clustering and factor score clustering. The differences were an additional cleaning of low variance cases and variables plus the limitation of the analysis to a four-cluster solution. This was a necessary limitation since HINoV is computer-time intensive. A four-cluster solution was selected based on the earlier, albeit inconclusive, evidence in its favor. As a preliminary step, persistent outliers were removed. This meant that a total of 16 cases were removed from the psychographic data set and 13 cases from the client data set.

Conventional methods were initially used to identify the variables not contributing to the solution. Those having a disproportionately high number of responses in two adjacent values were removed. As a result, 10 psychographic variables and two client variables were discarded. The HINoV procedure was applied as an additional means to identify "noisy" variables. The two data sets and the split-half sets of each were then evaluated.

Results

The first-stage comparisons of the 88 raw data vs. factor score clustering solutions gave mixed results. The second-stage comparisons of the four-cluster solutions for raw data, factor score and HINoV gave results which favored HINoV.

Raw Data vs. Factor Score Clustering:

1. Predictive Validity: The results from the discriminant analysis predictions of cluster membership were conflicting: raw data clustering gave better results with the client data set and factor score clustering gave better results with the psychographic. These results may have reflected the fact that the larger (60-variable as opposed to 32-variable) psychographic data set had greater redundancy which factor analysis removed. In any case, the results did not clearly indicate the superiority of raw data clustering or factor score clustering.

2. External Validity: The analysis of the crosstabs for different number of clusters showed that with raw data clustering, 41% of the crosstabs between cluster membership and 23 demographic variables were significant. With factor score clustering, only 15% were significant. This suggested that raw data clustering provided more useful information to a manager.

3. Cross Validation: A comparison of the significant crosstabs in the split-half samples of each data set showed greater potential similarity of profiles with the raw data clustering than with the clustering of factor scores. With raw data clustering, three times as many crosstabs were significant in both the odd and even split half samples of the client and psychographic data.

HINoV vs. Raw Data & Factor Score Clustering

1.Predictive Validity: A higher percentage of group membership was correctly predicted by discriminant analysis for HINoV clustering than with raw data or factor score clustering. The HINoV results, based on only one-third (21) of the 60 psychographic variables, predicted cluster membership more accurately than either of the alternatives. The results were substantiated by the high average score of the split run and further supported with the client data set.

2.External Validity: The profiles of the psychographic clusters built on the HINoV selected variables appeared to be more clearly differentiated than those built on raw data clustering. With raw data clustering, the first two groups identified were virtually identical in their demographic pr ofiles; they differed only in their attitudes. The first group was less happy, less religious, less family oriented. While this was an interesting distinction, it would not be managerially useful because it would not be actionable. The HINoV clustering appeared to be more meaningful, defining four distinctly different groups.

3. Cross Validation: A comparison of the profiles for the odd/even data sub-samples was made to determine the stability of the results with HINoV. Too few of the psychographic/demographic crosstabs were significant to make a comparison. The crosstabs of the client groups and their demographics, however, showed nine significant demographic variables. With four clusters, this meant 36 profile characteristics, of which 28 (80%) were identical. Another four characteristics were similar with one group having an "average" response which might have been in the same general direction as the second group but not as strong. These results indicated relative stability of the HINoV solution.

Psychographic Groups Correctly Predicted

STRATEGY	CASES RE-MOVED	VARI-ABLES REMOVED	% CORRECT
RAW DATA (AVG)	10	0	77%
FACTOR SCORE(AVG)	10	0	83%
RAW DATA	13	0	82%
RAW DATA	13	10	78%
HINoV	13	29	87%
HINoV	13	39	92%
HINoV (AVG SPLIT)	13	39	91%

Conclusion

This study demonstrated that optimal psychographic segments for MEMS were recovered with the HINoV strategy. The "noisy" variables distorting the solution were apparently identified and removed. The remaining variables were those which contributed most to the clustering solutions. The resulting clusters were "better" in the sense that they were higher in predictive and external validity plus cross validation. The removal of HINoV identified variables helped define more understandable and clearly differentiated segments. Furthermore, HINoV improved the validity of the clusters using only one-third to one-half of the variables.

As an immediate benefit, clear segments of the Mexican market have been identified, a valuable contribution to future marketing in Mexico under the North American Free Trade Agreement. As a long term benefit in ongoing projects such as the study of the Mexican market by

Client Groups Correctly Predicted			
STRATEGY	CASES REMOVED	VARIABLES REMOVED	% CORRECT
RAW DATA (AVG)	4	0	82%
FACTOR SC.(AVG)	4	0	77%
RAW DATA	16	0	92%
RAW DATA	16	2	87%
HINoV	16	14	93%
HINoV (AVG SPLIT)	16	14	86%

CIBES, being able to reduce the number of psychographic questions can reduce the cost of the survey as well as the fatigue of the respondent.

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DISTRIBUTIONAL PROPERTIES OF DATA AND DIMENSIONS OF SERVICE QUALITY

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The purpose of this paper is three-fold. First, the dimensionality of the 22 service quality attributes contained in the SERVPERF scale will be investigated. This will be explored using the original data, a power transformation of the data, and a censored transformation of the data using PRELIS. Second, the convergent and discriminant validity of service quality dimensions will be assessed using LISREL VII. Finally, the relationship between the service quality and an antecedent construct will be investigated.

The measures for the performance scales were adapted from the SERVQUAL scale. The 22 performance measures were assessed using a 7-point semantic differential scale. A direct measure of overall service quality was measured via a 4-point Likert scale. The data were first randomly divided into an analysis group (n=253) and a cross-validation group (n=256).

To analyze the dimensionality of the service quality construct using transformed data, two additional data sets in addition to the original data (ORIG) were constructed. The first dataset (SQUARE) consisted of the squared transformations of the original data, and the second dataset (CENSOR) consisted of the censored values of the original data.

Each data set was subjected to maximum likelihood exploratory factor analysis to assess the dimensionality of the construct, including five exploratory factor analyses (one to five factors). For each of the ORIG, SQUARE, and CENSOR data sets, a three-factor solution was found to best characterize the data. The explained variance for the three-factor models were 60.3%, 61.5%, and 60.8% for the ORIG, SQUARE, and CENSOR scales.

In the present study, the three-factor solution in all three analyses revealed a "tangibles" factor, a factor which consisted of the various "intangible" measures, and a factor which contained references to promises of promptness to be provided to the consumer. The "tangibles", "intangibles", and "promptness" items loaded at relatively the same weights on the same dimensions in all three analyses.

The various scales which were developed exhibited acceptable levels of reliability. For the "intangibles" dimension, the coefficient alphas for the ORIG, CENSOR, and SQUARE scale were 0.94, 0.95, and 0.95 respectively. The coefficient alpha for the "promptness" dimension was 0.89 for all transformations. The ORIG, CENSOR, and SQUARE scale coefficient alphas for the "tangibles" dimension were 0.70, 0.72, and 0.73. The overall reliabilities for the scales were 0.96, 0.97, and 0.97.

The validity of the three-dimension solutions were also examined using confirmatory factor analysis via LISREL VII on the cross-validation sample. For each data set, the average variance extracted (φ) by each dimension was greater than the 0.50 level. In all three analyses, discriminant validity was evidenced between the "tangibles" and the "promptness" dimensions, as well as between the "tangibles" and the "intangibles" dimensions. Correlations between the "promptness" and "intangibles" dimensions ranged from 0.91 using original data to 0.92 using squared data. In contrast, the correlations between the "tangibles" dimension and either the "intangibles" or the "promptness" dimensions ranged from 0.61 to 0.76. For all three data sets, the χ^2 for the various combinations of dimensions were significantly greater ($p < .05$) than the χ^2 for the individual dimensions, thus suggesting discriminant validity.

To assess the relative impact each dimension has on an overall measure of service quality, structural models which employed a single-indicator of the respondent's overall perception of service quality with the utility were investigated.The squared multiple correlations for the ORIG, CENSOR, and SQUARE data sets structural equations were 0.46, 0.47, and 0.45 respectively.

In all three data sets, the average correlation for all data sets between the overall measure and the three dimensions were 0.50 ("tangibles"), 0.65 ("intangibles), and 0.67 ("promptness"), and were consistently higher in the transformed data sets than in the ORIG data set. However, in all data sets investigated, the only significant relationship between the individual dimensions and the overall perception of service quality was that of the "promptness" dimension.

To explore the possibility that the "promptness" dimension may somehow affect the respondent's perceptions of indicators of the "tangibles" and "intangibles" dimensions, two additional structural models

were tested, including the "promptness" dimension as an antecedent construct to service quality. In both cases, the models failed to fit the data. In all data sets, overall fit indices were < 0.50.

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ON THE PREDICTIVE VALIDITY OF MDS: AN EXPERIMENTAL INVESTIGATION INTO THE SOURCE OF DATA AND THE METHOD OF SIMILARITY MATRIX DERIVATION

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INTRODUCTION

Measurement of consumer preferences and perceptions is of continual interest to marketing managers. By understanding how consumers perceive and react to the many viable choice alternatives, managers can better develop positioning and marketing strategies for their products and services. These perceptual representations can be derived through various techniques including cluster analysis, conjoint analysis, discriminant analysis, factor analysis, and nonmetric multidimensional scaling, which is the focus of the current study. This study begins to address the lack of research concerning the comparability of two factors important to the constuction of perceptual maps: (1) the data collection methods - the type of data and (2) the methods used to derive similarity measures.

The authors investigate the predictive validity of two types of dichotomous data which is often referred to as pick-any/n (DeSarbo and Hoffman 1987, Elrod 1988, Levine 1979, Takane 1983). The two types of pick-any/n data used in this study are (1) the evoked set, information related to the last purchase and (2) the use set, information indicative of whether the respondent had purchased from the store within an established period of time.

Additionally, two methods of deriving similarities are included in the current study: (1) correlations and (2) number agreement, a measure derived from the crosstabulations for all combinations of stores. Combining the two factors leads to the four models of the study: (1) evoked set/correlations (E/C), (2) evoked set/agreement (E/A), (3) use set/correlations (U/C), and (4) use set/agreemeent (U/A).

NON-METRIC MDS

Nonmetric multidimensional scaling (MDS) is a technique for representing consumers' perceptions of objects based on measures of similarity or dissimilarity between the objects (Cooper 1983, Green 1975). MDS has many purposes including product-market definition, new product planning, and market segmentation. Frequently, external analysis of preferences is used to place either (1) ideal points or (2) vectors onto a product space resulting in the formation of a joint space representation with both consumers and products (e.g. Carroll 1972; Shocker and Srinivasan 1974, 1977). The vector model represents preferences by finding the shortest perpendicular drawn from an ideal point to the vectors. The ideal point model indicates preferences by calculating the minimal distance from the respondent ideal point to the location of the objects.

Data for the model are either similarities or dissimilarities-based. Objective measures such as behavioral switching data and true attributes can be used as can subjective measures such as perceived attributes and similarities. The actual similariity/ dissimilarty input used can be derived from either subjective or objective measures and take many forms including correlations, statistical distance measures, and percent agreement (Holbrook and Lehmann 1981, Lehmann 1972, Nunnally 1978). Data can also be drawn from rankings, ratings, purchases, and likability.

The widespread appeal of MDS to marketing researchers has led to much interest in the robustness and applications of the technique. Researchers have investigated many aspects of its use including different algorithms, as well as the validity and reliability of results (Carroll and Chang 1970, DeSarbo and Rao 1986, Kruskal 1964, Moore and Holbrook 1982, Young and Torgerson 1967). MDS has also encouraged application to many areas including product line management, product design, positioning, market structure analysis, and retailing (Green and Krieger 1985; Korgaonker and Sheshai 1982; Moore and Holbrook 1982; Sudharshan, May, and Shocker 1987).

Few studies have compared the methods of deriving similarities measures or the data collection techniques used in the MDS models, although many studies have investigated the ratings versus rankings versus paired-comparison question (see Cooper 1983 for a review). An exception is the study by Lehmann (1972) who investigated perceptual maps derived from judged similarity data and brand-switching data. Lehman (1972) found that different maps result from different methods of computing similarity (switching versus subjective similarity).

In addition, Nunnally (1978) suggests that correlations can be useful for generating similarity data from pick/any data. Also, Levine's (1979) pick-any MDS model is an attempt to extend the type of input data to what might be called recognition or recall measures of various alternatives,

rather than from actual comparisons or ratings as is normally needed (Elrod 1988, Gideon 1989). Cooper (1983, pg.445) indicates that the methods and the spatial representations derived from ..."set-membership requires more general attention" from marketing researchers as to the validity and reliability of perceptual maps derived from this type of data. Thus, the following hypotheses in null form:

Hypothesis 1: There is no difference in model predictions from the different types of data (evoked set versus use set).

Hypothesis 2: There is no difference in model predictions from the different methods of deriving similarity measures (correlations versus agreement)

THE STUDY

The scope of the study applies to a retailer-type familiar to the subjects of the study: fast-food hamburger outlets. The research is carried out at a large university located in the southeastern United States. The sample consists of undergraduate marketing students. The data are collected as part of a class project in which seven separate classes participated. One hundred and seven responses are obtained from approximately one hundred and fifty potential respondents. Twelve surveys were deemed unuseable due to incomplete responses, resulting in ninety-five useable surveys.

Six fast-food hamburger outlet brands are present in the market: (1) McDonald's, (2) Burger King, (3) Wendy's, (4) Hardee's, (5) Maxie's, and (6) WhataBurger. Although more than one outlet exists for each of the company names, data are only collected for the brand names, not for the individual outlets.

Concerning the data collection method (type of data), the evoked set is a measure of the brands that a consumer considers before making a decision (Narayana and Markin 1975). In this instance the evoked set refers to those outlets considered before the very last purchase made by the consumer. The measure was taken by having the respondents check those outlets which were considered immediately prior to the last purchase in this category. This results in a series of six dichotomous (yes, no or 1, 0) points for each respondent.

The use set is defined as a measure of past experience with each of the brands. In this instance, respondents are asked to check those outlets that he/she purchased from in the past three months. This again results in a series of six dichotomous points (yes, no or 1, 0) for each respondent.

Concerning the method for generating similarity data, the first method, correlations, computes similarities via the Pearson product-moment formula for both types of data (see Nunnally 1978). The number agreement measures are computed for each type of data in the following manner. Crosstabulations of frequencies were run for all brand combinations. The cells in which the responses matched (i.e. both 1 or both 0) are then summed to obtain the agreement measure. In other words, the agreement measure is a summation across respondents of the number of times the respondent who picks brand i also picks brand j and the respondent who does not pick i also does not pick j.

Two samples are constructed by randomly assigning respondents from each of the seven classes to either a holdout or a calibration sample. This results in a calibration sample size of forty-four and a holdout sample size of fifty-one. The forty-four people in the calibration sample are used to form the perceptual space using the MDScal program. It is suggested that the models predict equally well within both the calibration sample and the holdout sample. Thus, a third hypothesis.

Hypothesis 3: No dropoff in model prediction is evident when moving from the calibration to the holdout sample.

Respondent preference rankings for the six brands are obtained for use in testing the predictability of the models. A correct prediction is recorded when the model matches the respondents preference rankings. Two measures of performance (correct predictions) are utilized in the study: (1) first choice without allowing ties in the model predictions and (2) first choice with ties allowed in the predictions. Ties refer to the model predicting more than one first choice brand for a respondent's preference. The model predictions are obtained by placing the respondent preferences on the perceptual maps using the Prefmap program. Then distance measures are computed for each respondent's ideal points and the brand points. If the program could not find an ideal point for the respondent, then that respondent was eliminated from the analyses for that model. The use of two performance measures results in a fourth hypothesis.

Hypothesis 4: No difference in predictions is evident for the two performance measures.

Combining the two factors results, again, in four possible models: (1) evoked set/correlations (E/C), (2) evoked set/agreement (E/A), (3) use set/correlations (U/C), and (4) use set/agreement (U/A). The fit of the four models (perceptual space using MDS) to the original data is shown in Table 1 for four, three, and two dimensions. The MDScal program continues to iterate until a predetermined satisfactory level is reached or the minimum stress is achieved. As shown in Table 1, cutoff stress level is reached for each model in dimensions three and four. For

the two dimensional case, the stresses ranged from .010 to .249. The two-dimensional case is, however, selected to test the predictive validity of the models. This allows a secondary investigation into the relationship between model fit and predictive validity.

Hypothesis 5: The higher the model fit, the better the predictive validity.

TABLE 1: MODEL STRESS

Model	2-D	3-D	4-D
U/A	.010	.006	.003
U/C	.249	.007	.010
E/A	.149	.009	.007
E/C	.129	.002	.010

RESULTS

The two space configurations for each brand for the four models are shown in Table 2. The numbers indicate that the four models result in very similar perceptual relationships among the six brands. In fact, graphing the configurations (not shown) magnifies the similarity in configurations. If labels are added to the two axes, one might be a local/national (advertising) dimension while the other a service/speed dimension.

TABLE 2: Brand Ideal Points

	Dim.	BK	MAX	WHA	MCD	WEN	HAR
E/A	1	-.634	.357	.948	-.769	-1.16	1.26
	2	-.260	-.204	-.535	.767	.148	.085
E/C	1	.094	.269	1.29	-.463	-.901	-.298
	2	.772	-.158	.035	.864	-.208	-1.30
U/A	1	-.803	.441	1.60	-.861	-.798	.412
	2	.027	.725	.050	-.029	-.083	-.698
U/C	1	.505	.163	-1.26	.994	.420	-.818
	2	-.923	.520	-.281	.301	-.427	.870

The tables are analysed by using the Catmod procedure in SAS. This procedure allows the categorical modelling of data by fitting linear models to functions of response frequencies (see SAS User's Guide). The procedure uses Chi-squared as the test statistic, appropriate in this instance because the performance measures are binomial (predicted/not predicted). The predictions for each of the four models are shown in Table 3 for both criterion.

TABLE 3: Correct Predictions

	Calibr.	Holdo.
First Coice Without Ties		
E/C	17/43*	20/50
E/A	13/40	15/47
U/C	20/44	15/51
U/A	15/43	15/51
First Choice With Ties		
E/C	43/43	49/50
E/A	40/40	47/47
U/C	44/44	50/51
U/A	22/43	22/51

* = 17 correct predictions out of 43

The results of the analysis for the measure without ties are shown in Table 4. As can be seen, there are no significant (.05) effects for type of data, similarity method, samples, or any two-way interactions. Thus, all of the models are equivalent when predicting first choice without ties. Thus, hypotheses 1, 2, and 3 cannot be rejected (5 is rejected: see below). This indicates that for the predictions without ties, when using non-metric MDS with Prefmap, it does not matter which type of data or which method for deriving similarities is utilized (at least from the choices of the current study). Also, no loss in predictive validity is evident when moving from a calibration sample to a holdout sample.

TABLE 4: Analysis of Parameters

First Choice Without Ties				
Effect	Param.	SE	Ch-Sq	Prob.
data Type	-.0288	.110	.07	.7935
Sample	-.1173	.110	1.14	.2861
sim. MeTHod	1394	.110	1.61	.2049
Type*Sample	1204	.109	1.20	.2732
Type*Mth	.0298	.109	.07	.7863
Sample*Mth	.0502	.110	.21	.6483
First Choice With Ties				
Effect	Param.	SE	Ch-Sq	Prob.
data Type	-1.127	.393	8.20	.0042*
Sample	-.1837	.371	.24	.6212
sim. MeTHod	.005	.401	6.27	.0123*
Type*Sample	0717	.394	.03	.8557
Type*Mth	-1.161	.393	8.71	.0032*
Sample*Mth	.0981	.371	.07	.7918

The results of the analysis for the measure with ties allowed are also shown in Table 4. In this case, there are numerous significant (.05) effects: type of data, method for deriving similarities, and the type*method interaction. Thus, hypothesis 1 and 2 (4 and 5 also: see below) are rejected. Thus, for the second performance

measure (ties allowed), both the type of data and the similarity method utilized do impact the predictive validity of the models. A look at Table 3 indicates that the evoked set data and the correlation method are the two better choices. The interaction of the two factors is discussed below. Hypothesis 3 is again not rejected: no differences are evident when predicting between the calibration and holdout samples. The significant interaction refers to the four models to be tested in the study: (1) use set/correlation (U/C), (2) use set/agreement (U/A), (3) evoked set/ correlation (E/C) and (4) evoked set/agreement (E/A). Further analysis reveals that the use set/agreement model is significantly different ($p<.0001$) from the three other models, underperforming the other three in predictions.

Concerning hypothesis 4, the performance measure used to test predictive validity is indeed critical. In this study, predictions with ties allowed resulted in differing relative importance for the factors under study. However, when using predictions with no ties allowed any of the models studied are acceptable.

Regarding hypothesis 5, one would not expect major differences in predictions between the four models unless the stress measures are extremely varied, indicating one model exhibited a better fit than the others. That is the case in the current study where use set/agreement is the best. The hypothesis suggests that the model exhibiting the best fit should be the best predictor. For the first criterion, none of the models are better predictors. For the second criterion, the best fit model is the worst predictor. So, in both instances hypothesis 5 is rejected: model fit does not necessarily imply predictive validity.

SUMMARY

This paper investigates the predictive validity of a joint-space model, nonmetric-MDS. MDS is used to locate a set of six fast-food retailer brands in perceptual space. Then an ideal-point model (Prefmap) is used to locate individuals in the perceptual space. Predictions are evaluated for both a calibration sample and a holdout sample for two factors: (1) the type of data and (2) the method for generating similarities.

The results suggest that no differences are evident in predictive ability when moving from a calibration sample to a holdout sample. Also, the criterion used to measure predictive validity is indeed relevant to the findings of the study. For one criterion, no differences are evident due to the factors under study. However, for the second criterion, both the type of data and the similarity derivation method exhibit significant differences, as does the interaction between the two factors. Finally, just because a model exhibits high 'fit' does not necessarily guarantee high predictive validity: there is a difference between fit and prediction.

This paper illustrates the general need for future studies concerning the types of data as well as the similarity measures used in multidimensional scaling applications. Further investigation might proceed to utilize and compare different dimensionality as well as other factors important to MDS.

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SERVICES MARKETING

SERVICE QUALITY: THE PUBLIC POLICY DIMENSION

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Abstract

The prominence of the service sector in the U.S. economy has led to sustained interest in and prolific research on various aspects of services marketing, perhaps the most visible of which is the research on service quality. Despite the extent of research, one area that appears to have been neglected by researchers is that of public policy implications of service quality. This paper highlights the public policy role of quality in service industries and delineates an agenda for research in the nexus between service quality and public policy issues. The paper reviews existing treatment of quality in policy oriented literature, outlines the shortcomings therein, and makes a case for the need to consider service quality as an important decision variable in policy issues and research.

Traditionally, the variable considered critical to the analysis of the competitive and welfare impact of market activities in public policy literature has been price. A growing number of studies, both general as well as those dealing with specific industries, have been taking into account the quality of products in the markets studied. However, in the general type of studies, quality has generally been treated as a unidimensional abstraction, and this literature has a primary focus on goods markets. Studies embedded in specific service industry contexts such as the airlines and goods transportation industries are limited by their conceptualization and operationalization of service quality.

The importance of delivered service quality in service industries, from a policy viewpoint, appears to be understated in the existing literature. This paper makes a case for recognizing this importance by considering some policy issues in service markets, and showing how the recognition of service quality as an important policy variable could improve policy actions and research. Due to the emerging dominance of the service sector, concerns have been voiced about whether the service sector will follow the manufacturing sector into decline. Records show tremendous structural changes in key service industries in recent years, and these changes are of the kind that fall within the purview of policy and regulation e.g., mergers and acquisitions, which have to be approved by the government. The potential impact of service quality considerations on policy decisions dealing with structural aspects of markets is discussed, and a case is made for an active role for policy makers in enhancing service industry competitiveness by appreciating this potential impact. In another area of policy viz., consumer welfare, the inadequacy of the traditional preoccupation with price as a critical variable is discussed, and a case is made for the specific consideration of quality in service markets as a factor antecedent to consumer welfare. With a view to highlight aspects of services marketing practice that may be of interest to policy makers, it is argued that service quality delivered to consumers plays a major but unrecognized role in determining the fairness and equity of exchanges. In the area of business to business exchanges, the potential for service quality being a source for possible infractions of applicable laws is discussed. The paper offers an agenda for future research, with specific focus on the relationships between service quality and market structure and concentration, discrimination, broad welfare considerations, and also on policy intervention and monitoring and measurement issues for practitioners.

MEASURING PERCEIVED SERVICE QUALITY AS A MULTI-ATTRIBUTE ATTITUDE

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Introduction

The past decade has witnessed concerted efforts to define and measure perceived service quality (e.g., Gronroos 1984; Parasuraman, Zeithaml, and Berry 1988; Parasuraman, Berry, and Zeithaml 1990). In particular, Parasuraman and his colleagues have initiated a systematic research program in the services marketing area, developing a comprehensive measure of quality based on extensive conceptual work and empirical refinement. This instrument, called SERVQUAL, is considered to be a multidimensional measure of perceived service quality.

SERVQUAL has attracted great interest from researchers (e.g., Brown and Swartz 1989). Consistent with the wide spread user interest, the scale has also attracted criticism with respect to its conceptual base and psychometric properties (Babakus and Boller 1992; Carman 1990; Cronin and Taylor 1992). Parasuraman et al. (1990) acknowledged concerns with the use of gap scores, and they subsequently called for further research for the development of alternative measures. The present study explores such an alternative approach to measuring service quality.

This paper provides the results of an empirical study based on a multi-attribute attitude model of service quality and compare them with the existing literature that is based on gap scores. The present approach defines service quality as a multiplicative function of perceived performance and importance ratings.

Background and Issues

While the definition of service quality is built on the sound tradition of the disconfirmation paradigm of consumer satisfaction research (cf. Gronroos 1984; Oliver 1980), it is not without problems. There is some evidence suggesting that consumers may not use a comparison standard at all in the satisfaction formation process. For instance, Oliver (1989) argues that consumers of continuously provided services may not use any performance standards.

The five-dimensional definition advanced by Parasuraman et al. (1988) has received strong empirical support in a number of studies they conducted. However, there is also evidence suggesting otherwise. Using the attributes in SERVQUAL, two-dimensional structures (i.e., tangibles and intangibles) were found to be viable abstractions of service quality in the utilities (Babakus 1992) and health care services (Mishra, Singh, and Wood 1991).

There are a number of empirical problems with the gap approach. First, the literature on the use of difference scores indicates problems of reliability and validity with such scores (Babakus and Boller 1992; Johns 1981; Prakash 1984). In particular, gap scores with components originating from the same respondents, as in SERVQUAL, have been shown to be highly vulnerable to a number of problems including response biases and unstable factor structures (Johns 1981).

The second concern is about the "expectations" component of the scale. The initial definition and measurement of consumer expectations was built around consumers' wants and desires (i.e., desired service level). In the latest version of SERVQUAL, the definition of the expectations construct reflects consumers' predictions of the performance of an excellent service provider (i.e., predicted service level). More recently, Zeithaml, Berry and Parasuraman (1991) completely redefined the expectations concept as composed of two levels: desired and adequate service levels, separated by a zone of tolerance. While the latter work deepened our understanding of the concept, it also signifies the difficulties involved in dealing with this construct, as consumers may use various types of standards (Tse and Wilton 1988).

The wording of the expectations items may encourage extreme responses. Statements with operative terms such as "these companies should ..." or "excellent service companies will ..." may be prone to social desirability response bias. This can be a major problem in testing substantive models and hypotheses (Arnold and Feldman 1981). Recently, Babakus and Inhofe (1991) found that the expectation scores in SERVQUAL were more susceptible to social desirability bias compared to importance ratings.

Finally, the role of expectations and the 'importance' of various service attributes is another concern. There is some evidence of convergence between expectations scores and importance ratings of service attributes, suggesting there is no need for distinction (Babakus and Inhofe 1991; Lambert and Lewis 1990). However, others distinguish between the two, suggesting the use of importance ratings as a third component in the service quality equation (Carman 1990). The major problem with a three-component measurement

approach is that the length of the instrument may become extremely long.

Current Study

The basic linear multi-attribute attitude model appears to be a viable alternative to SERVQUAL. This model is consistent with the definition of service quality as an enduring construct or, an "... attitude relating to the superiority or excellence of the service whereas satisfaction is related to a specific transaction." (Parasuraman et al. 1988, p. 16). In addition, the importance component of the model makes it particularly worthwhile to explore, because "to most service providers, the importance of a particular service attribute seems more relevant than its expected level." (Carman 1990, p. 49). The "simple" multi-attribute model (i.e., performance x importance) (Lutz and Bettman 1977) was employed. A more complex model (i.e., importance x [perceptions - expectations]) was ruled out on the basis of the convenience criterion. The importance component was measured by self-report ratings. The self-report approach is the most frequently used measure of attribute importance due to its practical nature.

Data for the study were gathered from the residential customers of a municipally owned utility firm located in the southern part of the United States. The survey instrument contained one section to measure performance perceptions and another section for corresponding importance ratings. The scales used a 7-point Likert-type response format (see Table 1 for item contents). The instrument included questions about problems and complaints, complaint resolution, overall service quality perceptions, and demographic information. A systematic random sample was generated ten days prior to each mail-out. Of the total 2376 initial questionnaires, 625 usable responses were obtained. This response rate (26.3%) compares favorably with those reported in the same industry (Amsden 1989).

Results

Performance (P) and importance (I) measures were subjected to factor analysis (principal axis) and reliability analysis separately, followed by the product scores (P x I). Since theory suggests that the dimensions of service quality are correlated, oblique solutions were obtained (Parasuraman et al. 1988).

Each factor analysis provided two meaningful dimensions which were remarkably similar across three sets of analyses with respect to underlying dimensions, variance extracted and eigenvalues. Items for the "tangibles" dimension converged as distinct indicators, while the other 18 items did not emerge as proposed by Parasuraman et al. (1988). These 18 items jointly and consistently appeared as the indicators of the major factor (which may be labelled as the intangibles) accounting for most of the covariation underlying the item scores.

Using factor analysis results, two subscales were created and evaluated for reliability. The four items representing the "tangibles" dimension provided internal consistency reliabilities of .805 for performance , .790 for importance, and .838 for the product scores (P x I). For the other 18 items, comprising the 'intangibles' subscale, reliabilities were .959, .944, and .962 for performance, importance, and product scores (P x I) respectively.

The summated subscale scores for performance (P) and the product of performance and importance (P x I) were further examined by relating them to two other measures via correlation and regression analysis. Despite the two-factor solution in this study, independent variables were also created using the five-dimensional definition to allow direct comparisons with Parasuraman et al. (1988; 1990). The first dependent variable was a single-item scale measuring respondents' overall service quality perceptions (OSQ). The item was scored with a range of "excellent = 4" to "poor = 1." The second dependent variable was a measure of the satisfaction levels with complaint resolution (SCR) for those who had a recent problem with the firm. This measure was also a single-item scale with anchors "very dissatisfied = 1" and "very satisfied =7."

Results based on a two-dimensional view of service quality (tangibles and intangibles) revealed that both components of service quality correlated significantly with OSQ and SCR. However, the tangibles dimension had significantly lower correlations with OSQ and SCR. Regression analysis provided consistently significant coefficients for the predictor containing the intangibles dimension. The coefficient for the tangibles was negative, a result attributed to multicollinearity (Neter, Wasserman, and Kutner 1990). This coefficient was significant in the case of OSQ, but not significant for SCR. More importantly, the inclusion of the 'importance' component did not add to the predictive ability of the measure.

Regression rewsults identified 'reliability' and 'assurance' as significant predictors of OSQ. These findings are consistent with those reported in Parasuraman et al. (1988; 1990). A general observation in this study as well as the previous studies is that the reliability component is the most important aspect of service quality. Considering the collinearity issue in the regression results, additional evidence for this generalization comes from the average importance ratings and rankings (see Table 1) in this study. The cumulative evidence (i.e., Parasuraman et al. 1988; 1990, and the present study) also suggests that the 'assurance' component may be the second most important aspect of service quality. However, for those customers who had a problem with the service provider, responsiveness appeared to be more important than

assurance as a determinant of satisfaction with complaint resolution.

Finally, results were compared with those reported by Babakus (1992) and Babakus and Boller (1992), using unweighted summated scores of 22 items. These scores were then correlated with OSQ and SCR scores. The summated performance scores had correlations of .558 with OSQ and .559 with SCR scores. The correlations using summated product scores (P x I) were .539 with OSQ and .540 with SCR scores. Babakus and Boller (1992) reported higher correlations with the same variables using the SERVQUAL scale. Babakus (1992) also reported higher correlations based on an alternative scale (using the same service attributes) that combined expectations and perceptions into single items. An interesting parallel between the findings by Babakus and Boller (1992), Cronin and Taylor (1992), and this study is that the predictive power of the measures decreased when the expectation or importance components were included. For instance, Babakus and Boller (1992) report a correlation of .59 between gap scores (performance - expectation) and overall quality ratings, while the correlation was .66 when they used performance scores only.

Discussion and Implications

Results of this study add further evidence to the existing literature that the 22 service attributes identified by Parasuraman and his colleagues may be considered generic indicators of service quality. The qualitative phase of the study produced evidence supporting the content validity of the items from both customers and the management of the utility services investigated. However, the analytical phase of the study provided limited support for the proposed five-dimensional abstraction of service quality. Findings suggested a two-dimensional service quality with the tangibles as one dimension and the rest of SERVQUAL dimensions as another. Similar underlying structures have been reported recently in health care and utilities industries (Babakus 1992; Mishra, Singh, and Wood 1991). In addition, the correlations reported by Parasuraman et al. (1990) clearly indicate the difficulty of identifying an empirical distinction among the proposed dimensions with the exception of the tangibles dimension. These findings collectively suggest that while the service attributes may be applicable across a wide range of industries, the dimensions may not be as generalizable.

The inclusion of attribute importance in the present measurement model did not improve model fit in predicting overall service quality perceptions or satisfaction with complaint resolution. On the contrary, performance perceptions alone provided better results than the two component model. In the case of service expectations, there is prior evidence suggesting that the addition (subtraction) of this component also does not improve the measure (Babakus and Boller 1992; Cronin and Taylor 1992).

A number of alternative explanations may be provided for finding better results with the single component measurement. One potential explanation concerns with the type of service under investigation. Utility services are purchased and consumed on an ongoing basis. They may be characterized as low-involvement service experiences (cf. Babakus and Boller 1992). Hence, service expectations or attribute importance may not be active in the customers' mind. As a consequence, service quality perceptions may be formed solely on the basis of performance perceptions (cf. Bolton and Drew 1991). Oliver (1989) uses the term "contentment" for such consumption response orientations. The single component model, therefore, may be appropriate for this type of service. Alternatively, the importance component may not be relevant when there are no other service choices. The service firm in this study has a monopoly on electric, gas and water services.

Another potential reason why expectations and importance components do not improve the measure, is an operational one. Factors such as social desirability bias and extreme response tendencies may be responsible for uniformly high ratings. In dealing with this issue, attitude researchers frequently use "normalized" importance ratings although little theoretical justification exists for such practices (Lutz and Bettman 1977). It is also likely that nonresponse bias may be responsible for the results. While the sample demographic profile was consistent with the population, a self-selected group with uniformly high importance ratings could make the importance component obsolete.

In conclusion, for some services, a simple measurement model that focuses only on performance perceptions, may be more viable over more complex models (such as SERVQUAL or multi-component attitude models). Furthermore, findings in this study suggest that a generic five-dimensional conceptualization of service quality may not be appropriate across service industries. Instead, attention should be given to the development of valid measures that are also specific enough to meet the needs of practitioners and researchers.

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TABLE 1

Scale Items, Means ($\bar{X}$) and Standard Deviations (sd) of Performance and Importance Ratings(n=473)[1]

Service Attributes	Performance $\bar{X}$	Performance sd	Importance $\bar{X}$	Importance sd	Rank[2]
Tangibles					
Q1. Having up-to-date equipment.	5.45	1.26	6.34	1.06	13
Q2. Appearance of physical facilities.	5.16	1.46	5.10	1.72	22
Q3. Appearance of employees.	5.59	1.46	5.52	1.44	20
Q4. Appropriateness of physical facilities.	5.18	1.39	5.33	1.63	21
Reliability					
Q5. Keeping promises to do something by a certain time.	4.87	1.72	6.55	.91	5
Q6. Reassurance and understanding.	4.79	1.70	6.40	.94	9
Q7. Dependability.	5.68	1.50	6.57	1.08	3
Q8. Providing services at the time promised.	5.18	1.57	6.52	.90	6
Q9. Accuracy of records.	5.07	1.66	6.71	.75	1
Responsiveness					
Q10. Stating exactly when services will be performed.	4.90	1.74	6.39	1.04	12
Q11. Receiving prompt service.	5.09	1.65	6.55	.87	4
Q12. Willingness of employees to help customers.	5.04	1.64	6.40	.98	10
Q13. Speed & promptness of employees to customer requests.	5.03	1.68	6.42	.85	8
Assurance					
Q14. Trustworthiness of employees.	5.19	1.56	6.57	.86	2
Q15. Feelings of safety.	5.45	1.48	6.36	.97	11
Q16. Politeness of employees.	5.38	1.54	6.29	1.07	16
Q17. Adequate support for employees to do their jobs well.	5.03	1.38	6.32	1.03	14
Empathy					
Q18. Individual attention you receive.	4.82	1.67	6.17	1.11	18
Q19. Personal attention from employees.	4.87	1.72	6.10	1.30	19
Q20. Employees' knowledge of customer needs.	4.82	1.63	6.31	.99	15
Q21. Having customer's best interests at heart.	4.53	1.69	6.45	.93	7
Q22. Having convenient operating hours for all customers.	4.95	1.78	6.27	1.06	17

[1] Performance and Importance ratings were obtained on a 7-point scale. Higher values indicate higher perceived performance and importance. Item contents and order were exactly the same as in Parasuraman et al. (1988). However, all items were cast with positive connotations and presented in a random order.

[2] Attributes were ranked using mean importance scores, i.e., the item with the highest mean importance score (Q9) was ranked as number one (1), and the item with the lowest mean importance score (Q2) was ranked as the least important attribute (22).

IMPRESSIONS OF SERVICE QUALITY POTENTIAL BASED ON CONTACT EMPLOYEE IMAGE

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Abstract

The move to provide customers with service quality has necessitated the marketers' understanding of customer expectations and perceptions of the service delivery act. Attempts have been made to determine which internal organizational factors are responsible for unmet customer expectations. One of the most important factors appears to be the characteristics of the employee contact situation. In this situational context, subjective impressions of customers concerning the contact employees can affect perceptions of the service act as well as attributions for service delivery.

The focus of this research is to increase the understanding of the situational influence of contact employees which lead consumers' into impressions about service quality potential. Previous research of the service contact situation has looked at various aspects, from the physical surroundings of the situation to the actual dyadic interaction of customer and provider. Extending the knowledge of the situational surroundings to include customer impressions of employees will enhance the understanding of the service encounter and service quality evaluations.

As part of the service encounter, physical surroundings and environment are certainly a key element in the delivery of the total service. The appearance of employees is an important part of the physical surroundings which need to be monitored by the service provider. Not only can they affect the expectations and evaluation of the service delivery, but they can also affect the attribution of failure or success of the service delivery as a chronic or temporary situation. The study of individuals and impressions we form based on appearance has a long history. We base impressions on such cues as facial expression, gestures, physique and dress. We make judgements about many aspects of the person based on our first impressions.

The theoretical framework of SERVQUAL provides foundation for studying consumer assessment of service quality potential. SERVQUAL develops the theory that a customer assesses service quality potential of a service provider based on the five dimensions of reliability, responsiveness, empathy, assurance, and tangibles. It therefore seems logical to ask consumers questions about their impressions of contact personnel on these criteria. Previous research on impressions of people has not looked at these key service quality dimensions.

The objective of this research is to construct a valid and reliable instrument for evaluation of contact personnel by consumers in a hospital setting based on service quality dimensions. This instrument could potentially be used across a wide range of service industries for management decisions on uniforms, appearance and body language of employees. The hypothesis being tested in this research will be that clothing, grooming and body language will affect the consumers' assessment of a health care provider based on service quality dimensions.

A questionnaire was designed to tap the multidimensional nature of service quality as theorized by Zeithaml, et.al(1985). Statements were developed which tapped the constructs of Assurance, Empathy, Reliability, Responsiveness and Tangibles in regards to health care delivery. Six color pictures of a nurse were staged to show various uniforms, states of personal grooming and body language. The uniforms were chosen as a standard range of attire for nurses employed in a hospital. The same subject was used for all six pictures to eliminate bias created by differing physical characteristics of a female nurse(i.e. weight, height, hair color).

A factor analysis using common factor analysis with a varimax rotation was used to assess the convergent and discriminant validity of the five categories of service quality.

Three factors having eigenvalues greater than 1.00 emerged from the factor analysis. The Cronbach reliabilities were in the moderately high to high range and are evidence of the internal consistency of the items. The factors did not completely correspond to the five categories of service quality as originally designed. Factor III contains only items appearing in the original Tangible category. The items in this factor represent the physical presentation of the nurse, which in fact are the Tangible features of this health professional. While Factor I contains all of the items from the Empathy category, it also contains most of the items from Responsiveness which are related to interaction with the patient. As such, Factor I represents a dimension of service quality representing personal interaction skills with the patient. Factor II contains all of the items from the Reliability category and most of the items from Assurance. The items from these two categories that loaded on Factor II are those which relate to

a nurses professional skills rather than personal interaction skills.

Using the items in this instrument to represent Service Quality Impression Dimensions(SQID) instrument, each of the three factors was equally weighted in the assessment of total score. To test the validity of the instrument and scoring, differences in mean SQID scores between nurses were assessed using T-tests for independent samples at the .05 level of significance.

Research in the area of customer-producer contact situations is necessary to understand the complete scope of service quality. The development of an instrument to understand customer assessments of contact personnel impressions should encourage additional research into the area of contact situations in service quality assessments.

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SERVICE QUALITY IN THE PUBLIC SECTOR: A COMPARATIVE ANALYSIS OF PUBLIC- AND PRIVATE-SECTOR CONTACT PERSONNEL

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"There is probably no concept more overused in the political and administrative vocabulary than the word 'crisis.'" (Ventriss 1991, p. 275). Among the many crises currently facing the public sector is the growing public dissatisfaction with the quality of services provided by public employees (Walsh 1991).

Public Service Quality: In Search of an Answer

Much has been written about the poor quality of service provided in the public sector, from a variety of perspectives. First, public choice economics emphasizes consumer utility in service delivery and assumes superiority in the private sector. Public choice advocates (e.g. Ostrom 1973) note that private enterprise, under competitive conditions, has direct feedback when people exercise their discretionary power as consumers to purchase from competing sources. Because public agencies have no such direct check on service quality, one might expect lower service quality in the public sector. The new public administration paradigm (Frederickson 1980) is distinguished by its enhanced concern for responsiveness and equity in the delivery of public services. This view encourages the gathering and analysis of citizen feedback regarding agency service performance. Finally, from a moral/ethical perspective, the public sector has been set apart because it bears a special responsibility to treat the total public as "owners" of the business, not just consumers of its services (Coffman 1986, Hart 1984).

The Meaning of Service Quality In the Public Sector

In contrast to the marketing literature, the public administration literature has offered mainly generalizations about the nature of service quality -- often "horror stories" of excessive costs, time and psychological harassment by a bureaucracy originally intended to serve the public, not itself. Von Ward (1979, p. 26) observed that "...news stories and any street corner conversation reveal a widespread perception that something is dramatically wrong both with the quality of government services and the attitude with which they are provided to the citizen." Despite such accounts, the concept of service quality in the public sector has been defined vaguely. Accessibility and equity of services, respect for individual citizen consumers, and the degree of attention to the disadvantaged are among the quality attributes typically cited (Katz 1975, Klaus 1985, Pesso 1978). Only recently (Walsh 1991, Wagenheim and Reurink 1991) have specific attributes of service quality, like those discussed in the marketing literature, provided a framework for the scrutiny of public sector service quality. Although empirical work in public sector service quality is limited, some studies (Cowles and Myers 1992, Myers 1990) have begun to appear in the public administration literature. For the most part, this empirical work has relied on the approach to service quality measurement championed by Parasuraman, Zeithaml and Berry (1985, 1988), which focuses on customer expectations and perceptions of performance across five specific dimensions to assess service quality.

In a recent public-sector study (Cowles and Myers 1992), the SERVQUAL (Parasuraman, Zeithaml and Berry 1988) measurement instrument was extended beyond the traditional five dimensions of tangibility, reliability, responsiveness, assurance, and empathy to include equity as a service quality dimension. This dimension is discussed below. The researchers concluded that the SERVQUAL approach to service quality measurement has merit for the study of public-sector services, especially when expanded to included equity considerations. Building on their work, this analysis addresses three objectives: 1) to confirm the appropriateness of the SERVQUAL approach to service quality measurement in the public sector; 2) to consider whether the dimensions of service quality vary in importance across public- vs. private-sector service settings; and 3) to examine whether consumers truly perceive public services to be lower in quality than private-sector services.

Research Design

Data were collected as part of a project designed to help administrators of a public community college learn more about the quality of services provided to students of the college. The school, with an enrollment of 6,733, is located in a city of approximately 50,000, one hour's driving time from the nearest major metropolitan area, in

the southeastern United States. With assistance from the college's director of institutional research, a cluster sample of classes was selected, which closely approximated the college's student population with regard to age, gender, and race. Participation in the study, which was voluntary, involved completion of a standardized paper-and-pencil questionnaire, which took about 20 to 25 minutes to complete. With less than one percent of the questionnaires unusable, this process yielded 321 responses.

Recent work in the area of public-sector service quality suggests a need to expand the SERVQUAL list of service quality attributes to include equity, which Myers (1990) defined as "equal treatment," being treated "fairly and impartially." This concept is different from the social equity concept in the public administra-tion literature, which requires service benefits to be greater for those most disadvantaged, resulting in differential treatment for various consumers (Rawls 1971). The position advanced by this analysis is that social equity may be appropriate for resource allocation and program development within the public sector; however, the individual customer of a public agency or program may prefer equal treatment in service quality at the "moment of truth" when interacting with customer contact employees (Cowles and Myers 1992). The instrument also measured respondents' evaluations of the importance of service quality attributes (e.g. Swartz and Brown 1989).

For comparative purposes, respondents were asked to evaluate customer contact employees of the community college in which they were enrolled, as well as two non-specific public-sector services (the U.S. Post Office branch and the branch office of the Department of Motor Vehicles patronized most frequently) and two non-specific private-sector services (the bank branch/grocery store patronized most often), in relation to expectations, performance, and importance of service quality dimensions. In all cases, respondents evaluated services provided by customer contact employees. The intangible nature of public services highlights the critical role of such employees; their performance is an inseparable part of the services provided, which are simultaneously consumed by their customers. Gartner and Reissmsan (1974) have suggested that service outcomes of the public service production system be evaluated at the point of the relationship, the point of contact, between the consumer and the server. Customer-employee contacts have been viewed as an organization's "moment of truth" in which the image of the organization is created (Albrecht and Zemke 1985, Gronroos 1990). In this study, such employees were described to respondents as receptionists, clerks, and secretaries who answer the telephone, greet, or otherwise deal with customers face-to-face to handle typically routine transactions.

To help achieve research objectives, study participants assessed two very different types of private-sector services -- banks and grocery stores. Banks are known to provide, for the most part, doubly intangible services (Lovelock 1983) in which service providers direct intangible actions toward customers' intangible assets. In contrast, grocers provide a variety of consumer services and varying levels of customer service to compete in an industry that focuses largely on tangible goods. Therefore, one would anticipate the importance of the service quality evaluative dimensions for consumers of public services to be more comparable to the importance of the same dimensions in a bank setting (vis-a-vis a grocery setting), given the doubly intangible nature of many government services (Lovelock 1983).

Data Analysis and Results

Respondent evaluations of the importance of service quality dimensions in each of the service settings, as well as evaluations of expectations and perceptions of performance were compared across public- and private-sector settings using a simple t-test of significant differences to compare paired-sample mean ratings in each area. Table 1 shows that, for the most part, subjects felt each of the dimensions was more important in a banking setting, compared to the three public-sector service settings. However, while Table 1 does not provide explicitly the analysis comparing banks and grocery stores, respondents felt the attributes were significantly more important in nearly all public-sector settings and the banking setting, compared to the grocery-store setting, as anticipated. The determination of construct validity relies on the way measures relate to others within a system of theoretical relationships (e.g. Babbie 1989). Because the measures in this study performed in ways consistent with theoretical expectations, researchers have more reason to pursue this approach in future public-sector research.

Table 2 shows a similar pattern with regard to customer expectations of service quality. Except in the case of equity, customer expectations of service quality dimensions were significantly higher for the customer contact employees of banks, compared to all public-sector service settings. Although no differences exist in the case of equity, it is important to note that expectations in this area of service quality are very high overall (ranging from 5.58 to 5.69 on a 6-point scale), and among the highest ratings of expectations for the public-service settings, a finding discussed below. With regard to Table 3, perceptions of service performance, it is important to recall that, except for the community college, respondents did not necessarily evaluate the same branch, office, or location of the service organizations considered. While this is a limitation of the study, it does not preclude the drawing of some

conclusions from the results, since consumers do carry with them "gestalt" evaluations, or generalizations, of service offerings (Bitner, Booms, and Tetreault 1990). Results in Table 3 indicate a pattern similar to those in the two previous tables: Performance of bank customer contact employees was evaluated higher than that of public servants in similar positions. Exceptions to this pattern are discussed below.

The final table shows the "gaps" between expectations and perceptions of performance, with perceived service quality being defined as service expectations minus perceived performance. In all cases, mean expectation ratings were larger than mean ratings of perceived performance. In the majority of cases, "gaps" were found to be significantly smaller for private-sector service providers (both banks and grocers), compared to public-sector service quality "gaps."

Conclusions/Directions For Future Research

Study participants indicated that all of the original SERVQUAL attributes (tangibles, reliability, responsiveness, assurance, empathy) were important determinants of customer contact service quality in all of the selected organizations. Further, equity, as defined in this study, was also found to be of high importance in these same organizations when making such service quality evaluations. No additional determinants of customer contact service quality were discovered. Moreover, customers seem to assign a hierarchy of importance to the various service quality attributes.

At face value, results of this analysis suggest that consumers indeed perceive service quality -- as defined here -- to be lower in the public sector than in the private sector. However, additional research is needed to determine at what point service quality "gaps" translate into actual customer dissatisfaction. It is possible that one "hears so much" about poor service quality in the public sector because consumers see negative word-of-mouth communication as their only recourse when dissatisfied. In the private sector, customers' service quality perceptions influence word-of-mouth communication, brand loyalty, and switching behavior (Bitner 1990). In the public sector, the concepts of brand loyalty and switching have little meaning because the recipients of the services are "captives" of the service-providing government. In Hirschman's terms (1977), consumers of public services cannot employ an "exit option." Thus, public organizations should provide ample opportunities for their customers to express dissatisfaction. This strategy not only would reduce negative word-of-mouth communication with other citizens, but also would serve as a much-needed source of feedback about customer needs, wants, and expectations.

Exceptions to the overall pattern of results depicted in the tables provide some direction for future research. First, although very few differences were observed (Table 2) across service settings (public vs. private, specific college vs. non-specific others) in the area of consumer expectations of equity, expectations are relatively high in this area. At the same time, Tables 3 and 4 show that while public agencies may not meet customer expectations with regard to equitable treatment, they are perceived to do so at least as well, and in some cases better, than for-profit service firms. Public administrators and policy makers need to understand and act on the public's desire to be treated equitably in specific, one-on-one service settings. Finally, equity may be an attribute worthy of further attention in both the private and public sectors.

Tables 2 and 3 suggest that while consumer expectations of service quality by customer contact employees of the community college in which respondents were enrolled was lower than expectations of bank employees in similar positions, the performance of the college's service providers was evaluated at least as high in quality in three cases (reliability, responsiveness, assurance), higher in two cases (empathy, equity), and lower in one case (tangibles, which respondents assessed as the least important service quality dimension). Further, Table 4 shows that the college's "gaps" in service quality were either smaller or not significantly different from those of both for-profit service providers. These results cannot be interpreted without taking into consideration that the community college was the only specific service entity evaluated by respondents. It is quite possible that familiarity and frequency of contact with service providers play a role both in the shaping of service expectations and in the evaluation of performance. This is consistent with theoretical perspectives in the communications and consumer behavior literatures (e.g. Cowles 1989), which imply that customers who infrequently patronize a service organization would base expectations on a generalized model of service offerings. At the same time, evaluations of actual performance could be affected by consumers' ability (or inability) to make attributions (Bitner 1990). While more research is needed to test these propositions, public administrators should recognize that the challenges of delivering quality to customers who use an organization's services infrequently are likely different from those challenges experienced in delivering frequently consumed services. Regardless, from nearly every perspective -- economic, historical, political -- it would appear that the time has come for government to be more effective. This cannot happen without continuous improvement in the quality of the services the public sector

provides to its citizen consumers. Toward this end, public servants must learn more about their immediate customers' service expectations and perceptions of performance along the dimensions of service quality, and then develop service delivery systems capable of meeting those expectations.

References

References are not provided due to space constraints. A full list of references is available by writing to the authors at Box 4000, Richmond, VA 23284.

TABLE 1

Importance of Service Quality Attributes* Public vs. Private
T-Tests For Paired Samples (n = 321)

		Bank	Grocery
Tangibles		3.61	2.95
Comm. Coll.	3.29	(.000)	(.000)
Post Office	3.08	(.000)	(.004)
DMV Branch	3.03	(.000)	(.074)
Reliability		3.88	3.35
Comm. Coll.	3.77	(.000)	(.000)
Post Office	3.67	(.000)	(.000)
DMV Branch	3.58	(.000)	(.000)
Responsiveness		3.85	3.44
Comm. Coll.	3.70	(.000)	(.000)
Post Office	3.59	(.000)	(.000)
DMV Branch	3.57	(.000)	(.004)
Assurance		3.83	3.26
Comm. Coll.	3.67	(.000)	(.000)
Post Office	3.52	(.000)	(.000)
DMV Branch	3.46	(.000)	(.000)
Empathy		3.58	3.02
Comm. Coll.	3.56	(.525)	(.000)
Post Office	3.06	(.000)	(.255)
DMV Branch	3.07	(.000)	(.231)
Equity		3.72	3.56
Comm. Coll.	3.73	(.525)	(.000)
Post Office	3.63	(.000)	(.028)
DMV Branch	3.63	(.001)	(.012)

* 4-pt. scale, 1-not at all important to 4-very important; p-value in parentheses.

TABLE 2

Service Quality Expectations Means* Public vs. Private
T-Tests For Paired Samples (n = 321)

		Bank	Grocery
Tangibles		5.42	4.47
Comm. Coll.	5.03	(.000)	(.000)
Post Office	4.90	(.000)	(.000)
DMV Branch	4.96	(.000)	(.000)
Reliability		5.76	5.37
Comm. Coll.	5.61	(.000)	(.000)
Post Office	5.66	(.000)	(.000)
DMV Branch	5.63	(.000)	(.000)
Responsiveness		5.62	5.34
Comm. Coll.	5.43	(.000)	(.027)
Post Office	5.50	(.000)	(.000)
DMV Branch	5.46	(.000)	(.004)
Assurance		5.77	5.48
Comm. Coll.	5.60	(.000)	(.000)
Post Office	5.67	(.000)	(.000)
DMV Branch	5.60	(.000)	(.000)
Empathy		5.42	4.99
Comm. Coll.	5.23	(.000)	(.000)
Post Office	5.05	(.000)	(.234)
DMV Branch	5.03	(.000)	(.443)
Equity		5.66	5.58
Comm. Coll.	5.65	(.665)	(.041)
Post Office	5.65	(.643)	(.013)
DMV Branch	5.69	(.447)	(.000)

* 6-pt. scale, 1-strongly disagree to 6-strongly agree; p-value in parentheses.

TABLE 3

Service Quality Perceptions Means*
Public vs. Private
T-Tests For Paired Samples (n = 321)

		Bank	Grocery
Tangibles		5.18	4.13
Comm. Coll.	4.80	(.000)	(.000)
Post Office	4.47	(.000)	(.000)
DMV Branch	4.38	(.000)	(.000)
Reliability		4.87	4.44
Comm. Coll.	4.79	(.204)	(.000)
Post Office	4.57	(.000)	(.056)
DMV Branch	4.45	(.000)	(.769)
Responsiveness		4.88	4.33
Comm. Coll.	4.75	(.029)	(.000)
Post Office	4.55	(.000)	(.000)
DMV Branch	4.22	(.000)	(.100)
Assurance		5.04	4.49
Comm. Coll.	5.00	(.468)	(.000)
Post Office	4.76	(.000)	(.000)
DMV Branch	4.48	(.000)	(.923)
Empathy		4.31	4.32
Comm. Coll.	4.70	(.000)	(.000)
Post Office	3.98	(.000)	(.234)
DMV Branch	3.72	(.000)	(.443)
Equity		4.59	4.54
Comm. Coll.	4.80	(.002)	(.000)
Post Office	4.75	(.006)	(.000)
DMV Branch	4.54	(.385)	(.956)

* 6-pt. scale, 1-strongly disagree to 6-strongly agree; p-value in parentheses.

TABLE 4

Service Quality "Gaps"* - Public vs. Private
T-Tests For Paired Samples (n = 321)

		Bank	Grocery
Tangibles		.23	.33
Comm. Coll.	.22	(.791)	(.158)
Post Office	.43	(.001)	(.236)
DMV Branch	.58	(.000)	(.002)
Reliability		.91	.95
Comm. Coll.	.83	(.214)	(.071)
Post Office	1.10	(.001)	(.031)
DMV Branch	1.19	(.000)	(.001)
Responsiveness		.73	1.02
Comm. Coll.	.67	(.308)	(.000)
Post Office	.95	(.001)	(.414)
DMV Branch	1.24	(.000)	(.004)
Assurance		.73	1.00
Comm. Coll.	.61	(.043)	(.000)
Post Office	.92	(.003)	(.268)
DMV Branch	1.13	(.000)	(.069)
Empathy		1.12	.67
Comm. Coll.	.54	(.000)	(.090)
Post Office	1.07	(.507)	(.000)
DMV Branch	1.30	(.045)	(.000)
Equity		1.08	1.04
Comm. Coll.	.84	(.001)	(.005)
Post Office	.91	(.004)	(.035)
DMV Branch	1.15	(.306)	(.074)

* 6-pt. scale, 1-strongly disagree to 6-strongly agree; p-value in parentheses.

THE RELATIONSHIP BETWEEN RETAIL ADVERTISING AND PUBLISHED QUALITY RATINGS IN A STATE'S LODGING SECTOR

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For some time economic and marketing research has examined the relationships between the level of advertising expenditures and product quality. The primary result of all this research has been conflicting theoretical perspectives and empirical findings. For some products and circumstances it does appear that the higher the advertising expenditure level, the higher is the relative quality level of the product being advertised (Nelson 1970, 1974, Klein and Leffler 1981). In other cases, there appears to be a more "perverse" (Schmalensee 1978, Comaner and Wilson 1979) relationship where the highest expenditure levels belong to those manufacturers producing the lowest quality goods.

The significance of this question rests with the degree to which consumers utilize advertising as a prepurchase source of information and respond positively to products whose advertising they have been exposed to with great frequency. As utilization and positive response increase, consumers are served well when quality and expenditures are positively correlated. However, in the perverse scenario, consumers using advertising frequency as a surrogate indicator of quality form inappropriate expectations bearing on their purchase decisions. The implications of this are of interest to firms and industries who must determine levels of advertising expenditures in a competitive environment, to consumers who seek to make well-informed buying decisions, and to public policy makers who wish to monitor or influence activities which may produce inequities in the marketplace.

Which scenario might we expect to be predominant in the hotel and motel industry? Since one of the factors influencing the likely relationship is product type, and no study has used this industry in an empirical evaluation, the answer is not certain. The purpose of this paper is to identify the factors which would affect the expenditure/product quality relationship in this industry and to perform an empirical study in the industry.

Literature Review

It has been suggested that the two theoretical positions summarized in the introduction are actually extremes on a bipolar continuum (Tellis and Fornell 1988). We can label the first, proposed by Nelson (1970, 1974, 1975) as the information theory of advertising approach. The underlying premise is that advertising provides useful information to consumers about product differences, attributes, advantages, etc. which should result in better purchase decisions. Products of high quality would have the incentive to advertise heavily since their products would have desirable features to highlight. While the possibility for deceptive or false information might exist, Nelson argues that in the long run consumers would reject products whose quality level did not meet expectations generated by advertising. Additionally, manufacturers of better quality products, with theoretically higher sales, should be more efficient producers enjoying a higher profit per additional sale. As such, if advertising influenced consumers' purchasing behavior positively, high quality producers would logically advertise at higher levels.

However, at the other end of the continuum, the argument is proposed that producers of poorer quality goods will have a greater need to engage in persuasive advertising to generate new flows of customers. In this model, labeled the "perverse case," advertising is used to create preferences for products by focusing on attributes not related to physical characteristics or relevant functional abilities (Schmalensee 1978, Comaner and Wilson 1979). If undecided consumers use this advertising as a surrogate indicator of quality, then the relationship between advertising expenditures and product quality would be negative.

To answer the question of how the issue is relevant or related to the hotel/motel industry, several factors must be examined. First, empirical studies supporting the tenets of the differing theories reviewed have varied depending upon the product type studied. In one study alone (Rotfield and Rotzoll 1976), twelve different product classes were included, though most of these were items commonly

purchased in a grocery store. The strength of any correlation between advertising expenditures and product quality varied across the different products. From this information alone, we are at a loss as to which scenario we would hypothesize to be represented in the hotel/motel industry. However, three additional factors may be used to analyze the industry and to formulate hypotheses regarding the relationship between advertising expenditures and product quality. These factors are: (1) the presence of published quality ratings, (2) the stage of the product life cycle that the product is in, and (3) whether the product can be classified as a "search" or "experience" good.

Archibald, Haulman, and Moody (1983) propose that "the confusion about the relationship between advertising and quality disappears in the presence of published quality ratings" (p. 1). As such, the "perverse" case is unlikely since published quality ratings exert an influence on advertisers to parallel advertising budgets more closely with product quality. Indeed, their study found positive relationships between product quality and advertising expenditures are much more likely when published quality ratings exist. As a variety of published quality rating systems exist in the hotel/motel industry, this conclusion would suggest the information theory of advertising model would hold.

The stage of the product life cycle (PLC) also appears to have a bearing on the relationship between advertising expenditures and product quality. Tellis and Fornell (1988) hypothesized that highly advertised products would exhibit higher quality more often in the later stages of the product life cycle. The rationale behind this argument rests on the fact that later in the PLC, quality costs less to produce and consumers are less dependent on advertising to help make purchase decisions. The results of their empirical test support the hypotheses.

Following this reasoning then, the hotel/motel industry should reflect a positive relationship between advertising budgets and product quality since it can be shown that the industry has past the growth stage and is settled in the maturity stage. Withian (1985) indicated that "the number of hotel rooms occupied per day has remained flat for more than three decades" (p. 51), and Powers (1988) details a number of factors which have slowed or reversed the growth of the lodging demand. In spite of these trends, lodging organizations have continued to expand the numbers of units, producing an intense competition for a static number of occupancies (Lee 1987).

Finally, whether the information model or the perverse case will be supported is thought to be influenced by the product being either a "search" or an "experience" good (Nelson 1975). Goods or services which have "search qualities" are those whose features and quality can be inspected and determined prior to purchase. For example, a person may try on a new suit before buying it and a carpet may be seen, felt, and smelled before installation in a home. Goods and services in the "experience" category are those whose qualities and characteristics cannot be assessed until actual use of the product or service takes place. Examples from this category would include the taste of a steak or the look of a haircut.

The relationship between expenditures for advertising of search goods and actual product quality is more likely to be positive and significant than the relationship between advertising expenditures for experience goods and product quality (Nelson 1975). The reasoning behind this stems from the fact that claims in advertising which are misleading or erroneous can be checked by the consumer prior to purchase, through product inspection. Such is not the case with experience goods, though purchasers of experience goods who find that claims were false or misleading will not likely make the same purchase in the future. Still, new purchasers continue to come along, and purchasers of durable goods suffer the most since the product is purchased infrequently with the intent of enjoying a long period of utility.

The question to be answered is whether a hotel or motel would be classified as a search or experience good. In many cases, a hotel or motel would be considered as an experience good. One cannot determine the comfort of a bed, the atmosphere of a room, the level of service provided until one pays for and experiences the stay. This would suggest that, in contradiction to the presence of published quality ratings and the stage of the PLC which the industry is in, the relationship between ad expenditures and product quality would more likely be negative.

However, published quality ratings, when present, provide a surrogate means of assessing quality and product characteristics prior to purchase, as is the case with a search good. Additionally, the existence of franchised or chain hotels/motels mediate the experience classification somewhat as well. Once one has classified what a Holiday Inn or Comfort Inn or Hilton is like, the brand name in alternate locations serves as a surrogate indicator of product characteristics and quality as well. Because of this, it is possible that a positive relationship between advertising expenditures and product quality would exist under these conditions. National advertising is often possible for large chains and franchises, whereas local hotels and motels remain relatively unknown and therefore somewhat risky to potential lodgers who cannot surmise quality level before experiencing it. There is more likely to be a negative

relationship between advertising expenditures and product quality in these instances. In fact Rotfeld and Rotzoll (1976) tend to support this type of reasoning with their findings that nationally advertised brands of products are more likely to get higher quality ratings than non-nationally advertised brands. However, they did also conclude that the likelihood of getting a better product when choosing a nationally advertised brand are "not overwhelming" and would depend on the product type involved.

Hypotheses

Ho1: In the presence of published quality ratings and because the hotel/motel industry is in the mature stage of the product life cycle, the relationship between advertising expenditures and product quality should be positive.

Ho2: Because nationally recognized chains and franchises reduce the effects of hotels being an "experience" good, there should be a greater positive relationship between advertising expenditures and product quality for these types of hotels and motels than for those which are local, regional, or single location operations.

Sample

The purpose of this study was to determine the nature of the relationship between hotel and motel quality ratings and their advertising intensity. To achieve this end, a purposive sample of 144 general managers was drawn from the membership of a South Atlantic state's hotel and motel property association. Seventy-four general managers responded to the questionnaire yielding a response rate of 51.4 percent. Only those properties which met the criterion of having a quality rating by the American Automobile Association (AAA) were included in the final analysis yielding a final sample size of fifty-eight.

Steps were taken to try to assess the impact of non-response bias. Following suggestions by Ferber (1981), follow-up comparisons of available characteristics (e.g., AAA quality ratings, occupancy rates) in the population and the sample were made. The responding manager's properties exhibited quality ratings consistent with those of the property managers' association. Chi-square goodness-of-fit showed no significant differences between the true populations and sample in terms of published quality ratings (Chi Sq: 3.62 (d.f.:4).30 < p < .50). In addition, no significant differences existed between the two samples in terms of the previous years occupancy rates (D.F.:73, t=1.46, p≤ .15).

Further analysis of the occupancy rate estimates revealed a hotel and motel industry in the maturity stage of its product life cycle. Pannell, Kerr and Foster (1990) estimated the state's occupancy rate at 57.3 percent. This rate was approximately three percent less than the previous year's estimate. Respondents of this study reported a mean occupancy room rate of 59.5 (S.D. 11.8, Range: 30-82) for the previous fiscal year. Though the range of responses indicated that many specific properties fared much better (and conversely much worse) than the aggregate, the collective experience for the state suggests a competitive environment where supply exceeds demand.

Procedures

Previous studies exploring the relationship between quality and advertising used a straight forward measurement of advertising expenditures (e.g., total expenditures on advertising during a fiscal year) as their studies' dependent variable. However, these studies operated under an assumption that the relative size of these producers were equal among product categories. This assumption was not reasonable in the case of this state's motel/hotel industry where properties' quality ratings were significantly and positively related to the number of quests rooms each possessed (D.F.: 317, rho: .38, p< .001). Therefore, this study incorporated a multivariate approach to measuring advertisement intensity where projected advertisement expenditures for the fiscal year were reported as a percentage of projected gross sales for that same time period. Using advertisement intensity as the study's key dependent variable was appropriate since the majority of advertising expenditures are based upon predicted sales (Scherer 1980) and the statistic would not be biased towards those properties who by their larger size (therefore volume) could afford to advertise more.

Respondents' estimates of projected advertisement expenditures were aided through the following series of questions. First, property managers were asked to identify the types of media and promotional campaigns they planned to use during the fiscal year. Next, subjects indicated the proportion of their advertising budget they planned to spend in each advertising category using a 100 point constant-sum scale. Lastly, respondents were asked to estimate their advertisement and promotional budgets for the fiscal year. Advertisement intensity was then calculated by dividing each respondent's estimate of advertising and promotional expenditures by their projected gross sales for the fiscal year.

The quality of the hotel and motel properties was assessed through the available quality ratings assigned by the AAA Committee on Accommodations (American Automobile Association 1987). A rating, of one to five diamonds, was assigned to each lodging establishment

affiliate based upon the findings of an unannounced annual inspection. The criteria used to rate a property was based upon AAA's assessment of the current standards prevalent in the lodging industry. Though a debate exists among hostelers as to the relevance and objectiveness of the rating criteria, the alternative of using hotel/motel guest surveys to measure quality among a state's lodging establishments is generally considered too subjective for quality assessment purposes (Miller 1991).

Results

A scattergram of the data revealed a wide but reasonably homogeneous variance between the quality rankings in terms of advertising intensity. One star properties range in intensity from less than one percent to seven percent of predicted sales being committed to advertising with a central tendency of .025. Two star properties range in advertising intensity from less than one percent to nine percent (mean of .035) , three star properties from one to ten percent (mean of .04) , and four stars from one and one half to eleven percent (mean of .056).

Contingent table analysis (Chi square) yielded a positive and statistically significant association between quality and advertising intensity (D.F.: 57, Rho .32, $p \leq .01$). In this data set, a mild tendency for higher quality hotels and motels to a fix more of their sales to advertising existed.

As predicted, a strong relationship between advertising intensity and product quality was revealed for chains and franchises but not for single location properties. Properties that reported being a part of a chain or franchise revealed a significant relationship between advertising intensity and quality ratings in the direction predicted (D. F. 35, Rho .48, $p \leq .01$). The variables of interest were random among single location properties (D.F. 20, Rho .15, $p \geq .05$).

Discussion

The case for the misleading effect of advertising made by Comanor and Wilson seems not to be occurring in this sample of hotel and motel properties. Apparently, managers of hotel and motel properties with higher quality ratings express a greater need to share information to potential consumers. The perhaps mild, but nevertheless significant finding supports the information role of advertising put forth by Nelson. Such a finding suggests that the Federal Trade Commission has little reason to concern itself with the advertising intensity of hotels and motels, at least not in this sample. Consumers who are influenced by the more intensely advertised hotel and motel properties, are generally receiving more high quality experiences.

Exploring the relationship between retail advertising intensity and quality ratings is not a means for consumers to discover performance differences between competing hotel and motel properties. In regards to quality, a more efficient approach would be to consult directly a travel guide (e.g., AAA, Mobile Club). Nor is it a means of determining a best buy. Such would require an understanding of the relationship between price, quality and advertising intensity. The relationship does however provide a means of understanding the role property managers envision for their advertising. It is comforting to know that in this limited study advertising functions to promote quality to consumers.

Implications

It is not reasonable to predict that the advertising and quality relationship will persist over time in any competitive environment unchanged. Powers (1990) and Kotler and Turner (1981) suggests that a hotel and motel industry will respond to mature marketplace in at least one of two ways. First, new markets may be identified in which hotel companies may reposition themselves. For example, Withian (1985) discussed the efforts of several lodging companies to continue growing by launching new types of hotels that are targeted to specific groups of travelers. When successful, growth in lodging occupancies may be realized in what was once a saturated or mature market. A reversion back to a growth stage of the product life cycle would theoretically have a bearing on the relationship between advertising expenditures and product quality. Though hotel brand segmentation may be possible for a lodging company and perhaps a destination area, it appears unlikely that it would occur across and entire state.

Another response to a mature marketplace that theoretically may influence the advertising and quality relationship is the modification of the lodging product. Powers (1990) suggests that product modifications in the increasingly competitive hotel and motel industry has generally led to increases in quality and quantity of service offerings. Take for example, in room entertainment has recently evolved from local programming on TV, to cable, and then again to free in-room movies. Those properties that cannot compete in terms of advertising and service quality may be forced to operate strictly on a price-competitive basis to stimulate adequate sales to remain in business. The dropping-out of weaker competitors will eventually mean a less competitive environment composed of well entrenched businesses.

Since the geographic scope of this study is limited, future researchers should choose a variety of locations in an attempt to replicate or counter these findings. In addition, future researchers may wish to explore the relationship between advertising intensity and quality on a city basis. Cities will conceptually evolve along the product life cycle much quicker than an entire state. A broader test of the theories could be realized in settings known to exist along different stages of the product life cycle. Finally, the absolute frequency of advertising or the level of advertising expenditures are not a good surrogate for the quality and impact of these advertisements. One firm may spend less money to design and purchase a promotional campaign of significantly greater effectiveness than another company whose budget is more generous. The effect of "impact per dollar" is ignored in the methodological approach of the past and current studies, and is an issue which must be addressed in further research on the relationship between advertising and product quality.

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DETERMINANTS OF THE ENVIRONMENTAL IMAGE OF AN INDUSTRIAL SERVICE: AN EMPIRICAL ANALYSIS OF CONSUMER PERCEPTIONS

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ABSTRACT

Despite a rise in environmental consciousness amongst the British public during the past decade, very little academic research has been conducted on consumers' perceptions of environmental problems. This holds particularly for research relating to perceptions of environmental issues in industrial sectors and service industries. This paper aims to redress this gap through focussing on concerns about environmental nuisances arising from an industrial service, notably freight transport. Following a review of the literature, multivariate analysis is used to test a number of hypotheses relating to demographic and situational variables and to examine certain environment-related factors likely to impinge upon individuals' perceptions of nuisances. The paper concludes that many of the characteristics found to be associated with general concern about the environment are only of limited use when related to a specific industrial service.

INTRODUCTION

Public interest in green issues and concern about environmental degradation gained a strong momentum in the U.K. during the late 1980's. In 1989, a MORI poll found that 61% of British people would prefer to live in a country that emphasised environmental protection over economic growth (Peattie, 1992). During this period of rising environmental concern, green organisations were showing a growth in support of 20-30% per annum (Nelson, 1989). Greenpeace U.K., perhaps the best known green pressure group, grew from just 30,000 subscribers in 1985 to 414,000 in 1992 (telephone enquiry to Greenpeace U.K., October 1992). This newly found environmentalism also had a profound effect on British purchasing behaviour: a MORI poll in July 1989 indicated that the proportion of consumers buying products according to their environmental performance had risen from 19% to 42% in less than one year (Prothero, 1990). However, Corrado and Ross (1990) argue that concerns about the environment peaked in July 1989 and, in a Harris Poll following the Earth Summit in June 1992, the environment was reported to take back seat to the economy in terms of importance (Marketing, 1992). Nevertheless, given the UN's commitment to the concept of "sustainable development" (Brundtland, 1987), economic and environmental goals should now begin to merge.

Concurrent with the rise in environmental concern, a number of attempts have been made to classify consumers according to the extent of their "environmental consciousness". For example, MORI categorised consumers by the number of "green activities" undertaken (Nelson, 1989), Mintel based its classification on the purchase and use of environmentally friendly products and services (Marketing, 1991), and Diagnostics Market Research defined groups on the basis of support for green organisations, recycling materials and concerns expressed for the environment (Murphy, 1989). However, hardly any study has investigated demographic and situational characteristics in order to highlight idiosyncrasies in the consumer base for concerns/awareness of environmental problems. Indeed, despite the acceleration in the green movement in the U.K. and the media attention given to the environment in the late eighties, the academic literature for the subject has been limited (Prothero, 1990); moreover, the majority of studies have focussed on consumer purchasing behaviour and relatively little information has been obtained regarding public perceptions of environmental nuisances arising from industry.

This paper aims to redress the above research gap through **(a)** focussing on consumer perceptions of environmental nuisances rather than purchasing behaviour, and **(b)** examining environmental nuisances arising in a service setting (freight transport) rather than a physical goods context. Specifically, this paper uses multivariate analysis to test a number of hypotheses relating to demographic, situational and behavioural factors likely to impinge on individuals' perceptions of nuisances arising from alternative modes of freight transport.

Public perceptions about the transport industry have often been highlighted in environmental surveys. For example, in a recent study, when presented with a list of environmental problems, 44% of respondents were concerned about air pollution from traffic fumes, 34% were concerned about traffic congestion and 19% were concerned

about noise pollution (Research 2000, 1990). Hence, the freight transport industry is particularly appropriate for a study of this nature as it is particularly 'visible' to the general public.

LITERATURE AND HYPOTHESES

Table 1 provides a summary of recent research conducted on demographic and situational factors potentially affecting individuals' concerns about the environment.

The majority of the available literature provides results based largely on descriptive analyses of survey responses without subjecting them to statistical tests. Furthermore, all but one of the studies outlined in Table 1 have focussed on concerns about the overall environment, rather than investigating public concerns arising from specific industries, which may produce differing response patterns to the environment in general. Bohlen et al. (1992) is the only study to have investigated public perceptions of the environmental effects of the freight transport industry; although no significant relationships were found between the demographic variables and concerns about environmental nuisances, the latter study employed a convenience sample of 34 consumers and was limited to bivariate non-parametric analysis in testing for relationships.

Despite the limitations inherent in prior research and in the absence of more rigorous evidence, the findings in Table 1 are used to formulate hypotheses for the present analysis; in this context, positive relationships are expected between environmental concern and all variables in Table 1 other than age.

In addition to demographic and situational factors, there are certain environment-related factors that could be expected to impinge on individuals' perceptions about nuisance factors. Specifically, a person's level of knowledge about environmental problems and level of environmentally responsible behaviour would both be expected to impact on his/her environmental concerns. Thus, it is hypothesised that environmental knowledge and behaviour are positively related to concerns about environmental nuisance factors arising from the freight transport industry.

METHODOLOGY

A sampling frame, consisting of 600 addresses of members of the general public throughout Great Britain, was obtained from the sampling agency, C.A.C.I. Half of the addresses were selected from a number of key interest regions, notably the major conurbations and areas experiencing high levels of freight transported by rail. For this half of the sample, respondents were selected using sampling proportional to the number of addresses in each region. The second half of the sample were randomly selected from the remainder of Great Britain. All questionnaires were mailed on the 21st of May, 1992 and two weeks later, 100 follow-up letters were sent out and 100 telephone calls were made to non-respondents of the first wave. A total of 113 usable questionnaires were finally received, representing an effective response rate of approximately 19%. However, although a sample size of 113 was achieved, the analysis was conducted on a total of 72 cases, for which a full set of responses for all variables was available. The demographic data (Table 2) indicate a slight bias towards the higher social classes and the higher educated than the U.K. population as reported by Smyth and Browne (1992).

Dependent Variables

The level of environmental concern was operationalised by two dependent variables both reflecting concerns arising from **a)** road and **b)** rail freight transport respectively, as identified by Schlegelmilch et al. (1992). With regards to road freight transport, respondents were asked to state their concerns about the following nuisance factors; *noise, fumes, vibration, dust and dirt, accidents involving dangerous goods, visual intrusion, effects on plants and wildlife* and *congestion*; each factor was measured on a six-point semantic differential scale (1=*"Not at all worried"*, 6=*"Extremely worried"*). Regarding rail freight, respondents were asked to indicate their concerns about the same set of nuisance factors except *congestion*, since the latter is not relevant to freight transport by rail.

Subsequently, summated scales were constructed by summing over all the various nuisance factors; the internal consistency estimates of the road and rail freight scales proved to be excellent (alpha values of .914 and .900 respectively). In addition, factor analyses indicated each of the scales was unidimensional in nature; lastly, Kolmogorov-Smirnoff tests confirmed that both summated scales were normally distributed.

Independent Variables

Table 3 shows the list of independent variables used in the analysis. While the demographic and situational variables are self-explanatory, the environment-related variables deserve some elaboration.

TABLE 1: Literature Summary of Factors Likely to Influence Environmental Concern

PREDICTOR	LITERATURE SUMMARY			
	Name of Institution	Author(s)	Year Published	Impact on Env'tal Concern
DEMOGRAPHIC				
Sex (0=male 1=female)	Gould Mattinson & Associates	Sturges	1988	Positive
	Diagnostics Market Research	Murphy	1989	Positive
	British Social Attitudes	Young	1991	Positive
	Mintel International Group	Peattie	1992	Positive
	E.B.M.S. University of Wales	Bohlen et al.	1993	None
Occupational Group	Gould Mattinson & Associates	Sturges	1988	Positive
	Diagnostics Market Research	Murphy	1989	Positive
	Research 2000	Anonymous	1990	Positive
	E.B.M.S. University of Wales	Bohlen et al.	1993	None
Education Level	Gould Mattinson & Associates	Sturges	1988	Positive
	Aarhus School of Business	Grunert	1991	Positive
	E.B.M.S. University of Wales	Bohlen et al.	1993	None
Age	Carrick James Market Research	James	1990	Negative
	MORI Social Research Institute	Corrado/Ross	1992	Negative
	Aarhus School of Business	Grunert/Kristenson	1992	Negative
	E.B.M.S. University of Wales	Bohlen et al.	1993	None
Number of Children	Diagnostics Market Research	Murphy	1989	Positive
	Aarhus School of Business	Grunert	1991	Positive
	Cardiff Business School	Peattie	1992	Positive
Marital Status (0=single 1=married)	Research 2000	Anonymous	1990	Positive
SITUATIONAL				
Level of Disturbance	Diagnostics Market Research	Murphy	1989	Positive
	E.B.M.S. University of Wales	Bohlen et al.	1993	Positive

TABLE 2: Characteristics of the Respondents

Occupation Group(1)	Freq	%	Educational Level	Freq	%	Respondent Age	Freq	%	Number of Children	Freq	%	Marital Status	Freq	%
A	1	.9	No exams	10	8.8	00 - 20	2	1.8	0	27		Married	73	64.6
B	11	9.7	GCE 'O'	21	18.6	21 - 30	17	15.0	1	23	23.9	Single	18	15.9
C1	37	32.7	GCE 'A'	8	7.1	31 - 40	16	14.1	2	28	20.4	Separated	4	3.5
C2	25	22.1	Prof./HNC	17	15.0	41 - 50	26	23.0	3	9	24.8	Divorced	8	7.1
D	19	16.8	First degree	14	12.4	51 - 60	13	11.5	4	3	8.0	Widowed	6	5.3
E	3	2.7	Higher degree	4	3.5	61 - 70	17	15.0	>5 Missing	2	2.7	Missing	4	3.5
Missing	17	15.0	Missing	39	34.5	71 +	10	8.8		11	1.8			
						Missing	12	10.6			9.7			

TABLE 3: Independent Variables used in the Analysis

VARIABLE	DESCRIPTION	OPERATIONALISATION
	DEMOGRAPHIC	
MARSTATUS	Marital status	Dummy (1=married, 0=other)
CHILDREN	Number of children	Integer
OCCUPATION	Occupational grouping	Dummy (1=groups A/B/C1, 0=groups C2/D/E)
AGE	Age of respondent	In years
SEX	Sex of respondent	Dummy (1=female, 0=male)
	SITUATIONAL	
T_TRAFFIC	Amount of truck traffic passing home	5-point itemised category (1=very light, 5=very heavy)
RAIL_DIST	Distance from nearest railway line	In miles
	ENVIRONMENT	
PAPER	Recycled paper products	5-point itemised category (1=never, 5=always)
NOT_ANIMAL	Products not tested on animals	5-point itemised category (1=never, 5=always)
DETERGENTS	Environmentally-friendly detergents	5-point itemised category (1=never, 5=always)
ORGANIC	Organically grown fruit and veg.	5-point itemised category (1=never, 5=always)
PETROL	Unleaded petrol	5-point itemised category (1=never, 5=always)
AEROSOLS	Ozone-friendly aerosols	5-point itemised category (1=never, 5=always)
GENBUY	General environment-related purchase behaviour	Summary scale of 3 items (1=never, 5=always). Alpha=.817
KNOWLEDGE	Knowledge about green issues	Summary scale of 11 items relating to environmental problems, measured on itemised category scales (1="Would never do", 5="Do often"). Alpha=.941
RECYCLING	Extent of recycling activities undertaken	Summary scale of 4 items relating to recycling, measured on itemised category scales (1="Would never do", 5="Do often"). Alpha=.807
POLITICAL	"Political" activities relating to environmental protection	Summary scale of 4 items regarding "political" action, measured on itemised category scales (1="Would never do", 5="Do often"). Alpha=.798

The first six variables reflecting purchase frequency of environmentally-friendly products were retained in an itemised-category format following an unsuccessful attempt to construct a summated scale (neither internal consistency nor unidimensionality could be established).

The last four environment-related variables are all summated scales, constructed following unidimensionality and reliability tests. *General environment-related behaviour* covers aspects such as discovering the environmental effects of products prior to purchase and willingness to purchase environmentally-friendly alternatives. *Knowledge about green issues* covers a wide range of topics ranging from global warming to radiation from storage of nuclear waste. *Extent of recycling* captures recycling of paper, plastic, glass and metal. Lastly, *"political" activities* includes support of green pressure groups, lobbying politicians and writing to newspapers about green issues.

ANALYSIS

Regression analysis was employed to test for the impact of the variables in Table 3 on the level of environmental concern. Two regression equations were formulated separately for road and rail freight transport. As a first stage of the analysis the tolerance levels of the independent variables were computed in order to check for multicollinearity in the data set. Subsequently, one of the environmental variables, *general environment related purchasing behaviour*, was removed from both regression equations, as tolerance values of .342 and .331 were obtained for road and rail freight respectively; the analysis was then repeated with the remaining variables in the equations (see Table 4).

TABLE 4: Regression Summary Statistics

REGRESSION RESULTS				
DEPENDENT VARIABLE	R^2	Adjusted R^2	F-Value (15,56)	Significance
Road freight	.440	.293	2.990	.001
Rail freight	.345	.170	1.967	.035

The adjusted R^2 result for rail is substantially lower than its road counterpart. Since the summated scale for lorries includes an additional variable, *congestion*, this variable was omitted and the analysis was repeated to check for the existence of a data artifact. However, the results were almost identical, with the adjusted R^2 falling by just .02 and all beta coefficients illustrating the same directionality. Therefore, it would seem that the independent variables are much better predictors for road freight nuisance factors in comparison to nuisances arising from rail freight.

Table 5 shows the beta coefficients, tolerance levels and the results of significance tests on the independent variables used in the equations. With regards to road freight, relatively few of the predictors yield significant results. Of the demographics, OCCUPATION is the only significant variable. This variable also has the highest beta value, thus accounting for the highest proportion of variance in the dependent variable. However, in contrast to expectations (see Table 1 earlier), the beta sign for OCCUPATION is negative. Hence, members of C2/D/E occupational groupings are likely to be more concerned about environmental nuisances arising from road freight than members of higher groupings.

The situational variable, T_TRAFFIC (the extent of truck traffic passing the home), yields the second highest beta coefficient in the analysis. As hypothesised, the directionality is positive, indicating that the higher the level of road freight traffic, the greater the environmental concerns.

Regarding the environment-related variables, only POLITICAL (the level of "political" activities undertaken to help reduce environmental deterioration), has a significant beta weight; its sign is consistent with expectations, indicating that the higher the levels of participation in "political" action, the greater the concerns about nuisances arising from road freight transport.

In contrast to the road freight analysis, an almost entirely different set of significant variables emerges when the summated scale for rail freight is used as the dependent variable. Regarding demographics, SEX is an important predictor for concerns about environmental nuisances, indicating that females are likely to more concerned than their male counterparts. The only other demographic variable to have a significant beta coefficient is OCCUPATION. As for the lorry analysis, the relationship with the dependent variable is negative, which again contradicts the hypothesis formulated from the literature.

The situational variable, RAILDIST - the distance from the nearest railway line, does not yield a significant beta coefficient. This suggests that people are equally concerned about nuisances arising from rail freight, regardless of whether they personally experience the effects of passing goods trains.

TABLE 5: Beta Coefficients and Tolerance Levels for all Variables

VARIABLES	ROAD FREIGHT EQUATION				RAIL FREIGHT EQUATION			
	Beta	Tolerance	T-Value	1-Tail Sig	Beta	Tolerance	T-Value	1-Tail Sig
DEMOGRAPHIC								
SEX	-.041	.671	- .340	.735	**.316**	**.656**	**2.367**	**.021**
OCCUPATION	**-.320**	**.727**	**-2.753**	**.008**	**-.280**	**.718**	**-2.195**	**.032**
AGE	.001	.634	.010	.991	.026	.658	.198	.844
CHILDREN	.163	.728	1.406	.165	-.148	.714	-1.156	.253
MARSTATUS	-.068	.812	- .622	.536	.085	.826	.714	.478
SITUATIONAL								
T_TRAFFIC	**.296**	**.822**	**2.705**	**.009**	N/A	N/A	N/A	N/A
RAIL_DIST	N/A	N/A	N/A	N/A	-.048	.783	- .398	.692
ENVIRONMENT								
PAPER	.051	.828	.466	.643	.146	.798	1.210	.231
NOT_ANIMAL	-.107	.639	- .860	.393	-.090	.625	- .655	.515
DETERGENTS	.093	.623	.768	.446	.137	.670	1.037	.304
ORGANIC	-.008	.659	- .065	.948	**.434**	**.655**	**3.249**	**.002**
PETROL	-.080	.733	- .694	.491	-.062	.724	- .491	.625
AEROSOLS	.041	.780	.366	.716	.003	.774	.026	.979
KNOWLEDGE	.178	.646	1.444	.154	.197	.634	1.449	.153
RECYCLING	.109	.750	.950	.346	**-.280**	**.727**	**-2.210**	**.031**
POLITICAL	**.283**	**.567**	**2.151**	**.036**	.155	.546	1.062	.293

Finally, only two of the environment-related variables are found to be important predictors of concerns about freight on rail. ORGANIC - the level of organically grown fruit and vegetable products purchased, yields the highest beta coefficient for all the variables in the analysis. As hypothesised, the greater the level of these types of products purchased, the greater the concern about the environmental effects of freight trains. RECYCLING - the level of recycling activities undertaken, is the second environment-related variable found to be an important predictor. However, our hypothesis is rejected for this variable, since a negative beta coefficient is obtained. Hence, people who undertake lower levels of recycling activities are more concerned about nuisances arising from freight on rail.

It must also be noted that a significant correlation coefficient of .419 (p=.000) was found between concerns about road freight and concerns about rail freight. Hence, it would seem that individuals "project" their concerns about a specific transportation mode onto other transportation modes or onto the freight transport industry in general.

DISCUSSION AND CONCLUSIONS

Out of a total of sixteen hypotheses developed from the (admittedly limited) literature on concerns about environmental nuisances, only two give significant results in the postulated direction in the case of road freight. However, most of the relationships between demographics and environmental concern in the literature have been formulated from research on purchasing behaviour (e.g. Grunert studies 1991,1992) and, since different segments of consumer product markets often have different demographic characteristics, it is hardly surprising that certain groups of the population are found to be more "concerned" about green issues. However, as far as road freight transport is concerned, it is likely that virtually everyone is subjected to its environmental nuisance factors as practically everybody is a regular road user. Given such "equal exposure", it is not surprising that demographic variables such as *sex*, *age* and *marital status* do not yield significant results.

Regarding occupational status, previous research on transportation suggests that members of different social classes are not equally exposed to environmental problems. For example, in one study it was pointed out that *"in the U.K children of social class V [i.e. the lowest class] are six times more likely to die as pedestrians than those in social class I"* (TEST, 1989: 79). Given that members of the lower social classes are more likely to live in less "attractive" residential areas (e.g. inner cities), which typically experience higher traffic volumes, they are likely to become more susceptible to road freight nuisances. Since the various *occupational groups* are general indicators of social class, this is a possible explanation of the strong negative relationship between *occupational groupings* and concerns about road freight nuisances. Research also indicates that children are more vulnerable to road accidents than adults (TEST, 1989). One would expect, therefore, that people with children would be more concerned about road freight nuisances than those without. Although no significant positive relationship was identified for *number of children*, the result was marginal (the p-value came to .165); thus, with a sample size greater than the present one may indeed have yielded more significant results.

Research 2000 (1990) discovered that over 50% of British people purchase environmentally friendly products, 60% take glass and paper to be recycled, but a mere 6% undertake such activities as writing to newspapers about green issues or supporting environmental pressure groups (the items summated to the *environmental political action* in the analysis). Therefore, it would seem that people undertaking the latter activities represent the most environmentally conscious segment of the population. Hence, it is not surprising that, of the environment related variables, *political action* was the only variable to be seen as a predictor of concerns about environmental nuisance factors arising from lorries.

With regards to freight transport on rail, again only two of the hypotheses developed from previous research give significant results in the anticipated direction. The negative relationship discovered for *occupational groupings* and concerns about environmental nuisance factors can probably be explained using the same argument as for road freight. In this context, a large proportion of freight on rail is transported to and from heavily industrialised areas: typically, higher percentages of people in the lower rather than the higher occupational groupings are housed in these regions and, consequently, people in the lower groupings are likely to be more exposed to the environmental nuisances arising from rail freight.

With regards to proximity to a railway line, it has been argued that *"the existing rail network has been present for a long time and therefore regarded by the local community as an inherent part of the local geography. In contrast many of the roads are relatively new additions and are typically opposed by the neighbouring communities"* (TEST 1990: 79). If this is true, it is not surprising that there is a positive relationship between the situational variable for road freight and environmental concerns, but no relationship for its rail counterpart.

People who frequently purchase *organically grown fruit and vegetables* often do so because these products are produced without the use of any potentially harmful pesticides and insecticides. British Rail has recently faced public criticism for its use of pesticides and insecticides on its linesides, which could partially explain why a highly significant relationship between purchasing this type of produce and concerns about nuisances arising from rail freight has been discovered.

Other results from the analysis concerning the rail mode are more difficult to interpret, particularly the negative result for the level of *recycling activities undertaken*. At first, this result was thought to be caused through multicollinearity with other predictors; however, this explanation was discounted due to the high tolerance values for all variables in the analysis and the fact that a significant negative relationship with environmental concern was also found on a bivariate basis. Another more plausible explanation is that different respondents may have adopted different strategies in answering the questions. Rail freight transportation is widely regarded to be more environmentally friendly than its road counterpart (for example, see Schlegelmilch et al. 1992). In the present study, respondents were asked to indicate their concerns first about road freight and then about rail freight. It is possible that, in some cases, scores attributed to rail nuisances are not independent of scores attributed to road freight nuisances. If respondents are aware that rail is the "greener" mode of transport, they may establish their response for road freight and then "automatically" attribute a proportionally lower score for rail freight. Hence, in some instances, the scores obtained for trains could be a function of the corresponding results for road freight, while other respondents may have treated the two sets of variables entirely independently. Given that people doing recycling are likely to be more environmentally aware, they are more likely to be the group who would not treat the two modes independently. Naturally, it is impossible to be certain about which technique each respondent adopted to answer the questionnaire; however, these method-specific differences could have resulted in the "strange" sign of the recycling variable.

This paper has illustrated the potential dangers of using classification variables for concerns about the general environment as an effective framework for segmentation in specific industries. For example, if an organisation involved in the road freight business targeted the higher occupational groups in a public relations exercise to lessen public concerns about the negative environmental effects of road freight, the more concerned sectors of the population would fail to receive the message; such a targeting error would have obvious implications for the competitive success of the organisation.

Furthermore, although both road and rail freight modes compete in the same industrial sector, the predictors for environmental concern for each mode are substantially different from each other. This suggests that not only is it unwise to use concerns about the environment in general to develop specific predictions for each industry, but also to generalise between product classes from results obtained from the same industrial sector. It is therefore recommended that organisations facing public concerns about environmental problems within their sector of the market do their own research in order to identify if idiosyncrasies exist in the consumer base for their products.

Kirkpatrick (1990) believes that environmentalism will become the most important business issue of the decade. Indeed, numerous industries are now attempting to present themselves in a more environmentally friendly light. In March 1991, a DRT International/Touche Ross survey of 250 large industrial and commercial companies across Europe revealed that 70% of companies had stated that they had specific plans to improve their environmental performance (Abbott, 1991). Furthermore, improvements in environmental performance make good sense in commercial terms, particularly since over 250 directives on green issues are currently making their way through the European Commission (MacKenzie, 1992). Thus, without sufficient research into the effects of environmental nuisances on the consumer base, many companies will undoubtedly face severe financial and social problems in years to come.

Regarding future research directions, one possibility would be to extend the analysis to other industries in general and industrial services in particular. This would help establish the stability of the present results. Another avenue for research would be to investigate the impact of psychographic and attitudinal variables on environmental concern and explore the scope for developing segmentation typologies based on "green" factors. Finally, an examination of the environmental concerns of the actual customers of industrial services (e.g. physical distribution and logistics executives) would provide a complementary angle on the importance of green-related issues in today's industrial environment.

Notes:

1. All categories were obtained from *"Occupation Groupings: A Job Dictionary"* (Market Research Society, 1990: London). Groups are defined as follows:

A - Higher managerial, administrative or professional
B - Intermediate managerial, administrative or professional
C1 - Supervisory, clerical, junior administrative or professional
C2 - Skilled Manual Workers
D - Semi-skilled and unskilled manual workers
E - State pensioners, widows, casual and lowest grade earners

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HMO SELECTION CRITERIA: AN EXPLORATION OF DIFFERENCES BETWEEN FAMILY AND INDIVIDUAL ENROLLEES

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Introduction

Since the passage of the Health Maintenance Organization (HMO) Act of 1973, HMOs have become an integral part of the consumer health care landscape. HMO choice factors, usually expressed in enrollment or disenrollment decisions, have been studied from a variety of perspectives: a framework for analyzing HMO enrollment decisions (Berki and Ashcraft, 1980); consumer choice decisions between HMOs and either service benefit organizations like Blue Cross/Blue Shield or independent health insurance plans (Bashshur and Metzner, 1967; Juba, Lave, and Shaddy, 1980; Tessler and Mechanic, 1975); differences in criteria for HMO re-enrollment and initial enrollment decisions (Scotti, Bonner, and Wiman, 1986); and determinants of voluntary HMO disenrollment (Travis, Russell, and Cronin, 1989).

However, despite the fact that consumers must enroll in and pay for HMO services as either individuals or families (individuals with dependents), and Berki and Ashcraft's (1980) confirmation of family or individual as the decision unit, only descriptive work about the types of decision units likely to be found in HMOs versus Blue Cross/Blue Shield has been done. Moreover, even in this work the results have been contradictory. Compare, for example, Bashshur and Metzner's (1967) finding that enrollees in HMO programs were more likely to be married than single and Juba et al.'s (1980) conclusion that younger and larger families were more likely to be found in HMOs with Tessler and Mechanic's (1975) conclusion that married families tended to be found in Blue Cross/Blue Shield and that there were no significant differences in age or family size between enrollees in HMOs and Blue Cross/Blue Shield.

We propose to move away from a descriptive examination of HMO populations. Using the framework developed by Berki and Ashcraft (1980), we shall propose and test differences between the selection criteria used by single and family decision units.

Berki and Ashcraft (1980) have proposed an analytical framework that distinguishes two major categories of characteristics that may influence HMO enrollment choice. The first category is insurance cost characteristics, that is: 1) the benefit package covered; 2) premium cost to the enrollee; and 3) cost-sharing provisions such as deductibles, co-payment, co-insurance, and benefit ceilings.

Since, Berki and Ashcraft (1980) argue, "enrollment in a HMO is a simultaneous choice of both insurance coverage of the cost of medical services and their system of delivery (p.590)," the second category of characteristics that may influence HMO choice is delivery characteristics. The dimensions of this category are: 1) access (further divided along spatial, psycho-social, and temporal aspects); 2) continuity of care; 3) comprehensiveness; 4) clinical quality; and 5) social quality.

While the Berki and Ashcraft (1980) paradigm provides a theoretical base for the importance of non-monetary factors (the delivery characteristics delineated above) in HMO choice, studies also have confirmed its validity in practice. Scotti et al. (1986) found that "quality of care" was the number one reason -- ahead of cost -- in planned disenrollment. Moreover, while Travis et al. (1989) found that cost was the most frequently given reason for actual disenrollment, "the choice and ease/convenience factors were as important as the quality of care factor (p.76)." In fact, they conclude, "our findings suggest that these three secondary issues should be addressed equally (p.76)."

While significant work has been done on cost-related factors as decision criteria in HMO choice (e.g., Travis et al., 1989; Scotti et al., 1986), delivery factors may also play an important role in HMO choice. Accordingly, the objective of our study is to propose and test differences between family and individual respondents choice of HMOs using factors from the delivery characteristics category of the Berki and Ashcraft (1980) taxonomy. Specifically, we have hypothesized differences along the dimensions of access (both spatial and temporal aspects), continuity of care, clinical quality, and social quality, as discussed in the next section.

Hypotheses

Berki and Ashcraft (1980) define spatial access as, "the location of delivery sites in relation to the potential user's domicile or, where appropriate, domicile and workplace (p.596)." They further comment: "How strongly consumers feel about spatial access is likely to be affected by their expected use patterns (p.597)." Other studies have also highlighted the importance of this spatial

distance dimension (cf., Folland, 1983; Donthu and Rust, 1989).

We would expect that children, who are likely to require HMO services primarily when ill, would be kept home from school or other activities when they are ill. Moreover, any prescription medicine would likely be obtained and brought home to them for consumption as soon as possible, so:

H1a: Families are more likely to select HMOs that are close to home.

Conversely, individuals are more likely to utilize HMOs for checkups and tests, and are more likely to try to fight through presumably minor illness at work, so we hypothesize:

H1b: Individuals are more likely to select HMOs that are close to work.

Berki and Ashcraft (1980) define the temporal aspect of the access dimension as "the time lag between the patient's first attempt at establishing contact with a provider and its actualization. Under non-emergency conditions, waiting time required to get an appointment and waiting time in the office comprise the basic elements of temporal access (p.597)."

Since we hypothesize that individuals will be using HMOs for more "routine" situations such as checkups and tests, which usually may be expected to require a fixed amount of time, they are more sensitive to the timeliness of the service provided. Also most of them will be coming to the HMO from the pressures of work, therefore we hypothesize that:

H2: Individuals are more likely to expect temporal responsiveness from the HMO they select.

Berki and Ashcraft (1980) define the continuity dimension as "the ability of the patient to establish or to maintain a patient-physician relationship with a physician of choice, and having a given physician as the principal health care coordinator (p.599)."

Since family respondents must settle a number of people within a HMO, and some subset of these are likely to be children, we would expect that building trust with doctors and staff and minimizing the dislocations of frequent switching among HMOs would be highly important to families, thus:

H3: Families are less likely to switch HMOs.

According to Berki and Ashcraft (1980), "the clinical quality of delivery characteristics encompasses the clinical appropriateness and effectiveness of the care pattern (p.600)." Moreover, since "few if any patients have sufficient experience and clinical information to assess for themselves the competence levels of various providers (p.600)," most of these patients are likely to take their cues of clinical quality from other areas of the HMO operation.

Among these other cues are several aspects of the dimension of social quality, which is conceived by Berki and Ashcraft (1980) as capturing "the elements of the delivery system that, although not objectively related to other delivery characteristics, are perceived by potential enrollees as relevant (p.601)." Physical attractiveness of the HMO facilities and humane concerns are among the aspects of social quality (Donthu, 1991).

Because, as previously delineated, building trust and curing children's illness are likely to be very important in family respondents selection of HMO facilities, we would expect that family respondents would take their cues in evaluating the quality of service received from such things as how promptly they are received in emergency situations, how their children respond to the doctor's treatment, and how they (and/or their spouse or children) "feel" about their doctor rather than the physical appearance of the HMO facility. Hence:

H4a: Families are more likely to select HMOs based on non-physical appearance factors.

Conversely, individuals, who are more likely to utilize HMOs for checkups and tests, would take their cues in evaluating the quality of service received from such things as the physical appearance of the HMO facility. Hence:

H4b: Individuals are more likely to select HMOs based on physical appearances.

Data

To test the above hypotheses, a study was conducted at a mid-size state university. The university offered health plans through five HMOs. The study included all teaching, nonteaching, and support staff of the university who were enrolled in one of these five HMO plans.

A questionnaire was mailed to 1300 randomly selected employees of the university. From the 1300 questionnaires that were sent out, 499 were returned and usable. This represented a response rate of 38%. The high response rate could be attributed to the fact that this survey had personal relevance to the employees as it concerned their health benefit program, and the survey had the approval and encouragement of the Personnel Department of the university. Moreover, the respondents were required only to return their survey by campus mail. Of the 499 respondents who provided usable data, 201 were individual enrollees and the remaining 298 were family enrollees.

The questionnaire contained several sections: First, respondent history with HMOs was investigated. This included questions regarding their overall satisfaction, number of years enrolled in HMOs, switching between HMOs, etc. The second section investigated their expectations and perceptions of the quality of service received from their HMO (cf., Parasuraman, Zeithaml, and Berry, 1988). In the third section, respondents were asked their opinions regarding various factors, and the importance of these factors, that influenced their choice of an HMO (cf., Folland, 1983; Berki and Ashcraft,1980). Finally, some demographic information (such as age, income, employment information, and type of HMO enrollment: individual vs. family) also was collected.

Results

The results are presented in Table 1. Table 1 summarizes the statistical tests performed to test all of the hypotheses. Clearly, we have empirical support for all of the hypotheses.

Specifically, families are more likely to select HMOs that are close to home. Family enrollees placed more importance on the distance of the HMO facility from home than individual enrollees (mean importance of 3.56 vs. 2.34; $p < 0.05$). Individuals are more likely to select HMOs that are close to work. Individual enrollees placed more importance on the distance of the HMO facility from work than family enrollees (mean importance of 4.1 vs. 2.4; $p < 0.05$).

Individuals are more likely to expect temporal responsiveness from the HMO they select. Individual enrollees placed more importance on the timeliness of the service they received than family enrollees (mean importance of 4.2 vs. 3.7; $p < 0.08$).

Families are less likely to switch HMOs. Overall, family enrollees had a much lower switching rate (between HMOs) than individual enrollees (mean switching of 21% vs. 36%; $p < 0.05$).

Families are more likely to select HMOs based on non-physical appearances factors. Family enrollees placed more importance on non-physical appearances factors (such as caring and dependability) than individual enrollees (mean importance of 3.8 vs. 3.0; $p < 0.05$). Individuals are more likely to select HMOs based on physical appearances. Individual enrollees placed more importance on physical appearances (of facilities and employees) than family enrollees (mean importance of 4.0 vs. 3.1; $p < 0.05$).

Table 1
Statistical Analysis of Data to Test Hypotheses

Factor	Mean 1 (Families)	Mean 2 (Individuals)	Difference Significant at 0.05 Level?
1. Distance from Home	3.56	2.34	Yes
2. Distance to Work	2.4	4.1	Yes
3. Timeleness of Service	3.7	4.2	No*
4. Switching Rate	21%	36%	Yes
5. Importance of Non-Physical Factors (Caring, Dependability)	3.8	3.0	Yes
6. Importance of Physical Appearance	3.1	4.0	Yes

*P = 0.08

Conclusions

As health care costs increase, the popularity of HMOs is increasing. HMOs typically have two type of plans: One targeted at individuals (single coverage) and a second targeted at families (multiple coverage). It has previously not been known whether individual enrollees and family enrollees use the same criterion to choose HMOs. In this paper we report results of a study designed to investigate these differences, if any.

Using a survey of 499 HMO enrollees we found that:

- Families are more likely to select HMOs that are close to home.
- Individuals are more likely to select HMOs that are close to work.
- Individuals are more likely to expect temporal responsiveness from the HMO they select.
- Families are less likely to switch HMOs.
- Families are more likely to select HMOs based on non-physical appearance factors.
- Individuals are more likely to select HMOs based on physical appearances.

These findings have strong implications for planners at HMOs, and health care providers in general. As HMO managers know, and Travis et al. (1989) state explicitly, "disenrollment is a continuing problem for HMOs (p.75)." Given the differences between individuals' and families' expectations of HMOs, this is not surprising. HMOs cannot have a single unified strategy to attract customers and hope to retain all of them.

Families and individuals are looking for different attributes in HMOs. If, as indicated in our study, families are less likely to switch HMOs than are individuals, HMO managers might profitably pursue this segment. Inherent in this pursuit are site location considerations (especially for new facilities), and spending money for quality health-care professionals, prompt responsiveness, and other surrogates for clinical quality rather than the physical appearance of the facility.

Further research is needed on the differences in selection criteria between family and individual consumers. We particularly would suggest exploration along the comprehensiveness and social quality dimensions of delivery characteristics in the Berki and Ashcraft (1980) taxonomy.

Another rewarding area of enquiry would be to examine the relative impact of (and likely interaction between) the insurance characteristics and delivery characteristics on family and individual consumers selection criteria.

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PURCHASING ISSUE IMPORTANCE IN SERVICE CHANNELS OF DISTRIBUTION: TOUR OPERATORS AND TRAVEL AGENTS

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Abstract

Customers purchasing directly from tour operators valued experience with the tour company and personal recommendations in decision making. Agency clients valued the ease of booking through agents along with information from guidebooks and tourist bureaus. Domestic travelers were more often operator clients, and foreign travelers were more often agency clients. Differences are discussed in terms of different segments of customers within the channel of distribution.

Introduction

Purchasers of tours, similar to other customer groups, differ in the benefits that they seek from tours and from the travel companies involved (Kendall and Booms 1989). Operators design tours and offer packages to the public through alternative channels to attract customers who seek varying benefits. One channel of distribution for operators is direct sales to customers. Alternatively, operators offer tour packages through intermediaries by allowing travel agents to offer added services for consumers. It may be suggested that travelers who purchase these added services from intermediaries differ from those who purchase directly from operators not offering added services.

Since traveler attitudes toward added services differ, the consumers' perceptions of the role of the travel agent is quite variable. Consumers generally accept the idea that travel agents provide information regarding arrangements and act as facilitators; but consumers do not agree on the necessity for agents to provide such physical services as ticket delivery, pleasing office decor, or airport parking (Kendall and Booms 1989). Consumers may choose to purchase directly from the tour provider if the value added by the agent does not meet their expectations. No prior research has attempted to distinguish or to describe differences in consumers at these varying channel levels in services marketing. Along with many similarities, differences may also exist between travelers to foreign destinations compared with domestic travelers within the channel.

Channels and Consumer Communications

Little attention has been directed to the riskier nature of purchasing services and the appropriate information needs of service consumers (Murray and Schlacter 1990). Because more evaluation occurs during consumption and after purchase, more pre-purchase information is needed for services. Additionally, more informal (personal) and independent sources of information are used instead of formal (company-sponsored) sources as risk becomes an important issue (cf. Gitelson and Crompton 1983). Opinion leaders and reference groups play a more prominent role in services (Murray 1991). For example, if foreign travel is assumed to be higher risk (cf. Gitelson and Crompton 1983), then more personal information and dependency on experienced travelers or independent travel agents (as opinion leaders and reference groups) might be expected.

Since information needs vary, effective communications methods differ within the channel of distribution. Advertising is an effective means of creating image and attitude toward destinations (Bojanic 1991). However, ads for travel agents are not as effective (Kendall and Booms 1990). Brochures are a popular and tangible source of information but are not used to maximum potential by consumers in their travel decisions (Wicks and Schuett 1991).

This study explored the similarities and differences in purchasing decision attributes and the sources of information used by tour operator clients and travel agents clients. The specific objectives were (1) to investigate differences in purchase decision parameters within the channel of distribution, (2) to investigate differing information sources used by customers, and (3) to explore these same issues between domestic and foreign travelers.

Method

Purchase decision attributes and sources of information were compared for tour operator clients and agency clients preparing to go on escorted tours. Comparisons were also made for domestic versus foreign purchasers on both decision attributes and information sources.

Sampling Procedure

Travel agencies were recruited from those approved by the Airline Reporting Corporation, the most comprehensive listing available. Tour operators were recruited from members of the National Tour Association (NTA). A total of 111 firms agreed to distribute questionnaires. Firms were asked to distribute surveys to escorted tour clients booked on upcoming tours. Responses were obtained from 133 of the tour participants who were asked to provide information (response rate of 25%). Agency clients provided 52% of the responses, and operator clients provided 48%.

A broad sampling of clients from multiple tour operators and travel agencies was sought to illustrate purchasing differences in the service channel of distribution. Successful efforts in obtaining a relevant sample is indicated by the respondent characteristics which were similar to those of (1) domestic escorted tour travelers (Longwoods 1990) and (2) previous limited escorted tour studies of satisfaction (cf. Quiroga 1990). The majority of respondents were female, and most participants were between the ages of 61 and 75 years. Education level was relatively high, and respondents reported that they were experienced group travelers having participated in previous escorted tours. Thirty-seven respondents (27.2%) indicated they had visited their tour destination before. Tours occurred in every month of the year except January. Respondents resided in 29 states in the U.S. indicating geographic dispersion.

Instrument

Respondents were asked to provide information on the importance of decision-making attributes and information sources which were developed from a pilot study of escorted tours (Persia and Duke 1991). Self-administered questionnaires asked participants to indicate the importance of the list of 12 purchasing decision attributes on a scale from very important (scaled as +2) to unimportant (scaled as -1). An unbalanced scale was developed from the pilot study (Persia and Duke 1991) and from pretests which matched the responses expected in the population. Respondents also identified the sources of information used in the purchase decision. A list of 8 information sources (Table 2) was developed from the pilot study (Persia and Duke 1991). Respondents were asked to indicate all of the sources that they used in making a tour decision. Respondents returned completed questionnaires in pre-paid mailers.

Results

Purchase decision parameters were listed from highest to lowest mean importance score among travelers who purchased from operators and those who purchased from agents (Table 1). To those purchasing through operators, the tour provider's reputation was highest in importance. Travelers purchasing through travel agents considered destination as most important. Tour company reputation, experience with the tour company, and ability to meet new friends were more influential factors for operator clients. Ease of booking and agent recommendations were more influential for agency clients.

Purchase decision parameters were also listed from highest to lowest mean importance score for domestic and foreign travelers (Table 2). The attributes listed first and second are reversed for the two groups with tour company reputation being most important for domestic travelers and destination being most important for foreign travelers. Experience with the tour company was also important for domestic travelers but not relatively important for foreign travelers. Ease of booking, agent recommendations, and elimination of financial risk were more influential for foreign travelers. Tour company reputations and experience with the tour company were more influential for domestic travelers.

Sources of information were also ranked by frequency of mention for operators versus agents (Table 3). Not surprisingly, tour operators more often provided information for those purchasing directly, whereas agents more often provided information for those purchasing from these intermediaries. Guidebooks were used more often by those purchasing from operators, and personal information from friends and relatives was used more often by those purchasing from agents. Periodicals were used moderately by both groups. In general, this sample did not often use travel clubs, tourist bureaus, or mass media to obtain information.

Domestic travelers used tour companies most often whereas foreign travelers used travel agents most often (Table 4). Foreign travelers used travel agents, guidebooks, tourists bureaus, and mass media more often than did domestic travelers.

ANOVA's were used to examine any potential interactions between distribution channel level and destination. Evidence found in this post hoc analysis should be helpful in developing future research studies. Elimination of financial risk was significantly more important for foreign-agency customers (Table 5). The significant interaction derives primarily from the lower mean for domestic-agency customers for whom financial risk did not appear to be important. In the only other interesting interaction, tour timing was marginally more important with foreign-operator customers and domestic-

agency customers (Table 5). Although this attribute should be considered in further research, caution with using this marginal result is emphasized by the lack of ANOVA main effects.

Discussion

Travelers who purchase directly through tour providers demonstrated stronger ties with these operators, especially domestic travelers. Reputation with the tour company scored even higher than destination in purchasing choice. Good experiences with operators indicated that this experienced group of tour-goers tended to return to tour companies meeting their expectations. Although not highly rated in importance, it is interesting to note that operator clients placed a marginally higher importance on risk reduction than did agency clients. Tour providers might appeal to their satisfied customers to return for another trip by promoting reputation and lower financial risk. Travelers who use agencies indicated much higher importance for ease of booking, especially foreign travelers. The use of agencies for this administrative function appealed to those who wanted convenience but also insisted on good tour providers who served the desired destination.

Communications issues did not appear high in overall purchasing importance but shed some light on differences within the channel. Although no differences were given between levels in the channel, formal communications such as brochures and ads were the highest rated in overall importance. Operator clients and domestic travelers showed slight preference for friends and family over agent recommendations. However, travelers who purchased from agencies and took foreign tours valued agent recommendations over personal recommendations of friends. In contrast to some previous findings, high risk (foreign) travelers used more company-controlled sources (brochures, guidebooks, tourist bureaus) and formal sources (agents) than did lower risk (domestic) travelers.

Sources of information indicated that all travelers use both operators and agencies as major information sources. The only significant difference between channel clients was in which is used most often (Table 3). However, more differences existed when the destination was considered. Domestic travelers were more likely to use periodicals and used personal information sources (friends and family) slightly higher (Table 4). Foreign travelers were more likely to use information from guidebooks and tourist bureaus while placing slightly more emphasis on broadcast media.

These results suggest that foreign travelers do more total information search using different types of information. This may follow from the presumed higher risk of foreign travel. The use of personal information sources (friends and family) needs to be further researched to determine the relative importance of each for both destination as well as channel of distribution level. Agents appeared to be more important as information sources for international customers, perhaps because foreign travel is thought to be higher risk. The ease of making the purchase transaction was critical, along with the ability to simply provide information even though the agent's recommendation may not be uppermost in the decision process.

The generalizability of this study is limited by the specific sample characteristics. Most notably, these travelers were mature, experienced escorted tour-goers who may have different purchasing attitudes from younger, less experienced travelers.

Managers can use this style of analysis to gain insight into the attitudes, interests, or life-styles of consumers purchasing directly from operators versus those purchasing from agents. Because customer offerings may overlap between segments, areas of potential conflict between operators and agents can be identified along with solutions which can optimize the success of the entire channel.

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TABLE 1
PURCHASING ATTRIBUTE IMPORTANCE:
OPERATOR CLIENTS vs AGENCY CLIENTS

Attribute	Operator (n = 61) Rank	Mean	Agency (n = 72) Rank	Mean	t	p
Operator Reputation	1	1.83	2	1.59	2.38	.02
Tour Guide	2	1.62	3	1.46	1.33	.18
Destination	3	1.61	1	1.69	.64	.52
Experience w/Op.	4	1.49	8	1.16	2.14	.03
Time Scheduled	5	1.39	5	1.30	.68	.50
Safety in Group	6	1.24	6	1.24	.01	.99
Brochure / Ads	7	1.20	7	1.17	.20	.84
No Fiscal Risk	8	1.12	11	.98	.83	.41
Ease of Booking	9	1.08	4	1.37	1.77	.08
Info. from Friends	10	.77	10	.99	1.23	.22
Info. from Agent	11	.73	9	1.04	1.70	.09
Make New Friends	12	.61	12	.25	1.91	.06

NOTE: Scale (-1 = unimportant, 0 = no opinion, 1 = moderately important, 2 = very important).

TABLE 2
PURCHASING ATTRIBUTE IMPORTANCE:
FOREIGN vs DOMESTIC TRAVELERS

Attribute	Domestic (n = 62) Rank	Mean	Foreign (n = 71) Rank	Mean	t	p
Operator Reputation	1	1.82	2	1.59	2.10	.04
Destination	2	1.65	1	1.68	.26	.80
Tour Guide	3	1.48	3	1.52	.26	.79
Experience w/Op.	4	1.44	10	1.14	1.71	.09
Time Scheduled	5	1.34	5	1.32	.14	.89
Safety in Group	6	1.10	6	1.31	1.17	.24
Brochure / Ads	7	1.08	7	1.24	1.09	.28
Ease of Booking	8	.93	4	1.49	3.24	<.01
No Fiscal Risk	9	.82	9	1.14	1.67	.10
Info. from Friends	10	.77	11	.88	.62	.54
Info. from Agent	11	.52	8	1.21	3.62	<.01
Make New Friends	12	.33	12	.38	.27	.79

NOTE: Scale (-1 = unimportant, 0 = no opinion, 1 = moderately important, 2 = very important).

TABLE 3
PURCHASING INFORMATION SOURCES:
OPERATOR VERSUS AGENCY

Source	Operator Clients (n = 61) Rank	No.	Pct.	Agency Clients (n = 72) Rank	No.	Pct.	Chi-Sq	p
Operator	1	39	58.2	2	34	40.5	3.60	.05
Agents	2	26	38.8	1	56	66.7	13.65	<.01
Guidebooks	3	19	28.4	4	26	31.0	.24	.62
Friends	4	18	26.9	3	28	33.3	1.02	.31
Periodical	5	14	20.9	5	14	16.7	.31	.58
Travel Club	6	6	9.0	8	4	4.8	.94	.33
Tour Bureau	7	5	7.5	6	12	14.3	1.95	.16
Radio/TV	8	3	4.5	7	6	7.1	.55	.46

TABLE 4
PURCHASING INFORMATION SOURCES:
DOMESTIC vs FOREIGN TRAVELERS

Source	Domestic (n = 62) Rank	No.	Pct.	Foreign (n = 71) Rank	No.	Pct.	Chi-Sq	p
Operator	1	34	54.8	2	30	41.7	1.95	.16
Agents	2	29	46.8	1	46	63.9	4.40	.04
Friends	3	18	29.0	4	23	31.9	.17	.68
Periodical	4	14	22.6	6	11	15.3	1.11	.29
Guidebooks	5	13	21.0	3	27	37.5	4.58	.03
Travel Club	6	4	6.5	8	4	5.6	.04	.84
Tour Bureau	7	2	3.2	5	12	16.7	6.56	.01
Radio/TV	8	1	1.6	7	8	11.1	4.88	.03

TABLE 5
PURCHASING ATTRIBUTE IMPORTANCE ANOVA RESULTS

A. "Elimination of financial risk."

	Level in Channel: Oper.	Agency
Domestic	1.08 (n=40)	.36 (n=22)
Foreign	1.09 (n=21)	1.16 (n=50)

ANOVA Source	df	M S	F	p
Main Effects:				
Destination	1	5.20	4.43	.04
Level	1	2.73	2.32	.13
Interaction:	1	4.51	3.84	.05
Error:	128	1.17		

B: "Time the tour was scheduled."

	Level in Channel: Oper.	Agency
Domestic	1.25 (n=40)	1.50 (n=22)
Foreign	1.50 (n=21)	1.24 (n=50)

ANOVA Source	df	M S	F	p
Main Effects:				
Destination	1	.01	.02	.99
Level	1	.01	.01	.92
Interaction:	1	1.82	2.66	.10
Error:	128	.68		

A MODEL OF CUSTOMER PARTICIPATION IN THE HEALTH CARE INDUSTRY

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Abstract

This paper focuses on consumer participation as being an important component in the production of perceived health care value. As such, this study will develop a 2 by 2 matrix (the relationship between consumer participation and the complexity of the health care offering) for understanding consumer participation in the health care industry. The consumer participation matrix is integrated into an initial conceptualization of the overall health care process.

Introduction

Health is a topic of concern to all people, either directly or indirectly. Stable health is a prerequisite for living a productive and satisfying life. Thus, health is related to the concept of well-being; health is not an end in itself but represents on-going efforts to enrich a person's level of well-being. This means that health is not just "feeling good," but instead is a broad concept embracing social, emotional, cognitive, and physical aspects of life.

In health care encounters (as in many service encounters), one of the critical factors exploited in creating the health offering is the interaction between the health care provider and the consumer. Thus, the interaction component is a focal part of the health care offering itself. From a consumer's perspective, the essential element of the interaction in the health care setting is the degree of consumer participation involved with the particular offering. The degree of participation will differ depending on the type of offering and also depending on the characteristics of the consumer. Thus, the "ultimate" offering, as perceived by the consumer, will be delivered when consumer participation corresponds to the complexity level of the service, i.e., different health care offerings may require different consumer participation.

The purpose of this paper is to address the overall health service process and also consumer participation in this process from a new and different perspective by building on four concepts in the health care, services, and organizational literatures. These concepts are: (1) organizational arrangements, (2) the health care offering, (3) the health care exchange, and (4) the outcome (e.g., value) of the process. As such, this study will develop a 2 by 2 matrix (the relationship between consumer participation and the complexity of the health care offering) for understanding patient participation in the health care industry. The consumer participation matrix is integrated into an initial conceptualization of the overall health care process.

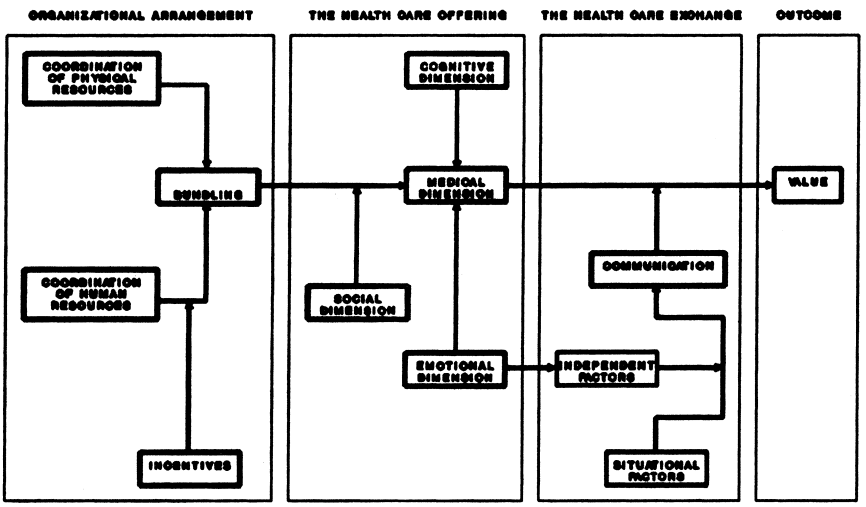
The Health Care Process

Figure 1 depicts a conceptual framework for understanding patient participation in the health care system. Patient participation is viewed as being a critical component of the "health care offering" and "the health care exchange." Thus, both the offering and the exchange are functions of the degree of consumer participation. This means that the scheme presented in the matrix (Figure 2) is an integral part in both the offering and the exchange process.

The overall system consists of four major "health care subsystems" (organizational arrangement, the offering, the exchange, and the outcome). First, the health care process begins with an infra-structure of human and physical resources. These resources are essential to the health process since health care generally requires both human and "material" inputs. Second, incentives are needed to incite positive behavior on the part of the health provider. Thus, human "action" can only be created through some form of stimulus. Third, the active health provider supplies medical care (i.e., health specific care). This medical care is going to be moderated by the knowledge that exists among people in society (e.g., treatment of AIDS is moderated by society) and by the individual patient's prior knowledge of the health problem. The medical care is also going to be directly influenced by the patient's emotions (i.e., is the treatment perceived to cause harm to the patient, is the treatment going to disrupt the patient's integrity, etc.). These emotional factors will affect the composition of the medical care. Further, the emotional factors will have a direct effect on the person's self-monitoring ability. The ability to tolerate inconsistency in behavior and attitude (e.g., self-monitoring) will function as a moderator between situational characteristics (e.g., the power relationship) and the communication between the actors in the exchange. The communication factor will affect the health care that is delivered and the utility that is received by the involved parties. Thus, the overall "exchange" may cause a difference between the proposed treatment and what is actually delivered. The exchangemay also diminish or enlarge the utility of the treatment as well as the utility of the outcome (value). In the following sections the health care system constructs will be discussed in more detail.

FIGURE 1

A FRAMEWORK FOR UNDERSTANDING PATIENT PARTICIPATION IN THE HEALTH CARE INDUSTRY



Organizational Arrangement

The concept of organizational arrangements is defined as the organizational instruments for dealing structurally with the construction and production of offerings (Edgren 1991). In the health service setting, this definition builds on the notion that service systems are structured to facilitate both the demand and supply of transactions rather than the demand and supply of products (e.g., Mills, Chase, and Margulies 1983). This means that the main objective of the transaction between the service provider and the consumer is to create value for both parties.

Edgren (1991) states that there are four organizational arrangements particularly important in the creation of the health care offering. The first of these is the "coordination of human resources" so as to achieve an advantageous mixture of internal and external resources. The second is a similar "coordination of physical resources." The third is "incentives," which is the institutionalization of measures aimed at stimulating the occurrence of a particular behavior which is sought after. The fourth is "bundling," which is the combining (bundling) of the coordinated human and physical resources in constructing the offering.

The Health Care Offering

Use of the "offering" concept for understanding the position of the health care system in relation to the consumer is motivated by the fact that what the health care system offers its consumers is a mixture of products, services and information (Edgren 1991; Normann et al. 1989). An offering is the content in the transaction which a buyer and a seller engage in to jointly create value (Normann et al. 1989). Within the health care profession (and possible all other service professions), the offering concept automatically takes into account the new assets that health care organizations need to manage strategically in order to keep or obtain competitive advantage. These assets include "know-how," information, and consumer "access control."

Edgren (1991) and Mills et al. (1983) found the health care offering to include several different dimensions pertaining to how health care is organized in relation to its consumers. These authors found that medical, social, cognitive and emotional dimensions are involved. The medical dimension deals with the problem that made the consumer seek a physician's advice or help. The social dimension refers to a situation where the medical dimension exists in the social setting and thus affect the overall health of the society. The cognitive dimension includes the information that the consumer has about their health problem before seeking the advice of a physician. The emotional dimension includes the rights of the consumer; for example, to be treated with respect and dignity. This dimension also includes being treated as a functional, intellectual, and passionate human being (e.g., Kenny 1990). Thus, the organizing of consumer participation is based on the nature of the offering as seen in terms of the number and characteristics of the dimensions involved.

The Health Care Exchange

Exchange has been accepted by many scholars as the core concept of marketing (e.g., Ferrell and Lucas

1987). Exchange has also been supported as the nucleus of the "service exchange" (e.g., Berry 1981; Lovelock 1979) and the "health care exchange" (Assal and Lacroix 1990). At a basic operational level, exchange involves a transfer of something tangible or intangible, actual or symbolic, between two or more social parties (Bagozzi 1979). The implication that each party in the exchange both gives and receives value separates exchange from other forms of need satisfaction (e.g., Houston and Gassenheimer 1987). Thus, it is proposed that the health care exchange can only take place if all the parties involved receive something of value (this notion differs from other exchanges and transactions that may take place because of pressure from coercive forces or that exchange may take place even though there is not an equilibrium in received and delivered values). The reason for this abstraction of the health care exchange is twofold. First, the health care consumers seeks the service of the health care provider only if he or she feels that the potential health that can be received exceeds the value given up in the transaction, i.e., the health offering possesses a greater value than the value (e.g., money) lost in the exchange. The health care provider, on the other hand, will generally not provide a consumer with the health care offering if he or she feels that it would diminish their value level. Value for the health provider may consist of both intrinsic and extrinsic "rewards." Thus, providing health care to a person that is unable to pay for the service may create a form of increased intrinsic value for the health provider.

This mutual exchange of value began in primitive societies where exchange rates were set by social tact and an equilibrium was established by reciprocity (Sahlins 1972). Social tact refers to the established way of dealing with entities within a society that evolves over time. The rate for an object in any plausible exchange is the value assigned by the dyad. Reciprocity is the process whereby this mutual exchange of acceptable terms is actualized; it is a social interaction in which the actions of one party evokes a compensating movement in some other party.

Along these same lines, Bonoma (1977) states that in an interaction where each individual strives to gain maximum satisfaction, the exercise of social influence is the inevitable result of the state of conflict existing between actors to interaction since gain maximizing creatures such as humans will naturally attempt to circumvent, overcome, or otherwise reach an accommodation with someone preventing them from complete satisfaction attainment. Further, the influence modes that an individual utilizes depend on their relative power in the interaction (Bonoma 1977). French and Raven (1959) state that this power, which is present in all interpersonal relationships including the physician-patient interaction, is a characteristic not of the individual but of the exchange situation (e.g., the relative power of each individual is viewed as a situational variable to the health care exchange). The exercise of this power can prevent an individual from receiving, as well as giving, information to another (Bebko 1990). However, some people choose to not exercise their "power." Snyder (1974) discusses a characteristic of individuals called "self-monitoring," which is a form of impression management. In a situation where a high self-monitoring individual can exercise power, that person may choose not to if they feel that it will affect the overall exchange. Thus, self-monitoring refers to a person's ability to act according to what is socially appropriate.

Health Care Value

The concept of value is employed to denote both the process of health care, seen as involving a potentially active consumer or patient, and the result of this process. In the health care setting, value can be defined as the individual customer's measure of experienced satisfaction at the condition of health attained, as viewed in regard to their investment of resources in connection with the health care which took place (Edgren 1991). As such, value is considered as more individualistic and personal than quality and is therefore a higher level concept than quality (Zeithaml 1988). Also, value involves a trade-off of "give" and "get" components (Zeithaml 1988) that is not a part of the quality construct.

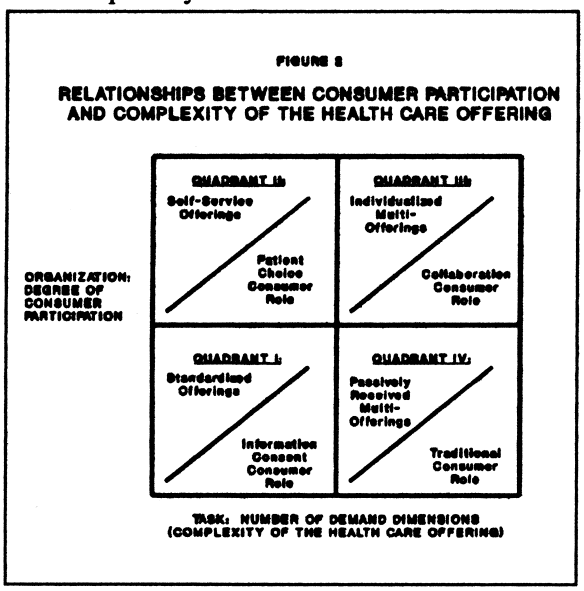
Siegel (1990) states that health care and medical services are notable for their shared decision-making process. This means that to obtain quality and value levels that are acceptable to both parties, it is essential that the patients participate in the decision-making process. Green (1988) suggests that patients can assume four different roles in this process (Table 1). Consumer participation in the health care and medical profession may also mean that the patient is encouraged to take an active role in caring for their specific decease and/or their overall health (Assal and Lacroix 1990).

Table 1
Customer Roles in the Decision-Making Process

Traditional: Physician decides. Patient trust and confidence replaces the need for consent.
Information Consent: Physician decides with the patient's consent.
Collaboration: Joint decisions.
Patient decides: Patient decides with physician's consent.

A Model of Customer Participation in the Health Care Industry

Based on the specific health care case, which is affected by the nature of the health care process (Figure 1), and also the characteristics of the service provider and the consumer, consumer participation is proposed to be organized in four different ways. Figure 2 describes a scheme for understanding how consumer participation is organized. The 2 by 2 matrix is a broad generalization of the relationship between the degree of consumer participation and the complexity of the health care offering. In the matrix, the health care system's task for the consumer, as conceived in terms of the number and characteristics of the offering dimensions, is treated as the independent variable and consumer participation is treated as the dependent variable. The upper triangle in each quadrant represents that quadrant's ideal health offering. The lower triangle in each quadrant represents the ideal consumer role during the offering and the exchange processes. Overlap between the various quadrants may obviously exist during certain circumstances. In the following sections, the various quadrants of the matrix are discussed separately.



Quadrant 1: Low Degree of Consumer Participation and Few Demand Dimensions

This quadrant is signified by standardized offerings. This perspective differs from previous research in that past theories have stated that a few demand dimensions lend itself to high consumer participation since it is assumed that few dimensions suggest that the service task is simple to perform. Characteristics of offerings in this quadrant are that they generally involve treatment of ambulant nature. For example, when the offering concerns surgical measures of routine character, operations can be scheduled in closer succession than in clinics which need to maintain readiness to deal with acute problems. Also, as technology progresses, it becomes possible to separate an increasing number of health and medical problems from hospitals dealing with acute patients, to standardize the offering and to provide such offerings in ambulant form in facilities outside the hospital area. This quadrant is also symbolized by the "information consent" consumer role where the physician decides the appropriate treatment method with the patient's consent.

Quadrant 2: High Degree of Consumer Participation and Few Demand Dimensions

This quadrant involves self-service offerings. Characteristics of self-service offerings are that they allow for treatment in the patient's home or through self-service clinical tests (e.g., the taking of one's own blood pressure, treatment of diabetes, or pain reduction through infusion). Thus, the health care provider is only indirectly involved in the creation of the offering through their involvement in providing the initial conditions necessary for the consumer to utilize the offering. This quadrant is also symbolized by the "patient choice" consumer role. This means that the patient decides about the treatment method with the health care provider's consent.

Quadrant 3: High Degree of Consumer Participation and Several Demand Dimensions

This quadrant is represented by individualized multi-offerings. Due to multiple dimensions of demand, offerings in this quadrant are usually bundled. For the same reason, customer participation is usually necessary. Typical examples of health service situations included in this quadrant are pain clinics, migraine clinics, back clinics, and units for abdominal pain. The nature of the service offered in this quadrant requires a sound integration of medical, social, cognitive, and emotional dimensions. Perceived power structure and self-monitoring capability of the participants are also important elements in this situation. For example, the abilities of people who interact with consumers to create an atmosphere of trust and satisfaction with the service provider is decisive in this quadrant. Also included in this quadrant is the "collaboration" consumer role, which is signified by joint decision making; thus, the parties involved in the health care "exchange" will jointly make the decision of appropriate treatment method.

Quadrant 4: Low Degree of Consumer Participation and Several Demand Dimensions

This quadrant is symbolized by passively received multi-offerings. A typical circumstance under which the

offering may be classified in this quadrant is when a consumer for some reason cannot or does not wish to actively participate in the health process. This can be the case with patients who are seriously ill or seriously injured. In this case, the patient's participation simply cannot be high, but the demand dimensions are several. The result of such a case is that the health care system undertakes the task of dealing with the patient's health problem. This quadrant is also symbolized by the "traditional" consumer role. This means that the health care provider is likely to make the treatment decisions; patient trust and confidence replaces the need for consent.

Conclusion

The health care process model and the 2 by 2 matrix discussed in this paper can function as content-oriented theories in the sense of taking account of how the individual consumer's participation in the health care process influences the health care system's business development and also its organizing of consumers. The conceptual framework provides an expanded illustration of the four principal constructs of the health care system. The framework focuses both on what health care can offer the patient and on what the patient can contribute to the offering itself. The model proposed in this paper provides a theoretical conceptualization of various situations representing/requiring different degrees of consumer participation in the health care profession. Thus, the logic is as follows: the perceived consumer value (and the perceived health care provider value) will increase if the degree of consumer participation corresponds to the level of complexity of the health care offering.

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PERCEIVED SERVICE QUALITY IN LONG-TERM CARE FACILITIES: IS QUALITY IN THE EYE OF THE BEHOLDER?

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INTRODUCTION

In services such as health care and education, the service consumer and purchaser of the service are not necessarily the same. The purchaser could be the family of the client, the taxpaying public, or a philanthropic sponsor. Intermediary purchasers include organizations such as insurance companies and governmental agencies. The challenge to the manager and marketer is identifying which dimensions of service quality are most important in determining how satisfied with the service this outside stakeholder group is and whether their expectations and perceptions of service quality match the service client's.

Historically, one of those institutions for which the quality of service is determined by people other than the recipient of the service is the long term health care setting. Major stakeholders in the service are families of residents. Families here refers to blood relatives or close friends of the resident. Since these stakeholders supply the nursing home revenue, either through direct private payment or public medical support, their evaluations are important because they will support institutions that offer what they consider high quality and punish those who do not by withdrawing funds.

The residents of nursing homes are infrequently included in the definition of service quality because many of them are cognitively or physically unable to make their evaluations known. Therefore the other stakeholders in the nursing home process assume they are able to evaluate service quality for the residents. This assumption has not been tested. The present study was undertaken to test the assumption by comparing the expectations, perceptions and evaluations of five dimensions of service quality of nursing home residents with those of family and/or friends. The study extends the application of the SERVQUAL instrument by using it to study two different constituencies for the same service: long term health care.

BACKGROUND

The idea to segment service customers based on their expectations and perceptions is not novel (Webster, 1989) nor is the idea to segment stakeholders into customers and service providers (Mangold and Babakus, 1991; Swartz and Brown, 1989; Zeitheml and Parasuraman, 1988). What all those studies had in common was the focus on people who were actually involved in the service system.

What is new in the present study is the effort to identify differences and similarities between consumers and third parties. The latter stakeholder group is not actually within the service system and it is questionable whether their lack of involvement in the service process results in differences in their subjective feelings and ideas about service quality.

The questions which this study addresses are:

Question 1: Is there a difference between stakeholder groups in the gap between level of expectation and perceived level of service delivery?

Question 2: Are there differences in the expectations about service quality?

Question 3: Are there differences in the perception of the actual quality delivered?

Question 4: Is service quality equally predictive of overall satisfaction with the service for the different groups?

Question 5: Is there a difference in the relative importance of various dimensions of service quality between stakeholder groups?

This study is conducted in the context of long term health care which is characterized by the dichotomy between service consumer and payer. Families can be direct payers of the service or, more likely, are representatives of taxpayers who buy the service for the elderly through the Medicaid program. Even in cases where the elderly person is paying for nursing home care with their own financial resources, families are powerful stakeholders in the nursing home because they are concerned about the elderly person living there. With the exception of a recent study by Kleinsorge and Loenig (1991), there appears to be no published studies of residents' perceptions of service quality. Moreover, there are no studies comparing the quality expectations and perceptions held by nursing home residents and their families.

To the degree that there is discrepancy in the expectations or perceptions of service quality between residents and family members, there is a potential source of conflict and misunderstanding for nursing home management. The purpose of this study is to measure and compare expectations for nursing home service quality and perceived quality of services offered for the two stakeholders in long term care. In addition, the influence the different dimensions of quality on constituents' overall sense of satisfaction with the facility will be examined.

This study conceptually and operationally defines the construct of service quality as perceived quality. Perceived quality is defined as an individual's judgment about overall excellence of the service (Zeithaml, 1987). This study uses the disconfirmation paradigm to determine quality. According to this model, expectations of a service must equal the perceived level of the service before a person judges the quality of the service satisfactory. Gaps in which expectations exceed perceptions is a judgment of poor service quality.

SERVQUAL, a multiple-item scale was designed to measure the degree and direction of the gap between expectations and perceptions. The conceptualization, development and validation of SERVQUAL is well documented (Parasuraman, Zeithaml, & Berry, 1984, 1985, 1986). While criticism of the instrument has been noted (Carman, 1990; Lewis, 1990), the usefulness of SERVQUAL has continued to be demonstrated (Kierl, 1990), especially in health care contexts (O'Conner, 1988; Reidenbach, 1990; Mangold & Babakus, 1990, 1991). The work by Mangold and Babakus (1991) is similar to the present study in its use of SERVQUAL to study the discrepancies between two hospital stakeholder groups' expectations and perceptions regarding service quality. However the stakeholder groups differed from this study; they were patients and service providers. The study accepts the idea that overall satisfaction with a service is strongly influenced by service quality (Woodside, Frey and Daly, 1989; O'Connor, 1988; Smith and Houston, 1983; Kotler, 1983). It refers to a general attitude of like/dislike of the service.

METHODOLOGY

Sample. The respondents for the present study consisted of a convenience sample of 217 nursing home residents and 49 family members. Residents were first screened on their cognitive ability to respond to the questionnaire. Nursing home staff performed the screening. All the residents considered able to respond were invited to participate in the study. Agreement to participate was over 90%. The average age of female residents was 80.7 and the average age of male residents was 75.9. Family members were defined as blood relatives or friends of residents who visited them at the nursing home. Names of family members were supplied by nursing home administration and all the individuals listed by the nursing home administration were sent questionnaires. It is possible that this procedure could introduce a positivity bias to the responses since administrators could have failed to submit the names of individuals who appeared to be dissatisfied with the nursing home. However, this method of identifying the family was pursued because the only other source of names was the residents and they frequently have problems remembering such details as street addresses--and even complete names.

Procedures. The questionnaire was administered to the residents individually by trained interviewers. Five of the nursing homes agreed to submit the names of family members. The questionnaire was mailed to 122 family members. Two were returned because the address was incorrect. Forty nine out of the remaining 120 responded making the response rate 41%.

Test instrument.

The test instrument for the study was SERVQUAL, typically used to measure quality of services (Parasuraman, Zeithaml and Berry 1990). This is a 22 item Likert scale measuring five dimensions of service quality. The dimensions measured are:

1) Tangibles - physical facilities, equipment and appearance of employees

2) Reliability - ability to perform the required service dependably and accurately

3) Responsiveness - willingness to help customers and provide prompt service

4) Assurance - knowledge and courtesy of employees and their ability to inspire trust and confidence

5) Empathy - caring and individual attention provided by the staff

Each respondent is required to answer 22 questions on a seven point Likert scale twice. One set of 22 asks for perceptions of existing service quality of the five dimensions. The second set of 22 is identical in structure to the first, but asks for customer expectations of service quality.

Within the SERVQUAL instrument, the first four items measure tangibles and the actual score used in the analysis is the mean of these four items. Likewise, the remaining four dimensions are measured with five, four, four and five items respectively and the mean of each is used in the analysis. The numerical measure of quality is

defined as the difference between a respondent's perception of existing service quality and his/her expectation of service quality on each of the dimensions. These are known as the gap scores. In addition to the five separate gap scores, an overall service quality measure was created using the average of the five sub-scale gap scores.

A question to evaluate the feeling of overall satisfaction with the facility was included. This question was also scored on a seven point Likert scale and is similar to what has been used
in earlier studies (Parasuraman et. al., 1988).

ANALYSIS

Since the independent variable in the study, status of the respondent, was nominal scaled and the method of measurement in the SERVQUAL instrument implies interval scaled dependent variables, the method of analysis chosen was Analysis of Variance (ANOVA). (The results of this test are equivalent to the t-test for two independent samples sometimes used in SERVQUAL studies.) One-way ANOVAs were completed for each of the 16 dependent variables: the five dimensions of the SERVQUAL instrument for expectations, perceptions, the gaps between the two, and the overall gap score.

To address the question regarding the relative contribution of the five dimensions for the two groups, regression analysis was used. The independent variables were the scores on the five sub-scales and a dummy variable signifying the respondent status, resident or family. In addition, the interactions of the dummy variable and the separate sub-scales were added to the model. This is the full model. A reduced model containing only the five sub-scales was also computed. The dependent variable for both models was satisfaction with the facility. A comparison of the full and reduced models provides the test of the difference between the two groups as a whole (Neter, Wasserman and Kutner, 1990).

RESULTS

The results of the analyses, summarized in Table 1, indicate the following differences between residents and family members. For perception of the level of service received, there were significant differences between perceptions of the residents and those of family members. For responsiveness, assurance, and empathy, residents consistently perceived the level of service to be higher than family members. While the remaining two dimensions, tangibles and reliability, were not significant at traditional levels, their p-values were .08 and .06 respectively with the direction of the differences the same as the other dimensions.

Table 1

Mean Perception, Expectations and Gap Scores for Family and Residents

	Perc		Exec		Gap	
	Res	Fam	Res	Fam	Res	Fam
Ta	5.4	5.2	6.1	6.5	-0.67	-1.38
Rl	5.3	4.9	6.3	6.6	-1.05	-1.65
Rs	5.0	4.5	6.0	6.1	-1.00	-1.63
As	5.5	5.1	6.4	6.7	-0.83	-1.63
Em	5.4	4.8	6.0	5.9	-0.60	-1.31
All					-0.83	-1.48

Rs, As, and Em sig. <.05 Percep
Ta, Rl, and As sig. <.05 Expect
Al Gap scores significant <.05

For service level expectations, residents and family members had significantly different means on three of the five dimensions, tangibles, reliability, and assurance. Unlike perceptions of service levels received, in each case the expectation of the family member was higher than that of the resident. The remaining two variables did not approach significance at traditional levels.

For the gap scores indicating the respondent's assessment of the quality of service being received, the means of all five dimensions were significantly different for residents and family members. In each case the resident's assessment of quality was higher than that of the family member. As can be seen in Table 1, the larger negative score (indicating lower quality) is indicated for the family member in every case. Not surprisingly, the overall gap score, a measure of overall quality, is significant and the direction of the difference is the same as for the individual gap scores.

To assess the degree to which residents and family members evaluate quality on the same dimensions, two regression equations were developed. The first was across all respondents for the five service quality dimensions with "satisfaction with the facility" as the dependent variable. The second was similar to the first but with the addition of a dummy variable (to indicate the status of the respondent) and the interaction of the dummy variable and the five quality dimensions. The analysis of the relationship between the two equations produced an F of 1.876. With 6 and 222 degrees of freedom, the p-value was not significant at traditional levels. Thus it appears that residents and family members evaluate service quality along the same dimensions.

DISCUSSION

Expectations and Perceptions. Residents and family had significantly different expectations on three service quality dimensions: tangibles, reliability and assurance. In all cases the residents had lower expectations than family members. What effect being in the home has on the difference in expectations cannot be ascertained. It is possible that the residents had similar higher expectations before they went to live in the facility, but lowered them after the experience of living in the facility. Their lower expectations may carry a negative connotation and reflect an effort to accommodate to a difficult situation by lessening the likelihood of cognitive dissonance.

However, it is also possible that the family of residents set unrealistic expectations on what should be provided in a nursing home setting. For example, the family expects more than the resident does in terms of the physical surrounding. Because most people want "the best" for their loved ones, they may put unreasonable expectations on those who are caring for their loved ones. It is also possible that feelings of guilt for placing someone in the facility lead to higher expectations for services.

For dimensions characterized by the greatest degree of interpersonal interaction: responsiveness and empathy, the residents and family are not dissimilar in what they expect the level of service quality should be. However, for the same two dimensions, the residents and family differ significantly in their judgments of the actual quality delivered. While they may have had similar expectations about how amenable the staff should be in helping the residents, the family members perceived significantly lower willingness of staff to help than the residents who were actually the ones involved in the service encounter. A possible explanation for this result is the belief that the institution is not providing the level of service they themselves would provide to their friend or relative. Again, this might be attributable to such factors as guilt or concern for family members. Resource limitations within the institution would, for example, probably not enter into their evaluation when their relative is concerned.

Another dimension which the family rated significantly lower in terms of the actual quality delivered was assurance. Like responsiveness and empathy, this is an interpersonal type of service. Here, as with the other two, the resident deals with the service on a daily basis and knows the individuals involved personally. Their characterization of the service provided on these interpersonal dimensions might be different because the family is not similarly exposed to the people delivering the service.

On the other hand, their perceptions of the quality of the physical facilities and the reliability of the service were not different. On those aspects of the service which are more observable and measurable, there appears to be less difference in the perceptions of the two groups. This is more likely to result than for interpersonal factors because the facilities can be seen and the reliability of the staff can be assessed somewhat by licensing, credentials, etc., information which the family and resident have equal access to. Equal access to such information is effectively denied for interpersonal aspects of the service situation.

Quality of the Service. Service quality is defined as the "gap" or lack of congruence between expectations and judgments of the actual quality of the service delivered. Gap scores were negative indicating that neither group thought the level of service in the nursing home was up to their expectations. On every dimension the gap was greater for the family group than for the resident group. The families' assessments of lower quality than the residents' is evidenced by the consistency with which the family group found a greater discrepancy between what they expect as service quality and what they perceived to be delivered. This finding is accentuated by the possible bias introduced by having nursing home administrators provide the names of family members to be used in the study. If there is a bias it would be toward producing a more favorable rating by the selected family members. Therefore the finding that the family gives a lower service quality rating than the residents is even more striking.

This result appears to materialize from the results above. It can be seen in Table 1 that in every dimension but empathy, and it is nearly true there as well, the interval between the families' perceptions and expectations contains the interval for residents. Family expectations are consistently higher and their perception of service delivered is consistently lower than those of residents. Thus the explanation for the consistently larger gap scores for families really lies in the explanation above for differences between perceptions and expectations individually.

General Satisfaction with the Service. Although there may be differences in the expectation and perception of service quality, the study shows that the contribution of the five service quality dimensions to the feeling of overall satisfaction with the service did not differ for the two groups. Tangibles, reliability, responsiveness and empathy were important determinants of overall satisfaction with the nursing home. The dimensions account for over 40% of the variance in the model.

SUMMARY

While reasons to explain the differences remain open to speculation and further investigation, the basic findings are important. The evaluation of service quality

is linked to feelings of overall satisfaction with the service in the much same way for both family and residents. There are, however, differences between quality evaluations for groups experiencing the service and those observing the service delivery. Especially within the context of long term health care, the implication for nursing home administrators is that they are not meeting the expectations for service quality for either group. All areas of service quality need the attention of management, but priority should probably be given to the four dimensions that are strongly linked to a person's overall feeling of satisfaction with the facility. If there are no resources to meet those expectations due to limited Medicaid funding, the managers should seek to educate the public about what would be realistic expectations of a service that is limited by financial resources.

This study illustrates the usefulness of SERVQUAL in a long term care setting. It also provides an example of SERVQUAL's usefulness to managers and marketers in, not only monitoring service quality over time, but also in identifying the dimensions of service quality most critical to ratings of satisfaction with the service. In addition, it could be useful in identifying areas where perceptions of service quality are not equal to expectations or where expectations differ by various stakeholder groups. This ability to differentiate expectations and perceptions of service quality by group could be particularly useful to marketers who must reach the service consumer through a third party. The study could also be useful to public policy makers who have no assurance that their determination of service characteristics match the interests of the actual service client.

References on request

THE PROMOTION OF LEGAL SERVICES THROUGH TELEVISION ADVERTISING: PERSPECTIVES OFFERED BY CURRENT LEGAL RESEARCH

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Abstract

TV advertising of legal services is a rapidly growing and hotly debated promotional practice of the past decade. While U.S. law concerning attorney advertising in general is now relatively clearly defined, TV advertising remains a "special case" not yet adequately developed by court decisions or by state and bar regulations. This paper explores attitudes of the general public and of attorneys toward TV advertising by attorneys, and summarizes the current legal status of the practice, based upon an intensive review of research findings reported in the professional legal literature.

Introduction

The legal status of advertising by attorneys in the United States was defined by a series of court decisions during the 1970s and 1980s, the most significant of which were Bates v. State Bar Association [433 U.S. 350 (1977)] and Shapero v. Kentucky Bar Association [108 S.Ct. 1916 (1988)]. Briefly stated, these decisions set forth parameters for state regulation of attorney advertising by providing that:

1. States may not blanketly prevent attorneys from:
   a. advertising the costs of certain routine legal services in the print media,
   b. advertising an accurate listing of the attorney's area of practice, either through general mailings, announcements to specified targeted groups, news- paper ads, or telephone listings,
   c. advising target portions of the public of their rights to pursue particular types of cases (e.g., Dalkon Shield users) and the attorney's willingness to handle such litigation,
   d. directly soliciting through the mail clients with a particular legal problem (e.g., impending foreclosures), or
   e. directly soliciting prospective clients in person, where the attorney is motivated by the desire to promote political and ideological goals, rather than for purely pecuniary gain.
2. States may, however, permissibly:
   a. ban in-person solicitation when the attorney is motivated purely for pecuniary gain,
   b. impose certain restrictions on advertising, such as requiring the attorney to: (l) make disclosures concerning his fee arrangements, or (2) set forth a disclaimer explaining that the listing of areas of practice does not constitute a certification of expertise, or
   c. place reasonable restrictions on advertising which are necessary to prevent untruthful, false, deceptive, or misleading statements (Peltz 1989, 44-45).

These parameters allow considerable discretion to bar associations and courts at the state level regarding the development and oversight of operational aspects of attorney advertising. As Myren (1988) has noted, the state can protect substantial state interests by restricting limited areas of advertising. Consequently, definitive rules concerning attorney advertising continue to evolve through case-by-case development.

This paper is intended to move beyond the broader question of the acceptability and appropriateness of attorney advertising, and to focus on one specific media application: use of television advertising by attorneys. This issue is intriguing for several reasons, including: (1) the relative recency of use of the TV medium by lawyers; (2) the rapid expansion of TV's use by attorneys; (3) assessments of the level of "professionalism" of these advertisements; (4) differences in attitudes of the general public compared to attorneys regarding attorney advertising on TV; and (5) the exceptional status under the law of legal advertising on TV.

More precisely, this paper will explore attitudes of the general public and of lawyers toward TV advertising by attorneys, and will attempt to define the present legal status of this form of legal services advertising. Data were collected from a comprehensive review of the relevant legal research literature of the past ten years.

Attitude of the Public Toward TV Advertising by Lawyers

Results of several surveys conducted within the legal community and reported in the legal literature provide insight into the public's attitude toward legal advertising generally, and toward TV advertising specifically. For example, a 1990 study commissioned by the Nevada Lawyers' Advertising Study Committee (DeWitt 1990) found widespread support for attorney advertising, with the level of support decreasing as the age of respondents increased. In a survey of 4,000 Tennessee residents by Johns, Moser and Reynolds (1990) 58.7% of the respondents agreed with the attitude statement, "I would like to see more advertising by lawyers." Concurrently, however, Johns found that 61.4% of his respondents agreed with the statement that "advertising by lawyers would benefit only quacks and incompetents," and 44.8% agreed with the statement, "I would be suspicious of lawyers who advertise."

Clearly, television advertising of legal services represents a "special case" in the public mind. A statewide survey by the Academy of Florida Trial Lawyers found that the Florida public's perception of lawyers who advertise on TV "provides clear empirical evidence of the harm that such advertising has caused the profession" (Peltz 1989). Survey results indicated that 63% of the public have a favorable impression of attorneys in general, compared to a 23% favorable impression of lawyers who advertise on TV. Further, only 27% of the Florida public considered legal advertising on TV to be a "good public service," while 59% felt that it is "bad for the public [because] it makes all lawyers appear to be unethical and encourages unnecessary lawsuits." Seventy percent stated that lawyers who advertise on TV remind them of "used car salesmen."

Similar findings were reported by DeWitt (1990), who reported that among the Nevada general public "lawyer advertising on television is far more responsible for people's decreased respect for the legal system than any other form of lawyer advertising." Data in Table 1 reflect different ratings given by the Nevada public to lawyers in general and to those who advertise on TV. People clearly view the latter group more negatively. Even so, 70% of the respondents thought that lawyers should be allowed to advertise on TV.

Two studies reported in the legal research literature reflect public attitudes toward the use of various media for legal services advertising. In Tennessee 55.6% of the responding public viewed lawyer advertising on TV as "appropriate" or "very appropriate" compared to 86.4% for yellow pages, 71.3% for billboards, 51.8% for radio, and 30.3% for newspapers. Conversely, 35.5% viewed TV as "inappropriate" or "very inappropriate" for legal services advertising, compared to 78.4% for professional magazines, 59.2% for newspapers, and 47.0% for direct mail (Johns, Moser and Reynolds 1990). Additional results of the Tennessee study are reported in Table 2.

Sobelson's (1989) Georgia study measured attitudes of the Georgia public toward attorneys who advertise in different media. Favorable attitudes toward lawyers using TV ads were reported by 44% of the respondents, compared to 79% for those using yellow pages, 57% for newspapers, and 54% for pamphlets. Unfavorable attitudes toward attorneys using TV ads were reported by 48% of the respondents, compared to 49% for those using radio, 33% for pamphlets, 30% for newspapers, and 13% for yellow pages. Other findings of the Georgia study are reported in Table 3.

Whatever its attitude toward legal services advertising on TV, the public is very much aware of its exposure to this form of advertising. The Nevada study (DeWitt 1990) reported that more people said they were exposed to lawyers' ads on TV than through any other medium: TV - 96%, newspapers - 61%, radio - 53%, billboards - 34%, direct mail - 11%, and magazines - 9%. The Tennessee study (Johns, Moser and Reynolds 1990) found that 92.6% of the respondents had seen at least one lawyer ad somewhere, and that 85% of this group had seen the ad on TV. Comparatively, the reported exposure to legal services advertising for other media were: newspaper - 69%, radio - 38%, direct mail - 14%, billboards - 12%, magazines - 11%, and yellow pages - 7%. Finally, the Georgia study (Sobelson 1989) found that TV ads for legal services had been seen by 83% of the respondents during the past year, and that 60% reported seeing these ads more than once each week. Respondents were more than twice as likely to report having seen attorney ads on TV than in any other medium, although only 2% of the state's lawyers used TV advertising.

Attitude of Attorneys Toward TV Advertising by Lawyers

The attitude of a majority of members of the legal community remains negative regarding the advertising of legal services, without regard to the practice's legal status. In fact, no less a critic than former Supreme Court Chief Justice Warren Burger has stated that some legal service ads were "sheer shysterism," and that he would advise "never, never, never, under any circumstances, engage the services of a lawyer who advertises" (Marlane 1989, 152). And if the legal community's attitude toward attorney

advertising is negative generally, it is even more negative with regard to TV advertising.

Marlane offers some examples of attorneys' views: "[TV advertising is a bit too glitzy for my blood. In TV there is just something that rubs me the wrong way. Television has a quality of fiction, a quality of nonreality....No doubt it's effective, but deguspidus non disputandum, I think it's tasteless." And, "the people who put together packaged [legal services] advertising on TV are flat out nut crooks." And, "The general impression after watching a series of these advertisements is that lawyers must beat the bushes for business like plumbers and those in the pizza delivery business....It reinforces the impression that lawyers are primarily interested in making money and generating fees."

"Champion and Champion (1991) offer examples of legal ads on TV which reinforce negative attitudes among attorneys. In the first ad a hand rises slowly from the depths of the ocean. Next, a man wearing scuba gear is shown, breathlessly yelling, "If you're in over your head because of bad debts or inflation, call the legal clinic, and we'll take care of your problems. We'll put you through bankruptcy for $100." The third ad shows a man strapped into an electric chair. Just before the switch is thrown, a neon sign lights up, saying "I should've called the law firm of ----."

Anecdotal evidence, however, may be more titillating than insightful. A more definitive view of attorneys' attitudes toward lawyer advertising is provided by research results recently published in the legal literature. While Hite and Fraser (1988) correctly observed that members of the legal community had little familiarity with professional advertising until recently, the following data suggest that attorneys now have more experience (even if only through observing the advertising of lawyers in firms other than their own), and that they have sharply defined opinions about the practice.

Mr. Chief Justice Burger stated that "just because the Constitution permits an act, that does not make it ethically acceptable for the privileged profession of law" (Champion and Champion 1991). Specifically, his concern was directed to some attorneys who advertise, and "who have lost sight of our once highly respected profession." In this regard he referred to professional concerns such as the following:

(1) unrestricted advertising will commercialize the profession and undermine the attorney's sense of dignity and self-worth;

(2) legal services and capabilities are so individualized regarding content and quality that advertising is inherently misleading, as TV ads rarely focus on these attributes;

(3) advertising will stir up litigation; and

(4) the quality of services offered will be inferior, such as that common to "ambulance chasing" (Champion and Champion 1991, 359).

The former Chief Justice cited a TV commercial that featured Washington Redskins running back Jack Riggins promoting a Washington law firm that specialized in personal injury cases. In the ad Riggins is first seen scoring a touchdown in the 1983 Super Bowl game against Miami.Then, dressed in a suit and appearing in an office, he states that if he were hurt, he would call the law firm of Ashcroft and Gerel (Marlane 1989, 152). Burger's assessment was that this kind of lawyer advertising adversely affects the image of the entire profession.

The Georgia survey (Sobelson 1989) previously cited found that approximately 5% of the Georgia attorneys who advertised had used TV ads, and that 54% of the attorneys felt that TV is generally effective in attracting clients. Further, attorneys who advertised ranked TV as second only to yellow pages advertising as the most effective medium in reaching consumers. TV's effectiveness rating (54%) was substantially greater than that of other media forms (e.g., radio - 37%, pamphlets - 35%, and newspapers - 33%).

Even so, only 2% of the attorneys responding to the Georgia survey had a favorable impression of attorneys who advertise on TV, while 90% had an unfavorable impression. (See Table 3.) On this measure attorneys who advertised on TV received the most negative evaluation, followed by radio (87%), and newspapers (73%). The most favorable evaluation by the attorneys went to lawyers who advertised in the more traditional media, i.e., the yellow pages (36%) and pamphlets (34%),

Further, it is significant that Georgia attorney-respondents were consistently much harsher in their assessments of attorneys who advertised in each media category than were their public counterparts. For example, attorneys who advertised on TV were rated favorably by 44% of the public, but by only 2% of the attorneys. Similarly, attorneys who advertised on TV were rated unfavorably by 90% of the attorneys compared to 48% of the public.

A national survey of attorneys conducted at Utah State University (Beck-Dudley and Buller 1989) found that only 1.5% of the law firm with 40 or more attorneys used TV advertising, equal to the proportion using radio and newspaper advertising. By comparison, many more firms used brochure (29.8%) and telephone directory (25.4%) advertising.

In spite of the negative assessment given to TV advertising by attorneys in general, there is clear evidence of the strength and continuing growth of the practice. The Television Bureau of Advertising reported that lawyers spent $45 million on TV ads in 1986, four times the level in 1982 (Johns, Moser and Reynolds 1990, 29), and the Bureau has referred to legal advertising as "one of our most important growth categories" (Alexander 1989, 30). Alexander reported that about 100 California law firms and legal referral groups together spent more than $7 million on TV ads in 1988, while nationally, an estimated $65 million was spent on legal advertising. As noted by Champion and Champion (1991, 357), "the consensus appears to be that a majority of lawyers do not necessarily mind TV advertising so long as the ads are not so crass as to give the profession an overall bad image," and so long as dignity and professionalism are maintained.

However, evaluation of dignity and professionalism as attributes of specific ads is a highly subjective matter, and judgments concerning them differ sharply between attorneys and the general public, as do judgments concerning the acceptability of lawyer advertising in any of the media. A recent study reported by Bogutz and Hornsby (1990) offers empirical evidence in support of this view. The researchers selected 10 lawyer ads (5 TV ads and 5 print ads) for review and assessment separately by 331 lawyers and 300 non-lawyer "consumers" selected from across the U.S. Some results concerning the TV advertising portion of the study are presented in Table 4. Non-lawyer respondents were substantially more accepting of the TV ads than were attorney respondents. Further, the study reaffirmed earlier findings that consumers were more accepting of legal advertising (36%) than were lawyers (13%), and that twice as many lawyers as consumers found such advertising to be inappropriate at any time.

The Legal Status of TV Advertising by Attorneys

As noted earlier in this paper, attorney advertising on TV represents a "special case" within the broader question of attorney advertising, and one which the courts have been reluctant to address (Champion and Champion 1991, 348). The U.S. Supreme Court in Bates reserved judgment on TV and radio advertising, noting that "the special problems of advertising on the electronic broadcast media will warrant special consideration" (Pearson and O'Neill 1986, 331). Distinctions between print ads and TV ads have been repeatedly noted by the Court. For example in there Shapero decision the Court's majority observed that: "In assessing the potential for overreaching and undue influence, the mode of communication makes all the difference" (Peltz 1989, 75). Similarly, in Metromedia, Inc. v. City of San Diego [453 U.S. 490, 501 (1981)] the Court observed: "Each method of communicating ideas is 'a law unto itself' and that law must reflect the 'differing natures, values, abuses and dangers' of each method." In FCC v. Pacifica Foundation [438 U.S. 726 (1978)] the Court made it clear that different modes of communication were entitled to different degrees of protection, and that "it is broadcasting that received the most limited First Amendment protection."

Within the broad and often vague parameters established by these and other decisions, the individual states are left to regulate attorneys' TV advertising within their jurisdiction. One recent survey (Champion and Champion 1991, 357) found that 44 states permit lawyers' TV ads to include dramatizations and graphics, and 43 permit the use of actors. Such advertising content may not have been identified as acceptable by specific rules. It is sufficient that such content has not been expressly prohibited in TV advertising. Twenty-one states have only the restriction that lawyer advertising not be false, fraudulent, misleading or deceptive, and 14 states specifically regulate TV advertising by attorneys in some manner. Some specific limitations found in some state guidelines include: use of drawings, animation, dramatizations, music or lyrics, spokespersons who are not licensed attorneys, and self-laudatory statements. Iowa is one of the few states which have developed rigid guidelines for TV advertising by attorneys.

In summary, "since the United States Supreme Court has yet to address the issue of broadcast advertising [by attorneys], the states are reluctant as well. Although all states allow television advertising [by attorneys], few have strict guidelines regulating it" Champion and Champion (1991, 360) conclude that: "Until the proper state authorities or the United States Supreme Court make a decision to regulate television advertisements [by attorneys], the hucksterism will continue and the 'shock' advertisements that are not false, fraudulent, or misleading will pass muster."

Conclusions

In 1853 Charles Dickens wrote in Bleak House, "The Business of the Law is to increase the business of the law." In the intervening years, especially since Bates in 1977, many U.S. attorneys have aggressively promoted their "business" through formal advertising, including more recently use of controversial TV ads. However, attorney advertising on TV does not enjoy equal protection under the law compared with non-broadcast media. Further, the courts, legislatures and bar associations generally have done little to define specific guidelines for TV advertising. Ambiguity and unpredictability concerning the future of attorney advertising on TV have resulted.

Meanwhile, its practice is growing rapidly in an atmosphere of hostility on the part of most attorneys and many consumers. For their part attorneys exhibit little hard knowledge about advertising, conducting little market research, failing to define advertising objectives sharply, and making media decisions based as much on peculation as on fact. And the character of many attorneys' ads on TV raises valid questions of professionalism and ethics.

TV advertising of legal services has the potential to become a valuable link between the legal community and the public, to demystify the nation's judicial system, to foster competition and possibly lower the price of attorneys' services, and in general to benefit the public through dissemination of information about attorneys' services, especially to people who are otherwise unlikely to acquire such information (e.g., poorer and less well educated people).

However, if TV advertising by attorneys is to realize its potential, the current ambiguity regarding TV advertising guidelines must be broken. Further, advertising and marketing "professionals" shouild accept this opportunity to become involved in defining the role and character of legal services advertising in TV and the other media. Clearly, attorneys have the right to advertise. Our profession has the opportunity to assist in assuring hat they do not abuse that right.

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TABLE 1
RATINGS BY THE NEVADA PUBLIC OF LAWYERS IN GENERAL
AND OF LAWYERS WHO ADVERTISE ON TELEVISION/RADIO

	Characteristic	Lawyers in General	Lawyers Who Advertise On TV/Radio
1	Competent/Incompetent	6.6	5.1
2.	Honest/Dishonest	6.1	4.9
3.	Concerned/Not concerned about seeking best results for clients	6.5	5.4
4.	Interested/Not interested in seeing justice served	6.2	5.0
5.	Interested/Not interested in improving the quality of the legal profession	5.9	5.0
6.	Careful not to mislead people/careless about misleading people	5.9	4.6

Source: Adapted from John DeWitt (1990), "Report of Findings" Nevada Lawyers' Advertising Survey," Inter Alia, 55 (April), 15.

Note: The table presents mean (average) ratings based on a nine point scale (e.g., 9 means competent and 1 means incompetent).

TABLE 2
RATINGS BY THE TENNESSEE PUBLIC OF LAWYERS IN GENERAL
AND OF LAWYERS WHO ADVERTISE ON TELEVISION/RADIO

Media	Very Appropriate	Appropriate	Undecided	Inappropriate	Very Inappropriate
Television	23.5%	32.1%	8.6%	31.8%	3.7%
Radio	21.6	30.2	9.9	34.6	3.4
Newspaper	13.3	17.0	10.2	50.6	8.6
Billboard	36.4	34.9	9.3	17.6	1.2
Telephone	53.4	33.0	2.5	8.6	2.2
Direct Mail	18.2	23.5	10.8	41.4	5.6
Professional Magazine	5.6	8.0	7.7	54.0	24.4
Popular Magazine	18.5	29.6	14.2	31.2	6.2

Source: Horace E. Johns, H. Ronald Moser and Daniel L. Reynolds (1990), "How Tennessee Consumers View Advertising by Lawyers," Tennessee Bar Journal, 26 (March/April), 30.

TABLE 3
ATTITUDES OF THE GENERAL PUBLIC AND OF ATTORNEYS IN GEORGIA
TOWARD LAWYERS WHO ADVERTISE, BY MEDIUM

	Attitude of the General Public		Attitude of Attorney	
Medium	Favorable	Unfavorable	Favorable	Unfavorable
Yellow Pages	79%	13%	36%	32%
Newspapers	57	30	7	73
Pamphlets	54	33	34	35
Television	44	48	2	90
Radio	41	49	2	87
Promotional Products	30	62	4	NA
Billboards/Posters	25	63	1	NA

Source: Adapted from Roy M. Sobelson (1989), "The Ethics of Advertising by Georgia Lawyers" Survey and Analysis," Georgia State University Law Review, 6, 62-63.

Note: NA = information not available

TABLE 4
ASSESSMENTS BY THE GENERAL PUBLIC AND ATTORNEYS OF
SPECIFIC ATTORNEY ADVERTISEMENTS APPEARING ON TELEVISION

	Description of TV Advertisement	Public	Attorneys
1.	The lawyer, situated in a law office, explains the recourse available to victims of personal injury	72%	56%
2.	With a background of the Old West, an announcer explains that hard work is the firm's work ethic.	53	43
3.	An announcer stands along a dented road barrier and explains the services the firm can provide in the event of an accident.	49	23
4.	Presented as a public service, the lawyer explains steps to take when involved in an auto accident.	43	35
5.	In fast motion, adults are seen colliding on tricycles. An announcer enters, explaining that the firm can help when someone is injured in a real accident.	36	5

Source: Adapted from Jerome E. Bogutz and William E. Hornsby, Jr. (1990), "Dignity in Lawyer Advertising: What the Survey Says," Bar Leaders, 15 (July/August), 15-16.

FACTORS INLFUENCING MARKETING INNOVATION IN THE HEALTH CARE INDUSTRY

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ABSTRACT

Organizational innovation, or the adaptability of an organization to change over time, can occur in many different contexts. From a marketing perspective an organization must adjust to its environment through internal organizational changes as well as taking market oriented actions. This paper reports the results of research that identifies several factors that are indicative of health care organizations propensity to adopt a formalized selling orientation and organizational structure.

INTRODUCTION

The ability of an organization to adapt over time to its external environment is oftentimes necessary in industries that are facing rapid change. An organization may adjust to its environment through a system of internal and external adjustments (Alderson 1957). Internal adjustments refer to organizational changes while external adjustments are actions directed at the external market environment. The U.S. health care industry is facing major environmental changes and is responding in the way that they do business, including the use of aggressive marketing to attract customers and referring physicians. Marketing in health care organizations represents a very new phenomena that has caused them to not only change their marketplace actions, but also to change their organizational activities and structure.

This paper reports research on the level of marketing organizational change that has taken place based on a survey of health care organizations throughout the U.S. The organizational change that has taken place in these institutions is measured through a previously validated Sales Orientation Index (Berry, Bowers, and Futrell 1985; Berry, Futrell, and Bowers 1985;). The sales orientation index (SOI) provides a measure of the level of organizational change that the respondents have undertaken in view of a rapidly changing environment.

The primary purpose of this research was to identify those factors that are related to the innovativeness of health care organizations in their adoption of marketing. It is not known what factors are related to this type of innovation, such as organization type, size, and level of marketplace competition. This research is designed to provide an understanding of the factors related to organizational innovation as seen in the development of selling organizations in health care institutions.

BACKGROUND

Marketing has evolved in the health care industry in three basic stages. The initial application of marketing saw advertising used to convey messages that were institutional in nature and that were aimed at the general consumer market. The second stage of marketing's development in health care organizations evolved in more targeted approaches (Kotler and Clarke 1987), with specific market segments being approached with health care services specific to its needs.

The most recent stage in health care marketing has resulted in promoting the health care institution to health care providers, i.e. physicians, that are a major source of their referral business. In order to accomplish this, health care institutions must use field sales forces to call on physicians directly, much in the same fashion that is required in the marketing of most higher level products and services (Peter and Donnelly 1989). Sales calls are being made on other publics besides referring physicians, such as employers, health maintenance organizations, and community groups (Gelineau and Cameron 1987).

The adaptability of an organization to environmental changes is a complex problem, and one not commonly addressed in the marketing literature. This issue involves a combination of marketing and management activities in response to environmental impacts on the firm's strategy (Biggadike 1981). Both the areas of strategic content and management processes must be addressed in combination to gain an understanding of this area (Jemison 1981). This includes the both the content of a firm's strategy as well as the process that the firm uses to deal with its changing environment. As desirable as it might be to possess a predetermined framework for understanding how organizations react to environmental change, this has proven to be an elusive goal, both for practitioners and for individuals researching the area (Hambrick 1980). The present research is designed to provide some initial insight in this area.

LITERATURE REVIEW AND THEORY DEVELOPMENT

A basic premise of this study is that the adoption of personal selling and sales management activities constitutes managerial innovation on the part of hospital administrators. A survey of the recent organizational innovation literature identified several variables which are commonly understood to be associated with the adoption of innovations (Baldridge and Burnham 1975; Kimberly and Evanisko 1981; Poole and Van de Ven 1989; Van de Ven 1990). Several of these variables are examined in the research reported in this paper. Characteristics of individuals in the organization are thought to impact organizational innovation. Attributes of individuals thought to be associated with organizational innovation tested in this study include the hierarchial level of the individual's position in the organization. The impact of the individual on organizational innovation are generally inconclusive, but where significant results have been reported, hierarchial levels of positions have been positively associated with innovation (Kimberly and Evaninsko 1981; Van de Ven 1990). Positions that are elevated in the hierarchy of an organization have formal power to promote innovation, thus providing a rationale for this relationship. Based on this notion, the first hypothesis for this study is:

H1: The higher the position in the organizational hierarchy for the individual responsible for the sales program, the higher the SOI score.

Other organizational variables have been related to innovation in previously reported research. Three variables frequently cited include size of the organization, organizational complexity and ability to attract resources (Baldridge and Burnham 1975; Kimberly and Evanisko 1981; Poole and Van de Ven 1989; Van de Ven 1990). The increasing size of an organization creates demands on coordination and control which requires innovative solutions. Complexity relates to differentiation and specialization, leading to innovation within specific areas of the organization. Innovation cannot occur in the absence of resources; thus the presence of resources does not guarantee innovation but it becomes a facilitator for it to take place.

For the purpose of this study, size was measured in two ways: the number of beds in the organization and the number of employees. Complexity was also measured in two ways: the number of different departments to which the sales force had access and the degree of departmental specialization found within the sales effort. The ability to attract resources was measured by a self-report on the competitive strength of the organization. The higher the competitive strength, normally the ability to attract resources would be greater. Hypothesis two through four are stated as:

H2: The larger the organization (number of beds and number of employees), the higher the SOI score.

H3: The greater the competitive strength of the organization, the higher the SOI score.

H4: The greater the organizational complexity (access and departmental specialization), the higher the SOI score.

Environmental factors are also known to influence organizational innovation, but there is a tremendous variety in the ways that the environment has been operationalized (Baldridge and Burnham 1975; Kimberly and Evanisko 1981; Poole and Van de Ven 1989; Van de Ven 1990). By the same account, there are many sources of environmental change that can occur. These include industry discontinuities and internal dynamics (Tushman, Newman, and Romanelli 1986; Whetton 1980). Overall, a challenging and changing environment is generally hypothesized to cause an organization to innovate for survival. The fifth hypothesis of the study is thus stated as:

H5: The more dynamic the environment, the higher the SOI score.

In the present study a dynamic environment was measured three ways. The first measure was geographic range. The premise was that the larger the geographic scope of operations, the more likely the environmental situation would change. The second measure was the number of competitors, as more competition is related to a dynamic environment. The third measure was the referral dependency of the organization. The more referral dependent the organization, the greater the influence outsiders have over an organization's survival, again making for a more dynamic environment.

Referral dependency was measured by identifying the types of health care organizations responding to the survey and by classifying them by which organization types are more dependent on referrals. The classification scheme of referral dependency was done through the use of a panel of experts. Psychiatric care facilities were determined to be the most referral dependent, followed by rehabilitation facilities and long-term care facilities. It was determined that the least referral dependent organization were individual acute care hospitals.

RESEARCH METHOD AND FINDINGS

A national sample was drawn from the membership of the Academy of Health Services Marketing of the American Marketing Association in order to develop a reasonably large and nationwide sample. From the membership roster there were 1203 member institutions that represented health care delivery systems, i.e. excluding individuals that are members of the organization. Questionnaires and cover letters, containing the endorsement of the Academy, were sent to organizations on the mailing list. The recipient was asked to route the questionnaire to the individual most knowledgeable about personal selling efforts in the institution. There were 186 responses obtained after the initial mailing. A second mailing produced another 93 usable questionnaires for a total of 279, providing a response rate of 22.4.%

The questionnaire contained a Sales Orientation Index (SOI) consisting of twenty statements relating to the emphasis placed on personal selling in hospitals and other health care systems. These statements were concerned with the organizational interest in selling, sales training, items which facilitate the sales effort, and the extent to which personal selling is measured and rewarded in the organization. Respondents rated their health care organization on these variables using a five point scale, ranging from Strongly Agree (5) to Strongly Disagree (1). The higher the SOI score the greater the sales orientation of the organization. Differences in the Sales Orientation Index (SOI) were identified based on the descriptive characteristics outlined in the research questions. Approximately 20% of the total number of respondents reported SOI scores above 80. Roughly 30% of the combined respondents reported SOI scores between 60 and 80. Half of the respondents reported SOI scores for their institutions below 60. The grand SOI mean for all respondents was 58.6. A score below 60 means there is more disagreement than agreement with the SOI statements, as 60 is the midpoint of possible scores.

The first step in the data analysis was to perform a correlational analysis with the dependent variables on the SOI scores. Table 1 suggests that the individual variable of hierarchial position is not significantly related to the sales orientation of the organization. Hypothesis 1 is therefore not supported. Hypothesis 2 is also not supported. Correlations approaching zero are reported for the relationship between SOI scores and both measures of organizational size. Hypotheses 3, 4, and 5 are supported, however. Competitive strength and both measures of organizational complexity are significantly and positively correlated with SOI scores (competitive strength r=.31 p=.001; access r=.36 p=.001; departmental specialization r=.27 p=.001). Although the number of competitors did not significantly correlate with SOI scores, the other two measures of environmental dynamism, geographic range and referral dependency, are significantly and positively correlated with the SOI scores (geographic range r=.22 p=.01; referral dependency r=.40, p=.001).

Using the dependent variables which were significantly correlated to SOI scores a regression equation was performed in the following form:

SOI=Referral+Departmental+
Competitive+Access+Geo

The equation was significant (F=19.1, pf>F=.000, R2=.38) but the dependent variable Geo did not significantly contribute to the equation (t=.98, p=.33). A new regression was ran in the following form:

SOI=Referral+Departmental+
Competitive+Access

As Table 2 indicates, the equation is significant (F=23.70, PF>F=.0000, R2=.37). Each of the dependent variables are
significantly related to SOI scores.

SUMMARY AND CONCLUSIONS

The adaptability of organizations that have historically not embraced marketing is a relatively new area of study. This is particularly true for the health care industry that has not considered marketing to be a necessary activity in the past. By the same account, the development of a formal sales program in an organization that has not undertaken that activity in the past is a major innovation. These two areas, in combination, represent a very dramatic change as has occurred in the health care industry. The results reported in this paper will hopefully provide further insight into this area and serve as a basis for future inquiry.

(Tables and References available upon request.)

AN INVESTIGATION OF FACTORS CONTRIBUTING TO ASYMMETRIC PRICE-TIER COMPETITION

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(Abstract of Doctoral Dissertation Completed at Syracuse University)

Attention has been given recently to understand the competition between brands belonging to different price-tiers because of the significant presence of private label brands in the market, recognition that the level of price and quality can be significant strategic variables, and consumers' increasing focus on quality. While existing research on asymmetric competition has focused only on brand choice, this research argues and demonstrates that asymmetric competition between price-tiers is a result of asymmetries in brand choice as well as asymmetries in product category choice. In fact, this research shows that the category choice aspect contributes more than the brand choice aspect towards asymmetric price-tier competition. The research also investigates how the asymmetry in price-tier competition is affected by the direction of price changes (increase or decrease). Existing studies which establish the differential effects of price increase and decrease do not incorporate the asymmetries arising from price-tiers and the category choice decision. Similarly, past research studying asymmetric price-tier competition does not distinguish between price increase and price decrease. Further, this research investigates consumer response when both a high priced brand and a low priced brand simultaneously implement price promotions. If there are differences in consumer responses to price changes by high and low price-tier brands, such differences can lead to net changes in brand choice shares when identical price changes occur in both price-tiers.

Scanner panel data for four product categories are analyzed to achieve some generalizability of results. Empirical results support the research propositions in all four product categories and offer some important managerial implications.

ANALYZING MARKET OPPORTUNITIES IN SERVICE ORGANIZATIONS: A LEISURE SERVICES CASE

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Abstract

Successful service marketers utilize strategic planning to meet the needs of their market. This paper discusses the role of market opportunity analysis in services marketing, focusing on leisure markets. Planning models and research techniques prove valuable in developing visitor-oriented facilities and programs. A joint theoretical and applied analysis is stressed. Building on a dual stream of marketing and leisure literature, a conceptual framework is presented. Research findings from recent parks studies are discussed to extend this perspective. Synthesizing these two different, yet compatible approaches yields key implications for service organizations. Finally, a six-point research agenda is offered.

Introduction

The importance of services in the U.S. economy has surged in recent years. Bateson (1989) observed that services account for 74 % of America's GNP. This paper probes the vital issue of market oppor-tunity analysis through planning and research techniques, in a key subsector, leisure services. The leisure industry encompasses a variety of related fields such as sporting activities, recreation, and parks. The parks agency is used to illustrate major points relevant to service marketing.

Although the need for a managerial marketing approach is apparent, the diffusion process by parks managers throughout the U.S. has been slow in taking shape. Pritchard (1989) wondered why research is not an integral part of decision-making by park administrators. Responses to that query include limited funding, lack of marketing training, and attention to operations at the expense of marketing activities.

While progressive park marketers remain in the minority today, a transition toward customer- oriented thinking has occurred during the past decade. Consider this research initiative by the Tennessee Valley Authority (TVA), a marketing-directed agency. The TVA's Land Between the Lakes (LBL) program in Tennessee and western Kentucky is a major provider of recreation services. Four major segmentation dimensions were studied in the LBL project. These included: 1) demographics -- family campers comprised over 50 % of total attendance, 2) psychographics -- activity participation by users were examined, 3) benefits -- 78 campground attributes were evaluated, and 4) usage -- annual equipment use/expenditure data was obtained. TVA used this information to provide cleaner restrooms, improved beaches, and more electrified sites. Carefully targeted promotion and increased levels of visitor satisfaction resulted from this research (McEwan and Paterson 1986).

Overview of the Literature

Several landmark publications about the importance of strategic marketing in non-profit service organizations (NPOs) have been written by Philip Kotler. His seminal article with Levy (1969), explained that marketing has great relevance for "so-called" non-marketers such as government agencies. Strategies for NPOs to introduce, improve, and implement marketing activities were given (Kotler 1979). Also, principles advocated in Kotler and Andreasen's book **Strategic Marketing for Nonprofit Organizations** (1987) have been embraced by many leisure service marketers. Andreasen (1982) noted that managers of NPOs focus too closely on their products/ services and must pay more attention to the needs and wants of their consumers. Rathmell's (1974) earlier work on services marketing reviewed how spectator sports and recreational services could benefit from marketing concepts. Crompton and Lamb (1986) examined marketing's role in government and social services agencies from a dual recreation and marketing perspective.

The leisure services field has contributed several important publications addressing the value of market research in park and recreation settings. Howe (1985, 1988) and Singleton (1988) examined qualitative analysis and secondary data, respectively. Howard (1985) studied levels of adult participation in various recreation activities through use of the Simmons Market Research Bureau's extensive database. Crompton (1983) discussed segmentation and target marketing for recreation marketers. An in-depth services-oriented discussion of marketing recreational "products" was written by Mahoney (1986).

Market Planning Models

An analysis of opportunities in leisure markets can be complex. In this section, three important planning models are discussed: a comprehensive planning model, a market opportunity matrix, and the General Electric strategic planning grid.

A useful and concise framework for developing marketing strategies for recreation and park services was conceptualized by Kraus and Allen (1986). This model reviewed the agency's internal situation, market considerations, marketing mix, and control mechanisms. Market issues (i.e. environmental scan, service needs assessment, and target market selection) are of primary concern. Prior to choosing target markets, leisure marketers should carefully research the market from both consumer and competitive perspectives. The Kraus-Allen model is useful since it illustrates that opportunity analysis is comprised of sub- areas, which in turn, build into an overall market planning approach for leisure marketers.

Crompton and Lamb's (1986) eight- cell market opportunity matrix is an expansion of the traditional 2 by 2 strategic market opportunity grid (market penetration, market development, product development, and diversification). Their adapted framework maintains two levels of markets, but presents five levels of programs/services. In addition to the existing and new categories, modifications, reduction, and termination options are identified. While a 2 by 5 matrix yields 10 elements, two potential combinations (new markets/reduction of services and new markets/termination of services) are infeasible. Crompton and Lamb's model is valuable for analyzing leisure opportunities and illustrates market stretching. Market stretching builds on product life cycle theory and suggests that service offerings can be extended through sound strategic planning.

The GE grid is familiar to marketing scholars and practitioners. This nine-cell model examines levels of business strength and industry attractive-ness. The Metropolitan Dade County Park and Recreation Department (Metro-Dade) in the Greater Miami, Florida area successfully adapted this strategic tool to evaluate market potential for picnickers. This analysis was enlightening because it revealed that small businesses and small families offered excellent market opportunities. Prior to this research, management believed that large corporations and large families were more attractive target markets for picnics.

Researching Leisure Markets

Enduring opportunities can be found through formal market research tools. The leisure marketer should be armed with an arsenal of potential research techniques, which include secondary and syndicated data, as well as qualitative and quantitative primary research. Observational methods also hold promise for service organizations (Grove and Fisk 1992). As an example, a national park can gain insight into its geographic reach by checking state license plates of visiting vehicles.

Secondary data offers cost and time economies and is valuable for solving basic problems. Neigbor-hood census data can assist planners in facility design issues (e.g. deciding whether a park should add playgrounds or shuffle-board courts). Romsa and Hoffman (1980) used secondary data to evaluate levels of non-participation in 19 outdoor recreation activities. Singleton (1988) found that only 13 % of leisure researchers used secondary data in their analyses. Given the potential benefits, a majority of leisure marketers should use (or consider using) secondary information in their studies. Researchers may erroneously believe that this approach is not "scientific" enough and treat secondary data as an afterthought.

Syndicated data is cooperative information sold to two or more organizations at fees consider-ably below the required invest-ment for primary research. Companies such as Claritas, CACI, and Donnelley offer cluster-based lifestyle services that can provide insight into the recreational habits of consumers.

Qualitative research techniques include focus groups, depth interviews, and related methods (Bellenger, Bernhardt, and Goldstucker 1976). Howe (1988, 1985) advocates its use in leisure research. Quantitative research uses larger samples and is more objective than qualitative approaches. Personal interviews, telephone surveys, and mail questionnaires are frequently employed. Wellman, Dawson and Roggenback's (1982) study compared samples of park visitors and managers, for user motivations, in visiting two national parks. Interestingly, 16 of the 22 comparisons showed significant differences in perceptions at the Cape Hatteras National Seashore, while 17 of the 25 comparisons at Shenadoah National Park were statistically compatible.

In summary, numerous techniques are available for researching leisure markets. Ideally, a combination strategy (two or more appropriate approaches) should be used. Ulrich and Addoms (1981) used multiple research procedures (a questionnaire, open-ended interviews, a photographic rating procedure, and observation) in

assessing the psychological and recreational benefits of a park.

Market Research in Action: Metro-Dade County Park and Recreation

Metro-Dade, a national gold medal award winner for excellence in park and recreation management, excels in planning and develop-ment. As an advocate of the marketing concept, Metro-Dade regularly uses marketing research to measure public perceptions and satisfaction with facilities, services, and programming. Two recent projects by this agency illustrate innovativeness and its market-orientation.

The data collection for Greynolds Park, a regional nature-based facility in North Miami Beach, consisted of four separate initiatives (Metro-Dade 1988). A toll booth survey was first conducted to establish the relevant service area for the park. Sixty percent of park visitors lived less than 3.5 miles from the park, 30% within 3.5 to 6 miles, and the remaining 10% outside of this geographic area. Cluster-based demographic and lifestyle data was purchased from Claritas' PRIZM service. However, the heart of this study was the primary research effort. Three focus groups consisting of a mix of golfers, nature-lovers, and general recreationists (e.g. picnickers and bike riders) were conducted to learn about users' needs and wants. Each focus group varied by degree of park usage. Heavy users visited the park at least once a month; occasional users visited at least once a year, but less than once a month; and nonusers did not visit the park during the past 12 month period. This approach yielded important general and segment- specific implications.

Building on the focus group findings, a questionnaire was then mailed to 2,000 residents. Key recommendations derived from the research included: developing a nature-based, mixed-use facility; improving existing structures (shelters and picnic tables); the need for information materials; creating revenue-generating activities; and adding special events programming (concerts, plant shows, and arts and crafts fairs).

Crandon Park, a regional ocean park on Key Biscayne, provides another example of effective market research (Metro-Dade 1989). Although the park is extremely popular, its visitation patterns are highly seasonal. The park was also perceived as an area consisting of unrelated recreational facilities. This two-phase project consisted of qualitative (focus groups and on-site, semi-structured interviews) and quantitative (telephone survey) components. Qualitative research showed a strong desire for developing/ improving bicycle paths and nature trails. However, the more representative quantitative analysis showed that these features were not that important. This reinforces the value of using multiple research methods.

Relating Theory and Practice

This paper illustrated that planning models and research can assist leisure service marketers in designing user-oriented facilities, activities, and programs. The adoption of this user-oriented philosophy is gaining momentum, but is by no means, universally accepted. The Broward County Parks district (the Greater Fort Lauderdale-Hollywood area) for example, conducts no consumer research. They feel that their planners "know" what residents seek in a park. This can be a dangerous position to take.

Four key implications for service marketers emerged from this analysis. First, market planning should be administered in a sequential and systematic manner. A services marketing audit can be helpful in this process (Berry, Conant, and Parasuram 1991). Second, once the goals of the organization have been specified and a SWOT analysis conducted, additional planning models (e.g. Kraus-Allen, Crompton-Lamb and/ or the GE framework) should be utilized. Third, an information- based foundation can be readily translated into strategic and tactical decisions regarding facilities, activities, and services. Various research methods are useful in explaining market-ing phenomena present in the service environment. Hence, multiple research techniques and approaches are desirable. Fourth, successful service marketers of the 1990s do not necessarily need to be skilled researchers. They should, however, be sufficiently knowledgeable about research alternatives to know when specific techniques are needed. Additionally, they should be skilled in contracting for and managing firms brought in to assist in the research effort.

Areas for Further Research

This paper provides a foundation for understanding market analysis in service organizations. While, the leisure/park agency was used as an illustrative case, the models and research techniques described are readily adaptable to other service providers. Based on this analysis, a six-point research agenda is proposed.

1. How widely accepted are the market opportunity analysis models discussed in this paper? How useful are these models?
2. Are there other potentially better models in use?
3. How prevalent is the use of market research in NPOs?
4. What types of research methods and techniques dominate?

5. Is most of this research conducted in-house or by outside research firms?
6. What have leisure service marketers learned/borrowed from other service sectors? How does leisure services differ from other service sectors?

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References and Figures are Available Upon Request.

PROMOTION MANAGEMENT

ASSESSING SERVICES ADVERTISING: SOME PRELIMINARY FINDINGS

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Abstract

Over the years, several guidelines have been proposed in literature for services advertising. Indeed, given the intangibility of services, most guidelines suggest various ways to enhance the tangibility of services. However, to date, no attempt has been made to assess the extent to which these guidelines are used in practice. This paper attempts to fill this void by analyzing services advertisements. Results show that associating symbols to services is most widely used. As well, catchy phrases are also frequently used in services advertising.

Introduction

With the growing emphasis of services in the economy, the importance of promoting services appropriately is greater than ever. Services marketers are confronted with the same marketing and promotion issues that goods marketers are. Goods marketers can distinguish themselves from each other by changing various features of essentially the same product. In contrast, different marketers providing the same service have very little to differentiate themselves from each other. A unique characteristic of services is that generally services are commodity products. The marketing of services requires, even more than does product marketing, a positive image for the service to transform it from a commodity to a product (Onkvisit and Shaw 1989). Consequently, promotions of services provide different challenges from those in goods marketing.

Particularly, advertising of services call for resolution of widely different issues from those in advertising of goods. For instance, a good can be demonstrated to the audience in an advertisement. A service, on the other hand, is more difficult to demonstrate in an advertisement. Because a good is an object, its performance can be shown in an advertisement rather easily. However, a service is itself a performance, and it is inseparable from the people and the equipment delivering the service (George and Berry 1981). Therefore, showing its performance in an advertisement involves showing either the people or equipment delivering the service.

Advertising of services is an issue often deliberated upon in marketing literature. Several guidelines for advertising have been offered in light of the very different nature of services compared to goods. The most commonly discussed characteristic of services in literature is intangibility of services compared to goods. Correspondingly, guidelines have often been suggested in literature to make services tangible in advertisements (e.g., George and Berry 1981; Legg and Baker 1987). The purpose of this study is to develop an understanding of how services are made tangible in services advertisements. Due to its exploratory nature, this study serves as a preliminary examination of the issues in services advertising. It is an initial report of an in-depth investigation analyzing the services advertising practices over the years. To provide a foundation for the study, this paper first provides a brief discussion on the intangible nature of services. A review of the literature is provided to identify various issues relevant to the intangibility of services and their ramifications in advertising. The hypothesis emanating from the review is presented, followed by a discussion of methodology and the results. Finally, the implications for advertising managers are also discussed.

Background

A service is primarily intangible as the product has no existence except to the degree that it is produced and consumed (Bateson 1977). Unlike goods, the intangible nature of services makes it difficult for individuals to visualize them. Services are impalpable -- they cannot be touched by the consumer -- and, they cannot be inventoried. Moreover, services often possess a higher number of attributes than physical goods; and due to their intangibility a high percentage of those attributes are less responsive to common methods of measurement or control (Czepiel 1980). Also, when a product is intangible, potential customers find it more difficult to evaluate the product's promise. They may, in fact, feel they are taking a considerable risk in buying a service if the costs of a wrong decision are high (Zeithaml 1981).

Clearly, it is prudent for services marketers to make their services tangible for their prospective customers to visualize the product offerings. Nearly all the guidelines offered in literature refer to making services more tangible in the services marketers communications. Indeed, for a

service communication to lower prospective customers' perceived risk in purchasing the service, it would need to be presented more tangibly in an advertisement.

According to Berry and Clark (1986), tangibilization of a service can be facilitated by enhancing the visualization of a service. That is, enabling prospective customers to visualize the service brings it within their mental grasps, reducing their perceptions of risk in purchasing the service. One way to accomplish this is to include physical evidences or facilities of the service, such as delivery sites, into an advertisement.

Another way to tangibilize a service is by making it vivid (Legg and Baker 1987). Vivid information is likely to hold individuals' attention and excite their imagination to the extent that it is concrete (Taylor and Thompson 1982). According to Shostack (1977), information can be presented concretely through fitting language in advertisements. Appropriate catchy phrases, such as "Reach out and touch someone" for long distance telephone service enhance the tangibility of a service. In addition, usage of appropriate symbols in advertisements also tend to portray a service concretely (Shostack 1977). Symbols, such as a bull for a financial firm indicating its bullishness in satisfying the financial objectives of its customers, allow a service marketer to associate the service with some form of tangible evidence, thereby making it tangible. Indeed, the language and the symbols together enhance the tangibility of services in advertisements.

Last, a service can be made tangible by incorporating word-of-mouth form of communication into advertisements (George and Berry 1981). Because many services are labor intensive, there exists a potential for variability in the services provided. This potential for variability in the services is especially critical when customers perceive the quality of the service to be important. Customers of such services tend to be receptive to word-of-mouth communications (Davis, Guiltinan and Jones 1979). Thus, another way to increase the tangibility would be to take a word-of-mouth approach in advertising the service as it lends credibility to the advertisements (George and Berry 1981).

The issues related to intangibility of services have received considerable attention in the literature. As noted above, several researchers have offered suggestions on promoting services in various ways by making them tangible. To a certain extent, the tangibilization of services in advertisements would be influenced by the nature of the service act (Lovelock 1983). That is, tangibilization of service differs depending upon whether the service is directed toward *people* or *things*. If the service is directed toward people (e.g., air travel), a major objective would be to gain confidence of customers because they are participants in receiving the service. Therefore, it would be appropriate to show facilities where customers would receive the service. On the other hand, if the service is directed toward things (e.g., lawn care), a major objective would be to establish trust in people's minds related to handling of those things. This is because the things on which the service is to be performed are assets of the people purchasing the service. The objective of building trust can be accomplished by communicating the reliability in handling of people's assets. In this case, it would be appropriate to include symbols or phrases in advertisements that would transmit such a message. Thus, it is expected that advertisements of services directed toward people would make a greater use of physical evidence than advertisements of services directed toward things to enhance the tangibility of services. Also, it is expected that services advertisements directed toward things would make a greater use of symbols or phrases than those directed toward people to augment the tangibility of services.

Another way that tangibilization of services may be influenced is related to whether services are directed toward individual consumers or business customers. As the decision making processes of consumers and business customers are known to be different, services marketers may want to communicate different messages to the two different groups of customers. The ramifications of using different advertising strategies for the two types of customers may encompass different approaches to tangibilizing the same service. That is, use of physical evidence, symbols, phrases and word-of-mouth communication form may vary depending upon who the services are targeted at. Given the exploratory nature of the study, no prior expectation were made about the extent different emphasis in advertisements directed toward individual or business customers. Nonetheless, it was deemed worthwhile to distinguish the usage of physical evidence, symbols, phrases and word-of-mouth in advertisements directed toward the two types of customers. Indeed, if a service is marketed to both types of customers, an advertisement may be targeted toward both of them simultaneously.

Methodology

Given the intangible nature of services, and the corresponding need to make them tangible (Legg and Baker 1987), it is expected that an analysis of current services advertising will permit an assessment of the extent to which various methods are used by marketers to tangibilize their services. Content analysis was used to determine the

extent to which various service firms actually use suggested advertising strategies to overcome the problems associated with intangibility. Further, it was decided to examine magazine advertising in this study. Magazines represent a major advertising medium for service advertisements, and are readily accessible for analysis. With the objective of detecting different advertising strategies, it was necessary to look at general interest magazines rather than specialty magazines. In conformance with the objective of the study, it was thought prudent not to exclude magazines that would be targeted to either gender. Because services may be directed to individual customers or businesses, a business magazine was considered appropriate for the analysis of the advertisements. A mass circulation magazine targeted at general business readers, specifically *Forbes*, was chosen for this study. The year 1990 was selected with every other issue examined. Because the same advertisement is generally run over the entire length of the campaign encompassing several issues of a magazine, it was thought unnecessary to look at every issue of the magazine for year. Yet, to allow the possibility of capturing a change in the advertising strategies of firms, it was prudent to cover different issues of the magazine in the study. Consequently, it was decided to look at the first issue of every alternate month of the year for the magazine.

Two senior level marketing undergraduate students were selected as judges to examine the advertisements. Both the judges independently coded all the advertisements, and were not aware of the purpose of the study. The coding of advertisements done by the two judges was found to have an inter-judge reliability of 85%, meeting the minimum inter-judge reliability of 85% suggested by Kassarjian (1977). The coders were instructed to analyze those advertisements that were sponsored by a service firm. That is, advertisements for goods were not further analyzed for this study. The advertisements were analyzed for the following: (1) type of service advertised (service directed at other businesses, at individual customers, or both), (2) nature of the service act (services directed at things or services directed at people), (3) use of physical evidence (e.g., showing facilities, equipment, delivery sites), (4) use of language as well as the symbols, and (5) use of word-of-mouth communication as encouraged by, or simulated in, the advertisements.

Results

In all, 1334 advertisements were found in the magazine for year 1990, of which 631 were services advertisements, whereas the rest of the advertisements were for goods.

As a first step, it was valuable to look at the frequency distribution of different types of advertisements analyzed. As shown in Table 1, more than half of the services advertisements were directed toward businesses, which is not surprising because of the type of magazine included in the study. Nearly equal number of advertisements were directed toward individual consumers as the advertisements directed toward businesses and consumers.

TABLE 1

FREQUENCY DISTRIBUTIONS OF SERVICES ADVERTISEMENTS

Customer Types Targeted In Services Advertisements

	Number	Percent
Ads Directed at Businesses	339	53.7%
Ads Directed at Consumers	146	23.1
Ads Directed at Both	147	23.2
Total Services Ads	632	100.0%

Methods Used To Enhance Tangibility Of Services (Percentages Based on Total Services Ads)

Number	Percent	
Ads Showing Physical Evidence	166	26.3%
Ads Using a Symbol	421	66.6
Ads Using Catchy Phrases	384	60.8
Ads Simulating Word-of-Mouth	43	6.8

Types of Services Advertisements

	Number	Percent
Airlines/Transportation	95	15.1%
Banks	60	9.5
Car Rental	7	1.1
Communications	96	15.2
Credit Card	17	2.7
Financial Services	167	26.4
Hospitality Industry	71	11.2
Insurance	88	13.9
Other	31	4.9
Total	632	100.0%

In addition, symbols were found to be most widely used (66.6%) in advertisements to enhance the tangibility of services, followed by catchy phrases (60.8%). Given that many services advertisements use more than one method to increase the tangibility of the service, the percentages exceed 100%. Also, various services were found to be included in the magazine advertising. The leading category was financial services (26.4%), followed by communications and Airlines/transportation (15.2% each).

Next, the usage of physical evidence in advertisements for businesses, consumers or both was examined. As shown in Table 2, the results indicate that there is a difference in usage of physical evidence in services advertising depending upon whether the service is directed toward people or things. Specifically, in services advertisements directed toward businesses, physical evidence is not used as frequently in the case of services for things as in services for people (χ^2=52.54, p<.001). Advertisements directed toward consumers as well as advertisements directed toward businesses and consumers also showed similar results.

TABLE 2

RELATIONSHIP BETWEEN PHYSICAL EVIDENCE AND NATURE OF SERVICE

Services Directed Toward Businesses

Nature of Service	Physical Evidence: Yes	No	Total	
Things	38	258	296	(87%)
People	26	17	43	(13%)
	64 (19%)	275 (81%)	339	

χ^2 = 52.54, d.f. = 1, p < .001

Services Directed Toward Consumers

Nature of Service	Physical Evidence: Yes	No	Total	
Things	21	77	98	(67%)
People	35	13	48	(33%)
	56 (38%)	90 (62%)	146	

χ^2 = 33.97, d.f. = 1, p < .001

Services Directed Toward Both

Nature of Service	Physical Evidence: Yes	No	Total	
Things	13	85	98	(67%)
People	35	14	49	(33%)
	48 (33%)	99 (67%)	147	

χ^2 = 47.64, d.f. = 1, p < .001

Physical evidence was not found to be as common for services for things as people (χ^2=33.97, p<.001, and χ^2=47.64, p<.001, respectively). The results also show that service advertisements directed for people tend to make a greater use of physical evidence than those for things to enhance their tangibility. This is especially true for services directed toward consumers as well as toward businesses and consumers simultaneously. These findings tend to support the prior expectation regarding use of physical evidence to tangibilize services directed toward people as opposed to things.

The advertisements directed toward business, consumers or both were also examined for the use of symbols to make them tangible. As shown in Table 3, a relationship between the use of symbols and the nature of service was found for each of the customer groups targeted. When services were directed toward businesses, advertisements showed a preponderance of symbols in case of services for things (χ^2=15.29, p<.001). Similarly, in case of services for things, the advertisements directed toward consumers as well as businesses and consumers more frequently included symbols than those for people (χ^2=17.38, p<.001, and χ^2=19.35, p<.001, respectively).

TABLE 3

RELATIONSHIP BETWEEN SYMBOLS AND NATURE OF SERVICE

Services Directed Toward Businesses

Nature of Service	Symbols: Yes	No	Total	
Things	231	65	296	(87%)
People	21	22	43	(13%)
	252 (74%)	87 (26%)	339	

χ^2 = 15.29, d.f. = 1, p < .001

Services Directed Toward Consumers

Nature of Service	Symbols: Yes	No	Total	
Things	64	34	98	(67%)
People	13	35	48	(33%)
	77 (53%)	69 (47%)	146	

χ^2 = 17.38, d.f. = 1, p < .001

Services Directed Toward Both

Nature of Service	Symbols: Yes	No	Total	
Things	74	24	98	(67%)
People	18	31	49	(33%)
	92 (63%)	55 (37%)	147	

χ^2 = 19.35, d.f. = 1, p < .001

This finding is also in conformance with the prior expectation about the usage of symbols in advertisements to increase the tangibility of services. Unlike the findings related to use of symbols, the findings related to phrases did not support prior expectations. As shown in Table 4, results indicate that there is no relationship between the use of phrases and the nature of service, regardless of whether the advertisements were directed toward businesses (χ^2=.46, p>.10), consumers (χ^2=.09, p>.10), or both (χ^2=.14, P>.10). This finding, contrary to prior expectations, indicates that phrases are used just as frequently in the case of services for things as in the case of services for people.

TABLE 4

RELATIONSHIP BETWEEN PHRASES AND NATURE OF SERVICE

Services Directed Toward Businesses
Phrases

Nature of Service	Yes	No	Total	
Things	205	91	296	(87%)
People	27	16	43	(13%)
	232	107	339	
	(68%)	(32%)		

χ^2 = .46, d.f. = 1,
not significant

Services Directed Toward Consumers

Phrases

Nature of Service	Yes	No	Total	
Things	47	51	98	(67%)
People	21	27	48	(33%)
	68	78	146	
	(47%)	(53%)		

χ^2 = .09, d.f. = 1,
not significant

Services Directed Toward Both

Phrases

Nature of Service	Yes	No	Total	
Things	60	38	98	(67%)
People	23	26	49	(33%)
	83	64	147	
	(56%)	(43%)		

χ^2 = .14, d.f. = 1,
not significant

Finally, the relationship between the word-of-mouth form of communication and the nature of service was also examined. As shown in Table 5, in services advertisements directed toward businesses or businesses and consumers, the use of word-of-mouth is not related to whether the service is for things or people (χ^2=.42, p>.10, and χ^2=2.26, p=>.10, respectively).

Moreover, advertisements related toward consumers also show similar results in that overwhelming majority of advertisements do not use word-of-mouth communication form to make services more tangible. Although a χ^2=3.24 (P<.10) would suggest an evidence of a relationship, it may be noted that no advertisement for a service for people was found to simulate word-of-mouth communication. Thus, this result warrants caution in its interpretation.

TABLE 5

RELATIONSHIP BETWEEN WORD-OF-MOUTH AND NATURE OF SERVICE

Services Directed Toward Businesses

Word-of-Mouth

Nature of Service	Yes	No	Total	
Things	22	274	296	(87%)
People	5	38	43	(13%)
	27	312	339	
	(8%)	(92%)		

χ^2 = .42, d.f. = 1,
not significant

Services Directed Toward Consumers

Word-of-Mouth

Nature of Service	Yes	No	Total	
Things	9	89	98	(67%)
People	0	48	48	(33%)
	9	137	146	
	(6%)	(94%)		

χ^2 = 3.24, d.f. = 1, p < .10

Services Directed Toward Both

Word-of-Mouth

Nature of Service	Yes	No	Total	
Things	7	9	98	(67%)
People	0	49	49	(33%)
	7	140	147	
	(5%)	(95%)		

$\chi^2 = 2.26$, d.f. = 1, N.S.

Discussion

The results provide an interesting look at services advertising. However, any implications of these results must be accepted in light of the limitations of the study.

Data were collected from alternate months' first issue of the magazine for just one year. Therefore, the number of advertisements analyzed was relatively small. However, the particular issues of the magazine were selected without any specific reason. That is, the particular issues would be as good as any other issues. Also, only one type of magazine was included in the content analysis. However, the magazine was selected because services advertisements directed toward businesses as well as consumers are included in it, which is congruent with the objectives of the study. Indeed, nearly half of the advertisements appearing in the magazine were services advertisements, providing a rich look at services advertising strategies. Although, it is acknowledged that more issues of different magazines could provide a broad spectrum of advertising in those magazines.

The results appear to indicate lack of use of physical evidence to enhance the tangibility of services for things (e.g., lawn care). While this is not contrary to expectations, it nonetheless reflects an overall absence of physical evidence in services advertisements for things. This is because of the very low frequency of advertisements using this strategy compared to that of not using the strategy. The services for people, regardless of the customer type, seem to be advertised using physical evidence more frequently than without. Interestingly, the arguments to enhance the tangibility of services for people with physical evidence provided in the literature are practiced in services advertising.

On the other hand, services for things are made tangible, predominantly, by using symbols. This is true regardless of who the service may be targeted toward. Evidently, advertisers are portraying the services concretely with symbols that communicate a message of trust to people purchasing those services. Similarly, phrases are also used more frequently to enhance tangibility of services for things than services for people. As mentioned earlier, when services are provided for things it is important to communicate what the services will accomplish for the people's possessions. This may be accomplished effectively via phrases because phrases can succinctly communicate the unique benefits of those services. It may be worthwhile to note a possible artifact in the overwhelming usage of phrases in advertisements. Inherently, the distinction between catchy phrases and tag lines is blurry, making it difficult to distinguish them from each other. Thus, the usage of phrases reported in Table 4 may be overstated.

The practice of word-of-mouth communications does not seem to be wide spread in services advertising. A substantially small number of advertisements used this method to increase the tangibility of services. Although the literature suggests that due to the potential variability in services word-of-mouth would lend credibility to services marketer, this approach is not as common as the approaches discussed above. A possible explanation for this startling finding may be related to the medium of advertisements. The print medium may not lend itself well to generate as much credence to the advertiser's claims regarding the services as another medium (e.g., television). In contrast, physical evidence and symbols can easily capture one's confidence in services.

Several research issues generate from this study for future investigations. Indeed, the study could be expanded by including more issues of the same magazine. Also, more magazines could be looked at, to fully capture services advertisements. While further examination of services advertising is being pursued by the authors, it may be worthwhile to include other media, such as television, in future investigations.

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RESEARCH PROPOSITIONS FOR EXAMINING THE EFFECTS OF DIRECT CONSUMER PREMIUMS

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Abstract

This paper reviews the sales promotion literature on the attitudinal and behavioral effects of direct consumer premiums, and presents research propositions that deserve further attention. Previous research deals primarily with the behavioral effects of monetary promotions (e.g., price-off coupons) in promotion time periods. Nonmonetary promotions and the delayed effects of promotions on individuals' attitudes and behavior toward promoted products in postpromotion time periods have received almost no research attention, but have been the focus of much discussion and disagreement. Direct consumer premiums (also referred to as package-related, free-premiums) are a key element in the nonmonetary sales promotion mix of U.S. packaged goods manufacturers. Most promotion researchers agree that premiums can stimulate favorable effects in promotion time periods. However, there is disagreement as to how promotion time period gains influence postpromotion attitudes and behavior toward promoted products. Many researchers have proposed that premium promotions have unfavorable delayed effects which lead to decreased probabilities of product selection in postpromotion time periods. Other researchers have suggested that premium promotions have little, or no, long-term effects on attitudes and behavior in postpromotion time periods. Finally, some researchers have argued that premium promotions lead to increased probabilities of product selection in postpromotion time periods.

There is a lack of theory-based research on the way individuals perceive and respond to premium promotions. Two behavioral theories, classical conditioning and cognitive dissonance, provide competing and opposite predictions for the delayed effects of premiums in postpromotion time periods. Although there is little empirical work that supports the applicability of either theory in a premium promotion context, the theories provide guidelines for investigating the effectiveness of premium promotions and address important strategic issues. For example, principles derived from cognitive dissonance theory provide counterintuitive predictions for the delayed effects of premiums (i.e., what appears to be a poor strategy in promotion time periods may be an excellent strategy when delayed effects in postpromotion time periods are taken into account).

This paper attempts to provide theoretical and practical insights for empirical examinations of the effects of direct consumer premiums. Based upon a review of the literature, this paper presents seven propositions worthy of future research. The proposed areas of research incorporate longitudinal studies, premium promotions vs. monetary promotions, different product contexts, classical conditioning principles, cognitive dissonance principles, consumer-franchise-building activities, and individual differences.

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TARGETING VULNERABLE SEGMENTS IN CIGARETTE ADVERTISING: ETHICAL CRITERIA AND PUBLIC POLICY IMPLICATIONS

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Abstract

Since the late 1980s targeting has been attacked and even questioned within the business community as a result of cigarette advertising of the Uptown and Dakota brands. However, no consistent evaluation criteria have emerged. This paper proposes two concepts as ethical criteria for evaluating targeting of cigarette advertising: "vulnerability of the segment" and "disproportionality of negative effects" in consumption. Applying these concepts with respect to Blacks in the Uptown case and to other high-risk groups as well, it is concluded that targeting vulnerable segments is untenable. Accordingly, corporate social and industry policymakers as well as decisionmakers in community organizations and anti-smoking groups should give greater priority to ethical standards in deciding future courses of action regarding the targeting of cigarette advertising.

Introduction

Targeting has been a fundamental concept and technique in marketing management since at least the 1950s. (Smith 1956; Bogart 1967) It is now recognized as an integral part of marketing strategy with respect to positioning as well as differentiation and segmentation. (Dibb and Simkin 1991) Band (1990) claims that careful targeting is the key to customer satisfaction strategies. Similar praise of targeting has been expressed by several other authors as well--and in a variety of types of publications. (Hapoieno 1990; Nascenzi 1988; Thorton 1987) As stated by Bogart (1967, p. 197) heavy users are targeted because they are usually the best prospects. Put more generally, it is expected that targeting will result in a more efficient use of advertising resources by (1) reaching prospects with the greatest potential and (2) by reducing waste in media circulation or exposure. (Runyon 1979, p. 297) In sum, the use of targeting is focused mainly on expected efficiency and profitability.

The effectiveness and value of targeting as a strategic concept and managerial technique are now generally undisputed. Targeting is surely fundamental to the $3 billion spent annually on cigarette advertising. (Berkowitz, Brooks and Enrico 1991). With 40 million U.S. smokers, this amounts to $75 per smoker who spends about $750 annually on cigarettes. (Konrad 1992)

Well known examples of targeting in cigarette advertising include Marlboro for the macho male and Virginia Slims for the fashionable female; Dakota for the lower status virile female; Salem and Kool for the menthol segment. More germane to this paper, Pollay, Lee and Carter-Whitney (1992) point out that racial/ethnic targeting to Blacks has been practiced extensively by the cigarette industry since at least the early 1950s.

However, recently questions have been raised and criticisms have been made of some uses of targeting in the case of cigarette advertising. (Bromberg 1990; McCarthy 1990; Pollay 1989; Shiffman 1990; Pollay, Lee and Carter-Whitney 1992) Several controversial examples are relevant to this discussion. The "Joe Camel" ads are ostensibly stylish and humorous appeals to adult smokers. But do they implicitly appeal to youth? The reported company rationale for marketing the Dakota brand was to get Marlboro smokers to switch brands. However, the basic targeting was designed to appeal to young, poorly educated, white "virile women" who enjoy tractor pulls, "Hot Rod" shows and "cruising" with their boy friends. Does this represent acceptable demogr aphic and psychographic targeting or is it unacceptable exploitation of gender status? Further, consider the uproarious response in the Uptown case. Why did the test marketing and announced rollout of this light menthol line extension create literally a firestorm of protest from a diverse array of community groups, anti-smoking organizations and government officials? Indeed, writing in The Wall Street Journal, a staff reporter posed the question: "After Uptown, are some niches out?" (Shiffman 1990) These questions and other controversies surrounding targeting in cigarette advertising are addressed in this paper.

The intent of this analysis is to present and explain a practical ethical standard for evaluating targeting in selected cases of targeting cigarette advertising. Criteria are described and applied for determining when targeting becomes untenable.

From the perspective of ethical or moral theory the analysis uses both major streams of moral argument--

deontological and teleological. Regarding the former, minimizing or avoiding harm is the underlying principle. With respect to consequences, both vulnerability and disproportionality can be linked to important teleological principles.

The information on which the analysis is based has been compiled from the newspaper, trade, academic and business literature on cigarette advertising. Extensive use has been made of several computer databases, mainly ABI/Inform, Business Dateline and The Wall Street Journal.

The basic structure of the analysis is built around two evaluative constructs: vulnerability and disproportionality. They are defined and discussed in the next section of the paper. The standards are applied in the section of the paper in which the Uptown case is used to illustrate fundamental objections to targeting when the consequences unavoidably involve subjecting a segment of consumers to numerous disproportionately negative outcomes in the consumption of cigarettes. Both concepts are interpreted with respect to Black consumers. However, in the section on other vulnerable segments (e.g., Hispanics, youth and women), attention is focused on the characteristics of their vulnerability. Implications for corporate and public policy analysis are discussed. Several conclusions are suggested regarding how these standards should challenge policymakers in the cigarette industry as well as in community organizations and anti-smoking groups with respect to the uses and limits of targeting.

Vulnerability and Disproportionality

Various terms have been used to criticize the cigarette industry for targeting specific segments such as Blacks and women. Deplorable, unfair and unacceptable are three which come readily to mind. In order to focus objections and criticisms on specific criteria for making such judgments vulnerability and disproportionality are proposed. Each is described briefly.

While disproportionality is introduced in this analysis as a standard for evaluating the limits of targeting, vulnerability has been used in discussing the issue. (Nelson and Lukas 1990; Specter 1990) However, suggesting some ways of using the concepts in evaluating the limits of targeting are more extensively addressed in this analysis.

Vulnerability

A group is defined as being vulnerable based on the extent to which it is placed at risk of harm, injury or loss in the exchange process. Implicit in the concept is susceptibility to potential or likely negative effects from marketing and consumption activity. In the case of cigarette smoking, Blacks are vulnerable because of the high incidence of disability and death from various smoking-related diseases. Hispanics are vulnerable because they have been less exposed to educational programs and anti-advertising messages and may be less aware of all the hazards of smoking. Women are vulnerable because of the harmful effects of smoking with respect to pregnancy and other gender-based health risks associated with smoking. Youth are vulnerable based on their susceptibility to the appeals of adult behavior and the life-long hazards of the early start of smoking. That is, generally the earlier smoking is started, the harder it is to quit. (Altman, et al 1991) A summary of the vulnerability concept is presented in Exhibit A.

Exhibit A

Segment and Vulnerability Characteristics Related to Cigarette Smoking

Characteristics of Segment Vulnerability	Youth	Blacks	Hispanics	Women
1. Legally recognized	Yes	No	No	No
2. Recognized by marketers	Yes	No	No	No
3. Physiological in origin	Yes	No	No	No
4. Linked to group status	Yes	Yes	Yes	Yes
5. Compounded by other health risks	Yes	Yes	Yes	Yes
6. Empirically observed	Yes	Yes	Yes	Yes
7. Disproportion-ately harmed, if targeted	Yes	Yes	Yes	Yes

Disproportionality

Disparity in the negative effects of smoking takes many forms. The comparative incidence of disease or disability associated with smoking is perhaps the best measure of disproportionality. Thus, if women who smoke are three times as likely to experience heart disease as nonsmoking women substantial disproportionality exists. Disproportionality has been generally used in references to the smoking and health aspects of the controversy.

Application to the Uptown Case and Black Consumers

The targeting strategy for Uptown planned to make the best of a bad situation with respect to Blacks and smoking. It would have been best for the company in terms of efficiency and profitability to have exploited the vulnerability of Blacks by launching the Uptown brand. The bad situation stemmed basically from the vulnerability of Blacks to targeting in cigarette advertising. With respect to the consequences of smoking, Blacks have a 58% greater chance of dying from lung cancer than Whites. (Le Pera 1990) Examples of the nature of the vulnerability and disproportionality are summarized in Exhibit B.

Exhibit B

Illustration of Vulnerability and Disproportionality Experienced by Blacks As a Group With Respect to Smoking
[Relative to Caucasian Smokers as a Group]

Vunerabiltiy	Disproportionality
Higher exposure to environmental stresses which are conducive to smoking	More concentrated exposure to cigarette advertising in the Black community through billboards, event sponsorship and support of community organizations by cigarette companies
Less access to financial and emotional sources of quitting smoking	Cigarette advertising is the most heavily advertised product on billboards
Less help-seeking regarding smoking addition.	Highly disproportionate incidence of smoking-related health risks, morbidity and mortality

Vulnerability of Other Segments

Brief comments are made regarding the vulnerability of other segments. Attention is focused on Hispanics, youth and women.

The Hispanic Segment

Nelson and Lukas (1991) note that the vulnerability of Hispanics is heightened by the fact that until recently, health-related issues have not been targeted toward Hispanics. Implicitly then, they inferred that the risks of and consequences of smoking are not as well understood. They go on to assert that it is morally offensive for the cigarette industry to target Hispanics ostensively under grounds of the right to smoke a legal product.

The Youth Segment

In many ways this is the most controversial of the vulnerable segments. Youth represent a major potential and actual source of new smokers. According to Altman, et al (1991) adolescents in Santa Clara County, CA were successful in over 50% of the time in purchasing cigarettes from stores or vending machines. However, the cigarette industry categorically denies targeting the segment. Indeed, their argument is that "parent, peers and pals" not cigarette promotion induce youth to start smoking. This is asserted more by the industry than it is supported by empirical research. (Moschis 1989) However, Jenkins (1988) did support the industry contention in his review of the research literature. However, the Canadian produced internal company documents at a trial challenging its Tobacco Products Control Act of 1988 which indicated that disguised attempts are made to attract children to take up smoking. (Mintz, 1991) But whatever the disputed cause, in one Center for Disease Control study tobacco use was found to be higher among high school students than adults: 36% v. 28%. (The Wall Street Journal 1991) Moreover, 52% of smokers started by age 18 and 90% by age 21. (Berkowitz, Brooks and Enrico 1991)

With respect to advertising it is of interest that in a study by Mazis et al (1992) 17% of the models in the advertising studied appeared to be younger than age 25, the norm adopted in the self-regulated industry guidelines [Cigarette Advertising Code]. Yet the evidence of the effects of cigarette advertising is inconsistent. Despite all the furor over "Joe Camel," according to a Centers for Disease Control study only 1% of teenagers smoked Camel cigarettes. (Payne 1992)

Women as Smokers

Dangers of smoking by women have been extensively documented. One of the most influential reports was published by the U.S. Surgeon General in 1980. (Alexander

1981) The issue takes on special importance because of the consequences for women as well as the children which they bear and have major responsibility of caring for. The degree of vulnerability is pervasive and severe. Risks and disabilities extend from higher levels of work absenteeism due to illness and injury than nonsmoking women. Smoking boosts the risks of women contacting cardiovascular diseases and cancer as in men, but additionally osteoporosis and pregnancy consequences add unique dimensions of disability and sources of morbidity. (Regarding Women and Health Care 1991) With reference to quitting, nearly three-quarters of the males surveyed had quit in comparison with about half of the women. (Regarding Women and Health Care 1991)

Implications for Corporate and Public Policies

In its reactions to the Uptown responses, RJR completely ignored ethical concerns of targeting Blacks. A vice president indignantly proclaimed that Blacks were being deprived of a choice. His statement was that "Blacks are not different from any other group that chooses to smoke." (Cooper 1990) Surely the vice president knew, but chose to disregard, the often deadly differences between Blacks and Whites when it comes to the consequences of smoking. But therein lies the difference between the traditional focus on standards of efficiency and profitability and the need to focus on standards of ethics and societal concerns.

Criticisms of targeting Blacks and other segments in cigarette advertising have not specified the criteria for evaluating the ethical limits of targeting. This analysis has proposed that ethical criteria should be used in evaluating the limits of targeting; namely, vulnerability of the segment and disproportionality of the effects of consumption. Based on the harm that is done, risks of morbidity and mortality are very strong. Moreover, vulnerable segments experience quite disproportionate risks and harm. Thus, corporate policymakers in the industry as well as in community organizations and anti-smoking groups, are challenged to adopt more specific and stringent ethical standards as the basis for their strategies and programs of action regarding targeting of cigarette advertising.

Conclusions

Targeting becomes untenable when it exploits a group based on it vulnerability and when there are likely to be disportionately severe or harmful consequences from the associated marketing and consumption activities. Taking advantage of vulnerability amounts to exploitation. Targeting becomes exploitation when the concentration of efforts and resources places certain groups at very high risks of contacting the fatal diseases caused by smoking. In more blunt language, targeting the vulnerable promotes increased efficiency of disability and death among the vulnerable segments. This harsh reality strengthens the moral argument against targeting Blacks, Hispanics, youth and women in cigarettes advertising. They are vulnerable segments.

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ELECTRONIC ZIPPING: AD AGENCY VIEWS

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Electronic Zipping: Ad Agency Views

Television viewers are no longer passive; they have become "adept manipulators of their media environment" (Hey 1987). Seventy-seven percent of U.S. households had television remote controls in 1990 (Shagrin 1990) and, no doubt, the figure is even higher today. The penetration rate for video cassette recorders (VCRs) is well over 70 percent (Hicks 1991). Television-related technology has dramatically influenced the viewing environment (Krugman 1985; Levy 1987). Most viewers routinely use the remote control to change channels in order to avoid commercials and simultaneously watch two or more programs (zapping) or to fast forward through playback of pre-recorded programming (zipping).

Remote control usage has important implications for advertising professionals with respect to media planning. Television viewers do not just use the new technology to satisfy their curiosity by checking other program options. They use the remote controls to zap and zip commercials, and, as a result, audience exposure for television commercials is smaller. One study indicated that over half of the people using remote controls say that they change channels during programs (Ainslie 1988). Additionally, it has been estimated that 50 to 75 percent of viewers in the U.S. zip or fast forward through commercials when watching recorded programming (Kaatz 1987).

The resulting reduction in audience size and diminished communication effects makes the practices of both zapping and zipping critical issues for advertisers and agencies today. The primary focus of the current research is electronic zipping. While a considerable amount of research has focused on measuring the extent of zipping (Kitchen 1986; Stutts, Eure, and Hunnicutt 1985) and researchers have investigated leading advertisers' attitudes and reactions to zipping (Daugherty, Stafford, and Asquith 1992), no empirical work was found focusing specifically on advertising agency personnel's perspectives and opinions on zipping. Agency perspectives regarding the impact of electronic zipping are certainly relevant. Advertising agencies assume responsibility for budget allocations and media planning for many of the largest corporations; agencies make decisions for literally billions of advertising dollars spent each year in the U.S. The intent of the current exploratory research was to examine agency views and reactions to electronic zipping.

Background

Zipping has received recent attention among both practitioners (Reiss 1986; Feinberg 1989) and academics (Stout and Burda 1989; Cronin and Mennelly 1992). Much of this research has focused on the efficacy of zipped commercials. This research has resulted in two distinct schools of thought.

The first viewpoint maintains that, overall, fast-forwarded ads are effective. Reiss (1986) found commercials "suffer no significant decline in penetrating viewer awareness" when viewed at accelerated speed. Greene (1988) reported that zipping (and zapping) did not adversely affect advertising recall significantly. The attention level for zipped commercials may actually be higher than for normal speed commercials; the viewer must pay close attention to avoid zipping into the program. Metzger (1986) offered support for this theory. He found that the visual element of zipped commercials is not lost entirely; about 85 percent of the respondents indicated seeing some of the pictorial elements during playback of zipped commercials.

Conversely, other researchers have reported reduced message efficacy associated with zipped commercials. Stout and Burda (1991) examined the effectiveness of commercials under zipped conditions and explored brand dominance as a potential strategy for combatting zipping. (Brand dominance refers to keeping the advertised product on the screen for an extended period of time.) They found that zipping does indeed interfere with one's ability to process the information contained in commercials. They also found that viewers of the zipped commercials developed more neutral attitudes toward the ad and the brand. Similarly, Abernethy and Rotfeld (1991) reported that information processing of commercial messages will be diminished during zipping because of the loss of audio material, lower visual quality, and faster information flow.

Other research has directly examined the loss of viewership due to zipping. Kitchen (1986) found that the majority of

commercials are lost on replay with zipping reported as the most popular activity during commercial breaks; more people fast-forwarded through commercials than all other activities combined. Sternberg (1987) reported Nielsen's research indicating that approximately 25% of VCR recordings are not played back, and about 60% of the played-back recordings involve zipping of commercials. He pointed out, however, that the Nielsen diary is imprecise; zipping may actually be under-reported.

Overall, there is general agreement that the zipping phenomenon has generated increased concern among both advertisers and advertising agencies (Stutts, Eure, and Hunnicutt 1985). Despite this increased level of concern, only limited research has addressed this concern and how the advertising industry is dealing with the issue. Daugherty, Stafford, and Asquith (1992) examined advertisers' perspectives on electronic zipping. Their research found that advertisers are concerned, but that few strategic measures have been implemented to combat zipping. Further, the authors suggested that advertising agency personnel might provide greater insight into the issue, as agencies are more involved with day-to-day media decisions.

Advertising Agencies

One of the main reasons advertisers utilize an external advertising agency is to gain access to specialists and knowledge of all available media (Belch and Belch 1990; Dunn et. al. 1990). Media planning is an especially important consideration today. Media choices are much more complex than in the past because of the proliferation of cable stations.

Advertising media planners must understand current and future media issues, including changes in media measurement and changing media technology (Jugenheimer, Barban, and Turk 1992). Evaluating media effectiveness is a complex task. In spite of this, researchers have made considerable contributions in recent years (Kamin 1978; Lancaster, Kreshel, and Harris 1986). Computer-based media models have been especially helpful in developing and evaluating media plans (Bearden et al. 1981; Kreshel, Lancaster, and Toomey 1985).

Agencies represent an important resource in dealing with the zipping issue. Thus, this research explores advertising agency perspectives on zipping in an attempt to begin to develop a basis for effective strategies for countering the zipping problem.

Research Design

After reviewing the literature, a four-page mail questionnaire was developed to survey advertising agency personnel. The questionnaire covered several topics including agency personnel's opinions of electronic zipping; their level of concern as to the impact of electronic zipping; and attempts at counteracting zipping.

In order to gauge agency personnel opinions related to zipping, a series of statements was provided, and respondents were asked to indicate how strongly they agree or disagree with each statement (see Tables 1 and 3). A five-point scale was used with endpoints of "strongly agree" and "strongly disagree." A separate question assessed level of concern utilizing a five-point scale ranging from "mildly concerned" to "very concerned." Additionally, in order to determine what practices are being used to combat electronic zipping, the respondents were provided with a list of seven items plus an "other, please specify" option and were asked to indicate which they have utilized. Respondents were also asked to indicate whether they have modified the placement of television commercials within programming or modified the placement of commercial messages within pods (ad clusters) to counteract zipping.

The questionnaire, cover letter, and postage-paid return envelope were mailed to 550 advertising agency personnel randomly selected from the membership list of the American Association of Advertising Agencies. Seven questionnaires were returned as undeliverable. One hundred and thirteen were completed and returned for a response rate of 20.8%.

Respondents included personnel from all functional areas of the agency. Over 35% were either the owner or president of the agency, nearly 17% were media planners, 11.5% were account executives, and 5.3% were copywriters. Art directors and production managers each represented 3.5% of the respondents, with media buyers and market researchers combined representing a total of 2.7% of the respondents. Over 21% classified themselves as "other." Agency size ranged from less than 10 people to more than 500 people with the majority (51%) falling in the 10 to 49 category.

Results

Agencies' Response to Zipping

Approximately one-half of the survey respondents indicated that they are concerned about the incidence of electronic zipping of television commercials. In general, moderate

levels of concern were expressed by those respondents (mean=2.737, SD=1.261, on a scale of 1 to 5 with 1=mildly concerned and 5=very concerned). Additional questions on viewing and effectiveness were used to further explore zipping issues. As shown in Table 1, agency personnel believed that zipping should be considered non-viewing (mean=3.885, SD=1.06) and that zipping decreases advertising effectiveness (mean=4.168, SD=0.96). However, respondents were somewhat neutral relative to a statement that zipping of television commercials reduces the number of viewers who see advertisements (mean=3.276, SD=1.02).

Although at least half of the agency personnel registered concern about zipping, they do not perceive zipping as any more damaging in terms of lost audience than the traditional means of commercials avoidance such as leaving the room (Table 2). Less than 14% of the respondents indicated zipping to be more damaging than traditional means of commercial avoidance. This is consistent with previous research suggesting that zipping is merely the newest, most convenient approach to commercial avoidance (Drexler 1987). This belief may explain why few agencies have made modifications to their clients' advertising strategies as a means of countering the zipping problem. Only about 12% of the respondents have made modifications to commercial content, 15.7% stated that they have modified the placement within programming, and 8.7% indicated that they modified placement of commercial messages within pods or ad clusters in an attempt to neutralize the effects of zipping.

Agency personnel who implemented content modifications predominantly utilized creative enhancements and brand dominance. Eleven respondents said they attempted to develop more entertaining commercials while eight respondents indicated they used brand dominance strategies. Split commercials were cited by four of the respondents with tag lines cited three times, shorter messages twice, and introductory messages were mentioned once. Primary focus on creative enhancements and brand dominance is consistent with literature which suggests that more entertaining commercials might prompt viewers to temporarily halt zipping behavior (Swisshelm 1984; Television/Radio Age

1985) and that brand dominant strategies can help to offset the effects of zipping (Stout and Burda 1989).

Despite the fact that few agency personnel had modified clients' commercials strategies, a clear preference was indicated for placement. Nearly 40% indicated a preference for commercial showings in the middle of the show rather than at the beginning or end of the program. When questioned as to the preferred placement within a pod or cluster of commercials, 65% indicated a preference for placement as the first commercial in a pod.

Perceptions on VCRs and Bonus Viewing

Table 3 summarizes agency perspectives on zipping and VCRs. Agency personnel's reactions to the statement, "current television advertisements are not as effective as in the past due to zipping of commercials during VCR playback," were slightly above neutral (mean=3.243, SD=.99), indicating consistency with their earlier viewpoint that zipping is no more damaging than physical commercial avoidance. A slight agreement (mean=3.285, SD=1.12) was also expressed relative to the statement, "highly entertaining commercials will cause viewers to temporarily stop fast-forwarding." This is compatible with the respondents' preference for more entertaining commercials as a means to combat zipping. In short, there appears to be a belief that commercials with higher entertainment levels have the potential to reduce electronic zipping.

Agencies had somewhat stronger feelings on the other issues. For example, the statement regarding additional exposure opportunities from VCR playback resulted in a mean response of 3.513 (SD=.88). Respondents expressed moderate agreement with a second statement regarding the concept of "bonus viewing" (mean=3.304, SD=.94) and a question stating that multiple playbacks result in an added bonus (mean=3.487, SD=.95). These results are consistent with researchers who propose that time-shifting (recording programs and viewing them at a later time) is an advantage to advertisers as it reaches audiences that would otherwise have been lost (Levy 1981; Sternberg 1987).

However, agencies are less in agreement with previous research which indicates that the visual element of zipped commercials is not completely lost since the viewer must keep his/her eyes on the screen to avoid zipping into the programming (Metzger 1986; Greene 1988). Agencies overall do not believe that a commercial maintains its full impact during zipping (mean=2.735, SD=1.08), and they do not consider zipping as forced viewing at fast speeds (mean=2.535, SD=1.17). Although agencies tend to accept that VCRs provide an expanded audience through bonus viewing, they are also skeptical as to potential benefits associated with bonus viewing.

There has been some discourse within the advertising industry regarding advertising rates and audience reduction due to zipping. Due to potential advertising losses associated with zipping, rate adjustments have been suggested to take into account the lost audience (Yorke and

TABLE 1

AGENCIES' PERCEPTIONS OF ELECTRONIC ZIPPING

	Mean	S/D
Zipping should be considered non-viewing	3.885	1.06
Zipping decreases advertising effectiveness	4.168	0.96
Zipping of television commercials reduces the number of viewers who see advertisements	3.276	1.02

N = 113, Five point scale: 5 = strongly agree, 1 = strongly disagree

TABLE 2

RESPONSE TO ZIPPING

	Percentage
IS ZIPPING MORE DAMAGING THAN TRADITIONAL MEANS OF COMMERCIAL AVOIDANCE?	
Yes	13.6%
No	75.5%
Not sure	10.9%
HAVE YOU MADE MODIFICATIONS?	
Content Modified	11.9%
Placement Within Programming Modified	15.7%
Placement Within Pods/Ad Clusters Modified	8.7%

N = 110

TABLE 3

AGENCIES' PERCEPTIONS OF VCRS AND BONUS VIEWING

	Mean	S/D
Current television advertisements are not as effective as in the past due to zipping of commercials during playback	3.243	0.99
Highly entertaining commercials will cause viewers to temporarily stop fast-forwarding	3.285	1.12
VCRs create additional exposure opportunities for advertisers	3.513	0.88
Since VCR playback means viewing of programming that otherwise might have been lost, any additional exposure means "bonus viewing"	3.304	0.94
Recording of popular programs presents an added bonus when the programs are played back more than once	3.487	0.95
A person has his/her eyes on a television commerical while it is being fast-forwarded; therefore, the full impact of the commercial is not lost	2.735	1.08
An advantage of zipping is that it is a form of forced viewing at fast speeds	2.535	1.17
Advertisers should receive a reduction in television advertising rates because of zipping	2.464	0.80

N = 113, Five point scale: 5 = strongly agree, 1 = strongly disagree

Kitchen 1985; Kitchen 1986). Others, however, indicate that zipping is negligible, accounting for just a minor part of a rating point (Swisshelm 1984), and no rate adjustments are warranted. The agency personnel surveyed in this study were of the opinion that advertisers should not receive a rate reduction because of zipping (mean=2.464, SD=.80). This finding is hardly surprising; if advertisers receive reduced rates, agency commissions will decrease.

Discussion

Clearly, agencies are concerned about the issue of zipping and its possible negative influence on advertising effectiveness. Yet few agency personnel have attempted to deal with the problem. There are a number of possible explanations for this lack of action.

First, this lack of response may be indicative of attitudes prevalent within the advertising industry. Apparently, commercial avoidance, in general, and electronic zipping, in particular, are viewed as "a fact of life." Advertisers themselves have done little in the way of developing strategies to combat the zipping problem. Further, Nielsen has yet to incorporate the effects of zipping into their rating system (Lindstrom 1991).

If advertisers perceive the effectiveness of television advertising to be significantly diminished because of zipping, they may funnel advertising dollars into other media or reallocate the funds for sales promotions. Therefore, advertising agencies may downplay the impact of electronic zipping because of the potential for loss in revenues.

It is also possible that, while agencies are concerned about the effects of zipping, they have not yet identified an acceptable solution to the problem. Therefore, lack of response should not necessarily be considered a lack of concern. Additional research is needed to establish guidelines and identify appropriate strategies.

Guidelines are particularly important considering that zipping is a somewhat unique form of commercial avoidance. Generally, physical avoidance is used to "do something" such as getting a snack or completing a task. Zipping, however, is strictly a commercial avoidance and time-saving strategy. The primary intent is to completely avoid watching commercials as opposed to using the time for other activities.

Conclusions

Advertising agency personnel indicate that they are concerned about electronic zipping, yet overall, there have been minimal efforts to combat the negative influence of the practice. However, with VCR penetration steadily increasing, it would be a risky strategy to ignore the issue and consider it just another form of commercial avoidance. Prescriptive guidelines are thus critical for advertising professionals to begin successfully dealing with the problem.

While this research and previous research indicate that more entertaining commercials are the most common method used to reduce the negative effects of zipping, a recent study suggested that placement of commercials within the pods and the program might actually be a more effective means of combatting zipping (Cronin and Mennelly 1992). Interestingly, only a small percentage of agency personnel indicated that they have modified commercial placement. Modifications of the placement of television commercials within programming was recommended nearly twice as often as modifications of the placement of the messages within pods or ad clusters. Yet, the clear majority of agency representatives indicated a preference for being the first commercial in the pod; Cronin and Mennelly (1992) found that zipping rates were lowest for the first commercials in the pod.

A unique suggestion for combatting the zipping problem is to eliminate the pod concept. One agency executive proposed that commercials should not be jammed together (Swisshelm 1984). Rather, they should be inserted into programming one at a time so that fewer viewers would take the trouble to avoid the minimal interruption.

A combination of message and media strategies may be the most effective method of reducing the overall negative effects of zipping. If advertising professionals continue to develop increasingly entertaining commercials and strategically place those commercials within programming (paying a premium if necessary), it is possible that viewers engaged in time-shifting may exhibit lower levels of zipping behavior. Further, it is possible that strategic placement of commercials within pods can help to reduce the negative impact of zipping behavior on advertising exposure and recall.

(References available upon request from the authors.)

PRODUCT AND PRICE MANAGEMENT

THE EXCHANGE VALUE CONCEPT IN MARKETING

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Abstract

The concept of exchange value in marketing is a useful tool to position product and service offerings. Consumers use value to evaluate the worth of the offerings as compared to competitive offerings. From the seller's perspective, buyer oriented pricing involves understanding consumers' benefit needs and setting a price consistent with this value. This paper suggests that the exchange value concept is a medium for achieving a more balanced relationship between buyer and seller in the market place. Recommendations are made to move toward marketing terminology that embraces the interaction between buyer and seller as moderated by the exchange value concept.

Introduction

As more customers demand the right combination of product quality, fair pricing, and good service, value is becoming the marketing watch word of the 1990's (Power 1991). When it comes to value, today's customers want to know precisely what they are receiving for their money (Levere 1992). Value is derived from simultaneous consideration of customers' needs in terms of price and product quality. While product and price decisions are discussed separately in text books and often treated temporally in the strategic planning process, it becomes clear that the management of these two marketing variables have become simultaneous concepts.

The exchange paradigm has emerged as a framework useful for conceptualizing marketing behavior (Bagozzi 1975). Exchange is generally accepted to be the act of obtaining a desired product from someone by offering something in return. Bagozzi's exchange model (1975) involves both utilitarian (anticipated use or tangible characteristics) and symbolic (psychological, social and other intangible entities) exchange. While marketing exchange depends on the nature of the symbolic and utilitarian mix, it is very difficult to separate the two. Bagozzi suggests that the process involved in the creation and resolution of an exchange relationship constitutes the subject matter of marketing.

The concept of value in the exchange process focuses upon two marketing variables, product/service benefits and price (Figure 1). These variables are major concerns shared by both buyer and seller in determining value. The market exchange process suggests the range of benefits and quality of each benefit that would provide a balance of value for both parties. A marketer seeks the attainment of marketing goals such as profit, market share, image, industry leadership, or simply survival, while the consumer seeks satisfaction of utilitarian and/or symbolic needs. Product and price decisions need simultaneous consideration to provide a balance in value for both buyer and seller. These decisions are key for building long-term relations between buyer and seller to achieve their respective objectives. In addition, the marketer uses communication and distribution decisions to maintain or to enhance value by communicating and delivering value to the buyer. The exchange value concept suggests a long run balance in value for both parties. When either the consumer or marketer feels short-changed on value, then the relationship weakens and that party seeks new partners at considerable cost in terms of time and money.

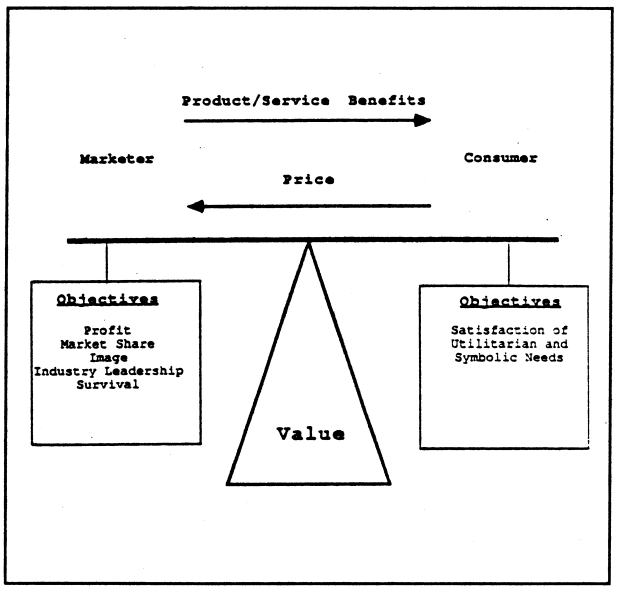

Figure 1: The Marketing Exchange Model

Value Perceptions: Marketers and Consumers

In today's competitive business environment, a premium is placed upon a firm's ability to make good, fast, and frequent marketing position decisions to maintain market position, and a balanced relationship with the consumer.

Product/service and price decisions are strongly inter-related in the positioning decision. Price is an indicator of the product's quality while the cost invested attaining certain levels of quality are reflected in the price. In the short-term, value marketing can add up to a double bind for marketers, often spelling added production and marketing costs and selling at lower unit prices (Power 1991). However, when a company makes an "investment" in research and development, personnel, and capital, the company is able to drive down costs through productivity and develop quality products and services through technology and reliability. The long-run results will be better value for both the buyer and seller. For many marketing managers, the profitable pricing of products by marketing firms has been an elusive goal. Perhaps the complexity of the marketing variables that have to be harnessed contribute to this difficulty.

From the buyers' viewpoint, it is total relative value that provides the willingness to pay a particular price for a given offering (Dodds and Monroe, 1985; Monroe and Krishnan, 1985; Zeithaml, 1988; and Dodds, Monroe and Grewal, 1991). The price set by the marketer must be consistent with the buyers' perception of quality and monetary sacrifice. A product perceived to be of higher quality or offering a better set of features than a competitive offering, will be granted the privilege of a premium price. But, a product perceived to be of lower quality or not offering the right set of features competitively will be forced to accept a discount price. The key point is that the buyer will make a purchase decision on the basis of perceived value, not solely on the basis of minimizing the price paid or maximizing product benefits. As Power (1991) puts it, "Value means getting more at a better price."

A Theoretical Perspective of the Marketing Mix and Value

Perceived value might be argued to be a combination of acquisition and transaction value. In a model of consumer choice that pulled together economic reasoning with principles of psychophysics and cognitive psychology, Thaler (1980, 1985) proposed that buyers evaluate a purchase opportunity by first judging the value of the offer, and then deciding whether to make the purchase. Thaler's transaction utility theory is used to position product and price as the marketing mix variables shared by the buyer and seller in determining acquisition value, while promotion and channel decisions, in the marketer's domain, enhance the overall value by communicating and delivering the transaction value. Since Thaler's model depends on the role that price plays in the evaluation process, three price concepts are described: (1) the actual price of the product; (2) maximum acceptable price for the product; and (3) a reference price which may be the expected price to pay, last price paid or the normal market price.

Acquisition value is the perceived benefit of the product compared to the outlay. The perceived benefit of the product is equivalent to the utility of paying the maximum acceptable price. If maximum acceptable price > actual price, then utility is positive; if maximum acceptable price = actual price , then utility is zero; if maximum acceptable price < actual price, then utility is negative. The idea of value, giving more product at a better price is synonymous with positive utility. Therefore, product and price issues will strongly influence acquisition value.

Transaction value is positive if the actual price is less than the reference price. Communication and distribution decisions can either enhance the reference price and/or lower the actual price. These decisions become relevant in the marketing exchange model by enhancing transaction value.

Communication Issues

Price can be viewed as consisting of two parts: 1) commodity price which fluctuates with ebb and flow of supply and demand and 2) premium price differential which is based on perceived value. If a marketer can estimate market perceptions of value, then three alternatives suggested by Gross (1978) for increasing reference price through communication are:

1. Perception opportunities where the market may not perceive the advantage one seller has over another competitor. The seller with the advantage must communicate to change the perception of the product/service and therefore increase reference price.
2. Value opportunities occur when the market places low value on an attribute where one brand excels on this attribute. The seller must communicate to change values placed on the attributes to enhance reference price.
3. Target market opportunities occur when market segments with similar values favorable to purchase can be identified, developed and channel information communicated to in order to increase reference price.

Additionally, reference price can be enhanced by emphasizing some of the intangible symbolic benefits of a product. Successful communication of the utilitarian and symbolic aspects of the products should develop and penetrate the target market to lower price through economies of scale.

Distribution Issues

Distribution decisions can have an impact on transaction value through selective placement of the products in retail outlets consistent with the initial target market of innovators and early adopters. This would enhance the reference price. Over the life of the product, judicious management of the product/service will protect the reference price from dropping sharply. Also, efficient methods of physical distribution will reflect in lower costs that will give latitude for lower actual prices.

The above situations can individually or collectively work to increase reference price and/or to decrease actual price which will enhance the transaction value. By placing communication and distribution decisions in the second phase of the marketer's decision process, the exchange of value will then be the sum of the acquisition value and transaction value (Figure 2).

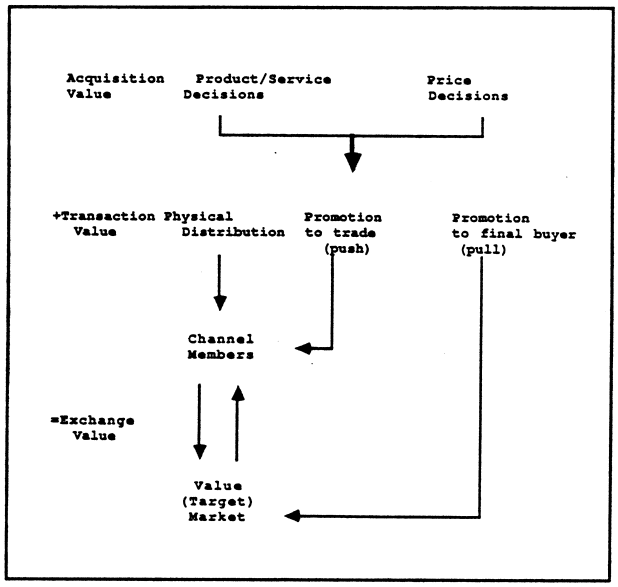

Figure 2: Value Formation Through the Firm's Marketing Program

Exchange Value in Marketing Practice

The interactive relationship of product, price, and the value concept as the center point in marketing transactions suggests a restructuring of marketing thought and practice. The discussion of restructuring starts with the traditional tools of the marketer and proceeds to the concept of value that brings about a more balanced practice to the marketing transaction.

A Traditional Concept: Price Elasticity

Demand estimation is a cornerstone in forecasting the profitability of the firm. The behavior of demand in pricing decisions is the focus of the price elasticity models. However, many of the economic assumptions such as no competitive reaction, perfect information by the buyers, and no other changes in the marketing mix give into a simplistic estimation that does not have the credibility to be used in actual pricing practice. Price elasticity is an excellent tool for understanding the price-demand relationship. While price elasticity is operationally deficient due to these untenable assumptions, it can still act as a guide in price setting.

New Concepts: Product Benefit and Value Elasticity

While price sensitivity analysis is well developed, concepts exploring the effects of product/service mix benefits and value on demand have been neglected. The concept of elasticity can be extended to include the relationship between product benefit and demand, and the value and demand relationship. It has been demonstrated that consumers buy based on value. As the market environment drifts, marketers need to keep value in focus by adjusting price and/or product benefits. The following discussion lends support to the reexamination of traditional marketing concepts.

Benefit Elasticity. A marketer can position a product's value by adjusting the quality level or number of features. The strength of benefit elasticity is influenced by the importance that consumers place on the incremental change in benefits. Changes in highly favored benefits will increase demand elasticity while changes in less favored benefits will be more inelastic. For example, advertising for luxury cars tends to focus on the quality of the car. Price is mentioned merely to position the quality perception, but is rarely used in a competitive comparison mode. But, in the economy car market, the emphasis is on price. There is little to gain by advertising differential benefits.

Value Elasticity. Product and service attributes (quality level and number of attributes) and price adjustments are perceived differently in distinct markets. In an economy market, value enhancements are strongly influenced by the price adjustment, whereas, in a luxury market, value is dominated by the product/service mix decision. Yet, product and price decisions can have positive effects on value in both markets if the changes are considered simultaneously. Value elasticity captures this relationship. Value elasticity could conceptually be calculated as *the*

change in demand times change in price divided by the change in product/service benefits.

The elasticity of incremental product benefits is assumed to be strong in a luxury market. Manufacturers who can deliver better product benefits, perceived to be important by the target market, can increase volume significantly through a higher perception of value. Price might be raised simultaneously to obtain the needed revenue to cover the cost of the quality improvement. In an economy market, the addition of extra product features (benefits) may not substantially increase demand. But, when coupled with a price decrease, the net result may give substantial increases in demand that will not be easily and quickly duplicated by the competition.

The major point is that changing price and product benefit at different times or changing price only may lead to undesirable demand implications. When product and price are implemented together in such a manner to change the perception of value, the results can be beneficial for both the marketer and the consumer.

The Price-Benefit-Value Relationship in Marketing Practice

This paper suggests market segments are perceived to be on a "luxury to economy" continuum, where the economy segments are dominated more by price while the luxury end of the continuum is influenced more by the product attributes. The marketer has options to change the value of their product/service offering where some will be beneficial to both buyer and seller, some will be detrimental to both, while some will be beneficial only to one party.

Price Dominant Market: The option to change only price results in significant changes in demand. However, in a price dominant market, the strength of the price effect can be enhanced or reduced by making simultaneous benefit changes to significantly affect the value of the exchange. When simultaneous price-product/service mix decisions are made, four possibilities are considered. Inverse price-product decisions produce elastic outcomes. But, when price and benefits are decreased, two outcomes are possible. If the consumer perceives the price decrease to be more significant than benefit reduction, then overall value will increase. But, if the changes are perceived in a manner where the perceived benefits decrease is greater than the price reduction, then value decreases. Conversely, price increases needs to be tempered with an increase in benefits in such a way that there is a net gain in value for the buyer. Given simultaneous price and product decisions, it would be in the marketers interest to utilize communication/distribution options to enhance the acquisition value of the exchange to increase the probability of a perceived positive gain in value.

Benefit Dominant Market. In a luxury market, product benefits are more salient than price. A benefit increase will have strong positive effects on demand if price is not changed. When both price and benefits are changed in the same direction, the marketer's job is to see that the change, intended to increase value, is actually perceived in that way. In the luxury market, it would be much easier to explain added value when both product benefits and price are increased than for the economy market. In either market, decreasing the attractiveness of the dominant decision variable, price or product benefit, will create an imbalance in the buyer-seller relationship. Increasing the attractiveness of the key variable will enhance the value and further strengthen the relationship. The key is to maintain a balanced value relationship in the market, but resist the pressure to accrue short term objectives such as profit at the expense of disrupting the value relationship.

Value Market. A third market is where medium quality and medium prices also produce value for both buyer and seller. The true number of markets would be dictated by the actual number of significant price points and quality categories. The value market exists where the salience of price and product benefits have a near equal weight in the transaction decision. Foreign automobile makers have been successful with an entry strategy of offering a comparable quality car at a lower price, or a comparably priced car at a better level of quality and service. Both strategies have been successful because the concept of enhanced value is fully understood by both the seller and the buyer.

Value Marketing

Stability in the market is dictated by the ability to maintain the balance of exchange value and strive to enhance the value of the transaction through communication and distribution activities. When the balance of the price-benefit relationship loses its equality of value enjoyed by both parties, the marketing relationship dissipates and becomes one sided. The value matrix (Figure 3) suggests making product and price decisions simultaneously to keep value in "focus" to the consumer segment. Deviation upward from the diagonal "buys" potential long-term differential value in the marketplace while foregoing short term profit objectives. Deviations downward from the diagonal may cause irreparable damage to the exchange relationship when short term profit becomes the dominant marketing objective. Marketers need to work to maintain a balance in the relationship by working along the diagonal, occasionally making a strategic foray into the upper right of the matrix to gain market share, but resisting

the short term temptation to move to the lower left of the matrix.

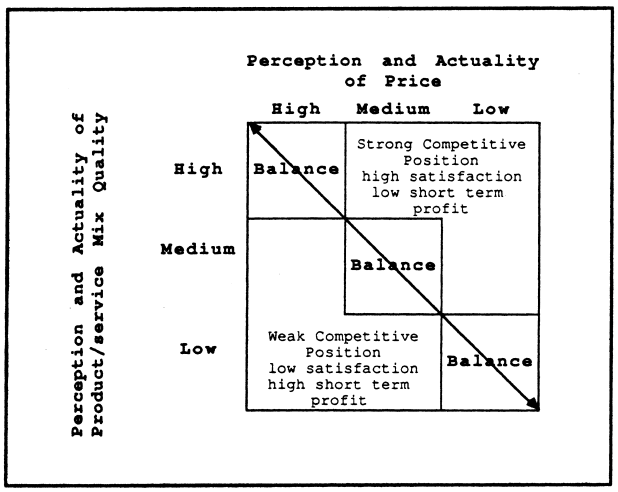

Figure 3: Value Matrix

Conclusions

A richer and fuller understanding of the marketing concept lies in understanding and explaining the dual nature of the phenomenon itself, rather than understanding it from the perspective of only the seller. The exchange value concept suggests that marketing practitioners need to view marketing as a social system of exchange rather than from their perspective as a marketing manager.

A case has been presented for the positioning of product and price as key variables in balancing exchange value between the buyer and seller. There is an opportunity to realign our current marketing thought to discuss marketing in terms of mutual benefit to both buyer and seller and to use value as the moderating variable in the exchange model. The value matrix clearly illustrates the balance that needs to be achieved where the customer achieves satisfaction with the purchase and the seller attains long term marketing objectives. Deviations away from the diagonal affect value in favor of one of the parties and threatens the long term prospect of a satisfactory and profitable relationship.

The recognition of value in marketing decisions should encourage the modification of terms in use today such as benefit segmentation, product positioning, target markets, product lines as well as price elasticity. Consumers do buy products and services, and pay a price for the benefits that they receive. By treating these variables separately, the opportunity is inviting for the marketer to engage in a win-lose strategy. Instead, marketing practice should be based on methods of creating and maintaining a value balance. This would embrace the marketing concept and encourage win-win strategies. Five seller oriented marketing terms that should be shifted to a more balanced value orientation are:

1. Value elasticity replacing price elasticity - The relative change in demand due to the relative change in price and/or product benefit expressed as value.
2. Value segmentation replacing benefit segmentation - Grouping buyers according to the trade-offs buyers are willing to make between the benefits they seek from the product and the price they are willing to pay.
3. Value lines replacing product lines - Groups of products closely related because the mix of benefits and price satisfy a particular group of customers.
4. Value positioning replacing product positioning - The place an offering occupies in a consumer's mind relative to its product benefits and price versus competitive product offerings.
5. Value markets replacing target markets - Specific segments of potential consumers having similar price and product benefit sensitivities toward which an organization directs its marketing program.

The importance of positioning a product's value in the marketplace with respect to price and product is a critical factor in reaching the intended target market. Successful firms, in terms of making profitable decisions, have taken a proactive approach by understanding how price and product decisions work and how consumers' perceive these variable. The concept of value in the exchange process is a useful tool for the marketer in positioning product offerings, and for the consumer in evaluating the worth of the offering as compared to competitive offerings. If the marketer and the consumer perceive the tradeoff between product benefits and price to be acceptable, then the transactions result in mutual satisfaction for both parties.

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(Available from Author)

THE EFFECTS OF FRAMING AND PRICE ON CONSUMERS' PERCEPTIONS OF NONPROFIT SOLICITATIONS

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Abstract

This paper presents the findings of an experiment investigating ways in which nonprofit organizations raise funds through product offerings. Prospect theory is used as a framework for describing two alternative framing scenarios: a product purchase versus a product gift in return for a donation. The study investigates which framing scenario produces a greater likelihood of consumers to engage in a transaction with the organization across different price levels. The findings suggest that price has a greater impact when an exchange is framed as a donation than when it is framed as a purchase.

Consumers' Perceptions of Nonprofit Solicitations: Some Preliminary Evidence on Framing and Price Effects

Nonprofit, charitable organizations often market products to the public as a means of soliciting funds. An organization has the option of either presenting the exchange as the purchase of a product or as a donation for which a product will be provided in appreciation. For both of these scenarios, traditional economic thought (i.e. expected utility theory) suggests that consumers make rational judgments about transactions based solely on the costs and benefits of the exchange. Thus, the framing of the exchange alone (i.e. presenting the monetary amount as a purchase price versus a donation) should not have any effect on the likelihood to engage in the transaction. However, recent investigations of the effects of framing suggest that the manner in which an exchange is framed may influence the likelihood that consumers will engage in a transaction (Kahneman and Tversky 1979, 1984; Tversky and Kahneman 1981; Thaler 1985). The purpose of this paper is to report the findings from one experiment as part of an ongoing research effort investigating the effects of framing on the likelihood of consumers to engage in transactions with nonprofit organizations.

Solicitation Requests by Nonprofit Organizations

There are several strategies available for nonprofit organizations which utilize products to raise funds. One strategy involves asking consumers to purchase a product, represented in the following scenario:

> Scenario 1: A product is offered for sale at a specified price, with the proceeds going to support a nonprofit, charitable organization making the purchase request.

Another strategy might be to request a donation, and provide a product in appreciation for supporting the organization, represented by the following scenario:

> Scenario 2: A nonprofit, charitable organization seeks a specified donation to support its work and provides a product in appreciation.

According to expected utility theory, the two exchange scenarios are essentially equivalent for a consumer in monetary terms in that the economic costs and benefits are the same (Von Neumann and Morgenstern 1944). Thus both scenarios should yield the same utility, or satisfaction.

Framing Effects

Kahneman and Tversky's (1979, 1984; Tversky and Kahneman 1981) prospect theory offers a more descriptive theoretical perspective which incorporates the notion of phrasing differences in equivalent economic alternatives. Contrary to the predictions based on expected utility theory, prospect theory posits that preferences are influenced by the way various outcomes are described. Kahneman and Tverksy term the effects of different descriptions as "framing" effects and argue that a particular decision problem can be framed in multiple ways that give rise to different preferences. The results of their investigations indicate that alternatives are evaluated on the basis of gains and losses relative to a reference point thus

influencing the evaluation and preference for one alternative over others. Related research also suggests that decision frames influence choice (Puto 1987, Qualls and Puto 1989), relate to attributes that consumers consider important (Bettman and Sujan 1987; Wright and Rip 1980), and influence preferences in marketing situations (Puto 1987; Thaler 1985). Thus, this research suggests that the gains of scenario 1 may be evaluated differently than those of scenario 2. Hence, two important questions to investigate are: (1) are consumers more or less likely to engage in a transaction with an organization if that transaction is presented as a donation versus a purchase, and (2) does the transaction amount influence this likelihood?

Hypotheses

For the consumer, both of these exchange scenarios involve a sacrifice (i.e. dollars "given up") and a benefit (i.e., the product). The sacrifice remains constant, even though it may be called a "purchase price" in the purchase frame and a "donation" in the donation frame. For different price levels within each frame, both expected utility theory and prospect theory would predict that:

H1: There will be an inverse relationship between transaction amount and likelihood of engaging in the transaction.

That is, adopting the traditional downward sloping demand curve, as price increases demand decreases. Expected utility theory and prospect theory diverge, however, in terms of describing perceptions of the benefits gained from the two exchange scenarios. Expected utility theory considers the perceived benefit as constant across the two scenarios because the product received in both cases is economically equivalent. In contrast, prospect theory suggests that the perceived "gain" should differ in the two scenarios.

When the exchange is framed as a purchase (scenario 1), consumers are cued to consider the transaction amount as representing the "price" of the product. A relatively small proportion of the transaction amount would be viewed as "commission" or "profit" to be used for the organization's activities. Further, an important issue relates to the level of correspondence between the price of the product and the requested donation amount. The effect of the purchase frame on the price is most likely to occur when the price of the product approximates the requested donation amount. For example, if a local public television station were to provide a coffee mug in return for a $25 donation, patrons would likely consider the mug a small token of appreciation. Regardless of how the exchange is framed it is unlikely that patrons would consider the exchange a "purchase" with proceeds going to the television station. The patrons' notion of the retail value associated with the mug would be too low compared with the requested donation amount. Thus, the plausibility of a purchase frame is dependent on an appropriate "match" between the price of the product and the requested donation amount.

When the exchange is framed as a donation (scenario 2), consumers are cued to regard the transaction amount as representing a "donation" to be used by the organization for its activities. A lesser proportion of the transaction amount would likely be attributed to the retail value of the product. Perceptions of value are influenced by a product's price; that is, ceteris paribus, a higher price signals higher levels of quality (Rao and Monroe 1989) and thus, greater value is attached to the product (Grewal 1989). The "purchase" frame should result in higher perceived benefits compared to the "donation" frame since the consumer would perceive the product as having greater value (i.e., same monetary sacrifice for a more expensive, and hence, more valuable product). Finally, it is likely that the frame which suggests a greater product value, and a higher level of benefits (i.e. the "purchase" frame), would produce a greater likelihood of engaging in the transaction. Thus, in an exchange with a nonprofit organization, the manner in which the gain is framed should influence the likelihood that consumers are willing to engage in the transaction. To state the effects of framing more specifically:

H2: If the exchange is framed as a purchase, there will be a higher likelihood of engaging in the transaction than if the exchange is framed as a donation.

Methodology

Pretests were conducted to select an appropriate product and to determine suitable levels of price. Specifically, the product selected had to be representative of those that consumers regard as products which charitable organizations use in their fund raising efforts. Furthermore, it was necessary to select a product whose price could vary sufficiently to provide a setting in which the purchase frame effect could occur. Preliminary interviews were conducted with ten participants asking them to recall products that they had either purchased or were given as a gift in a fund raising promotion. From these interviews several products of nominal retail value were identified including artificial poppy flowers and candy bars. However, these products were considered unsuitable for this study since the range of plausible prices would be too restrictive to allow for sizable price manipulations. The participants also identified four products of higher retail

value: a pen and pencil set, imported chocolates, a travel alarm clock, and a travel mirror.

In order to identify which of the four products was most suitable for use in the study, a second pretest was conducted. One-on-one interviews were used with a convenience sample of thirty-two faculty and staff members of a small northeastern university. Each participant was exposed to two of the four possible product descriptions to identify the product that the participants viewed as one they would most likely find in a fund raising effort by a charitable organization. Estimates of expected price ranges for the products were also measured to determine an appropriate price manipulation. The pen and pencil set was judged most likely to be used in soliciting funds by a charitable organization. The pen and pencil set also received the widest range of expected normal prices, therefore, allowing for a sizeable price manipulation. Based on the pretest's results of acceptable price levels, five and fifteen dollars were chosen to represent low and high price levels, respectively.

The framing manipulations involved the use of different textual descriptions in the set of instructions for the questionnaire. No actual organization's name was used in the different frames; thus, existing attitudes toward any specific organization should not have confounded the responses. For descriptions of the two framing manipulations, see the Appendix. Two levels of framing (purchase and donation) and two levels of price (low and high) were fully crossed in a 2 X 2 randomized factorial design.

The primary dependent variable, likelihood to engage in the exchange, was measured using a single seven-point rating scale. Subjects were asked to indicate, from very low to very high, the likelihood that they would purchase the pen and pencil set at a specified price or donate a specified amount in return for the set. An additional dependent variable, estimate of normal retail price, was obtained by an open-ended question and used to help interpret the results.[1]

A total of four hundred seventy questionnaires were distributed to faculty and staff at two small northeastern universities. A response rate of thirty-nine percent yielded one hundred eighty-five questionnaires. Due to three substantially incomplete questionnaires, however, the analysis was based on one hundred eighty-two usable questionnaires.

Results and Discussion

To test for differences in subjects' likelihood of engaging in the transaction due to framing and price levels, a two-way analysis of variance was performed (see Table 1). Results from the analysis indicate a significant effect for the framing by price interaction and suggest that the effects of one factor depend upon the level of the other factor. A visual inspection of the means by cells (see Table 2) illustrates an inverse relationship between price and subjects' likelihood of engaging in the transaction across both framing conditions. Therefore, these findings provide support for hypothesis one.

It is important to point out that price appears to have more impact in the donation frame condition than in the purchase frame condition. An examination of the means (see Table 2) reveals that in the high price condition subjects are more likely to engage in the transaction when it is framed as a purchase ($\overline{X}$ = 3.88) than when it is framed as a donation ($\overline{X}$ = 2.63). However, in the low price condition the means suggest a small effect of framing on subjects' likelihood of engaging in the transaction ($\overline{X}_{purchase}$ = 4.50, $\overline{X}_{donation}$ = 5.06).[2] Furthermore, a t-test was conducted on the subjects' estimates of retail price to test for differences across the two framing conditions. The results show a significant effect for framing ($t(118) = 2.09$, $p < .04$) indicating that the purchase frame condition ($\overline{X}$ = 12.50) elicits higher retail price estimates than the donation frame condition ($\overline{X}$ = 8.86), as expected. These findings provide partial support for hypothesis two. This effect is consistent with the conceptual argument presented earlier. That is, as the price (i.e., the sacrifice) increases, the likelihood of engaging in the transaction does not shift dramatically in the purchase frame condition because the benefit of the exchange (i.e., retail value of the product) increases as the sacrifice (i.e., price) increases, thus maintaining a fairly uniform trade-off. More specificaly, subjects might consider that they are getting more as they give-up more. However, this would not be the case for subjects in the donation frame.

Limitations and Future Research

Although the artificiality of the study (e.g., a hypothetical organization) constrains the implications that can be drawn, this discussion can be viewed as a starting point for further research. Thus, additional research is needed before any managerial implications can be considered credible. Moreover, there are limitations of this study that could be explored in future research. The measure used to assess subjects' likelihood of engaging in the transaction was a single-item measure. Future research is needed to incorporate multiple measures that are alternative indicators

of this dependent variable (Gerbing and Anderson 1988). In accordance with the pretest, the price levels used in the study fell within the subjects' acceptable price ranges. However, use of prices outside of these ranges might lead to other interesting findings than those revealed in this study.

Managerial Implications

For managers of charitable organizations, raising funds is a critical component of the job. The results of this study suggest that the framing of a fund raising promotion may affect the likelihood that potential supporters will engage in the transaction. Specifically, if the organization is requesting nominal transaction amounts, it appears that other factors (e.g., the degree to which the person knows and supports the organization, timing of the request) might be more important than the framing of the request. However, if the organization is seeking higher transaction amounts, the results of this study suggest that framing the request as a purchase may be more effective than framing the request as a donation.

TABLE 1
ANALYSIS OF VARIANCE RESULTS

SOURCE OF VARIATION	df	Sum of Squares	F-Value	P-Value
FRAME	1	3.58	1.07	.3039
PRICE	1	72.09	21.42	.0001
FRAME X PRICE	1	25.35	7.53	.0070
ERROR	120	403.85		
TOTAL	123	502.93		

TABLE 2
SUMMARY OF MEANS

FRAMING CONDITION	$5	$15
Purchase	4.50	3.88
	(1.70)	(1.98)
Donation	5.06	2.63
	(1.77)	(1.87)

*** The standard deviations are presented below the means in parentheses.**

FOOTNOTES

[1] Household income was also measured using an open-ended question, however, results from the analysis indicated that household income as a covariate was not significant.

[2] Some insight into why subjects did not appear to respond to framing differences in the low price condition was provided by unsolicited comments at the bottom of the survey form. It was suggested that at $5 (the low price condition), the sacrifice was nominal and subjects did not care if they received anything in return. That is, the frame had little effect since subjects considered the low price level to be an unimportant transaction amount.

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APPENDIX

DESCRIPTIONS OF FRAMING MANIPULATIONS

Purchase Framing:

Assume that you have been approached by a valid nonprofit charitable organization. You support this organization and agree with its purpose and objectives. This organization would like you to purchase a boxed pen and pencil set for [$5.00/$15.00]. The set features a slim design, high impact glossy black casings, and a gold-finished clip. Standard ball point and lead refills are widely available.

Donation Framing:

Assume that you have been approached by a valid charitable nonprofit organization. You support this organization and agree with its purpose and objectives. This organization would like you to make a [$5.00/$15.00] donation and in return will give you a boxed pen and pencil set. The set features a slim design, high impact glossy black casings, and a gold-finished clip. Standard ball point and lead refills are widely available.

PERCEPTUAL DIMENSIONS OF ODD AND EVEN PRICING

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Abstract

This study examines the dimensions consumers use to perceive odd and even prices. A-priori dimensions were developed to measure these perceptions. Subjects were shown ads for low, medium and high-priced products that were either even or odd- priced. They were then asked to respond to a series of questions designed to measure perceptual dimensions. A factor analysis was performed to evaluate the a-priori dimensions. The results confirmed these dimensions.

Perceptual Dimensions of Odd and Even Pricing

Odd pricing is technique used by retailers to stimulate sales (Berman and Evans 1986). Although the origin of this pricing procedure is lost in antiquity, it is extensively used (Dalrymple and Thompson 1969). Its effectiveness is, however, mostly a matter of speculation (Schindler 1984).

The definition of an odd price is also unclear. Some suggest an odd price is any price marginally below a full dollar amount, $9.99 and $9.98 for example (Lewison and Delosier 1986, p. 574; Berkowitz, Kerin and Rudelius 1989, p. 317). Others define an odd price as ending in an odd number. In this view, $9.98 would not be considered an odd price. For higher priced products, odd prices are often identified as being rounded down in dollar amounts. Thus, $200 would be considered an even price and $199 would be considered an odd price (Berman and Evans 1986, p. 440).

Background

Several explanations have been offered for the use of odd pricing. One explanation is that consumers focus upon the dollar portion of a price and ignore the cents portion. Thus, by pricing an item below a full dollar amount, the retailer will lower the perceived price by one dollar and increase sales.

Lambert (1975) evaluated this explanation by asking respondents to give an estimate of the monetary value of a set of products which was either even or odd priced. He found no consistent evidence to support the belief. Schindler and Wiman (1983), however, produced evidence supporting the "rounding down" effect. They asked subjects to recall prices they had seen two days earlier and found that respondents were more likely to underestimate odd prices than even prices.

Schindler (1984) conducted an experiment which tested whether consumers' tendency to notice a price increase in odd prices differed from their tendency to notice a price increase in even prices. Respondents were shown pictures of products which were given either odd or even prices. Two days later, the respondents were shown the same pictures with half of both the odd and even prices increased and the other half unchanged. The respondents were asked to indicate for each product whether or not the price had changed from the price they had seen two days earlier. The results indicated that the respondents were less likely to notice the price increases in the odd priced products than in the even priced products. Evidence indicated that this was due to a poor memory for odd prices and to a bias toward judging that the odd prices were not the ones that had increased. This study implies that consumers may have a lower awareness of a price increase for odd prices.

Other studies have failed to find any effect of odd pricing on sales (Dalrymple and Haines 1970; Georgoff 1972; Ginzberg 1936). Some hypothesized that this is due to the fact that consumers are so accustomed to odd prices that they use them as "price points," implying that if retailers were to abandon odd prices, consumers would respond to the resulting increase in price rather than to the movement from odd to even prices.

Most of the previous research on odd pricing has focused on sales effects and not on effects on perceptual effects or price illusions. Perception is basic to purchasing behavior. When positive perceptions are coupled with high importance attached to product attributes, purchase is likely to result. Likewise, the perception of a product's price will lead to evaluations of that product (Schiffman and Kanuk 1991). According to Monroe (1977), the key to understanding how price influences purchase decisions lies in determining how buyers perceive prices.

The bulk of price perception research has not specifically considered the effects of contextual variables, including the product itself, on price perception. Quigley and Notarantonio (1992) studied the perceptions consumers have of odd and even priced products. Subjects were given a package of information containing three advertisements for low, medium and high priced products. Odd and even prices were randomly assigned to each of the ads. Subjects were asked to respond to several scale items that attempted to measure: (1) subjects' perception of the products being advertised, (2) buying intention and (3) prior experience with the product. The results lend partial support to the actions of many retailers. Respondents perceive products priced odd as being on sale compared with even priced products. The price level of the product also influenced perceptions. Perceptual differences between odd and even prices were greatest for medium-priced products. The limited size and the composition of the sample used in this study, however, limits the ability to generalize these findings.

Research Objectives

The specific aim of this study is to develop a set of items which can be used to measure perceptions consumers have not only of product price but of the contextual variables surrounding prices. This is a preliminary step in developing a model which depicts the interaction of variables that may be related to consumers' perceptions of odd vs. even prices. Where possible, multiple measures of the individual concepts are included.

To ascertain subjects' behavioral or action tendencies toward the products used in this study, two measures were developed. The first is a direct measure and asks their likelihood of purchase. The second is a projective measure which asks the respondent whether friends would be likely to purchase this product.

Perception will affect consumers' evaluation of other contextual variables surrounding the price. In most situations the buyer brings to the purchase situation some notion of past prices paid, or an expected price. Nevakye (1975) found expected price was a guideline used in evaluating prices. This study includes four items which measure the PERCEIVED VALUE dimension; likelihood that the product is a value, likelihood of the product being a bargain, likelihood that the product is priced higher than expected and the likelihood that the product is on sale.

If consumers perceive the product to be priced higher than they would normally expect, their probability of purchase should drop. This reflects the economic concept of maximizing utility. If they perceive the product to be priced lower than expected, they may believe the product to be on sale and as a result of a lower price, an increase in purchase probability may result. Also, the probability of purchasing the product may increase if consumers perceive the price as a bargain. Consumers' probability of purchase would also be expected to increase if they perceive the product to be a value.

The final dimension measured in this study is PREVIOUS EXPERIENCE. Monroe (1977) reported that previous-use experience with a product or brand was a dominant factor in choice behavior. This study asked subjects if they have bought, been given, or used this product before.

Previous price perception research has concentrated on relatively lower priced consumer goods, and the role of economic constraint has not been directly tested. As Monroe (1977) points out, it is possible that the contextual effects of income or wealth may affect perception of prices and deserves attention in price perception research. The present study includes two measures of price proneness - tendency to compare prices before buying and tendency toward buying the lowest priced product available - to assess this dimension. It was the authors' feeling that price proneness or sensitivity would more accurately account for this contextual variable than would income alone. These measures are included to form the PRICE PRONENESS dimensions.

Methodology

Graduate and undergraduate students at a New England college were used as subjects in this study. Students were sampled by class section. Classes were selected so as to avoid duplication and to insure a cross section of the student body.

Each subject was given a package of information containing an advertisement for a low priced product ($5.00 or less), an advertisement for a medium priced product (approximately $30.00) and an advertisement for a high priced product (approximately $200.00), each followed by a series of questions. The low priced product was a bottle of Tylenol, the medium priced product was a Sony Walkman cassette/radio and the high priced product was a camera. The inclusion of products priced at three different price levels was to control for possible differences in perceptions and price sensitivity based upon the economic importance of the purchase decision. The selection of these products was based upon two focus group sessions with a total of 20 subjects. Subjects were all aware of these products and believed that they were in separate and distinct price categories.

The advertisements for each product were identical except for the price in the ad. Three price treatments were used for each product, an even dollar price ($5.00, $30.00, $200), an odd price one cent below the even dollar price for the low and medium priced products and one dollar for the high priced product ($4.99, $29.99, $199), and an odd price two cents below the even dollar price for the low and medium priced products and two dollars for the high priced product ($4.98, $29.98, $198). The sequence of low, medium and high price product advertisements were also randomized in the questionnaire given to the subjects. The price treatments were also randomly assigned to subjects.

Subjects were instructed to indicate their degree of agreement or disagreement with each of nine statements which followed each advertisement. The nine statements are identified in Table 3. As indicated earlier, four items were developed to measure PERCEIVED VALUE (PV), two items to measure PRICE PRONENESS (PP) and one item to measure the subjects' PRIOR EXPERIENCE (PE) with the advertised products. Two additional items were included to measure PURCHASE INTENTION (PI). Selected demographic factors were also measured.

Results

Characteristics of the subjects used in this study are reported in Table 1. The subjects' responses to the nine items for the first advertisement were factor analyzed to investigate the individual item's relationship to the concept they were believed to measure. The distribution of subjects over price treatments and price level are presented in Table 2. The results of the principle components analysis are presented in Table 3. Only factors which explained more total variance than an individual item (i.e., EIGENVALUE > 1) are included in this table.

Table 1
Characteristics of Subjects
(N=)

Characteristic	Subjects (% of Total)
Gender	
Male	%
Female	%
Education	
Under graduate Graduate	%
School	%
Household Income *	
<$5000	21%
$5000> <$9999	7%
$10000> <$19999	3%
$20000> <$34999	12%
$35000> <$49999 >$50000	17%
	34%
Marital Status	
Single	74%
Married	26%

* note: 6% not report income

Table 2
Number of Subjects by
Treatment Across Price Levels

Product	Price			Row
Price level	Even	Odd - 9	Odd - 8	Totals
Low	22	22	22	66
Medium	25	23	18	66
High	25	19	24	68
Col. Total	72	64	64	200

Three factors account for 75.1% of total variation. The first factor accounted for nearly one half (48.6%) of total variation. Four measures of perceived value (PV), two measures of purchase intention (PI), and one purchase experience (PE) had significant loadings on this factor. For the four perceived value items and for one purchase intention item, this was the only factor on which they had significant loadings. The previous experience and the other purchase intention item loaded significantly on factor three.

The second factor explained 15.1% of total variation. The two price proneness items were the only items to load high on this factor. This was the only factor on which these factors had significant loadings.

The third factor explained 11.4% of variation. The prior experience item and one perceived value item had significant loadings on this factor. Both these items had significant loadings on one other factor.

Discussion

The first factor, which accounted for nearly 50% of the variation in the nine items, is defined by the two purchase intention items, the four perceived value items, and one previous experience item (Churchill 1991, p. 911). As expected, the four items which were developed to measure the influence of price on consumers' perceptions of products, all had high loadings on the same factor. Further, this was the only factor on which three of these items had significant loadings. The perception of the product as a bargain, as a good value, and as being on saleall have high positive loadings on this factor. The perception of the product as being priced higher than expected has a high negative loading confirming the expected relationships. The perception of the product as being on sale also had a significant, although lower, loading on factor three.

The high positive loading of the two purchase intention items on this factor, while not postulated, are not unexpected and serve to confirm the overall purpose of this research; the relationship between perceptions and behavior. Perceptions of products which convey the image of bargains and values are associated with positive purchase intentions.

The second factor, which accounts for 15% of total variations, is defined by the two price proneness items. Both items have high positive loadings on this factor. Comparison shopping and selection of the lowest price product available apparently go hand in hand. This factor appears to portray the price sensitivity of the subjects.

The last factor is defined by a measure of prior exposure to the product and by the perceived value item of product being on sale. This factor represents the subjects' experience with the product.

Table 3
Principle Factor Analysis

ITEM	Concept	Factors		
		1	2	3
At this price, this product is a bargain.	PV	.915	.077	-.074
This product is a good value.	PV	.878	.092	.093
If I were shopping for this product, I would buy it at this price.	PI	.868	.074	.101
This product is priced higher than I expected.	PV	-.827	.135	.092
My friends will want to purchase this product at this price.	PI	.766	.175	-.073
This product is on sale.	PV	.757	.008	-.342
I always compare prices before deciding which product to buy.	PP	-.107	.816	.216
I usually buy the lowest priced product available.	PP	-.187	.789	.241
I have bought, been given, or used this product before.	PE	.342	-.025	.875
EIGENVALUE		4.37	1.36	1.02
Variance Explained (% of Total)		48.6	15.1	11.

The nine items apparently are measuring three discrete dimensions which are presumed to reflect consumers' perceptions and behavior toward products. The three dimensions are interpreted as value-intention, price proneness and experience. Although preliminary, these results are a first step in developing a model to describe relationships among behavioral, perceptual, and experiential variables as they relate to odd pricing.

Research Limitations

This study focused upon identifying perceptual dimensions of products which are believed to be susceptible to price manipulation. It did not investigate a variety of other dimensions which can influence the perceptions of products. Only two items were generated to measure price proneness and only one item to measure experience. Multiple measures for prior experience should have been included in this study.

Another issue which this study attempted to address is the impact of price level of a product on the perceptual dimensions. Only three levels were used.

Future Research

This paper provides results of the second stage of an ongoing study of the influence of price upon consumers' perceptions and behavior. Future research is needed to validate and apply the dimensions identified in this study to investigate the perceptions of products which are priced even and products which are priced odd.

Future research should also focus upon perceptions of odd and even prices and their relationship to both store and brand image. Each of these variables forms part of the background of the eventual purchase decision and should, therefore, be investigated. Also, the impact of intended product upon a consumer's perception of price should be investigated.

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MARKETING EDUCATION

THE USE OF BENCHMARKING AS AN INTEGRAL PART OF TQM IN MARKETING DEPARTMENTS

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Introduction

Marketing departments, like most major U.S. corporations, are going through a significant time period of analysis, change, and reorganization. As Bruce Stern commented, "the winds of change" are occurring in both American business and business education (1992a). Business schools and marketing departments are talking more about the meaning of "quality education." The new Dean at the University of Illinois College of Commerce, Howard Thomas, discussed his goals with alumni. The first priority he mentioned was to "emphasize quality." With this desire to improve, many schools are realizing the need to measure their current quality level and effectiveness.

Measuring quality is not easy. Defining quality must be a starting point in measurement. Allen and Davis (1991) discussed three types of studies on quality in higher education: reputational, objective indicator, and correlate. Reputational methods are based on the opinions of others unrelated to the school Objective indicator studies often use faculty research productivity as an indicator of quality. Finally, correlate studies identify variables which correlate with highly reputed programs such as student/faculty ratios.

Departments often go through "program reviews," which include some external evaluation of quality, yet the primary evaluation comes internally. A major question for all marketing departments should be: how should we measure our quality of education and what is the process of evaluation, change and improvement?

Articles which measure faculty research productivity (Stern 1992b; Barry 1990; Clark 1985), may provide one indicator of quality, yet these may not relate to teaching excellence. What is needed is an overall measure of quality, not just excellence along one dimension.

The ten dimensions of service quality in Delivering Quality Service (Zeithaml, Parasuraman and Berry 1990), may provide a foundation for understanding the quality dimensions a marketing department should consider. The following dimensions of service quality are discussed: reliability, responsiveness, competence, credibility, courtesy, communication, access, understanding the customer, security, and tangibles. Certainly factors such as faculty competence and credibility should be critical dimensions of excellence in marketing education.

A frequently used technique found in major corporations today, which may be useful to marketing departments in evaluating their overall effectiveness, is called Benchmarking. Recent studies indicate that by 1995 most major U.S. corporations will use some type of benchmarking program (Schmidt 1992). Benchmarking first gained popularity as a technique which was invented by Xerox in the late 1970's to study the Japanese and other major competitors (Maturi 1990). Benchmarking is primarily a process to search for the "best practices" in an industry and then use that information for the purpose of change and improvement in performance. Robert C. Camp, well known for his work on benchmarking, suggests that this practice will result in superior performance, if used effectively. He believes that companies must learn from others and measure themselves regularly against the best in the industry (Camp 1989).

Two primary objectives of this paper are: (1) to review the history and benefits of benchmarking in business and (2) to present a model of benchmarking for use by marketing departments.

History of Benchmarking

Benchmarking is the continuous process of studying specific processes and practices within best-in-class companies (Tyndall 1990). The primary interest of benchmarking is to improve a company's processes. One survey of Fortune 1000 companies found that 65% of the respondents stated they use benchmarking as a management tool in order to gain competitive advantage (Foster 1992). An article in Financial World stated that 60-70% of the largest U.S. corporations now have some kind of benchmarking program in place (Biesada 1991). In another study, 79% of the respondents believe that companies must benchmark in order to survive (Owen 1992).

For many companies, benchmarking is a key component of their total quality management (TQM) program (Whiting 1991). One method of improving one's own quality is to analyze the best quality practices of other successful companies. Although the practice of TQM has gained

great momentum in recent years, some companies still have difficulty with benchmarking projects which actually produce tangible results. Many do not complete the entire benchmarking process.

One organization has assisted companies in this benchmarking process. The American Productivity and Quality Center (APQC), a non-profit, Houston based organization, founded in 1977, was formed to improve the quality of U.S. products and competitiveness of U.S. companies. Recently APQC launched the International Benchmarking Clearinghouse (IBC), designed to help companies learn from one another. The IBC attracted companies such as IBM, Hewlett-Packard, and McDonnel Douglas to its program (Harper 1992). The IBC system assists companies who desire greater anonymity in their benchmarking efforts.

Process of Benchmarking

Benchmarking is a continuous process of measuring a company's performance against the best. Xerox Corporation developed the original rules for the process benchmarking, while many other companies have helped to refine the process (Maturi 1990; Martin 1991; and Owen 1992). The basic steps in the benchmarking process are as follows:

1. Identify what business functions will be benchmarked.

2. Determine the specific key performance variables to measure.

3. Carefully identify and research the target benchmark companies considered best-in-class. Measure their performance.

4. Approach target companies directly, indicating they were approached because they are recognized leaders, and establish a relationship with a benchmark partner(s). (Have a fall-back plan if a benchmark company will not cooperate).

5. Initiate a plan for data collection and collect data which will measure the firm's own performance. Measure the best-in-class company and analyze current performance gaps.

6. Be prepared to exchange information and be willing to accept that a benchmark company may not have the solution to a problem.

7. Use the findings to establish functional goals and action plans for change.

8. Take action for improvement and monitor results.

9. Remember that the aim is to fix the problem, not just review others' performance.

10. Attain the maturity state where the best practices are fully integrated into all business processes.

This process of benchmarking is now used by many major U.S. corporations. Elimination of any one step may create a critical error in the benchmarking process. If implemented correctly, benchmarking is a critical part to the success of a company's TQM process.

Corporations may have questions on how to identify the best-in-class companies. One method used to identify best-in-class may be to consider an existing published source, such as Fortune's most admired companies (Fortune 1992). A company interested specifically in effective sales techniques might consider Sales and Marketing Management's list of best sales forces (Sales and Marketing Management 1992). These published sources of data may provide a start in the selection process for an appropriate benchmark partner.

The primary benefit of a successful benchmarking program is improvement in performance or actually superior performance. The process provides a method for companies to resolve deficiencies and, therefore, gain greater competitiveness in the marketplace. Benchmarking is one significant type of competitive intelligence a company may consider. Companies that do not make competitive comparisons or benchmark, often find it difficult to compete with firms that do (Owen 1992). Another significant benefit of benchmarking is that it breaks down the reluctance of operations to change (Camp 1989). Benchmarking encourages flexibility and acceptance of change.

In the end, benchmarking can help a business to better serve its customers, increase competitiveness, and reduce costs (Sillyman 1992).

Model of Benchmarking for Use in College/University Marketing Departments

After getting its start in the manufacturing industry with companies such as Xerox, benchmarking is rapidly making its way into the service industry (Biesada 1991). Experts suggest that one good way to identify companies that benchmark is to look for evidence of change, the end point of the benchmarking process. Unfortunately, higher education is not exactly recognized for its desire or ability to change. Marketing departments, in particular, could use the principles of benchmarking in order to improve the

quality of education provided to students. This could be accomplished through analysis of the processes and practices of other successful marketing departments.

As marketing educators, we teach the importance of competitive analysis and marketing audits, yet marketing departments themselves rarely follow these principles. benchmarking would allow a marketing department to discover deficiencies, make changes, and gain greater competitiveness in the market.

The following model of benchmarking could be used by marketing departments to improve their quality of education.

1. What to Benchmark

   Determine the primary functions within the marketing department which will be benchmarked such as:

   - teaching effectiveness
   - contribution to community
   - faculty reputation
   - alumni relations
   - research productivity

2. Key Performance Variables

   If "Teaching Effectiveness" is the function to be benchmarked, then the following key performance variables may be used in measurement:

   - relevant, up-to-date curriculum
   - role of student evaluation
   - methods of faculty enrichment
   - qualities of master teachers

3. Select Best-in-Class Marketing Departments

   The key is "best-in-class," not necessarily absolute best. Selecting comparable, yet well-respected marketing departments will be important. A marketing department may decide to benchmark on different schools for the various dimensions such as teaching, research or service.

4. Establish Relationship With Targeted Marketing Department(s)

   The likely individual to contact will be the department Chair. An explanation of the purpose and benefits of this "benchmarking" activity will be necessary to help establish such a partnership.

5. Plan the Data Collection Procedures

   An analysis of the benchmark marketing department and the department's own performance will be necessary to determine performance gaps.

6. Exchange Information

   After a high level of trust has been established, departments may share valuable information. Ethically, each department has an obligation to share accurate information once an agreement is reached. Also, a department may need approval from a Dean or other administrator to release some of the information.

7. Establish Goals and Action Plans

   The key to successful benchmarking is the strategy development and implementation of needed changes. All faculty members of the department should be involved in the process of change.

8. Take Action

   Through this process, the marketing department may be less resistant to change and be willing to take the steps necessary to achieve improved performance levels. The real value of the benchmarking process will be evident with this step of actual implementation of new procedures.

9. Full Integration of Best-in-Class Marketing Department Procedures

   According to the stages of the adoption process, the marketing department now has adopted the practices of the benchmark marketing department.

A marketing department using this model may be able to initiate significant and beneficial changes for the department.

As many business schools face declining enrollment and severe funding problems, marketing departments cannot afford to remain static.

Conclusion

Benchmarking, a proven technique used by American businesses to improve quality and performance, could be used successfully by college/university marketing departments. This paper offers a basic model for marketing departments

to use in initiating a benchmark program. Several alternatives could be available to a marketing department:

1. As the paper suggests, select another college/ university marketing department as a benchmark partner. Most likely, this benchmark school will be selected because of its reputation in teaching, research or service. A department may have more than one benchmark partner depending on the objectives of benchmarking.

2. A marketing department could use a "within organization model," where it simply benchmarks on another department within the school. This could be a starting point in the benchmark process. For example, a marketing department interested in gaining further community recognition could benchmark on the college's successful accounting department. This experience could be a beginning in learning the usefulness of benchmarking.

3. If a benchmark partner does not agree to participate or if the marketing department is not yet ready to establish such a relationship, then the department could use an alternative form of competitive intelligence such as acquiring public information on another school's marketing department. Ethical considerations are important in gathering such information.

4. A marketing department might organize a benchmarking effort through an independent, third party organization, such as the American Marketing Association or another respected organization. Benchmark marketing departments might initially contribute information "anonymously." This proposed system is similar to the IBC organized for businesses.

Any of the above four alternatives may work as a start in the benchmarking process. The literature suggests the successfulness of benchmarking in business and marketing departments might also benefit from this powerful technique. Knowing that change is needed, this technique might provide the stimulus for change within a marketing department.

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TOWARD DEVELOPING AN IMPROVED CURRICULUM FOR GRADUATE EDUCATION IN MARKETING RESEARCH

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Abstract

This study reports on a survey of 191 marketing research educators and departmental chairs at AASCB accredited universities. Thirty marketing related topic areas were evaluated by these individuals to determine their perceived importance in preparing graduate students interested in marketing research careers. The results suggested that several traditional subject areas remain important from the perspective of educators, however, others were rated lower than expected. A factor analysis revealed five general topic areas that differed in relative importance, the results of which can be used in curriculum development decisions for graduate programs directed toward marketing research oriented students.

Introduction

In 1980, a significant event occurred in the history of the marketing research profession. Applying the philosophy of the marketing concept to graduate education, the University of Georgia identified how to better serve the needs of organizations that hire marketing research professionals. In the autumn of that year, the first Master of Marketing Research program was launched to "satisfy the needs of business for skilled marketing research professionals" (Reynolds 1981).

Since then, a few other universities have developed similar programs in the U.S. Rader (1990) identified four more schools (University of Wisconsin-Madison, University of Arizona, University of Texas-Arlington, and Southern Illinois University-Edwardsville) that have since added a graduate program that caters to the needs of the marketing research professional. Additionally, a few other schools such as DePaul University and the University of Cincinnati provide marketing research specialization opportunities within their M.B.A. degree programs (Giacobbe and Segal 1992).

There are at least three reasons that suggest a proliferation of such programs in the future. First, the demand for qualified marketing research (MR) professionals has grown substantially over the past 20 years and continues to grow (Honomichl 1992; Hupp and Redington 1990; AMA Survey of Marketing Research No. 31, 1988). Recent projections show no expected dampening of this growth trend (White 1989; Occupational Outlook Handbook 1990-91, pg 104; Occupational Outlook Handbook 1992-93 pg 109). Second, movement toward certification in the MR profession has emerged as a "hot" topic within the past few years, suggesting that a very sizeable market may soon emerge that needs to acquire training/education to maintain/augment its professional status (Stern and Crawford 1986). In conjunction with the AMA, marketing research practitioners and educators have already begun groundwork for certification (Schlossberg 1991a,b; Steinberg 1992). Third, there seems to be an oversupply on entry level management generalists (i.e. MBA graduates) which will cause many graduate schools to "gravitate toward market niches, producing specialists to meet specific customers' needs" (Linden, Brennan, and Lane 1992).

A major concern for administrators of existing specialized marketing research programs and for the initiators of new programs is curriculum design. Current administrators of successful programs need to monitor program effectiveness within a very dynamic environment. New program developers must design an educational offering that will have the best chance of successfully meeting the needs of the practitioner marketplace, the student, and the educational institution. In either case, information from practitioners, students (past, current, or prospective) and faculty can be quite valuable in the design or re-design of such curricula.

With few exceptions, studies that have addressed needs satisfaction in the context of graduate marketing research education have approached the issue exclusively from the perspective of the practitioner (c.f., Bellinger, Howell, Wilcox, and Greenberg 1990; John and Needel 1989; Parasuraman 1981; Reynolds 1981; Segal 1987). Miller (1967) did compare attitudes between both practitioners and educators regarding educational training of aspiring marketing research professionals, however, the focus was quite broad. The study examined the need for students to take courses within general categories such as Business, Economics, Mathematics, and Sociology. And, while Anderson (1982) researched both educators and

practitioners, the study was very limited in scope. Respondents evaluated and prioritized "text book chapter topics" regarding only data collection and analysis techniques.

Clearly, there is an absence of information from at least two key sources, students and educators. Such information can provide important insights for designing or improving the curricula of graduate programs geared specifically toward the needs of marketing research-oriented students. The objective of this study was to address one of these shortcomings. More specifically, the purposes were to:

- Identify an exhaustive set of course topics through a review of current curricula and prior literature.
- Determine the importance of such course topics and offerings in satisfying the needs of graduate students who desire a career in marketing research *from the perspective of marketing research educators.*
- Interpret the findings, assess implications and make appropriate recommendations, specifically regarding curriculum design.

To address the aforementioned objectives, a study directed toward marketing research educators at AACSB accredited institutions was conducted. A description of the study, including sampling design and procedure is presented in the following section. Analytical methodology, results, conclusions and implications follow thereafter.

Research Study

A random sample of 467 marketing faculty and chairpersons with a self-reported interest in marketing research was chosen from a sampling frame developed by coordinating a list of AACSB accredited business schools and the most recent American Marketing Association directory. A total of 191 usable questionnaires were returned, for a response rate of 41%. The response rate is much higher than those reported in previous studies using the American Marketing Directory as the sampling frame (e.g. Akaah and Riordan 1989; Hunt, Chonko, and Wilcox 1984).

The data collection instrument was designed to measure marketing research educators' judgments regarding which courses/topics/areas in marketing research should be covered in a curriculum designed to prepare professional marketing researchers. Additionally, the questionnaire included a number of questions designed to gather supplementary information such as the types of marketing courses taught at both undergraduate and graduate levels, educators' teaching interests/areas of expertise, size of marketing research faculty, number of years of teaching experience, and the number of years of practical experience in marketing research.

Results

Seventy-eight percent of respondents represented public colleges/universities and the remainder (22%) was from a private college/university. Respondents exhibited a wide range of teaching and practical experiences. On average, respondents had over 12 years of teaching and 11 years of practical marketing research experience. A typical respondent had also published over four marketing research-related articles in the past five years. A large majority (71%) of respondents indicated marketing research as their primary area of teaching interest, thus assuring that they were knowledgeable about the field of inquiry. Virtually all respondents (over 95%) represent institutions that offer MBA degree programs.

A seven-point scale was devised to elicit importance ratings from educators for thirty marketing research topics deemed relevant for preparing students for professional careers in marketing research. Respondents were prompted to consider the context of an ideal graduate program in marketing research as a basis for providing importance ratings. In examining the mean rating for those subject areas it is important to realize that many of the areas overlapped. Five topics received average importance ratings of 6.0 and greater: Marketing Research (6.6); Marketing Research Design and Data Collection (6.4); Marketing Research Project (6.4); Marketing Research Data Analysis and Reporting (6.2); and Multivariate Data Analysis (6.0). Thus, it appears that any graduate program designed to prepare students for professional careers in marketing research should, at the bare minimum, cover these five topic areas.

Six other topics received mean importance ratings of 5.5 and greater: Measurement of Marketing Effectiveness (5.7); Practical Experience/Internship (5.7); Sample Survey (5.6); Field Research (5.6); Experimental Designs (5.5); and Analysis of Commercial Databases (5.5). It is clear from these evaluations that marketing academicians view these topics as important for marketing research graduate students. Given the nature of these topics and their mean importance ratings one can infer that these subject areas should be required of students pursuing an advanced degree to prepare them for a professional career in marketing research. It is interesting to note that academicians attach such high importance to practical experience/internship programs. Furthermore, high importance was given to the subject area of Commercial

Databases, indicative of its practical usefulness to the research industry and its recent discussion in academic literature.

Topics which received moderate importance ratings between 5.0 and 5.4 might be considered as electives for marketing research students in an advanced degree program. These topics include: Consumer Behavior (5.4); Creative Problem Solving (5.4); Categorical Data Analysis (5.4); Non-parametric Statistics (5.4); Strategic Marketing (5.2); Quantitative Forecasting Models (5.1); and Syndicated Research (5.0).

Many of the traditional marketing topics such as Marketing Policies, Product Management, Promotion Management, International Marketing, and Distribution Management received relatively lower importance ratings. Perhaps these subject areas should be emphasized for those students who do not possess adequate undergraduate business (marketing specialization) backgrounds.

Statistical tests were carried out to determine if ratings for the topics differed between: department chairpersons and regular faculty; public and private universities; respondents with under six years of teaching experience and those with six or more years of experience; respondents with under six years of practical experience and those with six or more years of experience; and respondents who specified primary interest in marketing research and those who did not. There was general consistency in importance ratings for different subgroups.

Factor analysis was applied to marketing research academicians' topic ratings in order to reduce the thirty topics to a more manageable set of underlying constructs. A five-factor solution was derived from a principal component procedure, which accounted for 64.7% of variation in the data set. The five broad categories identified included: (a) Traditional Marketing Research Topics, (b) General Marketing Topics, (c) Quantitative and Computer Model Topics, (d) Logical Thinking and Theory Topics, and (e) Specialized Topics.

The variables assigned to the *Traditional Marketing Research Topics* include: Marketing Research; Marketing Research Project; Marketing Research Design and Data Collection; Marketing Research Data Analysis and Reporting; Multivariate Data Analysis; Practical Experience; Sample Surveys; Field Research; Experimental Designs; and Categorical Data Analysis. The variables incorporated as a part of the *Marketing Topics* factor include: Strategic Marketing; Marketing Policies; Product Management; Promotion Management; International Marketing; and Distribution Management. It is worth noting that these areas relate to traditional marketing topics generally associated with the four P's of marketing (product, price, placement and promotion). The *Quantitative Topics and Computer Models* dimension encompasses topics/subject areas which interface computer knowledge with analytical and modeling techniques. These topics include: Quantitative Forecasting; Database Management; Marketing Decision Support Systems; Marketing Models; and Econometrics. The *Logical Thinking and Theory Topics* factor includes the following variables: Creative Problem Solving; Computer Science; Calculus; Knowledge of Expert Systems/Artificial Intelligence. Finally, the *Specialized Topics* factor is composed of topics which appear to be quite specialized: Measuring Marketing Effectiveness; Analysis of Commercial Databases; and Syndicated Research.

Discussion and Implications

Clearly, curriculum decisions to design or augment graduate marketing research-oriented programs should not be prescribed on the sole basis of a single study. Moreover, the results of this research focuses on the perspectives of one source of information - marketing research educators. However, these findings can be used in conjunction with other meaningful data to enhance such decisions. And on that basis the following discussion is presented.

Educators placed a very high emphasis on the importance of traditional marketing research topics. Eight of these topic areas are among those typically addressed in most marketing research courses/textbooks (i.e., Marketing Research, MR Design and Data Collection, MR Data Analysis, MR Multivariate Data Analysis, Sample Surveys, Field Research, and Experimental Designs). The fact that three of these areas received mean ratings of 6.2 and above may suggest that a graduate MR program strongly consider each as a topic for a separate required course. For example, the program could require a three course sequence beginning with a general marketing research course, followed by a more in-depth course addressing research design and data collection procedures (including questionnaire design) and then a course that focuses on analysis and communication of results.

The fact the "Practical Experience" and "Marketing Project" received high ratings suggests that such curricula may want to insure that students receive a strong exposure to practical application of their developing skills. There are several alternatives to consider to achieve such an objective. Within courses, students may be required to design research proposals in conjunction with "real world" participants in several if not all required MR related

courses. For at least one proposal, an entire study including data collection, analysis and presentation must be performed. This paper may be incorporated as a type of "graduate program thesis" for which the student assembles a committee of faculty members and/or practitioners to oversee the project. In addition, practical experience through internship should be strongly considered as part of such curricula.

Consideration should be given to requiring a graduate Consumer Behavior course in a graduate MR program since the topic was rated relatively high, yet did not load strongly on any one factor dimension. One interpretation is that the topic is unlikely to be covered effectively in the context of other courses, yet its perceived importance is strong. A similar argument can be made regarding a course in Non-Parametric Statistics, although it is conceivable that such a topic might be effectively introduced in a "methods" course.

Three specialized topic areas received mean important scores of 5 and over. Two potential recommendations surface. One, educators may be suggesting that "in general" graduate MR students should be exposed to contemporary "specialized applied" areas. If this is the case, it seems to argue for a type of seminar series or a type of "special topics" course consisting of, perhaps, three selected topics that may vary from one course offering to the next. Two, educators may be suggesting that the three specific topics, Measuring Market Effectiveness, Commercial Data Bases, and Syndicated Research be formally addressed in the program. If so, it seems conceivable that a single course could be developed to focus on the latter two topics. The topic on measuring market effectiveness seems quite narrow to consider it as separate course offering and may need to be addressed as a component of some other course (e.g., Marketing Research).

With the exception of Strategic Marketing, educators rated the typical marketing topics relatively low on the importance scale. Based upon its importance rating, Strategic Marketing seems appropriate for consideration as a required course. Furthermore, creative problem solving and logic techniques could easily be applied in such a course using methods such as case analysis or an actual marketing audit/marketing plan project. The remaining subject areas in this dimension should be emphasized for those students who do not possess adequate undergraduate business (marketing specialization) backgrounds or may be offered as area electives for students who are interested in a specific application area for their MR degree.

The findings related to the remaining topic areas are less clear regarding their implications for curriculum development. While several of these topic areas seem to fit conceptually into a graduate MR program framework (e.g., marketing models, data base management) they received relatively lower importance scores. Thus, other than stating that several of the remaining topic areas may be included as possible elective courses, little additional insight can be gleaned from these findings.

Certainly, replications of this study with practitioners and current and past students of graduate MR programs would provide valuable information. Follow-up studies with educators of schools not represented in the sampling frame used for this study would also contribute to the understanding of perceived importances by educators. Comparisons of curricula among current graduate MR programs and the results of this and future studies would provide some evidence of the adequacy of such programs in meeting the expectations of each important constituent (i.e., student, educator and practitioner).

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ENDOWED CHAIRS IN MARKETING: RESPONSIBILITIES AND BENEFITS

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Abstract

A survey of AACSB accredited and non-accredited schools identified the benefits and responsibilities of the endowed chairholders. Overall only the benefits showed some hierarchical structure (e.g., provided to chairholders in a hierarchical fashion). With few exceptions, institutional characteristics and size of the endowments were unrelated to the chairs' responsibilities and benefits.

Introduction

Endowed chairs in marketing are often viewed as prestigious both for the holder of the chair and for the institution having the chair. Endowed chairs are frequently utilized to attract highly qualified faculty or to retain reward existing faculty. In addition, endowed chairs may serve as alternative or supplemental means of financing the escalating costs facing higher education institutions in fulfilling their teaching, research, and service missions.

Surprisingly, given the prestige and financial aspects typically associated with endowed chairs, very little is actually known about endowed chairs or the chairholders. According to the American Assembly of Collegiate Schools of Business (AACSB), very little is known about endowed chair positions in general let alone about endowed chairs in marketing (Barber 1990). With one exception (Jensen and Kurtz 1991), a thorough review of the literature did not reveal any studies addressing endowed chairs in business or marketing.

Consistent with intuition, Jensen and Kurtz (1991) reported that endowed chairs in marketing were more prevalent at large institutions (measured by number of faculty and students) and at institutions where there were other endowments in business. These authors concluded that endowed marketing chairs were a matter of "have and have not" in terms of endowments and the "law of large numbers" in terms of institutional size. They went on to suggest that having more graduates would increase the probability of getting an endowed marketing chair since most philanthropic gifts come from individuals as opposed to corporations, foundations, and professional associations (Harvey 1990).

Although Jensen and Kurtz (1991) provided information regarding institutional factors and the presence/absence of endowed chairs in marketing, little is known about the responsibilities of endowed chairholders. In addition, little is known about the benefits realized by endowed chairholders when compared to "typical" faculty members. Undoubtedly, individuals are awarded endowed chairs based upon their past performance and expected future performance. The present study attempts to ascertain the benefits and responsibilities of endowed marketing chairs beyond those of typical marketing faculty. In addition, the study examines the relationships, if any, between the benefits, responsibilities, size of the endowment, and institutional characteristics.

Methodology

A questionnaire was mailed to the 507 College of Business Deans listed in the Membership Directory of the American Assembly of Collegiate Schools of Business. Questionnaires were returned from 210 institutions, a 41.4% response rate. Of these respondents, 116 (55.4%) were accredited, which is insignificantly higher than the percentage which were accredited at some level in the directory (50.5%).

Through the cover letter and introduction to the questionnaire, Deans were informed that the questionnaire addressed business school endowments and, specifically, endowed chairs in marketing. The first item of the questionnaire qualified all respondents by asking whether or not the marketing department had any endowed chairs. Deans were requested to indicate the number of endowed chairs in marketing and complete an additional section of the questionnaire for each chair. Thirty-four (16.2%) schools of the 210 responding reported having endowed chairs in marketing, with all but four of these schools accredited by the AACSB. Four schools reported multiple chairs in marketing, with three reporting two chairs and one school reporting four. Thus, a final sample of forty chairs was available for analysis. As reported by Jensen and Kurtz (1991), schools with endowed chairs tended to have more business students

Table 1
Characteristics of Endowed Marketing Chairs

School's source of funding:[1] (n = 34 schools)	Public 64.7%	Private 35.3%		
Status of chair: (n = 40 chairs)	Filled 70.0%	Vacant 30.0%		
Chair typically filled by:[2] (n = 40 chairs)	Internal Candidate 47.5%	External Candidate 52.5%		
Chair's appointment:[2] (n = 40 chairs)	Permanent 60.0%	Renewable 40.0%		
Chair reports to:[2] (n = 40 chairs)	Dept. Head/Chair 60.0%	Dean 40.0%		
Chairholder selected by: (n = 40 chairs)	Dean or Faculty Committee 30.0%	President Chancellor 12.5%	Dept. Head Chair 10.0%	Other 51.5%

[1] Does not differ significantly from schools responding to the survey.
[2] Not significantly different from chance (i.e., 50% for each category).

(mean = 3392) and faculty (mean = 94) than those without endowed chairs, respectively, mean = 2, 108 and 60.

Results and Analysis

The first major section of the questionnaire, as shown in Table 1, concerned various aspects concerning the funding, appointment, and administration of endowed chairs in marketing. Of the thirty-four schools, twenty-two were publicly funded (64.7%), with the remainder being privately funded. Nineteen (47.5%) of the forty endowed chairs were intended to be filled internally as opposed to an external search for a chairholder. At the time of this survey, twelve of the endowed chair positions were vacant (30%). Twenty-four (60%) of the chairholders were appointed on a permanent basis with the remainder being renewable. Of the sixteen renewable positions, eight were for three years. Faculty committees and the decision of the Dean were most frequently (twelve) reported as having the final decision in selecting the chairholder, however, the decision was frequently the responsibility of the president/chancellor and department head/chairperson (reported five and four times, respectively.) Twenty-four (60%) of chairholders reported
to the department head/chairperson, with the remainder reporting directly to the Dean. Interestingly, there was no significant relationship found between a Dean being ultimately responsible for a chairholder's selection and whether that chairholder reported to the Dean. Similarly, the same independence appeared to be true for those four chairs selected by the department head.

The next section of the questionnaire asked the respondent to describe the responsibilities and benefits of the chairholder by checking-off the appropriate items listed in Table 2. It is important to reiterate that these responsibilities and benefits are beyond those expected of, or provided to, regular faculty members. As can be seen in the table, most chairholders face above average research expectations. In addition, approximately half of the endowed chairs involve some combinations of liaison with an industry, research directed toward that industry, and responsibilities for special education programs or curriculum. An average of 2.80 responsibilities were indicated for each endowed chaired position.

With respect to benefits, about half of the chairholders were provided with each of the benefits with the exceptions being the granting of tenure, secretarial support, and having a twelve month appointment. The Deans clearly distinguished between salary stipends and salary above faculty of the same rank. On the average, 3.22 benefits were indicated for each endowed chair position.

Table 2
Responsibilities and Benefits of Endowed Chairholders in Marketing
(Beyond Typical Faculty Responsibilities and Benefits)

Responsibilities:	*n*	%	Scalogram[a]
Above Average Research Expectations	30	75.0	
Liaison with Industry	22	55.0	3
Special Educational Programs/Curriculum	19	47.5	6
Research in Specific Industry	16	40.0	
Public Service/Lectures	9	22.5	
Grant Writing	5	12.5	
Fund Raising	5	12.5	
Government Agency Liaison	4	10.0	
Administrative Responsibilities	2	5.0	
Benefits:			
Additional Salary Stipend	26	65.0	1
Separate Travel Funds	24	60.0	2
Additional Graduate Assistants	21	52.5	10
Reduced Teaching Load	20	50.0	4
Separate Research/Development Funds	19	47.5	5
Salary Above Same Ranked Faculty	19	47.5	7
Tenure	15	37.5	8
Secretarial Support	11	27.5	9
12 Month Appointment	6	15.0	12

total $n = 40$
[a] Indicates relative rank order in a cumulative hierarchical scale (Guttman 1950).

A significant relationship was found between the total number of responsibilities and the total number of benefits ($r = .50$, $p < .01$). Somewhat surprisingly, no relationship was found between the size of the endowment and the number of responsibilities or benefits. Similarly, no relationships were found between the total number of responsibilities or total number of benefits based upon institution size (undergraduate enrollment, college enrollment, number of majors, number of business or marketing faculty) or form of institutional funding (private or public).

Correlational techniques could not provide a strong indication of any highly significant correspondence between the benefits associated with specific chair responsibilities. The eighteen items were further analyzed, however, to determine the extent to which the responsibilities and benefits of chairs were hierarchical in the sense that they held properties of scalograms described by Guttman (1950). An initial evaluation of these items provided a coefficient of scalability of .86 (Edwards 1957), representing the accuracy of the score in reproducing the characteristics of the chair. Included in Table 2 are the scalogram ranks of

the twelve items with such properties; lower numbers indicating that an item was typically a precondition to those with higher numbers. An item without a rank, such as "Above average research expectations," while being the most frequently checked by respondents, did not consistently appear with chairs with higher scores. From these item ranks, a hierarchical structure to benefits and a relatively independent structure to responsibilities can be seen. This is reasonable since it is unlikely that any chairholder has the ability perform large combinations of the duties included the study.

Sizes of chair endowments in the sample ranged up to $2,000,000, the median chair being $750,000 with a mean of $519,500. The Guttman scale of the items revealed a marginal relationship with the size of the endowment, $r = .34$, $p = .06$. As sets, neither the responsibilities nor the benefits had any significant relationship with the size of the endowment. However, three individual items did show a relationship with the size of the endowment. Chairholders given the responsibility for special programs or curriculum had a higher endowment (mean = $1,120,125) than those without special programs or curriculum (mean = $363,389), $F(1, 32) = 16.08$, $p < .01$. Chairs with salary stipends had a lower level of endowment (mean = $531,714) than chairs without salary stipends (mean = $1,022,846), $F(1, 32) = 4.93$, $p < .05$. Conversely, chairholders with salary higher than same ranked faculty had a larger endowment (mean = $1,015,857) than those not having a salary higher than same ranked faculty (mean = $512,050), $F(1, 32) = 5.39$, $p < .05$. Finally, the institution's size (in terms of students or faculty) and the institution's source of funding (private versus public) did not show any relationship with the size of the endowment.

Discussion

The present study revealed that holders of endowed chairs in marketing have responsibilities and benefits beyond those of typical marketing faculty. Also, the more responsibilities of the endowed chairholders the more benefits they received. However, with the exceptions of salaries, salary stipends, and special programs or curriculum, few relationships were found between the benefits and responsibilities with size of the endowment and institutional factors (e.g., number of students). In addition, there appears to be little or no systematic relationships between particular chairholder responsibilities and particular benefits. These findings may indicate the wishes of the benefactor as well as any institutional policies and practices. Future research should help clarify issues regarding these and other findings.

It was interesting to note that increased research expectations were not associated with any scaling properties of the responsibilities and benefits. This is not to say that increased research beyond that of typical faculty members was not expected, 75% of the endowed chairholders had this increased responsibility. Rather, above average research expectations were not associated in any systematic way with other responsibilities nor with any additional benefits. Only three responsibilities did show any relationship with each other or with the benefits (industry liaison, special education programs or curriculum, and public service or lectures). On the other hand, all of the benefits revealed a hierarchical relationship. This hierarchical relationship of the benefits should help administrators in planning benefit packages for endowed chairs. Unfortunately, the responsibilities do not show similar structural relationships and, hence, seem to be at the discretion of administrators. Finally, one should acknowledge and recognize the role of the benefactors in determining the responsibilities and benefits of the endowed chairs.

Perhaps the most surprising finding in the present study was that 30% of the endowed marketing chairs remained unfilled. Attempts at discovering any relationship between filled versus unfilled chairs and other factors did not reveal any significant patterns. At this juncture, other than pure speculation, it remains unclear as to why such a high percent of the chairs would remain unfilled. Extrapolating to the population suggests that there are approximately 82 schools with endowed chairs in marketing for a total of 97 endowed chairs; of these 97 chairs 29 may be unfilled. This extrapolation assumes that schools with versus without endowed chairs in marketing responded proportionately to the survey. We have no way of knowing if this assumption is valid.

Using the chairholder's responsibilities as an indicator, faculty desiring to occupy an endowed chair in marketing should focus on their research productivity and, possibly, industry specific research that would allow them to develop industrial ties and enable them to develop special educational programs/curriculum related to that industry. For those involved in developing endowed chairs in marketing, the chairholder's responsibilities also suggest the importance of industry specific features in selling endowed chairs to prospective donors from teaching/research, and service (industry liaison) perspectives.

In summary, although the present study found some systematic relationships between the responsibilities, benefits, and related factors of endowed chairs in marketing, the major conclusion that can be drawn is that endowed chairs are unique. In other words, there seems to

be as many combinations of responsibilities and benefits as there are endowed chairs in marketing.

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THE MARKETING/ENGINEERING INTERFACE WITHIN ACADEMIA: A STUDY OF STUDENT PERCEPTIONS AND STEREOTYPES

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Abstract

Seniors in marketing and engineering were surveyed to assess perceptions of their discipline's importance and stereotypes of themselves and the other discipline. Results suggest there are perceptual differences regarding importance and discipline stereotypes. Analysis tentatively suggests taking a course in the other discipline may lead to greater awareness and appreciation of the other discipline. Tentative recommendations are offered to direct future research and marketing education endeavors.

Introduction

The importance of marketing's interaction with other company functions has been highlighted by various marketing literature (e.g. Gupta, Raj, and Wilemon 1986; Ruekert and Walker 1987; Gupta and Wilemon 1991; Lim and Reid 1992). While this literature has provided greater understanding of interaction between marketing personnel and personnel of other company functions, little focus has addressed the antecedents of interaction. In particular, literature has overlooked the influence academic experience may have upon future practitioner interdisciplinary interaction.

The influence of academic experience is conceivably a strong promoter of functional interaction. Academia exposes students to strict functionalization, which promotes a sense of functional elitism and diminishes impetus for interdisciplinary coursework and research. Encouraging departmentalization contrasts with current corporate trends which demand functionally integrated work teams. Businesses need marketers with a holistic view that facilitates interaction with personnel from other company functions.

A review of all issues of the Journal of Marketing Education suggests limited research on educational interdisciplinary activities. Only four articles were found that pertain to issues of interdisciplinary coursework (Klein 1982; Burt 1985; Cook and Jenicke 1989; Lunsford and Henshaw 1992).

Integrating marketing and engineering activities often becomes a mandate due to their success in minimizing design costs, reducing design time, and improving product quality (Vessey 1992). The marketing-engineering interface is also key to the product innovation process (Gupta, Raj, and Wilemon 1986; Gupta and Wilemon 1991). The problem is that achieving an effective marketing-engineering interface is not easy. Often there are cultural, personality, and training differences (among other things), which impede the interaction process. Academia may promote these differences so that when students enter the workplace they have preconceived interdisciplinary perceptions. Lunsford and Henshaw (1992 p. 11) state that "the difficulty in achieving a marketing-engineering interface begs for attention in both the marketing and engineering classrooms. If future members of both professions can learn to work together while still in school, then hope exists that the interface can be better managed in an industrial setting." Lunsford and Henshaw suggest the coordination of engineering design and marketing research courses.

Another possible solution may be taking coursework in the other discipline. In this way, both groups learn the jargon and nature of each profession, gaining an understanding and appreciation. Evidence for the potential success of cross-enrollment comes from Lunsford and Henshaw (1992), who noted that when marketing students and engineering students were combined, students found it difficult to communicate and often blamed the other group for difficulties in completing project work. It is contended that if students had cross-enrolled in coursework, communication problems would have been alleviated.

Exploring the Marketing-Engineering Interface with Undergraduates

A study was undertaken to explore differences between seniors majoring in marketing and in engineering. These differences included family background, coursework taken, work experience, perceptions of the importance of other disciplines, and stereotypes of people in other disciplines. This paper reports preliminary analysis of the latter two issues. Two objectives guided this study. One, to determine if there are perceptual differences between marketing and engineering students, with specific regards to whether each discipline portrays itself as more important than the other discipline. Second, to determine whether

cross-enrollment of coursework promotes greater awareness, acceptance, and more positive attitudes of the other function.

The Survey Sample

A sample of 69 marketing seniors were compared to a sample of 52 industrial engineering seniors. The marketing sample consisted of 42 female and 27 males students taken from retail management, salesforce management, and product/price management classes. The engineering sample comprised 9 female and 43 male students taken from an industrial cost control class. Both samples had a median age of 21.

Only four students from the marketing sample had taken engineering coursework. This sub-sample consisted of 3 male and 1 female student with a median age of 21. Similarly, only four engineering students had taken marketing coursework. The sub-sample was all male with a median age of 22.

Perceptions of Importance

Two-group t-tests were used in the analysis. The results concerning the eight students having cross-enrolled should be taken with caution because of the small sample size. Nonetheless, results from these analyses may offer preliminary insight to direct future research.

The first analysis compared marketing students not having taken engineering coursework to engineering students not having taken marketing coursework. This analysis suggests possible perceptual differences that marketing students and engineering students may have concerning themselves and the other discipline. Students having taken coursework in the other discipline were excluded.

Table 1a presents the results. Marketing and engineering students disagreed on the importance of both their discipline and the other discipline (statistically significant at $\alpha < .05$). For each of the questions regarding importance to overall product success, importance to product development, and importance to product management, students positioned their major as most important and the other major as less important.

TABLE 1a

Marketers (n=65)	Engineers (n=48)	T-Value
Importance to Company Success:		
Engineering		
3.75	4.15	-2.68*
Marketing		
4.38	3.94	3.38*
Importance to Product Development:		
Engineering		
4.17	4.71	-4.15*
Marketing		
4.51	3.79	4.12*
Importance to Product Management:		
Engineering		
3.05	3.69	-3.40*
Marketing		
4.28	3.33	6.16*

[* = significant at $\alpha<.05$]
(1=Least, 5=Most important)

The second analysis compared marketing students having taken engineering coursework versus engineering students having taken marketing coursework. Table 1b presents results of this analysis. Both groups of students had no significant differences across the six questions, possibly due to the small sample size. However, for three of the six questions, students provided the same responses, which were favorable for both marketing and engineering. This suggests cross-enrollment may decrease perceptual differences, establish common understanding, and promote a sense of need for the other function.

The third analysis compared marketing students not having taken engineering coursework with marketing students that have taken such coursework and compared engineering students not having taken marketing coursework with engineering students that have taken such coursework. Table 1b reveals two statistically significant ($\alpha < .05$) differences. Marketing students with engineering coursework perceived engineering as more important to overall company success than marketing students who had not taken such coursework. Engineering students with marketing coursework perceived marketing more important to product management success than engineering student not having taken such coursework. Those student having cross-enrolled rated the other discipline higher. The only exception was the case of marketing students rating engineering as less important to product management success. Again, the small sample size may explain the non-significant findings.

TABLE 1b

Marketing Students:	With Coursework (n=65)	Without Coursework (n=4)	T-Value
Importance to Company Success:			
Engineering	3.75	4.50	-1.96*
Marketing	4.38	4.75	-1.18
Importance to Product Development:			
Engineering	4.17	4.75	-1.64
Marketing	4.51	4.50	0.03
Importance to Product Management:			
Engineering	3.05	2.75	0.35
Marketing	4.28	4.75	-1.41
Engineering Students:	**With Coursework (n=48)**	**Without Coursework (n=4)**	**T-Value**
Importance to Company Success:			
Engineering	4.15	4.50	-0.82
Marketing	3.94	4.50	-1.42
Importance to Product Development:			
Engineering	4.71	4.75	-0.14
Marketing	3.79	4.50	-1.14
Importance to Product Management:			
Engineering	3.69	4.00	-0.55
Marketing	3.33	4.50	-2.28*

[* = significant at $\alpha<.05$]
(1=Least, 5=Most important)

Stereotypes

Similar to the above analyses, three categories of analyses were used to assess stereotypes of marketing students and engineering students. A simple content analysis was applied to adjectives students listed to describe the other discipline. This analysis determined whether students had negative stereotypes of the other discipline and if so, did cross-enrollment reduce negative stereotypes in favor of neutral or even positive stereotypes.

The first analysis compared marketing students not having taken engineering coursework to engineering students not having taken marketing coursework. As shown in the Appendix, marketing students had primarily neutral stereotypes of engineering students, while having more positive stereotypes of themselves. The top three stereotypes of engineering students were intelligent/smart, technical, and mathematical, although negative stereotypes like geeks and nerds were mentioned. Marketing students overwhelmingly portrayed themselves as creative, outgoing, and intelligent/smart.

Engineering students portrayed themselves as intelligent/ smart, problem-solvers, and analytical/scientific, and marketing students as creative, salespeople, and talkers. Although there was greater diversity in engineering students' stereotypes compared to the marketing students', engineers had a tendency to portray themselves in a better light over marketers.

The second analysis compared marketing students having taken engineering coursework versus engineering students having taken marketing coursework. The Appendix shows that marketing students still had more positive images of marketers in comparison to their descriptions of engineers. Engineering students were much more positive about themselves, although their descriptions of engineers were neutral in nature. This suggests that coursework alone may not be enough to promote positive stereotypes.

The third analysis, which compared marketing students not having taken engineering coursework versus marketing students that have taken such coursework and compared engineering students not having taken marketing coursework versus engineering students that have taken such coursework, provides further evidence that coursework alone may not be enough to promote positive stereotypes between disciplines. Comparisons within the Appendix failed to show any particular differences in stereotypes. One reason probably stems from the small sample of cross-enrolled students. Future study with the aim to increase this sample size would offer a better test of whether coursework does or does not diminish negative stereotyping.

Conclusions and Recommendations

The intent of this preliminary study was two-fold. This study investigated whether marketing and engineering students portrayed their respective disciplines as more

important than the other discipline. Secondly, this study assessed whether cross-enrollment of coursework would promote greater awareness, acceptance, and more positive attitudes of the other discipline.

Results tentatively suggest that coursework can reduce perceptions of importance of one's own discipline over another discipline. Comparisons between students having taken coursework in the other discipline and those not taking such coursework showed the former positioning the other discipline in a more positive light. In essence, students having taken coursework in the other discipline were more accepting, more aware, and more positive towards the other discipline. Efforts to facilitate marketing students taking engineering coursework and engineering students taking marketing coursework should be effected. Such efforts may be in the form of offering greater latitude in electives to be taken or the mandatory enrollment in the other discipline's coursework.

Results are not as clear when analyzing stereotypes. Stereotypes appear to be harder to change. Activities beyond coursework may be necessary to diminish negative stereotypes as suggested by Biernat (1990), who found that contact with other groups increased the liking of these groups. Activities facilitating contact therefore may be more appropriate for diminishing negative stereotypes. Examples of these activities include joint seminars, joint meetings of associations/clubs, team-teaching of courses, and guest speakers from the other discipline.

Although various articles have studied marketing's interaction with other company functions within industrial settings, there needs to be consideration of such interaction within the academic environment. Our concern is that if students (future business leaders) put their disciplines first, efforts to functionally integrate corporations and efforts to establish concurrent engineering will be thwarted. As evidenced in this paper, marketing and engineering students have preconceptions of their discipline's superiority. Such elitism must be curtailed to facilitate effective interaction between the disciplines of marketing and engineering when students enter the workplace. If marketing and engineering academics continue to overlook this issue, we will only strengthen the walls that prevent our collective efforts to produce better products, manage more effectively, and ultimately promote company success.

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APPENDIX

STUDENT NOT HAVING TAKEN COURSEWORK IN THE OTHER DISCIPLINE:

Marketing Students' Descriptions of Engineers: INTELLIGENT/SMART (31), ANALYTICAL/ MATHEMATICAL (20), SCIENTIFIC/TECHNICAL (16), CREATIVE (8), GEEKS/NERDY (8), HARD-WORKING (7), DEDICATED/ DETERMINED (6). Marketing Students' Descriptions of Marketers: CREATIVE (39),

OUTGOING (17), INTELLIGENT/SMART (14), PEOPLE-ORIENTED (11), INNOVATIVE (9), GOOD COMMUNICATORS (8), SOCIAL/GREGARIOUS (7), ENERGETIC (6)

Engineering Students' Descriptions of Engineers: INTELLIGENT/SMART (9), PROBLEM-SOLVERS (7), CREATIVE/DESIGNERS (6). Engineering Students' Descriptions of Marketers: SLICK/PUSHY (6), SALESPEOPLE (5), CREATIVE (4), TALKATIVE (3).

STUDENTS HAVING TAKEN COURSEWORK IN THE OTHER DISCIPLINE:

Marketing Students' Descriptions of Engineers: CONFUSED, LOGICAL, INTELLIGENT, MECHANICAL, PROBLEM-SOLVERS. Marketing Students' Descriptions of Marketers: CONSIDERATE, DYNAMIC, GENERAL, TALENTED, CREATIVE (2), OUT-GOING, EXTROVERTS, UNDERSTANDING

Engineering Students' Descriptions of Engineers: ANALYTICAL, FAST, DANGEROUS, BOOKISH, DESIGN, NUMERICAL. Engineering Students' Descriptions of Marketers: AWKWARD, OVER-PAID, SLICK,DANGEROUS,OVER-REACHING,SQUIRMISH.

STUDENT EVALUATIONS OF TEACHING EFFECTIVENESS IN MARKETING: EXPERIENCE VS. BACKGROUND

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Abstract

The purpose of this study was to investigate whether marketing students evaluate instructors based on knowledge of the instructors' abilities and teaching methods or whether students make evaluations based on the students' own background such as major, sex, whether the course is required or not, and the expected grade. Our evaluation instrument used the key dimensions of a "Master Teacher" in marketing as identified by Smart et al. (1988). The respondents were 344 students in four different international marketing courses. Factor analysis identified two underlying constructs being used by the students: "professional ability" and "classroom techniques". These "explained" .30 of the variation in students perceived effectiveness. "Ability" alone "explained" .28. The only significant external variables were "expected grade" and "elected course" (vs. required). Our conclusion is that marketing students will evaluate an instructor based on knowledge of the instructor's abilities and teaching methods. External influences are not a major artifact.

Introduction

Student evaluations are used by students to select courses, by faculty to assess their own performance, and by the administration to make personnel decisions pertaining to retention, tenure and promotion. With so much at stake, it is no wonder that the controversy is so heated.

The evaluation of teaching effectiveness by marketing students is part of a larger and highly controversial issue: that is the reliability and validity of *any* student evaluations of *any* faculty. On the one side is the belief that the students are, after all, the ones best qualified to report on the effectiveness of the teaching they receive. On the other side is the strong doubt that students are capable of making a reliable evaluation; that they are, in fact, the *least* qualified to recognize a good teacher when they see one.

The idea of having students involved in the evaluation of faculty goes back at least to 1924 at Harvard University (Ghorpade & Lackritz 1991). Currently the practice has become standard in universities across the nation. In some cases, according to Dudley & Shawver (1991) it has become the "primary measure of teaching effectiveness."

The purpose of this article is to examine the determinants of the students' evaluations. Objective measurements are analyzed in competition with the influences of other student characteristics such as GPA, major, sex and age.

Evaluation of Teaching Effectiveness

Student Evaluations:
The supporters of student evaluations report positive correlations between grades and ratings. Overall (1977) showed that higher evaluations were positively related to "students' achievement and students' affective development." Other studies have shown an agreement between past and present students evaluating the same instructor as being between .70 and .87 (Aleamoni 1981; Clayson & Haley 1990). A high correlation is also reported between the evaluations of alumni who evaluated the instructor five years later and the evaluation of current students (Aleamoni 1981).

The opponents of student evaluations, however, point out the unresolved questions of validity and reliability (Ghorpade & Lackritz 1991). The critics say that student evaluations are more subjective than objective and that the results are contaminated by external influences.

Several studies show that students form an opinion about the instructor based on what appears to be inadequate information. They form an impression very early in the semester and do not revise this evaluation as a result of subsequent experiences (Ortinau & Bush 1987). They surround instructors with the halo effect, drawing conclusions from only partial knowledge (Orsini 1988).

The critics claim that students are not equipped to make objective, impartial evaluations. Unlike human resource professionals in industry, student raters are untrained and anonymous and therefore prone to personal preferences and biases (Ghorpade & Lackritz 1991). They are thought to be inconsistent due to their "immaturity, lack of experience, and capriciousness" (Aleamoni 1981).

The type of instrument used in the faculty evaluations has itself been criticized as encouraging subjective appraisals (Ghorpade & Lackritz 1991). The criteria used are typically personal measures of enthusiasm, warmth, friendliness, fairness. The danger is that the evaluation is more a popularity contest than an objective rating of teaching effectiveness.

Students' Background:
External variables having no direct bearing on teaching competence have also been cited as possible artifacts (Dudley & Shawver 1991; Clayson & Haley 1990). Aleamoni (1981) summarized the research on these external variables as showing, in general, a low correlation between them and higher instructor evaluations.
A. Sex of student/instructor: 11 studies showed no relationship; 7 showed positive relationship.
B. Required vs. elected course: 5 studies showed relationship; 2 studies showed no difference.
C. Major or non-major: 4 studies indicated no significant difference.
D. Expected grade: 22 studies showed no relationship; 28 showed positive relationship.

Student Evaluation Measures:
The controversy over student evaluations is compounded by the difficulty in defining and "objectively" measuring "teaching effectiveness". On the surface is appears to be simple enough concept based on how much students have learned. But how does one measure "learning"? As Clayson & Haley (1990) point out, there has never been agreement on what constitutes appropriate criteria for measuring either teacher "effectiveness" or student "learning".

In the field of marketing, however, Smart et al. (1988) have done valuable groundbreaking work in defining what is "effective". To identify the attributes of an effective marketing instructor, Smart et al. (1988) surveyed 144 marketing educators who had been identified by their department heads as "master teachers". The survey asked open-ended questions about "teaching effectiveness and what the respondent did in his or her classroom to enhance student learning and overall course effectiveness." As a result, Smart et al. identified seven key dimensions of lecturing effectiveness: 1.interactive style, 2.preparation and structure, 3.examples and implications, 4.teamwork philosophy, 5.enthusiasm and entertainment, 6.supplemental aids, and 7.professional tone.

In 1991 Kelley et al. conducted a follow-up study of 189 students, having them respond to the same questionnaire given to the "master teachers." The two sets of responses were then compared to determine whether students in their evaluations considered the same criteria as did the teachers. The results showed that "the perceptions of the students and educators were generally parallel." Smart et al. (1988) concluded their study on "master teachers" in marketing by writing that "It would be useful to assess our own individual lecturing skills based on these important points."

Research

Purpose of Study:
This study expands on Smart et al.'s approach. Our purpose was to investigate whether students actually do use experience measurements in evaluating the instructor or whether their evaluations were influenced by extraneous external influences. We consequently formed the following competing sets of research questions:

A. Questions related to the students' class experience:
(1) Do students use the key dimensions identified by the "master teachers" when evaluating lecturing effectiveness in marketing?
(2) Do these dimensions have underlying constructs which explain how these evaluations are being made?

B. Questions related to the students' background:
(1) Are students influenced by unrelated external factors such as sex, age, major, GPA, or reason for taking course (required or elected) when evaluating lecturing effectiveness in marketing?
(2) Do these external factors increase the likelihood of a predisposition in favor or against the instructor?

Method:
Four consecutive semesters of undergraduate (senior/junior level) and graduate international marketing classes under the same instructor were surveyed in a state university in South Florida during 1991-1992. 344 respondents answered 41 questions pertaining to the textbook, teaching methods, grading system, professor, and satisfaction. Included were 10 statements related to the teaching effectiveness of the instructor, the central concern of this paper.

The criteria for evaluating the instructor were based on the seven key dimensions isolated by Smart et al. (1988). Three additional dimensions were used (instructor's knowledge, professional qualifications and proficiency in the use of language). Three questions were used to determine students' evaluation of the benefits received. Information was also collected on the external factors: sex, age, major, GPA, and reason for taking course.

The dependent variables were the items defining the *perceived* effectiveness of the teaching, the students' subjective evaluation of what they have learned from the

course. A more precise measure would have been some outside test of marketing skills, but none is available. Grades (expected or actual) were not used as a measure: an actual grade can be subjectively influenced by the instructor and an expected grade can be influenced by the student for reasons unrelated to the perceived effectiveness of the teaching.

Factor analysis was used to determine the underlying constructs students were using in their evaluations as well as to test the internal validity of the questions. Using the average of the variables which loaded on each factor, the perceived benefits were then regressed on the teaching effectiveness variables to determine how much of the perceived benefit they "explained."

Exploratory stepwise regression was used to investigate the relative importance of the teaching effectiveness variables in relation to the other student characteristics.

Results

Factor Analysis revealed two underlying constructs in the 10 variables evaluating the instructor's lecturing effectiveness. The underlying constructs used by students in their evaluations appear to have been "classroom techniques" and "professional abilities." It appears likely that they reflect the original two open-ended questions posed by Smart et al. (1988) on general teaching effectiveness and classroom techniques.

The variable pertaining to organization ["Preparation and structure (outline, order)"] loaded equally on both factors, implying that it is part of both "techniques" and "abilities." The three variables for perceived benefits or satisfaction all loaded on another factor. This validated that they were measuring the same construct which was labeled "perceived effectiveness".

Regressing the student satisfaction factor on just the two factors of instructor's techniques and abilities gave an adjusted R^2 of .30 ($p = .0000$), indicating that these factors are positively related with satisfaction. [The adjusted R^2 may be inflated by the fact that the data is all negatively skewed, typical of student evaluations (Alea-moni 1981)]. However, the beta weights indicated the greater importance of "professional "ability" (beta=.48) rather than "classroom techniques" (beta=.28) in the relationship.

FACTORS & UNDERLYING DIMENSIONS: INSTRUCTOR'S ABILITIES, TEACHING TECHNIQUES, AND PERCEPTIONS OF EFFECTIVENESS	
FACTOR ONE: CLASSROOM TECHNIQUES	LOADING
1. Use of interactive styles (asking questions of students)	.57
2. Use of examples, cases and implications for practice	.50
3. Teamwork philosophy (encouraging students participation)	.75
4. Use of supplemental aids to teach (over-heads, video, etc.)	.81
5. Instructor's knowledge of the material for this course.	.64
FACTOR TWO: PROFESSIONAL ABILITIES	LOADING
1. Professional qualifications (degrees, experience) to teach	.46
2. Professional tone and posture (attitude in front of students)	.58
3. Motivation & enthusiasm when teaching or talking to students	.83
4. Proficiency in the use of language when communicating	.80
FACTOR THREE: PERCEIVED EFFECTIVENESS	LOADING
1. Compared to the actual benefits I obtained from this course, the number and complexity of the requirements may be acceptable	.74
2. Compared to other courses at the same level, I am satisfied with what I learned and accomplished in this course	.80
3. If I had to take this course, as it is, again, I would take it	.76

The importance of "professional ability" was demonstrated again in the stepwise regression where sex, GPA, major, age, undergrad vs. graduate students, expected grade and reason for taking the course were all provided for possible inclusion in the equation. The first variable selected in the stepwise regression was "professional ability" which resulted in an adjusted r^2 of .28. The second variable added was "expected grade" which increased the adjusted R^2 to .36. The next and last to enter was "required" vs. "elected" course. The relationship was negative resulting in an adjusted R^2 of .40. The beta weights in the final equation were:

FACTOR	BETA
"professional ability"	.49
"expected grade"	.17
"required course"	.39

None of the student characteristics -- sex, GPA, major, age, undergrad vs. graduate student -- passed the 4-point F-to-enter threshold and were consequently not entered into the equation.

Conclusion

Students appear to use the key dimensions identified by Smart et al. when evaluating marketing instructors. The underlying constructs of "ability" and "techniques" are both significant in determining the perceived effectiveness which the students receive from the course. The "ability" factor explains more of the variance than does the "technique" factor, reflecting the old adage that "it's not what you do, it's how you do it."

Students are not influenced by external influences except for their "expected grade" and whether the course was "required". The relationship between "perceived effectiveness" and "expected grade" may reflect the fact that they are measuring the same construct. Some prior studies have even assumed that expected grade is a measure of perceived mastery of the subject, similar to the measure of perceived effectiveness (Overall 1977). Further study is required to ascertain if that is the case.

Students do appear to be influenced by whether the course was required but the relationship is contrary to expectations. If the course is required, the rating of the teaching effectiveness is not lower, but higher. This finding may reflect the fact that the students who are required to take the course enter it with low expectations. When the instructor goes beyond those expectations, the students are pleasantly surprised and give a high rating.

The conclusion is that, given the opportunity, marketing students do use experience in evaluating their marketing instructors. However, further study is required to understand the external influences.

The implications for teaching are straight forward. Instructors should pay more attention to personal and professional qualities than to teaching tools. The latter also influence performance but at a lower level. Teaching trainers should focus more on the behavioral aspects of good instruction rather than the methods. And teaching evaluators should reward professional performance at a higher level than technical proficiency.

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AN INTERACTIONALIST PARADIGM FOR ASSESSING STUDENT OUTCOMES IN MARKETING CURRICULUMS

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Abstract

An increased demand for reliable and valid assessments of student outcomes in higher educational settings coincides with the business communities' increasing dissatisfaction with the quality of marketing education. The framework on which student outcomes assessments have customarily been based is the Institutional Effectiveness Paradigm. This paper systematically discusses the marketing channel-oriented shortcomings associated with this paradigm. Then, a framework guiding student outcome assessment is developed that is more compatible with the ontological core of marketing (the exchange process) and with the distinctive needs of the marketing educator's constituencies. This framework is grounded in principles taken from relational exchange theory (Macneil 1980) and offers several advantages over current approaches.

* * * * * * * * *

You can't measure the effects of what I do.
Why not!
They're intangible.
Oh? Why should I pay you for intangible results?
Because I have been trained and licensed to practice.
Hmm... all right. Here's your money.
Where? I don't see it.
Of course not...it's intangible.
Mager (1968)

An increased demand for reliable and valid assessments of student outcomes in American colleges and universities coincides with the business communities' increasing discontent over the quality of marketing education. Many business practitioners contend that marketing curriculums fail to adequately prepare students for the dynamics of the marketplace (Perry 1989). The Carnegie Foundation[1] suggests greater "coherence" is needed to relate the core programs of marketing to the lives of students and to the world they will inherit. Academicians may note the irony that accompanies such charges. After all, marketing educators generally agree that *exchange* provides the discipline's ontological core, and that the delivery and receipt of a marketing education reflects such exchange. Further, the marketing curriculum tends to focus on various aspects of the relationship between the exchange process and market forces.

Efficacy has two components: outcome expectancy and efficacy expectancy (Bandura 1977). Within the context of marketing education, outcome expectancy relates what the educator *does* to what the student *learns*. Efficacy expectancy refers to educator's beliefs about their competency in positively affecting student outcomes and subsumes considerations of the intensity of effort expended by educators (Benz, et al. 1992). Ultimately, the burden rests upon marketing educators to draft statements of student outcomes and to provide marketing curriculums that engender those outcomes.

Teaching efficacy is generally measured through either accreditation-based assessments, state-mandated accountability efforts and/or intraorganizational student outcome initiatives (Nichols 1991). Regardless of the measure used, the assessment procedure may create substantial trepidation among educators. Perhaps as a consequence, marketing educators are increasingly involved in the design and implementation of their own outcome assessments. The objective of this paper is to propose a framework for assessing marketing student outcomes.

Traditional Approach to Student Outcome Assessments

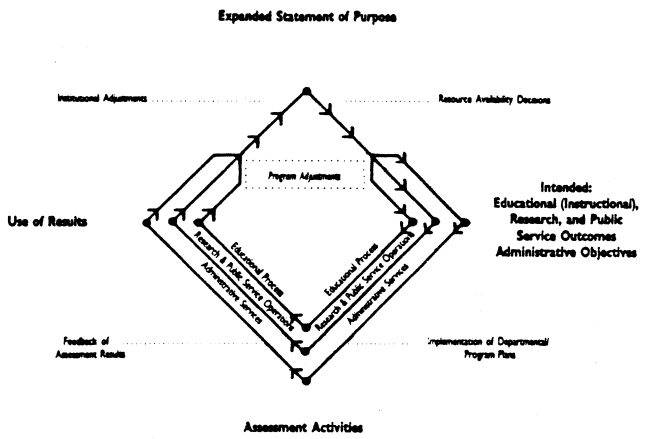
The paradigm on which student outcome assessments are customarily based is the Institutional Effectiveness Paradigm (IEP) (Nichols 1991). The IEP provides a normative tool for evaluating institutional effectiveness. The model posits that a non-recursive relationship exists between (1) a broad statement of departmental focus, (2) specific, intended outcomes linked to the statement of purpose, (3) evaluation of the extent to which departmental activities accomplish the intended outcomes and (4) the utilization of the results to ameliorate departmental results. The IEP's broad statement of purpose focuses on learning outcomes rather than teaching. Nichols (1989) cautions against a process approach, suggesting:

> "This traditional "process" orientation or focus within academe is frequently reflected in statements of departmental intentions which describe: "adding another course to a major," "reducing teaching loads," and that all-time favorite "raising salaries to regional or national averages" (p.18).

Results-oriented assessments are fundamentally meaningful. They relate teaching activities with their effect on student cognitions and behaviors. Assessments should be focused on the substantive outcomes of teaching rather than the means for attaining such outcomes.

The IEP also involves the implementation of programmatic evaluation procedures. Assessment activities involve a fundamental evaluation of student learning via quantitative and/or qualitative criteria. While "students" comprise the sampling domain in assessment activities, departmental activities are the focus of the evaluation. Assessment outcomes are a reflection of the entire faculty. The prescriptive value of this assessment program lies in its ability to generate meaningful indicators for refining departmental performance. The possibility that institutional adjustments may be made to refine service and improve educational processes is also accounted for in the IEP. The IEP is portrayed in Figure 1.

FIGURE 1
Institutional Effectiveness Paradigm[1]

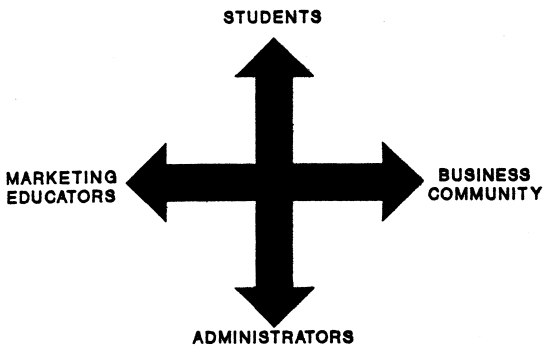


[1]From Nichols, James O. 1991. *The Departmental Guide to Implementation of Student Outcomes Assessment and Institutional Effectiveness*. New York, NY: 12.

The IEP Quandary

Educational institutions have long been described as *social organizations* by organizational theorists. Educational institutions inculcate both formal and informal channel structures (Morgan 1986). Because they are social in nature, marketing education channels may be evaluated as "collectivities" of institutions and actors who are simultaneously pursuing their self-interests and collective goals. The exchange processes associated with 'distributing' a marketing education involves an interrelated set of channel members, including educators, students, administrators and business practitioners. A wide divergence of opinion exists among faculty members, administrators, members of governing boards and the public regarding what constitutes a quality institution (Nichols 1991). Figure 2 illustrates the channel relationships that influence and are influenced by the exchange of marketing education.

FIGURE 2
Channel Relationships in Education Exchange



This network of relationships illustrates the deficiency of the IEP. The IEP adopts a simplistic perspective in assuming that educators represent the total set of interests in the marketing education channel and implies that the connection between the means and ends of assessment exists at a single channel level. As such, the assessment of student outcomes in the IEP is generated, monitored and then refined by the marketing department. However, the complexity of the assessment process can not be expressed from a single perspective (Bolman and Deal 1987). In fact, the monadic perspective is antithetical to the exchange perspective that provides the focal point of marketing.

Evaluating the Systems Orientation

The IEP offers a systems approach to student outcome assessment. Several problems are associated with adopting a systems orientation toward the assessment of student

outcomes (Ruekert, Walker and Roering 1985). First, the systems approach fails to account for the disparity between external and internal channel relationships. The presence of dissimilarities in each channel member's self-interests and the "collectivity's" goals often leads to shortsighted operationalizations of purpose. Instead, the purpose tends to reflect the marketing department's *normative goals* which may or may not reflect the collective goals of their constituencies. For example, 'knowledge for knowledge's sake' may be held in high regard by marketing educators. However, students and/or business practitioners may advocate a more applied educational approach. The IEP can not accommodate such disparate perspectives. Since the expanded statement of purpose governs student outcome assessments, the resolution of these alternative perspectives is left solely to marketing departments.

Second, the IEP is based on an assumption of independence between its task orientation and the environment in which the task is to be performed. The IEP ignores the situational context of task performance, yet, consumers are known to behave differently in different settings. For example, whether the marketing department is big or small, part of a college or university, or a public or private institution often influences resource availability. Further, measures of student performance sometimes vary substantially based on differences in rudimentary situational elements such as class size or class space. Ohanian, Taschian and Beard (1992) remark:

"As business school enrollments increase, administrators and professors seek creative, effective strategies to meet the resulting demand for more sections of required courses, as wells as additional classroom space. One widely adopted response from business schools has been a trend toward large sections of undergraduate core courses" (p.14).

The motivations of students to achieve is also highly dependent on context. The composition of the student body is likewise related to student outcomes, reinforcing the relationship between environment and teaching efficacy. Educational psychologists generally agree that a causal link exists between individual differences, achievement contexts and achievement attributions (Farmer, Vispoel and Maehr 1992).

Finally, the IEP assumes the marketing department is the most qualified party to evaluate self-efficacy. This assumption diminishes the role that business and community leaders play in contributing institutional statements of purpose and in gauging institutional effectiveness. The measurement of achievement is susceptible to bias from profit-driven motives (Sternberg 1992). This vulnerability may facilitate *post hoc* justifications of existing educational programs, faculty mixes and/or grade inflation by those who evaluate marketing educators, rather than any substantive refinement of the assessment procedure.

An Interactionalist Paradigm For Student Outcome Assessments

Channel issues should be examined within an interactional framework (McVey 1967; Stern, Sternthal and Craig 1973). Pennington (1968) was first to criticize researchers' tendency toward studying only one side of channel dyads, and suggested services researchers should adopt investigative styles that permit the concurrent observation of dyadic and individual behaviors. Considerations of the effects of and influences on all channel members who themselves impact the assessment process is critical to the interactionalist view.

Channel Structure

Channel structure is conceptually indistinguishable from the network of dyadic relationships that contribute to the educational exchange process. Channel structures are directly linked to dyadic performance and strategy (Dwyer, Schurr and Oh 1987). It follows that student outcome assessments can be viewed as a manifestation of channel structure. The relationship between channel structure and channel performance is viable only under conditions of *purposeful exchange*. The learning process is itself purposive. The deliberate nature of marketing education suggests each party to the *exchange process* is implicitly aware of behavioral contracts that govern their channel relationships. These behavioral contracts have been labeled as exchange governance structures.

The paradigm emerging in the marketing channels literature for explaining the exchange governance structures is *relational exchange theory* (Macneil 1980). The theory posits that all social exchange can be classified along a continuum ranging from purely discrete transactions to transactions characterized by a purely relational context. Discrete exchanges would characterize educator-student exchanges by each course experience. Students often take a course, receive a grade and move on to the next course or graduate absent any further interaction with the educator. In discrete exchange, the educational/learning exchange process is marked by a strict prespecification of the terms of conduct and performance appropriate to each dyadic role. Discrete relationships may be considered as transactions that ensue within impersonal competitive markets where both parties act as profit maximizers (Miles, Arnold and Nash 1990). In the context of educational channels, students sometimes competitively vie for high grades relative to other students.

Relational exchange is manifested in long-term, on-going alliances that feature a high degree of complexity. Relational exchange suggests the educator-student relationship extends beyond the delimiting notion of strictly exchanging 'course material.' This view suggests the educational process is best considered as a complex web of interfaces between all parties involved in the exchange process. Sometimes known as 'domesticated markets,' relational transactions are planned and administered rather than being conducted on an *ad hoc* basis (Arndt 1979). Discrete and relational exchanges are distinguished by the degree to which contractual norms are integrated and applied in the channel relationship (Kaufmann and Stern 1988). A marketing educational process characterized by relational exchange would represent a continual process that extends beyond the duration of the semester or quarter.

Value of a Behavioral Approach

How does relational exchange relate to student outcome assessments? We contend that performance assessment is best measured through considering *exchange relationships* rather than *curriculum processes*. This approach to outcome assessment focuses on the relationships that develop between channel members, rather than the information borne from these relationships. In essence, this perspective incorporates a behavioral rather than a systems approach to student outcome assessment. Several advantages are associated with this behavioral approach:

> The behavioral approach to assessment allows for *adaptive education* because it inherently reinforces the idiosyncratic nature of each channel relationship. The behavioral approach does not attempt to standardize a "template" that maximizes the learning process for the highest number of students.
>
> It is sympathetic to the need for *continual evaluation* of student outcomes. Whereas measurement in the IEP necessitates a cross-sectional analysis, the interactionalist approach is on-going.
>
> It is a more *comprehensive* approach, integrating both internal and external environments via the social exchange perspective.

The challenge that remains lies in operationalizing this paradigm for student outcome assessments. The norms of solidarity, role integrity and mutuality should prove useful as "governing" mechanisms for the Interactionalist Assessment Paradigm. The channels literature suggests these governing norms permeate all exchange relationships (Kaufmann and Stern 1988).

Contracting Norms

Solidarity, concerned with the level of allegiance between that exists between channel members, is the norm that holds the exchange dyad together (Macneil 1980). Taken from contract law, the norm focuses on the fruitful culmination of individual transactions. The presence of high solidarity can cement exchange relationships through administering and contributing to the continuity of exchange (Macneil 1980). Solidarity will generally be internalized by those who are party to the exchange and who view the exchange relationship as innately important (Kaufmann and Stern 1988). An underlying dyadic "continuity" is dictated by the solidarity norm. In marketing education, solidarity would refer to the "bond" that exists between students, educators, administrators and business practitioners.

Role integrity is the degree to which a given dyadic "role" (educator-student) is enacted properly. Whether a channel function (role) is enacted properly is primarily determined by the reactions of fellow channel members and others who may be affected (Solomon et al. 1985). Role integrity subsumes one channel member's analytical evaluation of their counterpart's role behavior and the behaviors that jointly form the exchange relationship (Merton 1957). Role expectations can be easily related to educational channels since student outcomes may be measured by evaluating the correspondence between role expectations and actual behaviors.

Mutuality is concerned with the outcomes that emerge from exchange. While it is not always present, the norm requires a "fair" distribution among the parties to a transaction. The presence of "mutuality" within a dyad by no means ensures equality of outcomes among channel members. However, the norm's presence does constrain the level of gain that can be realized by either channel partner for the duration of the exchange process. It is easy to see how the "benefits" that accompany the educational exchange process could relate to mutuality. In discrete relationships, the benefits may be assessed by measuring course grades and faculty evaluations. But in the relational context, measures of career placement and alumni support would more appropriately assess student outcomes.

How can these governing norms be used to actually measure student outcomes? Scales measuring each norm have been operationalized in a variety of settings. The scales in these studies have exhibited high internal consistency as well as content and construct validity (Dant and Schul 1992). The battery of scale items should be amenable to adaptation to the domain of educational channels.

These exchange governance norms jointly represent the degree to which channel interactions are contractually united. These norms are likely to not only regulate the structure that exists between members of educational dyads but to also influence the internal structure of a marketing department. Since all channel relationships are linked horizontally and vertically to other exchange relationships until, in effect, the entire world economy is linked, no social values exist that are completely external to any exchange (Macneil 1980). This suggests these behavioral norms are present in both internal and external norms. This view implies the three contractual norms govern interactions *between* marketing educational channel members (educators and students) and *within* channel environments (marketing departments).

Interactionalist Assessment Paradigm

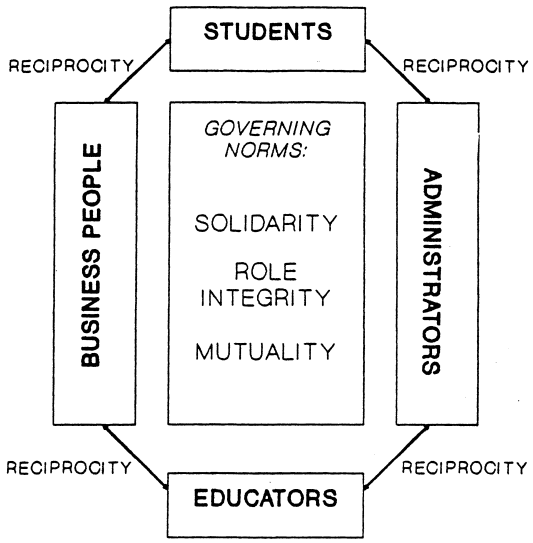
Treating student outcome assessments as a single, collective effect is inconsistent with the principles of behavioral channels theory. Considerations of the interrelatedness between the market department's structure and effectively serving student needs should be a presumed baseline from which the outcome assessment process can begin. Marketing educators should examine the interactions between channel members (i.e., students and faculty) and their environments.

Communication strategy has provided a useful vehicle for describing the adaptive techniques needed to effectively maintain channel relationships (Miles, Arnold and Nash 1990; Mohr and Nevin 1990). Yet, communication is nothing more than a manifestation of the rudimentary norms, values, attitudes and expectations of channel members. Effective communication should be viewed as a valuable strategic tool. Strategy development is an agglomerative process of consensus building through communication, leading to a common vision (Dess and Origer 1987). However, this collective perspective is hostile to the interactionalist view. The descriptive value of communication strategy is limited by the reciprocal nature of the educational exchange process.

Reciprocity subsumes communication strategy (Komorita, Hilty and Parks 1991). Reciprocity is clearly a preferred condition *within* a collegiate-level educational setting; ideally a sense of "give and take" exists between students, educators and administrators. Relational exchange necessitates the presence of reciprocity. Indeed, reciprocity might be identified as an important dimension of an educational department's progress; i.e., the integration of governance norms that simultaneously reflect and induce greater reciprocity is a requisite condition for higher order exchange systems to flourish.

The Interactionalist Assessment Paradigm (IAP) that has been developed in this paper illustrates the role of reciprocity in student outcome assessments. As shown in Figure 3, the IAP suggests students, educators, administrators and business publics are mutually responsible for fostering desirable educational outcomes.

FIGURE 3
Interactionist Assessment Paradigm



If marketing departments are to embrace the IAP as a tool for assessing student outcomes, internal and external channel values must be considered as antecedents to as well as outcomes of the educational experience. A basic tenet of relational exchange is that each channel member is willing and able to exhibit substantial flexibility over time and circumstances in their efforts to sustain cooperative relationships. The exchange governance view presumes that reciprocity is an ubiquitous norm, and one that provides the basis for stable channel relationships (Gouldner 1960).

Reciprocity is an intrinsic medium of exchange (Komorita and Esser 1975). Reciprocity prescribes that students, educators and administrators emulate one another's behavior. It implicitly prescribes that marketing departments should maintain on-going exchange with their students after they confer degrees. An organizational department's capacity to be simultaneously provokable and forgiving promotes the perception that the department is 'firm but fair' (Komorita, Hilty and Parks 1991). Students are more likely to enter into on-going relationships with educators that extend beyond the original transaction itself under exchange circumstances perceived to be 'firm but fair.' As channel relationships move toward a relational status,

altruistic behavior is expected (Macneil 1980). Further, expectations about trouble should be anticipated and countered. Reciprocity also has a temporal element. Consequently, in relational exchange, the future is an evolving process of mutually-grounded planning. In discrete exchange, there is no conceptualization of the future.

The IAP offers several advantages over previous treatments of outcome assessments. The IAP (1) captures the interaction departmental structure and the resulting "educational climate," (2) presents reciprocity as a mediator of channel relationships in educational settings and (3) preserves the unique needs and concerns of each channel member. In a manner compatible with the principles of the interactionalism, exchange between channel members is depicted as a separate function, forming an assessment network.

Comments and Future Research

As many states charge colleges and universities with the task of devising and implementing student outcome assessment programs, academics face an increasing need for normative models that can guide the development process. Marketing educators actually enjoy a distinctive competency in their efforts to meet this challenge. Conceptualizing the delivery of education as an *exchange process* is nomologically consistent with the ontology of the marketing discipline.

The IAP presents distinct normative implications. The paradigm calls for interactive participation among all constituencies who influence and are influenced by outcome assessment process. This contrasts with conventional approaches such as the IEP. The IEP positions each disciplinary department as both the source and target of student outcome assessments. This often promotes a re-entrenchment of current practices (i.e., teaching methods) rather than an enhancement of targeted student outcomes (i.e., learning).

Additional research should determine how solidarity, role integrity, mutuality and reciprocity can be effectively measured in educational settings. The refinement and subsequent validation of these constructs may induce a more behavioral approach to assessing student outcomes. The procedure may also advance a greater commitment to "learning" as the targeted outcome by all channel members. As such, an investigation of the association between the exchange governance norms and organizational commitment may represent a promising avenue for research. This may prove an important step in the design of student outcome assessment programs.

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[1]From *Assessing General Education Outcomes (1992), a resource manual developed by the Task Force on the Assessment of General Education Outcomes for the University System of Georgia.*

EVIDENCE FROM A U.K. NATIONAL SURVEY

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ABSTRACT

This paper compares the characteristics and activities of female marketing academics at U.K. universities with those of their male colleagues. Specifically, the characteristics are explored in terms of demographic profiles, educational background and career structures, while activity patterns provide insights into the composition and length of the working week, research record and the relative importance and sources of outside income.

INTRODUCTION

At U.K. universities, marketing education is still very much a male dominated profession. Whether the low numbers of women in marketing academia is the result of social norms, limited access to opportunities, discrimination or differences in interests and productivity remains unclear. In fact, despite an increasing attention to gender issues *in general* during the last few years, to date, there has not been a single systematic comparison of even the most basic characteristics of male and female marketing academics in Britain. This is even more surprising in the light of the substantial body of knowledge on the subject which has been generated in other countries, notably the U.S.

This paper attempts to redress this gap by profiling male and female marketing academics at British universities. Following a brief review of the literature and a description of the research methodology, the analysis compares the genders in terms of the academic rank occupied, the career- and educational background, work patterns, publication performance and outside earnings. The findings are discussed in the light of previous contributions and the paper closes with a reflection on the role of female marketing academics in Britain.

LITERATURE

There is a substantial body of literature comparing male and female academics on a wide variety of issues (Zuckerman and Cole 1975; Goldstein 1979; Ehrhart and Sandler 1987; Stern and Kellogg 1987; Over et al. 1990). Among others, it has been suggested that gender influences career patterns, career choice, promotion, work styles, interests and research performance.

As to career patterns, it has been widely suggested that males and females differ in terms of their career development (Aisenberg and Harrington 1988; Clark and Corcoran 1986; Simeone 1987). However, Erhart and Sandler (1987) suggest that differences in the career paths between men and women have narrowed and Carsky et al. (1990), looking specifically at marketing academics, found *no* difference in the career patterns of U.S. men and women in marketing education in terms of the time required to obtain degrees, number of job changes and age at last academic promotion.

With regard to career choice, there is evidence that women psychologists are less likely to gain appointment in prestigious universities, even when they received their doctorates from top-rated departments and had publication records comparably to their male colleagues (Astin 1972). Female doctorates in psychology have also been found to be more likely unemployed or underemployed (Solmon, 1979). Moreover, Hornig (1980) and Gutek and Burley (1988) point out that women in academia have a stronger presence in two- and four year colleges compared to research universities.

At the heart of the gender debate lies the insufficient promotion of women into senior positions. Both internal problems in reconciling traditional expectations towards women as well as external factors such as discrimination have been put forward as reasons for the lack of career advancement (Devanna 1984; Landau and Amoss 1986). Women in academia have also been found to earn less and occupy lower ranks (Carsky et al. 1990; Hornig 1980; Russo et al. 1981).

Differences in the work styles of men and women members of the American Marketing Academy have been reported by Badin Research Co. (1985). Astin (1972) pointed out that women are less likely than men to have been administrators and Carsky et al. (1990) noted the comparatively lower involvement of women in major national marketing organisations such as the Academy of Marketing Science or the Association of Consumer Research; they also noted

significant differences in work styles between women with and without Ph.D., with the former spending less time in teaching and administration but working more hours.

Closely connected with work style is the teaching and research interest of women marketing academics. In this context, it has been pointed out that women are more interested in consumer behaviour and promotion, while men's interests are more evenly divided across the discipline (Carsky et al. 1989; Hilger and Wafful, 1979).

Finally, with regard to research performance, Cole (1979) found women in biology, chemistry, psychology or sociology publishing less then men 5, 10 and 15 years after graduation in a comparison of five cohorts of PhD graduates. These results have been supported by Helmreich et al. (1980), who pointed out that women not only published less often but were also less frequently cited than men. Similarly, Emmons (1982, p.1234) concluded that "the work of women in the sample was cited significantly less often than that of men." Over (1982), observed that the women in his sample published significantly fewer papers than men but found no difference in terms of the number of citations gained per published paper. Guyer and Fidell (1973), also found differences in publication rates among male and female Associate Professor and Professor level appointments but not among more junior level academic appointments. However, it has been pointed out by Carsky et al. (1990) that the proportion of articles with female authorship in major marketing journals has nearly doubled in the 10-year period to 1988 and that the increase in the number of women marketing educators (71% of whom received their highest degree after 1980) is likely to redress the imbalance in the future.

While the above literature provides valuable insight into a range of differences between male and female academics, it is remarkable that the vast majority of the work has been conducted in North America. However, since gender roles are likely to be influenced by cultural differences (Jain, 1990) it is necessary to explore whether the findings above also apply in a different cultural setting. This paper aims to shed light on this issue and expands previous work by providing an analysis of gender differences of marketing academics from a U.K. perspective.

SURVEY DESIGN AND IMPLEMENTATION

A three-stage procedure was adopted for identifying and contacting appropriate respondents. First, the *Commonwealth Universities Yearbook* published by the *Association of Commonwealth Universities* was consulted to obtain a complete listing of all UK universities and the departments within each. This resulted in the identification of the department(s) which could be expected to have marketing staff (usually Business Studies or Management Departments)[1].

As a second step all potentially-relevant departments were contacted by telephone (sometimes more than one in a single university) and were asked to give the names of all individuals holding teaching/research posts in marketing. The names were usually provided on the spot, except in a few cases where there were so many staff that a list was sent by mail. This approach resulted in the identification of 234 individuals, practically representing a census of the relevant population. Out of 51 universities[2] contacted only 9 claimed to have no marketing academics at all.

The third stage in the survey involved the dispatch of a six-page postal questionnaire to all 234 individuals identified in the second stage. This was accompanied by a personalised cover letter requesting cooperation and a prepaid return envelope to facilitate response. A total of 111 usable responses were received, representing an effective response rate of 47.4%, which is comparable with the 43% obtained in a U.S. study of women marketing educators (Carsky et al. 1990). Only seven out of the 42 universities initially contacted were not represented in the final sample; each of these, however, had only one or two marketing staff in the first place (a total of 12 staff among the seven institutions concerned).

The content of the questionnaire was loosely based on the Williams et al. (1974) study of the academic labour market and elicited details on the respondents' academic and non-academic career, qualifications, teaching and research activities, and income sources; demographic information was also obtained. In terms of measurement, wherever possible, ratio-scaled variables were used to facilitate subsequent statistical analysis.

TABLE 1: Demographic Characteristics

DEMOGRAPHICS	MEN	WOMEN	p-Value*
Nationality (% British)	90.0	90.0	1.000
Marital status (% married)	80.0	44.0	.003
Average age (years)	42.1	35.3	.003

[*of x^2-test for nationality and marital status and t-test for average age]

RESULTS

Demographic Profile

In terms of distribution by sex, men outnumber women on a 4:1 ratio according to the sample data (81.8% of the respondents are male); the estimated population proportion for male staff lies between 74.2% and 89.4% (at the 95% level of confidence) indicating that UK marketing academia is a man's world! This men-to-women ratio, however, is not too dissimilar from the U.S., where about 20% of the American Marketing Association's marketing educator membership consists of women (Carsky et al. 1990). Still, in view of the fact that now 47% of university entrants are women (CVCP 1991), women still seem to be grossly under-represented in the profession. As Table 1 shows, there are no differences in terms of nationality (with most months long and the longest six years).

In terms of rank, there appears to be under-representation of women at the senior levels. Given the 80:20 men-to-women ratio observed in the sample as a whole (see previous section) one would have expected 4 women Professors, 3 women Senior Lecturers, 13 Lecturers and 2 Research staff (the UK terms Senior Lecturer and Lecturer are respondents irrespective of sex being British). In terms of age and marital status women educators are, on average, younger than men and, consistent with this result, less likely to be married.

Career Profile

Table 2 shows the position held by the respondents at the time of the survey. Although a somewhat larger proportion of women hold temporary (i.e. fixed-time) posts than men, the difference is not significant; however, the average *length* of contract is significantly shorter for women than for men (overall, the typical duration of a fixed-term contract is three years, the shortest contract being 3 equivalent to Associate Professor and Assistant Professor in the U.S. system). The observed frequencies, on the other hand, are 0, 1, 16 and 3 respectively; however, the small number of cases in the female sub-sample (N=20) does not permit the application of a one-sample chi-square test to check the statistical significance of the discrepancy between expected and observed frequencies. It should also be borne in mind that there is a positive relationship between age and rank (oneway ANOVA $F=8.31, p<.001$) which also confounds a straight comparison between the sexes (since, as was pointed out earlier, women are on average younger than men). A further confounding factor is the length of time in the profession (i.e. academic experience) which also differs substantially between men and women (see below). Still, taken collectively, the results lend support to previous findings showing that women academics tend to occupy lower rank than men (Hornig 1980; Russo et al. 1981; Carsky et al. 1990).

TABLE 2: Positions Occupied

POSITIONS OCCUPIED	MEN	WOMEN	p-Value*
Type of post (% temporary)	23.6	35.0	.292
Average length of (temporary) contracts (months)	41.7	27.4	.018
ACADEMIC RANK (%)			
Professors	22.2	0.0	N/A
Senior Lecturers (Associate Professor)	16.7	5.0	N/A
Lecturers (Assistant Professors)	53.3	80.0	N/A
Other (Research Fellows, etc.)	7.8	15.0	N/A

[*of x^2-test for type of post and Mann-Whitney-U test for length of contract]

TABLE 3: Career Background

	MEANS		t-Value	2-Tail Sig.
	MEN	WOMEN		
Time in current post (months)	57.0	41.1	1.43	.158
Time with current university (months)	82.6	48.0	2.72	.009
Total no. of previous full-time academic posts	1.5	1.0	2.68	.009
Number of previous university posts	1.1	.8	1.24	.223
Time working in education (months)	126.0	65.5	4.63	.000
Time working in university education (months)	109.4	57.3	3.92	.000
Number of full-time non-academic posts	2.6	1.7	1.50	.136
Time in full-time non-academic posts (months)	89.5	38.3	3.39	.001

TABLE 4: Academic Qualifications

	PERCENTAGES		x^2-Value	Sig.
	MEN	WOMEN		
Bachelors Degree	95.6	95.0	.01	.914
Masters Degree	64.5	50.0	1.45	.229
Doctorate	50.0	35.0	1.48	.224
TIME ELAPSED SINCE QUALIFICATIONS OBTAINED (YEARS)				
Bachelors Degree	19.0	12.3	3.80	.000
Masters Degree	13.3	7.2	2.52	.014
Doctorate	7.3	7.7	.16	.873

Further career information is provided in Table 3 which compares men and women educators in terms of their length of service within the academic sector, previous posts, and industrial experience.

The findings show no significant differences in terms of the number of university posts and non-academic posts held by males and females and thus support Carsky's et al. (1990) results relating to marketing academics in the U.S. However, the significant differences shown for virtually all other career background variables (the exception being "time in current post") *do* support the balance of the literature which suggests differences in the career patterns of males and females (Clark and Corcoran 1986; Simeone 1987; Aisenberg and Harrington 1988).

Education and Qualifications

Table 4 describe the educational background of the respondents. Only 35% of female marketing academics in the sample hold Ph.D.'s compared to 63.4% reported for female U.S. marketing academics (Carsky et al. 1990). No differences are apparent in terms of master- and bachelor degrees other than in terms of the time elapsed since these qualifications were gained; the latter findings seem to reflect the age difference between men and women marketing academics noted earlier.

In terms of professional association membership, no discernible differences can be detected between the two groups; the mean number of associations comes to 1.8 and 1.9 for men and women respectively (t-value=.08, 2-tailed significance=.937). However, 25% of the women did not belong to any professional association, which is congruent with Carsky's et al. (1990, p.4) observation that U.S. women academics tend to show a "low involvement in major national marketing organizations".

Work Activities

The length and composition of men and women marketing academics' working week are contrasted in Table 5. Respondents were asked to describe their work activities during term time. Thus, it may well be that the length of the working week (and, in particular, the time spent on research) are substantially different during the teaching-free period of the year.

TABLE 5: Length and Composition of the Working Week

	MEANS (HOURS)		t-Value	2-Tail Sig.
	MEN	WOMEN		
TOTAL				
Working Week	52.0	48.3	1.40	.173
TIME SPENT ON:				
Teaching Undergraduates	4.0	5.2	-1.19	.236
Teaching Postgraduates	4.0	3.4	- .78	.437
Teaching Preparation	8.5	10.5	- .97	.336
Outside Work (e.g. consultancy)	6.5	4.1	1.34	.184
Administrative Duties	8.8	7.8	.70	.485
Keeping Informed about New Developments	4.7	4.0	1.17	.249
Research	11.2	12.7	- .59	.554

The results in Table 5 show no differences in the length or composition of the working week between males and females and, with regard to "administrative duties", do not support Astin's (1972) U.S. finding that women are comparatively less likely to have been administrators.

What marketing academics achieve during the time they spend on research is reflected in the findings reported in Table 6. account for the fact that academics who spent longer in education had more opportunities to publish, "years working in education" (see Table 3) is employed as a covariate in an analysis of covariance (ANCOVA) comparison between men and women. The mean number of publications adjusted for the covariate is given in brackets.

While the figures in Table 6 indicate a lower publication rate of women compared to men in all but one category (non-refereed contributions to books of readings) and thus support previous results (Cole 1979; Helmreich et. al. 1980; Over 1982; Guyer and Fidell 1973), it is important to note that *none* of the observed differences are statistically significant. Moreover, the results demonstrate that the apparent differences in publication performance between men and women practically disappear when the raw means are adjusted for "years working in education".

A comparison with U.S. publication rates is difficult, as American contributions typically look at publications that appear in a restricted number of journals. However, looking at the sample of U.K. marketing academics *as a whole*, the mean publication rate in refereed journals was 10.2 articles. This can be compared with Amason (1987), who reported a mean number of 3.1 "scholarly publications" during the past three years for her sample of U.S. marketing academics. Given that for her sample, the average length spent working at a university was 13.2 years, it follows that the mean publication output for this category must be about 13.6. This compares to a U.K. range of 7.3 to 13.1 "refereed journal articles" (95% confidence interval). Applying the same logic to the mean "number of conference proceedings" reported by Amason (1987), one arrives at a figure of 11.9 for the U.S. This compares to 4.9 "conference papers in published proceedings" for the U.K. sample as a whole, or an estimated population range of 3.8 to 6.0 (95% confidence interval). Thus, while British marketing academics appear to publish only slightly fewer scholarly articles than their U.S. colleagues, their performance in terms of conference proceedings in notably lower.

OUTSIDE EARNINGS

Finally, the respondents were requested to indicate the proportion and type of any additional income they received on top of their basic annual salary. While only a quarter of the women academics responded positively to this question, 57% of their male counterparts claimed to have outside earnings (x^2-value=6.82, $p<.01$). Table 7 shows the proportion of income derived from different sources, together with the results of a t-test (where possible). It can be seen that, on average, income from consultancy and non-regular teaching represents a much greater proportion of the total income of men marketing academics than of women.

TABLE 6: Number and Types of Publications

PUBLICATIONS	MEANS (Adjusted Means)* MEN	WOMEN	F-Ratio	Sig.
A) Books written	1.5 (1.2)	.2 (.5)	1.46	.230
B) Books edited/co-edited	.6 (.5)	.0 (.1)	1.51	.222
C) Refereed contributions to books of readings	2.6 (2.2)	.8 (1.2)	1.13	.290
D) Non-refereed contr. to books of readings	1.3 (1.2)	2.2 (2.2)	.77	.382
E) Refereed journal articles	12.0 (10.0)	2.9 (4.9)	1.81	.182
F) Non-refereed journal articles	9.9 (7.5)	2.3 (4.7)	.38	.541
G) Conference papers in proceedings	5.5 (4.9)	2.5 (3.0)	1.73	.191
H) Conference papers delivered but unpublished	6.3 (5.1)	2.8 (3.9)	.26	.612
I) Total refereed publications (A+C+E+G)	21.4 (18.2)	6.4 (9.6)	2.60	.110
J) Total non-refereed publications I (D+F)	11.2 (8.7)	4.5 (7.0)	.13	.716
K) Total non-ref. publications II (D+F+book reviews, commercial reports, newspaper articles etc.)	14.2 (11.4)	5.3 (8.1)	.28	.600
L) Total publications I (I+J)	32.5 (26.9)	10.9 (16.5)	1.30	.258
M) Total publkications II (I+K)	35.4 (29.3)	11.7 (17.7)	1.30	.257

[* adjusted for the covariate; covariate is significant at p<.10 or better except for D]

TABLE 7: Sources of Additional (Non-Salary) Income

	MEANS (% of total annual income)		t-Value	2-Tail Sig.
	MEN	WOMEN		
Consultancy	15.4	2.9	5.13	.000
Book royalties	1.3	.9	.45	.654
External examinerships	.9	-	N/A	N/A
University adminisration	.7	-	N/A	N/A
Non-regular (eg exec. teaching)	6.5	1.5	3.36	.001
Board membership	.2	-	N/A	N/A

[N/A: t-test cannot be applied as the women sample has zero variance]

CONCLUSION

Overall, the above analyses paint a mixed picture with regard to the status of women marketing educators in the U.K. A higher proportion is working in temporary posts and the vast majority has not reached a senior rank. In fact, to the authors' knowledge, there are only two women marketing Professors (i.e. Full Professors) in the whole of the U.K. university system.[3] However, one also has to bear in mind that female marketing educators tend to be younger and have, on average, spent less time working in university education; thus it remains unclear whether the low proportion of women in senior academic ranks reflect sex discrimination or the (at present) still comparatively lower work experience.

Although the proportion of women with doctorates is lower than that of males, the difference is not statistically significant; however, this may well be a result of the overall small number of women in the sample. Male and female marketing academics in the U.K. also do not differ in the way they allocate their time to various activities (e.g. teaching, research, administration) during the term time, nor with regards to the overall length of their working week. The number of publications, adjusted for "years working in education", tends to be lower for females, but not significantly so. Very clear differences, finally, emerged in terms of the proportion of additional income derived from outside work, with only a quarter of the women in the survey showing *any* outside income and those who do engage in external work earning significantly less from outside sources than men.

Collectively, the findings suggest than a woman's lot in U.K. marketing academia is currently not as established as a man's. However, there is the hope that the comparatively higher proportion of younger women will stay long enough in the system to make their mark at senior rank.

Notes

1.Although this Yearbook contains a list of all teaching staff at U.K.universities broken down by department, it does not show which specific subjects individuals teach.

2.As of the academic year 1992/93, the U.K. government granted University status to some 40 former Polytechnics. These new institutions are not represented in this survey.

3.This refers to the "old" Universities excluding the former Polytechnic (see above).

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RATING THE NEWER MARKETING JOURNALS: FAMILIARITY AND QUALITY EVALUATIONS BY MARKETING DEPARTMENT HEADS

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Abstract

There has been a proliferation of new marketing journals in recent years. Although there are more opportunities for marketing faculty to publish in refereed outlets than ever before, it is also important for prospective authors to understand faculty perceptions of the newer journals. Unfortunately, even recently published journal ranking studies (e.g. Browne and Becker 1991, Gordon and Heischmidt 1992) do not include many of the newer publications. This paper presents familiarity and quality ratings of newer marketing journals based on a survey of marketing department chairs at AACSB-accredited business schools. It also includes an examination of the relationship between the relative research emphasis at a school and department chairs' journal evaluations.

Importance of Journal Quality Evaluations

Several recent studies (D'Onofrio, Slama and Tashchian 1988; Robicheaux and Boya 1989; Teer and Wisdom 1989; Tong and Bures 1989; Boya and Robicheaux 1992; Urban, Wayland and McDermott 1992) indicate that research is the most substantial element of professional evaluation for marketing professors at AACSB-accredited business schools. In light of the importance of research, faculty have paid increasing attention to the perceived quality of the journals in which their articles appear. Motes (1989) recognizes a clear tendency at many schools to rate the scholarly impact of an article according to where it is published. This view is consistent with results of empirical research conducted among AACSB-accredited business schools (Coe and Weinstock 1983). Quality evaluations or rankings of journals are often used to evaluate faculty performance for promotion, tenure, or merit pay (Bertsch 1986). Therefore, since rankings of marketing journals can be a key factor in the evaluation process for marketing faculty, it is important that new ranking studies be conducted and disseminated periodically to reflect current attitudes.

Research Emphasis and Journal Quality Evaluations

Previous research has examined a school's research emphasis and journal evaluations separately, but no studies have explored the possibility of a relationship between them. This gap in the published literature provides some interesting questions for which there are currently no clear answers supported by empirical results. For instance, are faculty at schools which stress scholarly research familiar with more marketing publications because their positions demand that they immerse themselves in the literature? On the other hand, are they familiar with a smaller number of journals--the established journals which have the greatest prestige and in which they are most interested in publishing? An important contribution of this study will be an exploration of the relationship between a school's research emphasis and faculty evaluations of journal familiarity and quality.

Number and Ages of Publications Evaluated

Past journal quality evaluations (e. g. Fry, Walters and Scheuermann 1985; Browne and Becker 1991) have demonstrated the difficulty in developing a single journal ranking study which includes all possible marketing publications. In previous journal rankings, most of the publications rated have been established journals which have been in circulation for several years. However, many newer publications have not been evaluated. Therefore, a need exists to evaluate the perceptions of marketing faculty regarding the quality of these newer journals. It is also important to compare the perceptions of the newer journals with the attitudes toward more established marketing journals.

Research Method

The population was composed of marketing department chairs/coordinators at the 256 AACSB-accredited colleges and universities. Department chairs were deemed a relevant population because they occupy positions of leadership which require them to provide guidance to other faculty and to evaluate research performance. Two waves of

surveys generated 142 usable responses for a response rate of 55.5%. The respondents appear to represent a good cross-section of marketing departments at AACSB-accredited schools, based on profile data such as: a.) the number of faculty in the department; and b.) the size of the graduate and/or undergraduate program. (Space limitations prevent the inclusion of these data in the paper, but they are available from the authors upon request.)

Measurement of Key Constructs

Respondents allotted 100 points among teaching, research and service according to the relative importance of these activities in evaluating the performance of tenure-track marketing faculty at their institutions. In recognition that these relative weights might differ by academic rank, the point allotment was done separately for assistant, associate and full professors. An overall indicator of research emphasis at a school was then constructed by averaging the research weights across the ranks.

In order to analyze department chairs' perceptions of newer journals, the authors presented respondents with a list of 13 marketing journals which began publication between 1985 and 1990; all journals had published at least one issue prior to the study. To provide a point of comparison, six journals which began publication prior to 1985 were added to the rating list. Three of these journals, *Journal of Marketing (JM), Journal of Marketing Research (JMR), and Journal of Consumer Research (JCR),* are consistently rated at or near the top of quality rankings (e. g. Gordon and Heischmidt 1992). The other three journals, *Journal of Retailing, Journal of the Academy of Marketing Science, and Industrial Marketing Management,* all began publication in 1973 or earlier, but have received quality ratings below *JM, JMR* and *JCR* in past studies (Luke and Doke 1987, Brown and Becker 1991). Thus, department chairs rated a total of 19 marketing journals. This list was by no means exhaustive, but since the main objective was to analyze attitudes toward the newer publications, the list was considered comprehensive enough to meet the objective.

Respondents rated their level of familiarity with the 19 listed marketing journals on a 1 to 7 scale, where 1 indicated a very low level of familiarity and 7 indicated a very high level of familiarity. Respondents also rated the overall quality of journals with which they were at least somewhat familiar; that is, journals to which they had assigned familiarity scores of 3 or higher.

Journal Familiarity and Quality Perceptions

Table 1 reports department chairs' perceptions of familiarity and quality for the new and established journals. Unlike the six established journals, none of the newer journals have mean familiarity scores which exceed the midpoint of the familiarity scale (4).

The established journals have all been in print considerably longer than the newer journals. Although it might be tempting to explain the differences in familiarity scores as being a function of age alone, this factor is not the only explanation for the relative rankings. Among the newer journals, for example, the *Journal of Services Marketing*, which began publication in 1987, has a significantly higher familiarity score (the highest score of the newer journals) than the *Journal of Business and Industrial Marketing*, which began in 1986, or *Research in Consumer Behavior*, which began in 1985.

The quality scores for the newer journals, which appear in Table 1, tend to be higher than the familiarity scores, and there are more quality ratings above the midpoint than there are familiarity ratings. Part of the explanation for this difference is due to the filter placed on the responses; only respondents who indicated that they were at least somewhat familiar with a journal were considered qualified to rate it. Thus, even though a journal may be recognized by a small number of respondents, it is possible that those respondents may be favorably impressed with the journal's quality. *Research in Consumer Behavior* and *Marketing Letters*, in particular, have quality scores which are comparable to those received by a more established journal, *Industrial Marketing Management*, but are only rated by about half of the people who rated *Industrial Marketing Management.*

Relationship Between Familiarity and Quality

For all but three of the journals (*Journal of Business and Industrial Marketing, Journal of Pharmaceutical Marketing and Management, Journal of International Food and Agribusiness Marketing*) there is a significant positive relationship between department chair's ratings of journal familiarity and journal quality ($p \leq .05$). In other words, even though exceptions can occur, in general, the more familiar a department chair is with a journal, the more likely it is that he/she will perceive it as being a quality outlet. (Specific correlations are available from the authors upon request.)

Relationship Between Research Emphasis and Journal Familiarity

For all the journals rated, except for *JM, JMR, JCR* and *Marketing Letters*, Table 1 shows negative correlations between the average research emphasis in the department and the department chair's level of familiarity with the journal. In addition, for 8 of the 13 newer journals, there is

a significant negative relationship ($p \leq .05$). The higher familiarity levels for newer journals at schools with less of an emphasis on research may be related to more flexible standards about what qualifies as an acceptable journal for faculty publication.

The positive correlations between average research emphasis and journal familiarity are statistically significant ($p \leq .08$) for *JCR* and *Marketing Letters*. This result is probably due to the academic orientation of these two journals which would be more popular at schools with a stronger research orientation.

Relationship Between Research Emphasis and Journal Quality

Correlations between departmental research emphasis and journal quality ratings are also shown in Table 1. The only significant positive correlation ($p = .00$) between research emphasis and quality evaluation is for *Marketing Letters*. Negative correlations appear for 4 of the 6 established journals and 10 of the 13 newer journals. However, most of the negative correlations are also not statistically significant, even for the newer journals. The small number of statistically significant correlations is probably due in part to the smaller number of evaluators for many of the newer journals; higher correlations would be needed to be considered statistically significant as the number of evaluators decreases.

Discussion

The survey responses reveal marked differences in the levels of familiarity between established and newer journals. Given that most of the newer marketing journals have familiarity scores below the scale midpoint, it is clear that they have not yet gained wide recognition within the field.

The study also reveals that among the newer journals, the age of the publication is not the only factor which contributes to journal familiarity among marketing department chairs, because older journals are not always the most familiar. Among the other factors which are related to familiarity is the relative emphasis placed on research in evaluating faculty performance. In general, department chairs at schools which place relatively more emphasis on research are not as familiar with the newer journals as are department chairs at schools which have less relative emphasis on research. There is also a weaker inverse relationship between the research emphasis at a school and the chair's perception of the quality of the journal. Chairs at schools with a higher research orientation tend to perceive the listed newer journals as being lower quality publications. This study also shows that even though familiarity and quality perceptions may not have a high degree of correspondence in every single case, they are often significantly related, as they are for 16 of the 19 journals listed in this study.

An exception to the above discussion is the increased level of familiarity for *Marketing Letters* among department chairs at schools with a relatively greater research emphasis. Its popularity may be due to factors like: a.) a wider range of topics accepted by the journal; b.) better dissemination of the journal among schools with a greater research orientation; c.) prominence of the editor and review board; and d.) better communication about the journal among marketing faculty at research-oriented schools.

Thus, many marketing department chairs will probably evaluate a journal's quality favorably if they have a high degree of familiarity with it. In turn, since journal quality assessments have often been a convenient yardstick by which the quality of an article is measured (Coe and Weinstock 1983), it is likely that many faculty will be most impressed by articles appearing in publications with which they are most familiar, even if they know little about the subject matter in the article. These findings have implications for faculty who are mapping their career strategies. One's professional reputation is based on a number of factors, not the least of which is the perceived quality of the journals which contain one's research. Therefore, faculty should consider how marketing professors at other schools evaluate journal familiarity and quality before submitting articles for publication.

Other Factors Influencing the Perceptions of Journals

The relative lack of familiarity department chairs have with the newer journals, and the low quality scores for these newer journals, raise the question of whether or not any of these publications will ever achieve widespread familiarity and prestige. Most of the newer journals are narrowly targeted as opposed to being general marketing publications, so the number of scholars who are interested in any new focused journal is likely to be smaller than for many of the more general established publications. The segmentation of publications along narrower topical lines may mean that the marketing discipline will never have more than a few journals which are widely perceived as top journals in the field, unless steps are taken by journal editors and authors to popularize the newer publications. Dwindling library budgets, brought on by highly publicized state budget shortfalls and other economic conditions, form another barrier to wide market acceptance of new journals.

Conclusion

Future research should continue to monitor the perceptions of marketing faculty about the journals in their field. One objective of such research would be to build on the results of this study by including more journals in the evaluation set. Future research should also investigate the extent to which faculty research evaluations today are more closely tied to the content and quality of an article, or to the reputation of the journal in which it appears. Other research may uncover more narrowly defined subgroups of institutions based upon the relative emphasis on teaching, research and service, which may, in turn, differ in their evaluations of journals. The extent of market penetration for newer journals can best be answered by additional studies which can determine if the newer journals are recognized by larger numbers of academic opinion leaders than at the present time. In summary, marketing faculty need studies like the one described in this paper so they can stay informed about the changes in their discipline.

References

References were not included due to space limitations. A complete list of references is available from the principal author at the School of Business, Virginia Commonwealth University, Richmond, Va 23284-4000.

TABLE 1
DEPARTMENT CHAIRS' RATINGS OF FAMILIARITY AND
OVERALL QUALITY FOR SELECTED MARKETING JOURNALS

Journal	Avg. Familiarity	n	Avg. Quality	n	Research Emphasis-Familiarity Quality r	Research Emphasis-Quality r
Established Journals:						
Journal of Marketing Research	6.78	139	6.55	136	.05	.03
Journal of Marketing	6.87	139	6.39	137	.04	-.28**
Journal of Consumer Research	6.36	138	6.41	132	.15*	.03
Journal of Retailing	5.93	138	5.26	133	-.07	-.22**
Journal of the Academy Marketing Science	5.65	138	4.98	124	-.16*	-.08
Industrial Marketing Management	4.46	136	4.45	104	-.04	-.20*
Newer Journals:						
Journal of Services Marketing	3.90	137	4.10	97	-.32**	-.16
Journal of Global Marketing	3.47	137	4.02	84	-.20*	.04
Journal of Business and Industrial Marketing	3.19	135	4.07	70	-.18*	-.09
Research in Consumer Behavior	2.60	134	4.65	51	-.05	-.05
Journal of Direct Marketing	3.41	134	3.61	79	-.11	-.12
Marketing Letters	2.49	136	4.42	43	.28**	.38**
Journal of Professional Services Marketing	2.84	137	4.03	59	-.28**	-.02
Journal of International Consumer Marketing	2.56	135	3.78	50	-.18*	.06
Journal of Marketing for Higher Education	2.36	137	3.79	43	-.18*	-.44**
Journal of Hospital Marketing	2.46	135	3.58	48	-.25**	-.20
Marketing Education Review	2.40	136	3.38	48	-.20*	-.20
Journal of Pharmaceutical Marketing and Management	1.67	136	3.38	21	-.10	-.14
Journal of International Food and Agribusiness Marketing	1.31	137	2.86	7	-.11	-.27

** $p \leq .01$ * $.01 < p \leq .05$

Journal quality assessment was limited to respondents who were at least somewhat familiar with the publication (i.e. those who had given the journal a familiarity rating of 3 or better on a 7-point familiarity scale)

STRATEGIC PLANNING

MANAGERIAL PERCEPTIONS: THE ROLE OF ENVIRONMENTAL UNCERTAINTY IN THE STRATEGIC PLANNING PROCESS

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ABSTRACT

This paper examines elements of the strategic planning process and, in particular, the influence of environmental uncertainty on marketing managers' perceptions and behavior. A model of the marketing management team's influence on the strategic direction of the firm at the product-market level is advanced, providing an integrative perspective of environmental uncertainty and strategic choice. Implications for future research are discussed.

INTRODUCTION

Organizational environments change, and the strategy and marketing literature recognize that organizations must adapt to their environments in order to survive and prosper (Hambrick 1982; McDaniel and Kolari 1987). A general conclusion from the literature regarding the scope and nature of marketing is that it involves the facilitation of exchange processes between organizations and their environment (Zeithaml and Zeithaml 1984). The broadening of the marketing concept denotes the importance of the environment for marketing theorists and managers. Furthermore, Day and Wensley (1983) indicate the need for more research in strategic marketing and for marketing management to reclaim its role in providing strategic direction at the productmarket level.

Top management teams influence strategy formation and have considerable control over the future direction of an organization (Child 1972; Thomas, Litschert and Ramaswamy 1991). Perceptions of the environment by the top management team also appear to play an important role in strategy formulation and strategic direction (Daft and Weick 1984; Hambrick and Mason 1984). However, it has been argued that the firm gains an understanding of changes in the environment through marketing inputs (Jain 1983). As a boundary function, marketing interacts with key environmental variables on a daily basis (Davis, Morris and Allen 1991). It is a function of the marketing team to monitor the environment and identify opportunities at the product-market level.

Environmental uncertainty has received considerable attention in organization science literature as the environment is a key factor in contingency theory. Bourgeois (1980) notes the importance of top managers' perceived environmental uncertainty and argues that these perceptions are crucial inputs to the strategy-making process. This does not imply that the "objective" environment is not relevant (Dess and Beard 1984), but rather that environmental perceptions cannot be overlooked (Child 1972; Weick 1979). Furthermore, environmental uncertainty has important implications for marketing strategy. As noted by Khandwalla (1977), marketing activities are a principle means of managing uncertainty, especially in dynamic environments.

The purpose of this paper is to examine elements of the strategic planning process and, in particular, the influence of environmental uncertainty on marketing managers' perceptions and behavior. A model of the marketing management team's influence on the strategic direction of the firm is advanced, providing an integrative perspective of environmental uncertainty and strategic choice. In order to establish an appropriate context for the development of the model, the concepts of strategy, strategic planning, the environment and environmental uncertainty will be reviewed.

STRATEGY AND STRATEGIC PLANNING

Strategy has been viewed as a pattern of decisions that guides the alignment between the organization and its environment and reveals the organization's purpose, objectives, and goals (Hambrick 1980). Two levels of strategy have been widely discussed in the strategic management literature; corporate and business-level (Bourgeois 1980; Hambrick 1980). Corporate strategy is concerned with defining the range of business in which the firm competes. In contrast, business-level strategy refers to how the firm competes within a particular product-market domain. The focus here is on business-level strategy as marketers influence how the firm competes at the product-market level.

Hofer (1976) suggests that the concern of strategic planning is developing a match between the organization and its environment. Central themes in the strategic planning literature are concern for environmental uncertainty and how the firm adapts to environmental

change. Adaptation is critical, and excellent firms have the ability to transform in response to environmental changes (Chakravarthy 1986). The role of marketing in adaptation is to analyze competitors, customers and environmental variables in order to redefine products and markets in response to changes in the environment. The marketer's aims are to effect and manage change while redefining and adapting business-level strategy which ultimately influences corporate strategy (Wind and Robertson 1983; Zeithaml and Zeithaml 1984).

CONCEPTS OF THE ENVIRONMENT

The environment has been conceptualized as objective, perceived and enacted (Smircich and Stubbart 1985). The objective environment is viewed as external and concrete phenomena, independent of the observer. The perceived environment remains external and real although bounded by the observer's cognitive and perceptual limitations. In contrast, the enacted environment is defined and created through the social interaction processes of key organizational members (Smircich and Stubbart 1985). Furthermore, environmental attributes are described in terms of munificence, dynamism (turbulence) and complexity (Dess and Beard 1984). Regardless of the conceptualization of the environment, research findings suggest that environmental characteristics influence decision making through managerial perceptions (Prescott 1986). This paper focuses on the perceived environment which is assumed to be real and external phenomena although bounded by the marketing manager's cognitive and perceptual limitations.

ENVIRONMENTAL UNCERTAINTY

Environmental uncertainty has been inconsistently defined in the literature. One source of confusion surrounding uncertainty stems from its being used to describe both the environment and the effect of the environment on the organization. The perception of uncertainty developed by Galbraith (1977) assumes that environmental elements hold no meaning until they are perceived by an individual. Therefore, uncertainty from this point of view is an individual psychological trait. A contrasting perspective holds that uncertainty is an environmental attribute (Downey, Hellriegel and Slocum 1975), which implies an objective perspective. These two conceptualizations are inherently different and have resulted in inconsistent operationalizations of environmental uncertainty (Downey, Hellriegel and Slocum 1975; Milliken 1987).

In the pioneering work of Lawrence and Lorsch (1967), uncertainty was a broadly defined construct. Duncan (1972: 318), in attempting to clarify the concept of environmental uncertainty, segmented the "lack of information" component of Lawrence and Lorsch's (1967) conceptualization into additional dimensions and defines environmental uncertainty as: 1) the lack of information regarding the environmental factors associated with a given decision-making situation, 2) not knowing the outcome of a specific decision in terms of how much the organization would lose if the decision were incorrect, and 3) inability to assign probabilities with any degree of confidence with regard to how environmental factors are going to affect the success or failure of the decision unit in performing its function. Duncan's definition captures a multidimensional view of uncertainty.

In observing inconsistencies in past studies, Milliken (1987) reexamined the environmental uncertainty construct. After reviewing the literature and noting the findings of Downey, Hellriegel and Slocum (1975), she suggested that different types of uncertainty have been incorporated in past measures and labeled "perceived environmental uncertainty". Thus, Milliken (1987) proposed the existence of more than one differentiable type of uncertainty and develops three possible components. The three types of uncertainty which an administrator can experience are:

> State Uncertainty (or Perceived Environmental Uncertainty): when one does not understand how components of the environment might be changing; unpredictable
>
> Effect Uncertainty: relates to an individual's ability to predict what the impact of environmental events or changes will be on his/her organization
>
> Response Uncertainty: a lack of knowledge of response options and/or an inability to predict the likely consequences of a response choice (Milliken, 1987: 136-138)

Recent research findings indicate support for Milliken's typology (Milliken 1990; Gerloff, Muir and Bodensteiner 1991). For purposes of this paper, perceived environmental uncertainty will be defined within the context of Milliken's three components. This extension in the understanding of the nature of uncertainty may serve to explain the inconsistent results of past research and help to achieve a better understanding of the strategic planning process.

THE INFLUENCE OF MANAGERIAL PERCEPTIONS AND BEHAVIOR

The strategic planning process is influenced by the marketing management team's perceptions of the environment and their behavior as they move through the strategic planning process. Perceptions of the environment identified in the model are state, effect and response perceptions. Behaviors of the strategic planning process, as indicated in the model, include scanning, information acquisition, analysis of the environment, interpretation, analysis of threats and opportunities and strategic choices (Milliken 1987).

Scanning, information acquisition and analysis of the environment occur in the first stage of the strategic planning process and involve the identification of key trends and environmental changes (Hambrick 1982). For example, marketing managers collect, analyze and evaluate market research. In the next stage, interpretation and analysis of threats and opportunities, marketing managers identify and assess the meaning and significance of these trends and environmental changes as they pertain to the firm (Milliken 1990). Strategic choice and strategy formation require the identification and development of response options, forming a strategy and deciding what actions to take in response to their interpretation of environmental changes (Daft and Weick 1984). In developing the model proposed in this paper, the focus is limited to the influence of environmental uncertainty and captures only a portion of strategy process elements.

The model presented in Figure 1 reflects the influence of the marketing management team's perceptions and behavior on strategy process elements and the strategic direction of the firm at the product-market level. The marketing team can be affected by the three types of perceived environmental uncertainty at different levels (e.g. high, intermediate and low) which can impact both perceptions and behavior. Moreover, the model implies that perceptions and behavior not only influence elements of the strategy process, but also each other.

In the first stage of the strategic planning process, the marketing management team's perception of the state of the environment and behavior (scanning, information acquisition and analysis of the environment) lead to a level of state uncertainty (e.g. high, intermediate or low). The model suggests that the level of state uncertainty as perceived by the marketing management team will be accompanied by behavior such as scanning, market research, and analysis of customers, competitors and other environmental variables. Research suggests that as the perceived state of the environment becomes more uncertain, implying increasing levels of state uncertainty, marketers collect more information for analysis (Davis, Morris and Allen 1991).

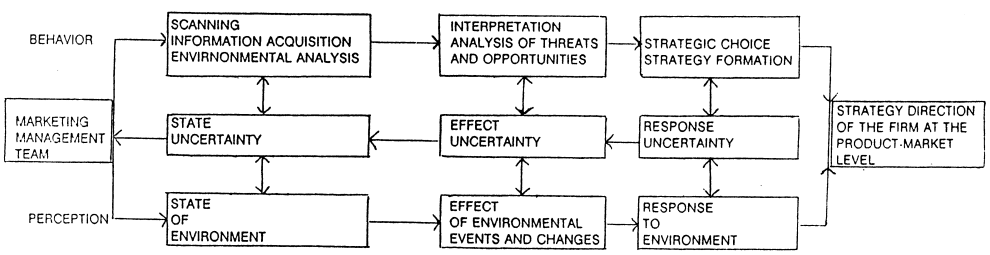
The level of state uncertainty not only influences the marketing management team's perceptions and behavior in this stage, but also affects their perceptions and behavior in the following stage. That is, the marketing managers' perceptions of the effect of environmental events and changes is influenced by perceptions regarding the state of the environment. In addition, behavior in the preceding stage (scanning, information acquisition and environmental analysis) affects behavior in the next stage (interpretation and analysis of threats and opportunities).

Again, the model implies that perceptions and behavior lead to a level of effect uncertainty as experienced by marketing managers. For example, if the marketing management team is entrepreneurial, their efforts may be a cause of changes in the environment. The model implies that the marketing team is constantly interpreting the environment and developing means to exploit changes in the market and creating new products and markets. Thus, they may better understand the effect of environmental changes and perceive a lower level of effect uncertainty.

Furthermore, perceptions and behavior in the preceding stage, influence perceptions of available response options and behavior (strategic choice and strategy formation) in this stage. The model indicates that the level of response uncertainty experienced by marketing managers

FIGURE 1

MARKETING MANAGEMENT TEAM'S INFLUENCE ON THE STRATEGIC DIRECTION OF THE FIRM



interacts with and is determined by perceptions regarding response choices and behavior such as the development and choice of response alternatives. Environments perceived as turbulent may require quicker responses (Davis, Morris and Allen 1991). These response choices and increased risk taking may result in higher levels of response uncertainty as the marketing team may be unable to predict the consequences of their response choice.

The feedback loop implies that all three types of uncertainty influence the marketing management team's perceptions and behavior. For example, the marketing management team for an entrepreneurial firm may perceive a high level of state and response uncertainty and a low level of effect uncertainty. Consequently, the team is heavily involved in scanning and interpreting the environment and forming new and different strategies to respond to environmental change. The levels of uncertainty affect the marketing team's perceptions and behavior possibly reinforcing one another and establishing a pattern of beliefs and behavior. Thus, the model implies that the marketing management team's perceptions and behavior influence the strategy process, the strategic direction of the firm and each other.

DISCUSSION AND IMPLICATIONS

This paper examines elements of the strategic planning process with a focus on environmental uncertainty. The model of the marketing management teams' influence on the strategic direction of the firm advanced in the paper suggests many areas for future research. Researchers in Marketing have indicated the need to study how organizations adapt to their environment and the role of the marketing function in understanding this relationship and in developing strategy to respond to changes (Davis, Morris and Allen 1991; Zeithaml and Zeithaml 1984; Davis).

The proposed model notes the importance of marketing managers in the development of business-level strategy and implies interactions between their behavior and perceptions. A better understanding of these relationships would increase our understanding of organization-environment relationships.

From a normative perspective, several issues arise concerning strategic types, levels of uncertainty and the firm's ability to adapt to the environment. For example, using Miles and Snow's (1978) business-level typology, what are the behaviors and perceptions of a Defender firm as compared to a Prospector firm? It would appear that Defenders and Prospectors would perceive their environments differently and/or behave in a different manner (McDaniel and Kolari 1987). Moreover, if perceptions and behavior lead to patterns that are difficult to change, does this amplify the firm's inability to respond to the environment? If a dramatic change occurs in the environment, the marketing management team of a Defender firm is not likely to transform into a Prospector by changing perceptions and behavior overnight. Furthermore, are there superior alignments regarding perceptions and behavior in an environment, and if so, what are they? What happens if the perceptions and behavior of the marketing management team are inappropriate for the firm's environment? For example, a high level of state uncertainty perceived by the marketing management team in a stable and predictable environment may cause too much scanning and environmental analysis consuming excess resources. What happens if the marketing management team perceives low state uncertainty when there is actually a high level of rapid and unpredictable change in the environment? What might be the impact on the firm's performance and its ability to adapt and survive? The proposed model suggests that both behavior and perceptions are important components in the strategy process and influence the firm's ability to adapt to its environment.

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WHY MARKETING SHOULD CONSIDER BIRTH ORDER AN IMPORTANT FACTOR IN THE STUDY OF ENTREPRENEURSHIP

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Introduction and Definitions

A number of studies have profiled the "typical" entrepreneur as being a first born child (e. g., Greenfield 1989; Neider 1987; Therrien et al. 1986). To date, however, little research by marketing academicians has been performed on links between birth order and entrepreneurship. While the literatures of psychology and sociology are comparatively rich with research on birth order and its effects, the topic remains substantially under-explored by marketing researchers. This apparent oversight is doubly unfortunate given marketing's long-standing appreciation of the usefulness of other demographic factors in the study of major areas such as advertising, consumer behavior, promotion and sales.

The purpose of this paper is to draw attention to relationships between birth order and entrepreneurship in hopes of underscoring to marketing investigators a fresh and promising avenue from which to expand study of entrepreneurship and its related phenomena. This paper will define *birth order* as the relative ranking of a child within the age hierarchy among siblings which distinguishes siblings within families from each other (Steelman 1985). *Entrepreneurship* is defined as the process which creates new organizations (Gartner et al. 1988), and *entrepreneur* as an individual who founds his or her own enterprise (Begley and Boyd 1987).

Birth Order, Personality and Entrepreneurship

Birth Order in Social Literature and Society

Literature. Interest in birth order and its sequelae has been substantial among social scientists. *English Men of Science*, published by Sir Francis Galton in 1874, offered the first known data investigating the relationship between order of birth and achievement (Altus 1966). In 1920, Alfred Adler reported the effects of birth order, family size and sex of siblings on personality. For the period between 1963 and 1967, the *Journal of Individual Psychology* listed 119 entries indexed under "birth order" (Miley 1969); for the period between 1967 and 1971, 272 entries were listed (Vockell, Felker and Miley 1973).

Society. First borns are over represented among top scientists, academicians, doctors, Rhodes Scholars, and persons listed in *Who's Who* (Kurtz, Boone and Fleenor 1989). Over half the nation's presidents were first born, a fact made especially noteworthy by comparison to the birth order distribution in the general population: 7.6 percent only children; 25.5 percent oldest children; 37.5 percent middle children and 29.4 percent youngest children (Moore and Cox 1990). Twenty-one of the first 23 U. S. astronauts were first born, as were 55 percent of the members of the United States Supreme Court, and 66 percent of students in Ivy League colleges in 1980 (Kurtz, Boone and Fleenor 1989).

Birth Order Links to Entrepreneurship

McClelland (1961) described need for achievement (termed "n Ach") as both a relatively stable personality characteristic rooted in experiences of middle childhood, and as a human motive which promotes entrepreneurship. In reviewing studies of female entrepreneurs, Bowen and Hisrich (1986) found n Ach, risk taking, locus of control and gender identity to be the most frequently studied entrepreneurial personality traits. Several studies which attempted to confirm the role of n Ach in female entrepreneurship failed to draw firm conclusions on its role in female entrepreneurship and thus implied a similar lack of certainty regarding its role in male entrepreneurship. Nonetheless, Bowen and Hisrich (1986, p. 404) concluded that female entrepreneurs are "relatively likely to have been first-born or only children" and cite findings of numerous prior studies in calling for more research into the issue of birth order vis a vis entrepreneurship.

Henning and Jardim (1977) similarly reported a tendency for female executives to be first born or only children. In 1981, Sexton and Kent noted that of female entrepreneurs in Texas, 45 percent were first born and 52 percent were middle or last born children. In 1983, some 50 percent of 468 female entrepreneurs in a national sample were found to be first born (Hisrich and Brush 1983). In Britian, some 60 percent of a sample of 45 female entrepreneurs were first born (Watkins and Watkins 1983). In reporting these findings, Bowen and Hisrich (1986) called for additional data to assess the relationship between birth order and entrepreneurship. Subsequently, Neider (1987) studied 52 female entrepreneurs in Florida, in part to determine their personality and demographic characteristics. It was also found that 77 percent of the participants were first born.

Personality Differences Among First-, Middle- and Last Borns

Carlson and Kangun (1988, p. 63) observed that "the differential treatment of children based solely on the child's birth order rank is a centuries old phenomenon that extends across cultures." Clear contrasts have been drawn between first- and later-borns. First borns have been characterized as exhibiting conformity to the established point of view, orientation toward rules and authority, ambition, responsibility, helpfulness, less peer-orientation, and less orientation toward group cooperation. Later borns have tendencies to be more peer-oriented; more self-need-oriented; and more oriented toward social activities and group cooperation (Cohen 1985).

Moore and Cox (1990) provided greater elaboration. First borns are more prone to being conservative, introverted, responsible, and serious. They are good workers and perfectionists in most areas. First borns prefer orderly lives and excel in structured occupations. They are conscientious, reliable, punctual -- and controlling. They keep feelings pent up. Pressures to succeed may result in first borns being more likely to have asthma, hives, migraine headaches, ulcers and other ailments related to stress. Based on a survey of 600 Texans, the authors reported that the adult life expectancy for an oldest child is lower than that for a youngest -- the general population contained 3.9 percent more youngest than oldest children, even though these percentages have equal expectancies.

Only children are a special type of first born. They tend to be highly motivated, self-confident, achievement oriented, non-competitive and often quick to anger. Only children are more accustomed to dealing with older people than are those in other sibling positions. As a result, only children often place themselves under the direction of powerful and authoritative older persons when seeking a profession.

The middle child position is frequently considered the most difficult. This may be partially because parents have less time to spend with middle children. Perhaps to compensate for lack of parental attention, middle children tend to thrive on personal relationships. They tend to be more attention-seeking, demanding, excitable and vigorous. Middle children are often cheerful, charming and manipulative. They are frequently risk takers and athletes, not good decision makers, and unthwarted by punishment. Although they tend to lag behind first borns in both need for achievement and motivation, middle children are good listeners, mediators and negotiators.

Middle children learn double roles in a family, following the orders of older children and leading younger siblings. Therefore, the middle child usually makes friends easily and has excellent people skills. Occasionally, however, the middle child becomes a loner, disassociating from family. Compared to first or last borns, they are flexible and adapt to changes in their environments more easily.

A family's youngest child is often pampered and sometimes favored by parents. Youngest children may grow up lacking independence if overly protected. Enthusiasm for work and professional motivation is usually irregular in the youngest child -- they are sometimes quite excellent in achievements, while unproductive at other times. Often carefree and vivacious, youngest borns tend to love life, are considered lots of fun and may appear extravagant. They tend to be charming and manipulative -- more often using their wits to succeed than relying on hard work and intellectual achievement. They frequently excel in less-structured artistic or scientific endeavors (Moore and Cox 1990).

The Role of Birth Order in Personality Differences: Two Potential Mechanisms

Of the myriad genetic and environmental factors that may contribute to differences among individuals, two -- socialization and the confluence model -- are briefly discussed. These two have been selected to demonstrate the range of approaches available to the researcher who wishes to include the entrepreneur as a salient factor in the study of entrepreneurship.

Socialization. Overt personality and behavior traits may differ between first- and later borns as a consequence of differential socialization (Carlson and Kangun 1988). Socialization is a process whereby a newcomer to an organization or group (or family) learns the values, goals and standards of the organization and/or group, and information about the individual's role within. In other words, socialization is an influencing process which identifies to a newcomer appropriate behavior for a given setting. Peers can be key socializing agents due to their similarity and availability to the newcomer, their power to reward and the likelihood that they may be perceived as experts (George 1990). As a result, first borns tend to carry an achievement orientation into adulthood, while later borns tend to be less achievement-oriented and more likely to endorse less conventional ideals (Carlson and Kangun 1988).

Confluence Model. Children are not born with the mental faculties that characterize adults. Such faculties are developed over time. Accordingly, a child's intelligence is theorized to be a function of the intellectual milieu in which he or she matures. The intellectual milieu may be determined simply by calculating the unweighted average of the intellectual levels (measured by IQ, for example), of all members of a family (Zajonc and Markus 1975).

To help explicate "the emergence of individual differences in a social context," Zajonc and Markus (1975) introduced the confluence model, an attempt to explain the effects of family size, sibling spacing and birth order on intellectual development. The confluence model is based on the concept of mutual intellectual influences among siblings within the family context. The model places major emphasis on the intellectual environment in which the individual develops, and interprets the intellectual environment as arising largely from the combined intellectual levels of the individual's parents and siblings.

Based on the family into which the child is born, the confluence model can be expressed as follows for the older of two children:

$$M_{it_A} = m_0 + m_1 = f(t)\Big|_{t_0}^{t_1} + g(t)\Big|_{t_1}^{t_A}$$

$$= \alpha_0(1 - e^{-k^2 t_1^2}) + [\alpha_1(1 - e^{-k^2 t_A^2}) - \alpha_1(1 - e^{-k^2 t_1^2})]$$

where M_{it_A} is the absolute intellectual level at adulthood; m_0 and m_1 are ordinate segments representing intellectual growth before and after the sibling is born, respectively; t is age in years; $g(t)$ reflects the shift in intellectual development from the mode $f(t)$ that occurred prior to the younger sibling's birth; α is a growth parameter reflecting the significant changes in the individual's intellectual environment as well as the interdependent nature of intellectual development within the context of family; and k is an arbitrary constant which varies according to the type of intellectual ability involved, and which may also be utilized to reflect individual differences. Accordingly, the individual is part of the given environment and, as such, has an effect on -- and is affected by -- the intellectual environment of the siblings. Therefore, each individual's α within a given family is interdependent with those of other family members, thus evidencing the family members' mutual intellectual influences (Zajonc and Markus 1975).

Confluence model results indicate birth order effects to be due entirely to spacing among siblings. Sibship size is negatively related to a child's intellectual growth in most cases. As the family becomes weighted with younger members who are less mentally developed, the intellectual climate deteriorates. Children born in families with smaller age gaps between siblings are less likely to be exposed to an intellectually profitable milieu than are children born in families with wider age gaps between siblings. Such spacing practices at the aggregate level are indirectly captured by birth rate. Typically, higher birth rates reflect shorter intervals separating successive siblings.

Importantly for the study of entrepreneurship, Zajonc and Markus hypothesized that other processes that develop over time may be similarly affected by ordinal position of birth, i. e., the confluence model need not be restricted to the growth of intelligence. Rather than characterizing the consequences of birth order as resulting in any type of pre-ordained or inescapable fate, the authors emphasized the dynamic relationship between each individual and his or her environment:

. . . the main feature of the [confluence model] formulation is that *the individual is considered to be a part of his own environment* (authors' italics). . . . The individual is continually influenced by his own environment, and being thus influenced and changed, himself brings about changes in his environment *by virtue of his very own change* (authors' italics, p. 86).

Mechanisms Linking Birth Order to Entrepreneurship: One Clue

As the above suggests, the work of a number of researchers has contributed information that may someday contribute to defining a mechanism whereby persons of a given birth position tend to gravitate toward certain situations, perceptions and behaviors such as vocation. Bryant (1987) reported partial confirmation of findings by Lynch and Lynch (1980) of different vocational preferences between first- and later borns as measured by Holland's (1973) six general occupational themes. Quoting Bryant's final remark, ". . . it can be concluded from this research that first borns and last borns are significantly different in some areas of and factors involved in vocational preference" (p. 40).

Moore and Cox (1990) observed that only children (which all first borns initially are) learn primarily from their *parents,* while youngest children learn primarily from *siblings*. Separately, Earley et al. (1990) reported the superiority of *process* feedback (over *outcome* feedback) in performance of unstructured or complex tasks. Process feedback facilitates performance of unstructured tasks -- of which entrepreneurship may be a quintessential example -- by helping people develop effective task strategies. It may be speculated that, if parents 1) represent a relatively greater source of instruction for only children, and 2) can, by definition, spend more time per child instructing the only child as opposed to multiple offspring, only children may be exposed to relatively greater amounts of process feedback. In turn, greater exposure to process feedback may differentially socialize first born children to be more adept at identification and implementation of the types of effective task strategies that foster entrepreneurial activity.

Summary and Implications for Future Study

This paper has highlighted links between birth order and entrepreneurship in an attempt to increase

awareness of birth order as an important facet in the overall study of entrepreneurship. The birth order concept was introduced in the context of birth order's social impact and its prominence in historical social literature. Numerous links between birth order and entrepreneurship were cited from current literature to support evidence that first borns tend to be disproportionately represented among today's entrepreneurs.

Differences in personality ascribed to birth order were discussed, as were socialization and the confluence model -- two of many potential mechanisms that may help explain birth order-based personality differences. Also, in comparing process feedback versus outcome feedback, a plausible mechanism was suggested for beginning to address the questions of *why* first borns are so disproportionately represented among entrepreneurs. It is hoped that perhaps one or several of such aspects surrounding the relationship between birth order and entrepreneurship may contribute to the formation of future research designs.

Insofar as no social phenomenon can be thoroughly studied without regard to the human beings that contribute to it, it seems clear that we as marketers may not wish to be content with the study of entrepreneurship in the absence of investigation into the nature of the entrepreneur. Because entrepreneurship is so intertwined with the singular people that make it happen, any study of entrepreneurship is especially incomplete without substantially more information about the characteristics and motivations of entrepreneurs. Marketing -- with its established recognition of the importance of individuals and demographics to market processes --provides perhaps the best perspective of all business disciplines from which to integrate the role of the entrepreneur into the overall study of entrepreneurship.

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THE USE OF KNOWLEDGE WORKERS IN MARKETING ORGANIZATIONS: AN EXPLORATORY STUDY

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Introduction

New information systems manage more data, permit firms to collect what was not available before, and expand the use of information in marketing management. These information systems not only transform the decision-making process, and organizations, but also change the nature of competition itself. Now, senior marketing management faces the problem of information overload and a need to synthesize data in ways that require the help of information specialists.

These organizations are undergoing changes unique to their emphasis on using information systems as a driver of the management process. With the shift from command-and-control structures and to information-based organizations, management levels are eliminated, and there is more bottom-up decision making. Decision processes, management structures, and the ways in which work is done are transformed.

Drucker (1988) predicts that future business organizations will employ many information specialists called "knowledge workers" who are unique because they deal primarily with verbal and mathematical information. Generally, knowledge workers labor in such areas as systems design and analysis, finance, legal, personnel, operations, marketing, and purchasing (Poppel, 1982). They spend large amounts of their time interfacing with technology, particularly computers. They need to be technically sophisticated and better educated to cope with the complex information systems emerging in business management (Apple, Cash & Mills, 1988). Their positions require substantial cognitive abilities critical to understanding strategies and tactics. Compiling, storing, retrieving, and analyzing data is the focus of most of their day. These workers need advanced educational and technical skills to cope with the complexity and change characteristic of knowledge work.

The emergence of knowledge workers was also anticipated by a number of others (Applegate, Cash, and Mills 1988; Collins 1987; Curley and Pyburn 1982; McCann 1986; Ruch 1982). However, those looking specifically at knowledge workers have only studied clerical support or non-marketing personnel (Gellman 1985; Shell, Okogbaa, and Huston 1985) or all such workers, grouping marketing personnel with others. Articles also exist on knowledge management theory (e. g., Ford 1989). Usually, authors only focus on the nature of marketing information systems (e. g., Goslar and Brown 1986; Stone and Good 1989; McLeod 1985) or on the design and use of the systems (e. g., Mayros and Werner 1987; McLeod and Rogers 1982, 1985). No researchers have addressed the personnel and task related changes occurring as marketing organizations add knowledge workers.

This paper presents the findings from an exploratory study of how the nature of work in marketing organizations is changing due to information management technologies and competitive pressures. The emphasis is on why these business environment changes necessitate the greater use of knowledge workers, who they are, the roles they play in marketing, and the concerns of senior marketing executives about knowledge worker management.

Theoretical Background

Although the literature does not support generalizations about the relationships between information technology and organization change, the work of Markus and Robey (1988) is helpful because it compares three theoretical frameworks. The "technological imperative" views technology as an exogenous force that determines the behavior of organizations; the "organizational imperative" argues that information technology creates options and opportunities rather than deterministic outcomes. However, the "emergent perspective" holds that the influences of information technology emerge in an unpredictable fashion from complex social interactions.

Based on the literature of competitive influences, this author would add a "competitive imperative" to the list of theoretical frameworks. Because today's competitive environment places a premium on adaptation and flexibility, all business functions are reexamining the way they operate (Applegate, Cash, and Mills 1988; Drucker 1988; Hammer 1990). The use of information technology to obtain a competitive advantage is frequently discussed when describing advances in information management technologies such as data base systems and sophisticated user interfaces (Applegate, Cash, and Mills 1988; Barney 1991; Collins 1987; Hammer 1990; McCann 1986; McFarlan 1984; Porter and Millar 1985). The advances

make possible more comprehensive and sophisticated data analysis, allowing marketing organizations to micro-manage their activities (McCann 1986; Porter and Millar 1985).

The academic research on computer use by knowledge workers involves two theoretical areas (see Howard and Mendelow 1991). Information systems implementation theory focuses mainly on the organization, while organizational innovation theory deals primarily with the nature of innovation. However, this very limited literature on knowledge workers is at best fragmentary. With the exception of the paper by Markus and Robey (1988), no theoretical framework exits in the organizational, information systems, or marketing literature for understanding the emergence and growth of knowledge workers in marketing organizations. And, except for the literature on information systems and competitive pressures, there is no conceptual basis for explaining why marketing organizations would increase the amount of their knowledge work.

This paper takes an emergent perspective by assuming that the interplay between marketing information technology and marketing organizations represents an unexplored and unpredictable dynamic driven by complex interactions between technology, competition, and people. This starting point is also consistent with work of Pfeffer (1982) whose emergent view of action in organizations emphasizes the segmented, discontinuous, and changing intentions of organization members associated with conditions of the environment.

Research Questions

From an emergent perspective, the preceding discussion about the literature on information systems and organizational change prompts several exploratory questions: 1) What business environment changes are causing the growth in knowledge workers? 2) Who are the knowledge workers? 3) What organizational roles do they play in marketing? And 4) what are senior marketing management's concerns about knowledge worker management?

Method

Over the past four years, this author talked to 147 senior marketing executives and middle-level marketing managers, sales managers, and information management personnel employed by 51 Fortune 1,000 consumer-goods companies. Each person consented to a one-hour, unstructured discussion about the impacts of technology, competition, and information on how they manage. Such firms as Avon Products, Colgate-Palmolive, Dean Foods, Ford Motor, Gillette, Kraft-General Foods, PepsiCo, and Travelers participated. Convenience issues influenced the selection of firms and individuals participating in this study. Of the 147 interviews taped during this research, the 59 with marketing vice presidents and directors (each from a different firm or a separate division) were subjected to a comprehensive content analysis for this paper.

Findings

Business environment changes are causing today's senior marketing executives to modify the composition of their work force. A combination of information management technologies and competitive pressures are leading to a greater use of knowledge workers. These senior executives understand the significance of integrated systems-based decision making, recognizing the need to combine sales, market research, and competitive intelligence for use in formulating, executing, and monitoring strategies and tactics.

However, although management information system pioneers appear to have an edge over their competitors, these advantages quickly evaporate when the innovations become widely adopted. Beyond technology, the transformation of information to knowledge makes for a critical success factor. While competitors can clone information system innovations, this is not always the case with approaches to knowledge creation and management. Success is thus extremely knowledge worker dependent.

Who are the Knowledge Workers?

Some 76% of the senior marketing executives interviewed increased the number of knowledge workers in their organizations in the last five years. While estimates of marketing employees focused primarily on knowledge work varied, the average was about 45%. And, about 90% of the senior executives expect that percentage to increase over the next five years.

However, the rapid growth in information needs also created a gap between the knowledge management goals of most organizations (about 76%) and the capabilities to meet those goals. With the growth of readily available computer power and associated techniques, a cadre of analytically minded workers has emerged. But, most of the employees moving into the knowledge-based positions transfer from those eliminated in the marketing or other departments.

The senior executives indicate that about 80% of all their knowledge workers were once employed within the firm in non-knowledge worker roles. Only three of the 59 executives interviewed engaged in a major search for knowledge specialists through outside recruiting. The main rationale (76%) for this predominant use of non-specialists

Table 1
SENIOR MARKETING MANAGEMENT'S CONCERNS ABOUT KNOWLEDGE WORKERS

1. Knowledge worker decision support needs	Percent	2. On-going knowledge worker projects	Percent
forecasts	85	timing	80
alternative actions	76	quality	76
market research	68	cost	68
strategy tracking	51	usefulness	51
competitor information	31	complexity	41
information integration	8	Total	316
strategy optimization	8		
Total	327		
3. Knowledge worker performance issues	**Percent**	**4. Knowledge worker qualifications**	**Percent**
timeliness	76	analytical skills	59
analytical skills	59	training	41
understandable	51	education	31
budgeting	41	experience	24
insights	34	communications	15
Total	261	people skills	8
		Total	178

Note: totals are more than 100% due to multiple mentions.

is that firms had hiring freezes or are in the process of downsizing.

Senior marketing management appears unaware of the background necessary to produce decision support information that is of high enough quality for serious decision making. Some 73% had trouble describing specific educational and technical qualifications necessary to conduct knowledge work. Thus, while the computerization of the marketing provided the tools for knowledge workers, most organizations (85%) lack the sophisticated knowledge workers necessary to fully utilize their information systems. Although many mundane tasks can be performed by less skilled knowledge workers, they cannot operate the statistical analysis procedures of sophisticated systems. Deciding upon optimal sales force allocations or determining a new product's success or failure requires complex statistical tools and sophisticated knowledge specialists.

An examination of the market analysis activities in the firms also highlights this issue. What knowledge workers in marketing describe as models of their business are usually multiplicative equations created in spreadsheets. Some 80% of the firms appear to be "spreadsheet addicts," because of their nearly exclusive use of spreadsheet models to support management decision making. Sophisticated market response models, those developed and applied by someone with the training of a marketing scientist, are rare (less than 20%).

The Organizational Roles of Knowledge Workers

Based on a sample of 16 interviews, seven knowledge worker roles were identified and tabulated across all 59 senior executive interviews to arrive at the findings here. With 68% of all mentions, the major organizational role for knowledge workers is that of a facilitator of the management decision- making process. They also serve as transmitters of data from information systems to decision makers (51%). Additionally, they structure the process by

framing alternative courses of action (41%). Other roles involve interfering by complicating the process with excess information and alternatives (34%), confirming what is already known (31%), exploring new marketing opportunities and threats (25%), and innovating by identifying new marketing directions (15%).

Understanding Senior Marketing Management's Concerns About Knowledge Workers

To understand senior marketing management's concerns about knowledge workers, 23 categories of the different aspects of knowledge work were developed based on a sample of 16 interviews. The coding scheme was then applied to all 59 interviews and summarized into four major themes (Table 1). The first theme shows that senior executives have concerns about their decision support needs, including getting forecasts, the ability to weigh alternative courses of action, market research information access, strategy tracking, and other areas. Evidently, they want more, and better, information about how their management efforts impact their business. These requirements are complex; accuracy is critical. The statistical techniques normally used to produce such estimates are among the most sophisticated available.

The second theme is task oriented. It describes concerns about on-going projects, including whether projects are finished in a timely and cost efficient manner, with the resulting work of high quality, useful, and not too complex. In contrast, theme three covers project management skills. Finally, theme four refers to employee qualifications, including skills, education, training, work experience, communications abilities, and people skills.

Clearly, senior marketing executives have some awareness of training and skill level issues in knowledge management. However, it is also clear that they are less certain about the depth required. Some 71% of executives told stories about making decisions based on knowledge worker support only to find that the expected result did not occur. A few of these experiences can raise questions about who is providing decision support information and why they qualify to do such important work.

Discussion and Conclusions

Consistent with an emergent perspective on the relationship between information technology and organizations, the growth of knowledge workers in marketing represents a complex dynamic. While senior marketing executives are converting their functions into organizations of these workers due to the influences of information management technologies and tougher competitive forces, their realiments are also influenced by the availability of financial, technological, and personnel resources. Although these executives are placing more emphasis on the management and dissemination of information, they must accommodate the uncertainties associated with information systems as a source of competitive advantage and the skills of their knowledge workers versus the complexity of the information systems used to support their decision making.

Whether or not information systems are a source of sustained competitive advantage is still debatable (e. g., Barney 1991; Hays and Wheelwright 1984). Information technology has a significant impact on competitive advantage in either lowering cost or increasing the differentiation of product and services offered to customers (Porter and Millar 1985). However, the most sustainable aspect of a technology driven competitive advantage is people based. In an information age, it is knowledge workers analyzing and interpreting data who provide the greatest edge. And, spending on technology without organizational change is a formula for failure.

The impact of information systems and knowledge workers on a company's profits is also difficult to determine. And, it is nearly impossible to quantify their impact on the decision-making process. This lack of precision in measuring gains maybe a rationale for why marketing organizations have been slow to use more sophisticated systems (Eisenhart 1990). This also occurs as cost pressures reduce employee levels and moneys available for training and new information systems.

As the cost and complexity of technological change affecting marketing continues, there is a growing need to address knowledge worker effectiveness and productivity issues (also see Collins 1987; Poppel 1982; Porter and Millar 1985). While all knowledge workers are computer literate, few are conversant with the analytical tools that bring information systems to their full potential. Thus, with the growing acceptance of information systems by marketing, management needs more awareness of the sophisticated nature of knowledge work. Training and educational priorities are needed to avoid wasting or incorrectly channeling organizational resources.

Future research should quantify the idea that information technologies and competitive pressures have organizational consequences by modeling how they impact the nature of marketing work. It should also examine competition influences on the adoption of information technologies. Finally, since an emergent perspective would dictate that the uses and consequences of change will emerge unpredictability from complex social interactions, the research also needs to study the relationship between

information technology and organizations as a process that occurs over an extended period of time.

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TESTING THE VALIDITY OF A MODEL OF REPUTATION AND CREDIBILITY

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Introduction

Reputation and credibility are concepts familiar to us all. Examples include whether to believe the product claims made by a manufacturer's advertising, credit check/ verification for a new account, or whether to believe delivery dates or claims made by a vendor. The value of a firm's overall reputation is easily seen in its relationship to a firm's revenues: as a firm's reputation increases, so does its sales (Shapiro 1982). A firm with a good overall reputation owns a valuable asset--"goodwill": brand names, corporate logos and customer loyalty. Brand names can often be repositories for a firm's reputation: high quality performance on one product can often be transferred to another product via the brand name (Moorthy 1985).

The objective of this paper is to test the validity of model of the reputation building and the credibility formation process and to quantitatively describe the different effects of the credibility transactions upon the reputation and credibility of the signaling firm. This paper provides a quantitative dimension to these two constructs and shows the powerful disincentives they provide to a firm thinking about risking (milking) its hard earned reputation for short term gains. This is achieved by a simulation in pricing reputation.

Reputation and Credibility

Reputation is the ***estimation*** of the ***consistency*** over time of an ***attribute*** of an entity. This estimation is based upon the entity's willingness and ability to repeatedly perform an activity in a similar fashion. Reputation is an aggregate composite of all previous transactions over the life of the entity, a historical notion, and requires consistency of an entity's actions over a prolonged time.

Reputation results from *market signal*.s. A market signal is a marketing activity that provides information beyond mere form and alerts another firm to its intentions, commitments, or motives. A reputation is established by fulfilling signals. A firm will lose its reputation if it repeatedly fails to fulfill marketing signals. This consequential loss of its reputation prevents the firm from signaling effectively since its signal will then be given little attention by its competitors. A firm, then, has considerable incentive to work hard to establish a credible reputation. Credibility of reputation signals can only be established if sending false signals would be highly unattractive and costly to the signaling firm (such as warranties or guaranties).

Credibility is the ***believability*** of an ***entity's intentions*** at a ***particular moment in time***. That is, credibility is whether a company can be relied upon to do what they say they will do. Credibility is time sensitive: the entity's perceived credibility today can differ immensely from its perceived credibility by the same firm on a previous or future date. Credibility is based upon a firm's intention; the entity's actions will either confirm or disconfirm the other firm's beliefs in the entity's indications. Credibility exists when one can confidently use past actions to predict future behavior.

Any signal will be evaluated by the receiver by, among other factors, the credibility of the source (Heil 1988a). The higher the credibility, the more persuasive the source (Krapfel 1985, Harmon and Corey 1982). Credibility must be before the message or action to have any significant effects (Sternthal, Dholakia and Leavitt 1978). To achieve credibility for high quality, a company must first develop a reputation for producing and delivering quality products (Bell 1984, Fitzgerald 1988). The quality of item produced in prior (previous) periods serve as a signal of quality of the goods produced in the current period.

A firm that fails to follow-through loses its credibility; to regain credibility, it must again pay the high costs of reputation building. Once a reputation is established, the firm has ample incentive to maintain that reputation.

To summarize, credibility is the believability of the current intention; reputation is a historical notion based upon past behaviors. Both credibility and reputation are dynamic in nature; both are a function of time. Reputation and credibility are states; reputation building and credibility establishment are processes.

The Model

The central module of the model is the relationship between credibility and reputation and the feedback loops from the latest *Credibility Transaction* to the module. A credibility transaction (CT) is the firm's comparison between a competitor's pronouncements or intentions and its true behavior or final actions. The credibility of a competitor increases if its' actions agree with its' statements and its' credibility decreases if its' actions and pronouncements are inconsistent. The four types of credibility transactions are true positive (CT1: ++ when a competitor indicates it will do something and subsequently does it), true negative (CT4: -- when a competitor indicates it will not do something and then does not), a false positive (CT2: +- when a competitor indicates it will do something or take some action and then reneges) and a false negative (CT3: -+ when a competitor says it will not do something and reverses itself by going ahead and doing it). A false positive or false negative CT is also called a mixed signal. Note that CT1 and CT4 are similar but opposite transactions as are CT2 and CT3 (not carrying out an action). The feedback loop delivers dR (change in reputation between transactions) and dC (change in credibility between transactions) as the result of a particular CT. The CT module compares what a firm signals (through public announcements, intents, releases etc. all) to its actual performance. The results of this transaction (dC and dR) are fed back to impact both credibility and reputation. Note that positive and negative are all relative; a competing firm may view a drop in price as a negative while consumers may view it as positive. Reputation building is related to the consistency of the outcomes: repeated similar outcomes strengthens a competitor's reputation. A true CT can be either positive or negative, for in either case repeated consistency provides believability (increased credibility) and heightened reputation (but in opposite directions). Repeated true positive CTs lead to a *high (positive)* reputation (for example, for quality or on time delivery) and a *positive (*high state of current believability) credibility while repeated true negative CTs lead to a low *(negative)* reputation (poor quality or tardy deliveries) but still a *positive (high)* credibility (you know it is consistently going to be bad quality or always late). That is, repeated promises and follow through of what is judged a positive action leads to a good reputation and supports the credibility of the firm, whereas repeated promises and follow through of what is judged a negative action leads to a poor reputation yet a high credibility. Contrarily, a mixed signal decreases credibility and repeated mixed signals result in a total lack of credibility. *Inconsistent* mixed signals tend to erode a firm's reputation; however, consistent mixed signals do eventually establish a reputation. For example, if a competitor were to consistently gives a false positive, fail to do something, always promising to deliver but fails, it will establish a poor reputation. Or, conversely, if a competitor were to always provide superior products regardless of the signal shown, they will eventually develop a reputation for high quality. The CT's (the comparison of outcome to signal) influences credibility, but consistent of outcome alone is the final determinant of reputation.

We speculate that as a firm's absolute reputation increases (the more consecutive positive CTs that occur the higher the positive reputation; while the more consecutive negative CT's that occur, the higher the negative reputation), the credibility of the firm's next decision should increase. Conversely, as a result of uncertainty resulting from repeated inconsistent mixed signals, reputation trends towards zero ("no" reputation) and credibility trends towards the unbelievable state. The greater and more enduring the level of uncertainty, the faster the firm's reputation should approach zero and credibility approach the unbelievable state. As a firm's credibility increases, its absolute reputation likewise increases. As credibility tends towards unbelievable, reputation erodes and trends toward zero.

Hypotheses

How well does the model hold up under testing? It is necessary to confirm reputation and credibility both in their individual relationships to CT's as well as their relationship to each other. It is also necessary to verify the speculated differences seen between them; i.e. the historical attribute indicative of reputation but not of credibility.

Hypothesis 1) Reputation is a function of the sum of the credibility transactions whereas credibility is a function of the current CT and the just-prior reputation.

Hypothesis 2) A firm's credibility is positively related to its reputation.

Methodology

A market simulation was used to view reputation formation. One of the strengths of simulation is the rules of the game are completely specified, the strategy set is known to all players, an equilibrium predicts not only what is expected to happen but also the anticipated consequences of any deviation from the optimal strategies of the players.The control inherent in a simulation makes its useful in a laboratory setting.

The experiment involved airline industry pricing on a single route. The airline industry is a particularly good choice because pricing is highly dynamic in nature (daily or even hourly rate changes can easily be made in response to competitor actions), competitive response can be quick, competition is well defined and have bordered product lines (routes) which are different and distinguishable from other products (preferred for ease of measurement purposes), competitors are well known with usually no more than 3 or 4 competitors on any route (a manageable number to simulate), a history on any one competitor is well established (a known track record), and the outcomes(profits) are typically not perfectly known (uncertainty exists on the profit profiles for each competitor).

Results

To verify Hypothesis 1, it is necessary not only to verify the model but also test the thesis that transience distinguishes reputation from credibility. It is therefore necessary to establish that the summation model does not perform well under credibility and that the single period model does not perform well with reputation as the dependent variable. Only if all four factors are significant will the hypothesis be considered confirmed.

Reputation is highly significant when regressed upon cumulative CT's ($F= 25$, $R^2 = .386$, $p < .001$). The signs and magnitudes of the CT's are as expected: CT1 and CT3 are positive in sign; CT2 and CT4 are negative in sign. The results using credibility have a R^2 of .03, an $F= 2$, coefficients that do not significantly differ from zero and an insignificant probability, this is sufficient to disconfirm credibility as a function of the summation model.

To define credibility as per the single period model a regression of the latest CT and just prior reputation was computed. The credibility regression is very powerful ($F=16$, $R^2= .33$, $p < .001$). The signs and magnitudes are again as expected:CT1 and CT4 are positive in sign while CT2 and CT3 are negative in sign. Using reputation yields $F=1.5$, $p<.174$, non-significant $R^2= .017$ and thus disconfirms reputation as a function of the single period model.These results clearly confirm the first hypothesis and the competitive credibility model.

Hypothesis 2:

Hypothesis 2 was tested by regressing credibility upon absolute reputation. The results ($F=192$, $p< .001$ $R^2 = .533$) confirm the hypothesis. The coefficient was .85 showing considerable equivalence between the two constructs. The constant was marginally significant. The constructs move in the same direction and had similar magnitudes. This confirms the hypothesis.

Strategic Implications

The findings tend to support the "Competitive Credibility Model". The implication is a firm's reputation and subsequent credibility are the result of the continuous process of credibility transactions. These transactions reinforce reputation and credibility. Credibility transactions, when they involved mixed (False) signals, are devastating to reputation and subsequent credibility. There is a high price to pay in lack of confidence in subsequent marketing signals for a substantial period of time.

The results of the experiment clearly show the destructive power on reputation of a mixed signal. Research demonstrates that a mixed signal has three to five times the impact of a true signal. It, therefore, takes many applications of a true signal to restore a firm's reputation to where it was before the mixed signal occurred. Managers must think twice about not living up to their commitments with the duration and magnitude of the penalty for not living up to their signaled intentions. Constant attention to the product, service, and customers must be given to maintain an established reputation and maximize profitability over the long term.

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WHO USES PREPARED FOODS? PSYCHOGRAPHIC AND DEMOGRAPHIC CORRELATES

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Abstract

Consumption of prepared foods is increasing dramatically. A more harried lifestyle, the changing role of women -- and men, the advancement of household appliances, and improvements in food processing technology have all played significant roles in this increase. This study identifies prepared food users and non-users and compares their psychographic and demographic profiles. Study results are presented and implications drawn from the results are discussed.

Introduction

Nuclear family lifestyles and demographics have been changing over the past several years. There is a shift from a focus on "life at home" with father working and mother staying home to care for the family to "life on the go" with both parents working and fewer children at home. Perhaps the most dramatic outcome of this trend is the premium people place on leisure time. Time, in fact, may be the scarcest commodity in modern life (Visser, 1989). With increased demands for this scarce resource, it is no wonder that consumers are continually seeking more ways to have greater control over their time and are shifting their time allocations. Consumers now want to minimize the time they spend in grocery shopping. Evidence suggests that the average time spent in a single trip to the grocery store has been diminishing significantly (Progressive Grocer, 1992). This orientation carries over to the kitchen as well: consumers now have the philosophy that what is easiest to serve is what prevails (Conover, 1989). What are easiest to serve, of course, are prepared foods.

About 92% of all supermarket delis now serve prepared foods and sales of prepared foods rose almost 30% in 1991 following a 22% increase in 1990 (Supermarket Business, 1992). On average, about 2.9% of store sales are now credited to prepared foods. As a result of high margins (52.7%) such foods account for an average of 6.4% of store profits (Supermarket Business, 1992). It has been estimated that by the year 2000 a significant number of people will be so dependent on prepared foods that they will have effectively forgotten the art of cooking (Visser, 1989).

Several social and technological factors contributed to the increased reliance on prepared foods. One major factor has been the increased penetration of women into the work force. Approximately 60% of all females between the ages of 16 and 65 are in the work force (American Demographics, 1988). Pressed for time and juggling home and work obligations, women are willing to pay more for prepared foods even if they save minimal time (O'Neill, 1992).

Today's career oriented young adults often postpone marriage and families. This increase in single working people has also lead to a greater reliance on prepared foods (Conover, 1989).

Prepared foods simply offer greater convenience. Men are taking on more and more domestic duties -- including shopping and food preparation -- and are eager to accept the convenience of easily prepared foods. Men are now the primary food shoppers in about one-third of all households and account for 29% of the total sales in many food product categories (Progressive Grocer, 1992).

Food processing technology and marketing efforts are also improving. No longer simply a means of preservation, food processing has become a means of adding convenience and value (Pearl, 1990). Prepared foods have also improved in taste and nutritional value and consumers now regard them as high quality products (Krescholleck, 1987; Consumer Reports, 1988; Jung, 1990; Reid, 1990). Consumption appeal has similarly increased -- the salisbury steak of thirty years ago has today been replaced by beef tips in burgundy sauce. Consumers no longer regard deli prepared foods as fast food substitutes but instead view them as nutritious entrees substituting for home cooked meals (Supermarket Business, 1992).

Ease in home preparation technology has also been a contributing factor. Not only is it easy to pop the prepared food in an oven, it is even faster and easier to pop it into a microwave oven. The number of homes with microwaves has increased from 19% in 1980 to 80% in 1990 (O'Neill, 1992). As Tuhy (1986) aptly states, "the 'Big Chill' generation is going for the big thaw at dinner time."

Purpose

Since changes in both lifestyles and certain demographic characteristics appear to play a part in the increased acceptance of prepared foods, the basic purpose of this study is to examine psychographic and demographic characteristics that may relate to the use of prepared foods. Besides shedding some light into the characteristics of consumers in the growing prepared food market, results may carry potentially useful implications for prepared foods marketers.

Methodology

Sample

Data for the study were collected through self-administered questionnaires from a sample of housewives living in a Midwestern city with a population of 85,000. The location is often viewed as a representative cross-section of America. A two-stage area sampling procedure was utilized where sections of the city were first randomly selected and then households within those chosen areas were randomly contacted. Of the five hundred questionnaires hand distributed, 365 usable responses were retrieved after a maximum of two call-backs. In the absence of any incentives, the response rate of 73% is adequate for an exploratory study of this nature.

Dependent Variable

The dependent variable, a measure of the extent to which prepared food is used by the respondents, was operationalized through responses to the statement, "I quite often use prepared foods." Those who agreed with this statement were designated as users of prepared foods while those who disagreed were classified as non-users. Responses resulted in the identification of 165 users and 200 non-users.

Operationalization of use measure by asking for frequency of purchase and/or dollar volume of purchase would be desirable. However, in the absence of any form of consumer diary, respondents would have had to estimate the dollar expenditure or frequency of purchase.

Another weakness of the measure was that the global term "prepared foods" was used instead of using various categories of prepared foods. The global approach was chosen for its parsimonious effect on the length of the questionnaire.

Independent Variables

Data on two sets of variables were collected for profiling the user/non-user groups. One set of variables were psychographic items which consisted of several activity, interest, and opinion statements. Respondents were asked to evaluate these statements using a six-point forced choice Likert type scale ranging from "definitely agree" to "definitely disagree." Many of these items were adopted from another source (Wells, 1974) and some were designed for this study.

The second set of independent variables consisted of selected demographic characteristics which were measured through categorical choices. These variables included marital status, employment outside of the home, education, age, and income.

Analyses

The lengthy set of psychographic variables was first reduced to a more manageable number by applying factor analysis (principal factoring followed by varimax rotation) to the set. This resulted in the identification of eight factors with eigenvalues of 1 or greater. These factors collectively accounted for 41.7% of the variance. Items with factor loadings of .40 or higher were used in interpreting the factors. Exhibit A shows the eight domains and a sample item that loaded heavily on a particular domain. These eight life style domains then served as the independent variables in a discriminant analysis to generate the psychographic profiles of the two groups.

The differences between the demographic characteristics of the prepared foods users and non-users were analyzed through a series of cross-classifications and chi-square tests.

Results

Results of the discriminant analysis performed to provide psychographic profiles of prepared food users and non-users are shown in Table 1. As the group centroids indicate, there is good separation of the two groups and positive coefficients are associated with the prepared food user group. The statistics indicate a significant discriminant function ($X^2 = 109.93$; $p = .001$) that correctly classified 82.67% of the respondents.

Exhibit A

Life Style Domains and Sample Statements

Domain	Statement
Fatalism	There is little use writing to public officials because they are not really interested in the problems of the average person.
Traditionalism	I have somewhat old fashioned habits and tastes.
Progressive	I enjoy trying new ideas and things.
Community Mindedness	I have helped collect money for the Red Cross, United Way, March of Dimes, etc.
Home Oriented	A woman's career should be to rear her children.
Influenced by Others	I have trust in a home economist's advice.
Worrier	I have to shop with great caution since wrong choices can lead to a great deal of expense.
Credit/Cash User	I buy many things with a credit or a charge card.

As can be gleaned from the table, prepared food users tend to be less fatalistic in outlook, less traditional in orientation, less home oriented, and less worrisome in nature than are non-users. Users are more progressive (willing to try new things), more community minded, more susceptible to persuasion by others, and somewhat more likely to use credit cards than are non-users.

Table 2 presents the demographic characteristics of users and non-users and the chi-square test results. The two groups were not significantly different in terms of education level, age, or income. They did differ, however, in terms of marital status (a greater proportion of the user group was not currently married) and employment status (women employed outside the home were more likely to be users).

Discussion and Implications

An observation that readily surfaces from the results of this study is that, as compared with demographic characteristics,

Table 1

Discriminant Analysis Results

Domain	Standardized Discriminant Coefficient	Rank by Size of Absolute Value of Coefficients
Fatalism	-.197	4
Traditionalism	-.176	5
Progressive	.323	1
Community Mindedness	.127	6
Home Oriented	-.218	3
Influenced by Others	.246	2
Worrier	-.097	7
Credit/Cash User	.029	8

Discriminant Function	
Group Centroids	
Users:	+ .888
Non-users:	- .880
Eigenvalue:	0.789
Wilks' Lambda:	.559
Chi-Square:	109.930
Significance:	.001
Hit Ratio:	82.67%[a]

[a]Based on split-half sample

life style characteristics appear to be more useful in distinguishing between users and non-users.

Users of prepared foods seem to be more outward oriented: they are progressive, community minded, and employed outside of the home. A challenge they likely face is to find time within a busy schedule to do their grocery shopping and food preparation. They need to make more spontaneous decisions and prepared foods offer a variety of options along with the convenience of minimal effort to prepare. They are able to buy food that looks good, tastes good, and is nutritious -- instant gratification without the guilt. Being progressive in nature, they feel modern ways are better -- and prepared foods offer a viable alternative to hours of kitchen work, especially in light of their busy life

styles. Prepared foods also allow them to experiment with different foods much easier. Non-users are more home oriented and traditional and fatalistic in their outlook. They are less likely to be employed outside of the home and are somewhat more likely to be married. This group is probably concerned about family eating habits -- they want their family to enjoy "home cooked meals" with healthy ingredients. Fresh fruits and vegetables and wholesome snacks are likely important to them. Food preparation is likely important -- home cooking is an indicator of a "good" housewife and mother. They probably share food ideas with others and when doing so would be more inclined to think in terms of recipes rather than prepared foods.

Table 2

Demographic Comparisons: Users Versus Non-Users

Demographic Characteristic	User	Non-user	X^2	Decision[a]
Age:				
44 or younger	57.7%	61.9%	0.6245	Accept
45 or older	42.3	38.1		
Education:				
At Least Some College	57.9%	64.9%	1.8020	Accept
High School or Less	42.1	35.1		
Income:				
Less than $25,000	43.6%	40.8%	3.8390	Accept
$25,000 to $40,000	30.2	39.1		
Over $40,000	26.2	20.1		
Marital Status:				
Married	76.7%	85.9%	4.8512	Reject
Not Married	23.3	14.1		
Employed Outside of Home:				
Yes	60.6%	40.9%	13.9570	Reject
No	39.4	59.1		

[a] Decision to accept or reject the null hypothesis of no difference between groups based on a significance of .05.

Implications

How can producers and retailers of prepared foods increase the consumption of those products? One strategy for producers is to continue to offer an increasing assortment of prepared foods. Being progressive in nature and susceptible to persuasion, users may be open to trying new things -- such as "exotic dishes" -- that would conform to a self-image of someone who is not old-fashioned. This would also help prevent users from looking for alternative meal sources such as increased dining out due to feelings that the variety of prepared foods is limited and that they have exhausted the choices. An increased variety might also encourage non-users to consider using at least some types of prepared foods on occasion.

As part of their product strategy, today's marketers of prepared foods might emulate a successful strategy used earlier by marketers of convenience foods -- if something was left to the housewife to do in the preparation of the food (even if it was something that the producer could have easily added), the acceptance of the convenience product tended to increase. To encourage use by current non-users and to ameliorate the guilt they may feel for not doing all the preparation, producers might consider ways of leaving some of the preparation to the consumer so that they feel more "involved." Supermarkets, for example, might place packages of additional pizza toppings beside frozen or prepared pizzas so that consumers could "customize" their pizzas at home. If this strategy is employed, advertising themes aimed at the non-users could stress the fact that home preparation is still being done -- but some of the drudgery has been reduced. Themes aimed at users might instead suggest that any preparation left is designed to allow the preparer to "experiment" with ingredients.

Advertising messages could also focus on the convenience of using prepared foods since it is really time utility that is being added to the food products. Since users are more susceptible to influence by others, such advertising efforts might use themes that simulate (for example, shows two career women talking about their positive experiences with serving prepared foods) and stimulate ("ask your friends about prepared foods") opinion leadership. Additional appeals aimed at the user group should include claims that prepared food use is the modern solution to the problem of feeding "busy people on the go," as well as suggesting that preparation time saved could be used for more enjoyable activities such as volunteering for community projects. Such themes would reflect the user characteristics of being progressive, modern, and community oriented.

Appeals to non-users should emphasize the offering of wholesome products "with old fashioned taste" for the whole family and that time saved in preparation can be diverted to more family/home time. Emphasis should be placed on tradition such as scenes showing families eating together for example.

Producers might use coupons to encourage increased consumption. Coupons may encourage users to continue purchasing prepared food items or may encourage trial of a particular prepared food item or new items. Such coupons could be distributed in newspapers, through direct mail, and in the types of magazines that might appeal more to career women. Retailers could also offer coupons for their own prepared foods such as deli items. Coupons too might induce non-users to try prepared foods, especially if the coupons are distributed in print advertising that stresses such themes as "an alternative to fast food when there is simply not enough time to prepare a meal yourself", or "a way to try some new type of food with which user may not be familiar". To this group, the nutritional value of the food also should be stressed. Coupons aimed at this group could as well be distributed through newspapers and direct mail. In addition, magazines aimed at women who are homemakers should be utilized.

Another strategy that may prove effective are free samples in the grocery store. This again may encourage both the user group to continue their usage and the non-user group to give prepared foods a try. Coupons should accompany the free samples to encourage immediate purchase.

In conclusion, this paper is an exploration of the prepared food market. As this market continues to expand, it is important to conduct additional studies before generalizations can be made. Several related issues could be examined in future research. For example, profiles of users could be expanded to include additional characteristics such as ethnic origin and occupation. To the extent differences exist, supermarkets, for example, might be able to tailor prepared offerings to the ethnic composition of their target customers.

Future studies might utilize improved measures of prepared food purchase. Dollar purchases and/or frequency of purchase measures could lead to refined categorization of buyers such as heavy, medium, or light users. Such groups could then be compared in terms of relevant characteristics.

Profiles of users of specific types of prepared foods should also be derived. Rather than use the global term "prepared foods," future studies might categorize such foods first to determine if users of the various types of prepared foods are different. For example, are heavy users of low calorie, healthy frozen dinners different from the heavy users of hot dinners from the supermarket deli?

An additional direction for future research would be to explore the viability of different types of outlets for prepared foods. Since they are convenience products, would consumers be willing to buy them from convenience stores? Should supermarkets offer home delivery of certain forms of prepared foods such as deli meals? Do people buying prepared foods at supermarkets differ from those who buy from membership based clubs?

Finally, future research efforts could explore any relationship that might exist between prepared food use and the growing body of literature on "convenience consumption.

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A STRUCTURAL EQUATION MODEL OF THE RELATIONSHIP BETWEEN ADVERTISING, PROFITABILITY AND SIZE

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Abstract

According to conventional theories, advertising intensity promotes product differentiation, leading to higher barriers to entry and higher profits. Previous research has attempted to test the relationship between advertising and profitability using historical and experimental approaches. However, these relationships have not been examined over a period of time; hence no causality can be imputed to the variables of interest. Based on COMPUSTAT data for 131 firms in the consumer goods industries, this study examined the relationships between advertising, profitability and sales over a three year period using LISREL.

Introduction

Advertising is one of the four major tools that companies use to direct persuasive communications to target customers. In 1987, advertising ran up a bill of more than $109 billion in the U.S. and the projected 1992 advertising spending is $169 billion. The sharp increase in advertising expenditures reflect the desire of U.S. corporations to gain competitive advantage and thus boost their sales and profits. There is widespread agreement that advertising can be persuasive to some extent and can reinforce buyer preference for a company's product. What advertising is supposed to do is fairly clear: advertising is undertaken to increase company sales and/or profits over what they otherwise would be. More specifically, the purpose of advertising is to enhance potential buyers' responses to the organization and its offerings by providing information, by channeling desires, and by supplying reasons for preferring a particular organization's offer.

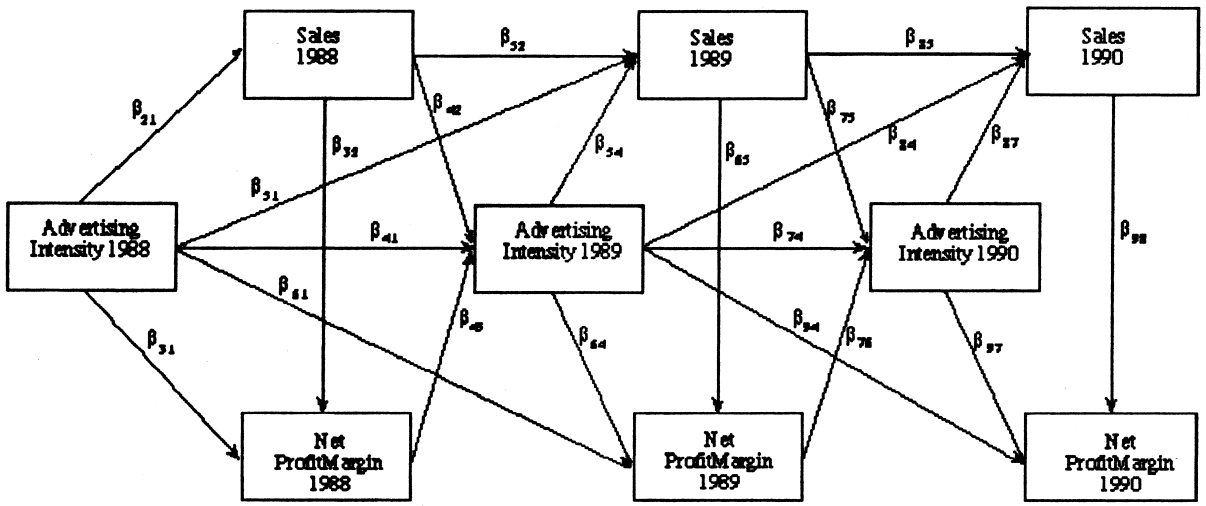
Researchers have tried to measure the sales and profit impact of advertising through historical or experimental analysis. The historical approach involves correlating sales or profits to advertising expenditures on a current or lagged basis. However, most research have tested for the profit impact of advertising based on data for a single year. This approach is flawed as the effect of advertising expenditures could be long lasting and sales and profitability may also determine the level of spending on advertising. The objective of this paper is to understand the complex relationships among profitability, advertising, and sales over a three year period, 1988-1990, by using a structural equation modelling approach. The model is tested on a sample of firms in the advertising-intensive consumer goods industries.

Literature Review

There have been inconsistent findings reported in the literature about the interrelationship between advertising, sales, and profitability. Beginning with studies by Comanor and Wilson (1967, 1974, 1979) there have been a number of studies analyzing this relationship. According to conventional theories, advertising intensity promotes product differentiation leading to higher barriers to entry and higher profits. Comanor and Wilson believe that advertising may accentuate preferences for specific brands even though physical characteristics are not different. In strategic management literature, advertising is treated as a resource allocation variable and hence an important component of a firm's business strategy. Porter (1980, 1985) suggests that advertising (or signaling, as he refers to it) can be used to create a sustainable competitive advantage based on differentiation. Barney (1991) argued that organizational or physical capital resources can be used to create a sustainable competitive advantage when the resources are not imitable by other firms or when they are not substitutable by other equivalent resources. Advertising can be considered as one such resource thus having a direct impact on profit and sales, the results of the competitive advantage gained. Oster (1982), in her study of change in advertising strategies in 19 consumer goods industries, found that advertising increased profits in almost all consumer goods industries.

Weiss (1969) investigated the effect that the expensing of advertising has on coefficients in the regression model relating advertising and profitability. He argued that advertising expenditures grow at a constant rate over time and advertising capital should be depreciated over a period of time. According to Weiss, adjusting the profit rates of a sample industry does not change the strong positive relationship between profit rates and advertising intensity significantly. However Bloch (1974) argued about the accuracy of the adjustment rates that Weiss used in his

Figure 1. The Structural Equation Model of Advertising - Profitability Relationship



study. Strickland and Weiss (1976) found that, contrary to the barriers-to-entry theory, the coefficient of advertising in a profit margin equation was larger for a sample of industries producing producer-goods than for industries producing consumer-goods. They viewed this result as an anomaly, inconsistent with both their theoretical reasoning and with other important empirical results.

The relationship between advertising and profitability has also attracted attention from policy makers such as the FTC because of the implications for public policy aimed at maintaining the maximum degree of competition. If advertising by differentiating products acts as a barrier to entry, a positive relationship between advertising and profitability can be expected. Thus, strong positive relationship between advertising and profitability has lent support to the view that a corrective policy toward advertising is needed to maintain competition. However, the study reported by Bloch (1974) found no significant relationship between measured profit rates and advertising intensity when they were adjusted to correct for the expensing of advertising. Thus Bloch (1974) argued that the view that a positive relationship between measured profit rates and advertising intensity indicated the need for corrective policy toward advertising was unwarranted.

Reekie and Bhoyrub (1981) and Ayanian (1975) argued that the conventional accounting treatment of advertising is incorrect. They maintain that advertising expenditure creates an intangible asset which depreciates over time, so advertising should be treated as capital rather than current expenditure. They adopt an approach based on earlier studies by Comanor and Wilson (1967), Weiss (1969) and Bloch (1974). They argue that there is a positive relationship between the conventional accounting rate of profit and the advertising-sales ratio. However, they concede that this relationship need not necessarily be positive. If advertising had insufficient effect on volume to generate enough marginal profit to cover its own cost, then heavy advertisers, with correctly calculated profitability measures, would then show lower profits.

Giesser (1991) argued that recent empirical literature on advertising, profitability and concentration has atrophied because of dissatisfaction with its theoretical basis. Using an extension of the theory developed by Stigler and Becker (1977), he analyzed the relationship between advertising, profitability and concentration. He hypothesized that when concentration increased, even if large firms continue to act independently, they would eventually decrease their advertising intensity at high levels of concentration

provided that the demand curve for industry's product is relatively inelastic. Giesser reported positive regression coefficients for advertising when regressed on profitability; in comparison to industries producing homogenous products, the coefficients were significantly larger in industries producing heterogenous products.

Ballantine, Cleveland and Koeller (1992) examined the relationship between several economic indicators and likelihood of earning profits for small and large businesses. They reported that high advertising intensity for small firms reduced the likelihood of being profitable in the mining and retail trade industry divisions, and for large firms in transportation, communication, and utilities. For most of the industry divisions, and for both small firms and large firms, regression coefficients, though not statistically significant, were generally negative for small firms and often positive for large firms.

Coate and Uri (1986) and Uri (1988), on the other hand, argued that the estimation results are sensitive to the data and model used to calculate the relationships. They argued that there were a large number of studies in the literature that used only single equation analysis and thus they failed to recognize or at least failed to take account of any causal relationship between profitability and advertising expenditures. They suggested that the relationship between profitability and advertising intensity should be modeled with simultaneous equations to reflect the complex relationships among the variables. According to them, profitability depends on concentration and advertising, concentration depends on advertising, and advertising depends on profitability and concentration. They also attributed disagreement in the literature to models the researchers used to analyze the advertising-profitability relationship. Based on an empirical study, they reported that profitability had a positive effect on advertising expenditures. Even though Uri (1988) and Coate and Uri (1986) argued that causal relationships are transitive, i.e. $A \rightarrow B$, $B \rightarrow C$, and $C \rightarrow A$, their empirical test was a "stationery" model based on a single year's data. They did not examine these relationships over a period of time when transitive relationships become possible.

The Model

The literature review indicates that the following two propositions have been frequently tested in past research: (1) there is a positive relationship between advertising intensity and year-end accounting returns; and (2) an increase in advertising will result in increase in sales. These relationships have been tested both at the firm and industry level and results have been generally supportive of both propositions. However, as mentioned earlier, very few have attempted to explore the temporal effects of advertising on sales and profitability. It has been often pointed out that advertising should not be treated as an expense as its effects are realized in the long-term than in the short-term (Bloch 1974; Weiss 1969). Mention is also made of the need to consider the effects of decay and half-life of advertising on profitability, but no one has included lag-terms in the model to account for the possible long-term effect of advertising. Our model depicted in Figure 1 attempts to explicitly consider the lagged-effects of advertising on profitability and sales.

It is hypothesized that advertising intensity will have a positive effect on sales and profitability in the same year. The model also shows the hypothesized relationship between advertising in a year and sales and profitability in the next year. This is based on the assumption that effects of past advertising may have an effect on current sales and profitability. Further, as Uri (1988) pointed out, profitability and sales are expected to influence advertising allocations in the next year. For example, a profitable firm may decide to increase advertising to maintain the competitive advantage; similarly, a firm on the decline may decide to reduce its advertising spending in order to control costs.

Two other relationships are also considered in the model: (1) the effect of sales on profitability (assumed to be positive); and (2) the stability of advertising and sales over the three year period, 1988-1990. These relationships will partial out effects due to the causal association between higher sales (or market share) and profitability and the temporal stability of advertising and sales.

LISREL 7.1 available within SPSS v4.1 running on VAX/VMS was used to test the model. The model is non-recursive, that is, the variables are interdependent; the model is also dynamic as elements of time play important roles in the model. Each variable in the model (excepting advertising in 1988) can be expressed as a function of one or more variables, as shown below for 1989 profitability:

$$NPM_{89} = \beta_{61}ADI_{88} + \beta_{64}ADI_{89} + \beta_{65}SLS_{89} + \zeta_6$$

where ζ_6 is the error term associated with profitability in 1989. The inter-item correlation matrix was used as input and the parameters were estimated using the generalized least squares estimation procedure. The model fit was examined by the significance of the model χ^2 and the Goodness-of-Fit index (GFI).

Table 1 Sample Consumer Goods Firms

Industry	2/4-digit SIC	Illustrative Firms	No.
1. Food and Kindred Products	20	Borden Inc., Sara Lee Corp., Coca-Cola Co., Anheuser-Busch Cos.	34
2. Tobacco Products	21	UST Inc., American Brands	5
3. Textile Products	2250 2253	Fruit of the Loom Inc., Signal Apparel Co.	6
4. Apparel and other textile Products	23	Crystal Brands, Benetton Group Spa., Gitano Group	18
5. Pharmaceutical Preparations	2834	Abbott Laboratories, Bristol Myers Squibb, Johnson & Johnson, Lilly (Eli) & Co.	25
6. Soap, Cleaners, and Toilet Goods	2840 2842	Colgate Palmolive Co., Dial Corp., Procter & Gamble.	7
7. Footwear	3021 3140	LA Gear Inc., Nike Inc., Stride Rite Corp.	9
8. Audio and Video Equipment	3651	Emerson Radio, Zenith Electronics Corp.	6
9. Motor Vehicle and Motor Cycles	3711 3751	Chrysler Corp., General Motors Corp., Harley-Davidson Inc.	7
10. Jewelry, Silverware and Platedware	3910 3911	Oneida Inc., Harlyn Products Inc.	5
11. Dolls, Games, Sporting Goods, pens, etc.	3942 3944 3949 3950	Mattel Inc., Hasbro Inc., BIC Corp.	11

Sample and Measures

Data for the study were obtained from COMPUSTAT which provides financial data on more than 2600 firms for 20 years. 131 firms in the consumer goods industries had complete data on the variables of interest for the three year period, 1988-1990, and were selected for this study. Illustrative firms and the industry they operate in are presented in Table 1. The industries represented include food and kindred products (like meat packing, dry groceries and beverages), textiles, pharmaceutical preparations, toiletries, footwear and toys.

Table 2 Descriptive Statistics

Description	Calculation	Symbol	Mean	SD
Advertising Intensity (ADI)	$\frac{\text{Advertising \$}}{\text{Net Sales}}$	ADI_{88}	.052	.045
		ADI_{89}	.053	.044
		ADI_{90}	.053	.046
Sales (SLS)	Ln(Net Sales,$m)	SLS_{88}	6.812	1.905
		SLS_{89}	6.923	1.897
		SLS_{90}	6.998	1.948
Net Profit Margin (NPM)	$\frac{\text{Profit after Tax}}{\text{Net Sales}}$	NPM_{88}	.063	.061
		NPM_{89}	.052	.083
		NPM_{90}	.048	.092

Three measures were used, namely advertising intensity, sales and net profit margin. The computational details and descriptive statistics are presented in Table 2. Annual sales, excluding extraordinary income, is used as a proxy to the size of the company. Due to the skew in sales distribution, logarithmic transformation of sales was used. Profitability was measured by the net profit margin which is similar to the price-cost margins used in previous research. While advertising levels have remained quite consistent over the three year period at about 5.3%, the profitability has gone down from 6.3% in 1988 to 4.8% in 1990.

Results and Discussion

Table 3 lists the LISREL estimates of all coefficients and their t-values. Both advertising and sales exhibit a high degree of stability as indicated by the high t-values for these coefficients (for example, the t-value for the path $ADI_{88} \rightarrow ADI_{89}$ is 38.86). This could be indicative of the high barriers within an industry to change strategies, what Caves and Porter (1977) referred to as "mobility barriers". Sales, as expected was positively and significantly associated with profitability in all three years, lending more support for the market share-profitability relationships. However, the effect of advertising on profitability received mixed support. In 1989 and 1990, advertising and profitability were negatively related while in 1988, they were positively related (but only marginally significant). The lagged effect of advertising on profitability was, on the contrary, positive: ADI_{88} had a positive and significant effect on NPM_{89} and ADI_{89} also positively impacted NPM_{90}. The effect of advertising on sales was significant and positive in 1988 but negative in 1990. While advertising seems to have had a positive impact on both sales and profits in 1988, in the next two years, it seems to have served a "maintenance" purpose only; increasing the

Table 3 Results of the LISREL Analysis

Parameter	Path	Coefficient	t-value
β_{21}	$ADI_{88} \rightarrow SLS_{88}$	.195	2.25
β_{31}	$ADI_{88} \rightarrow NPM_{88}$	.164	1.93
β_{41}	$ADI_{88} \rightarrow ADI_{89}$	.978	38.86
β_{51}	$ADI_{88} \rightarrow SLS_{89}$	-.002	-.07
β_{61}	$ADI_{88} \rightarrow NPM_{89}$	1.256	5.19
β_{32}	$SLS_{88} \rightarrow NPM_{88}$	.329	3.81
β_{42}	$SLS_{88} \rightarrow ADI_{89}$	-.045	-1.45
β_{52}	$SLS_{88} \rightarrow SLS_{89}$	1.000	105.11
β_{43}	$NPM_{88} \rightarrow ADI_{89}$	.024	.40
β_{54}	$ADI_{89} \rightarrow SLS_{89}$	.011	.32
β_{64}	$ADI_{89} \rightarrow NPM_{89}$	-1.171	-4.75
β_{74}	$ADI_{89} \rightarrow ADI_{90}$	.922	25.90
β_{84}	$ADI_{89} \rightarrow SLS_{90}$	.124	4.33
β_{94}	$ADI_{89} \rightarrow NPM_{90}$	.435	2.25
β_{65}	$SLS_{89} \rightarrow NPM_{89}$	.299	3.52
β_{75}	$SLS_{89} \rightarrow ADI_{90}$	-.069	-1.64
β_{85}	$SLS_{89} \rightarrow SLS_{90}$	1.002	98.66
β_{76}	$NPM_{89} \rightarrow ADI_{90}$	.275	4.63
β_{87}	$ADI_{90} \rightarrow SLS_{90}$	-.125	-4.36
β_{97}	$ADI_{90} \rightarrow NPM_{90}$	-.389	-2.08
β_{98}	$SLS_{90} \rightarrow NPM_{90}$	.354	4.29

allocation may not lead to significant gains in sales and profits but decreasing the allocation may have a significant impact on sales.

Table 4 R^2 values for Structural Equations

SLS_{88}	NPM_{88}	ADI_{89}	SLS_{89}	NPM_{89}	ADI_{90}	SLS_{90}	NPM_{90}
.039	.393	.942	.994	.488	.926	.993	.408

The overall model fit was not adequate to describe the data. The Goodness-of-Fit index was 0.834 and the overall fit assessed by the chi-square statistic was significant (χ^2_{15} = 97.12). It should, however, be noted that assessing model adequacy by chi-square statistic alone may provide misleading results as the statistic is particularly sensitive to sample size and minor departures from normality assumptions. The percentage variance explained for each dependent variable (R^2) was consistently high (See Table 4) indicating that the variables used for prediction were able to explain a significant portion of the variance in the criterion variables. The very low R^2 for SLS_{88} is possibly due to the exclusion of the effects of past sales and advertising from the model.

Conclusions

Even though many researchers have claimed that advertising will positively effect profitability, our study shows that the relationship is not so straightforward as it seems. In fact, the relationship between advertising and profitability was negative in two out of three years. The positive relationship was observed in 1988 when advertising also affected sales positively. It may be that advertising is used for defending current positions and as Oster (1982) found, high advertising levels may be associated with less variability in profits, a characteristic of a competitive industry like the consumer goods industry. Further research is needed in order to fully understand the complex relationship between advertising and profitability. Our results provide further evidence of the connection between market share (as captured by sales) and profitability.

An important limitation of the data source has to be mentioned here. First, all sales of a firm are attributed to its primary industry: several firms in this industry are diversified into related areas and using aggregated information may obscure the relationship. COMPUSTAT tapes also suffer from another limitation: small firms are excluded from the sample. It will be illuminating to include some firms from the very bottom of the distribution.

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SMALL BUSINESS MARKETING STRATEGIES: A CALL FOR CUSTOMIZATION

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Abstract

Many of the strategy tools developed in the literature, (e.g., portfolio models) have an inherent large-business orientation, and applying such tools in the small business context can be problematic. This paper posits that while some of the existing strategy tools can, with modifications, be of relevance and benefit to the small business, there is a need for the development of new tools that are custom-designed for small businesses. One such tool is presented.

Introduction

Strategy research has grown enormously over the last two decades. Unfortunately, some scholars criticize this research for lack of significant contributions (Bettis 1991; Daft and Lewin 1990). The objective of this paper is not to review the entire strategy literature, but to examine that part of it that applies to small businesses (e.g., Schrader, Mulford, and Blackburn 1989; Boyle and Desai 1991; Kinsey 1987; Pelham and Clayson 1988; Stoner 1987; Peterson 1989). Furthermore, this paper concentrates on existing businesses and not on entrepreneurial businesses.

Large Business Strategic Tools

The strategy literature has provided many analytical tools that businesses can use. Boston Consulting Group's (BCG) market share and market growth matrix, the Directional Policy Matrix' (DPM) market attractiveness and competitive position matrix (e.g., Peter and Donnelley 1991), the experience curve (e.g., Day 1984), economies of scope and scale, differentiation, and cost leadership (e.g., Porter 1980; 1985) are examples of such analytical tools. This paper argues that some of these tools need modifications before small businesses can use them.

1. BCG's market share and market growth matrix.
BCG's matrix is one of the most familiar analytical tools available and appears in most strategy texts (e.g., Kotler 1991). Briefly described, the matrix suggests that a business can formulate strategies based on two dimensions: relative market share and market growth. For example, strategic business units (SBUs) in small growth markets that enjoy high relative market shares are considered cash-cows. They generate cash-flow to nourish high-share, high-growth SBU's until such time when market growth slows when the latter SBU's become cash-cows.

Our position is that the BCG matrix should be modified when used by small businesses. An SBU's position in the matrix depends on its relative market share. Unfortunately, many small companies have a negligible relative market share. This is especially true in today's rapidly globalizing world markets. For such companies, only small-relative-market-share positions are possible. On the basis of the normative matrix recommendations, such businesses cannot generate enough cash-flow to sustain their low-share positions. Therefore, divesting is the only BCG matrix-derived strategic option. However, many small businesses compete successfully with substantially larger competitors (e.g., Porter 1985).

2. Market-Share's relationship with profitability.
This paper avoids the debate in the literature about the applicability of this PIMS-based relationship. It has been discussed and debated extensively in economics (e.g., Bradburg and Ross 1989; Gale 1972; Newman 1978; Porter 1979) and marketing literatures (e.g., Buzzell and Gale 1987; Buzzell, Gale, and Sultan 1875; Cook 1985; Jacobson 1988; Jacobson and Aaker 1985). Assuming that the findings of this literature stream are valid, increases in market-share are associated with increases in profitability. Our emphasis here is that for many small-businesses, market-share is small by definition. However, such businesses can enjoy high levels of performance (Fiegenbaum and Karnani 1991; Woo and Cooper 1981).

3. Economies of scope and scale.
Both economies originate in classical micro-economic theories and have been adapted to the strategic management literature (Hamel and Prahalad 1985; Hout, Porter, and Rudden 1982; Ghoshal 1987; Kogut 1989; Porter 1986). The argument is that companies can derive economies of scale (lower fixed costs per unit of production) from size. Economies of scope assume that businesses share fixed costs (and expertise) across large SBUs. Such economies may not be available for small businesses. They simply cannot compete against their larger counterparts, who enjoy scale and scope economies *by* definition.

To sum, the tools reviewed here might be best applied to large businesses, or, at the very least, to small-share units of large businesses. Before discussing possible modifications of these tools, small-business research is presented in the following section.

Small Business Strategy Literature

Research about small businesses has followed two major directions. The first stream examines focus (also termed niche) and differentiation. The second is concerned mostly with small business planning.

The first literature stream follows Porter's generic focus and differentiation strategies. Woo and Cooper (1981, p. 302) argue that effective low-share businesses in their PIMS' database are "...strongly characterized by selective focus..." (see also Buzzell and Gale 1987; Porter 1980). For a focus approach to be succeed, a niche has to be found, such that, "A viable niche should be big enough for the small firm, and unattractive to large firms..." (Fiegenbaum and Karnani 1991, p. 102). Only under such conditions would the niche be profitable for the small business. Such reasoning is consistent with Porter's (1980) U-curve relationship between ROI and market-share.

Articles appearing in small business' journals (e.g., *Journal of Small Business Management*) also emphasize focus strategies (Chaganti 1987). To illustrate, Watkin (1986, p. 15), in an analysis of the retailing industry, summarizes: "Small retailers have been able to survive and grow despite the competitiveness of the industry and the dominance of major firms. One way of doing so is to use a focus strategy." Davig (1986, p. 40) reports that small businesses he categorizes as Analyzers were the most successful. Such firms "...attempt to maintain a stable, somewhat limited line of products."

The second research stream relates to small business planning (Armstrong 1982; Bracker and Pearson 1986; Covin and Covin 1990; Covin and Slevin 1989; Cragg and King 1988; Hills 1985; Orpen 1985; Pelham and Clayson 1988; Shrader, Mulford, and Blackburn 1989). This research is summarized by Robinson and Pearce (1988), (see also Pearce, Robbins, and Robinson 1987; Robinson 1983; Robinson, Logan, and Salem 1986; Robinson and Pearce 1983; 1988; Robinson, Pearce, Vozikis, and Mescon 1984; Robinson, Salem, Logan, and Pearce 1986). On the basis of their synthesis and empirical findings, Robinson and Pearce (1988, pp. 56-7) suggest a two-dimensional analysis of the relations between planning, strategy, and performance. The first dimension is planning sophistication, "...a global assessment of the firm's strategic management process..." The second dimension is strategic orientation "...which reflects a global assessment of the content of the firm's strategy." Businesses with at least a moderate level on one and a high level on the other have superior performance. Businesses with no strategic orientation, or with medium orientation and low planning sophistication are characterized by low performance. Other combinations result in medium performance.

To sum, two major contributions of research about small businesses were identified from the literature. First, conditions favoring a focused strategy have been identified. Second, the value of strategic planning has been established. In the next section possible modifications of strategic tools are discussed.

Modification of Strategic Tools

One possible modification is changing the definition of the market used by a small business (Porter 1985). By narrowly redefining the market in which a small business operates, it can avoid some of the pitfalls discussed earlier. For example, if a market is narrowly defined, the relative market share for a BCG matrix changes from negligible to significant. Similar advantages are gained for DPM matrices since market-share is an important determinant of business competitiveness, one of the matrix dimensions. Such narrowing of market definitions can be achieved on a number of sub-dimensions: geographical emphasis (regional vs. national); product-line width (narrow vs. wide); product adaptation (vs. standardization); or specific end-user types. There is a tradeoff involved in market definitions. If the market is defined too narrowly, it ceases to be attractive even for a small business. Wide definitions increase the risk of larger competitors entering the market. When properly defined, small businesses can enjoy output flexibility in their chosen market (Fiegenbaum and Karnani 1991).

A different modification of tools that small businesses can use is in the importance they assign to strategic factors or in the way markets are scored on these dimensions. For example, the market attractiveness dimension in the DPM matrix incorporates factors, such as market size and growth. For large businesses, large or growing markets are desirable. They are scored favorably on the two, and are designated as attractive. Smaller businesses, on the other hand, might consider such markets undesirable because they attract large competitors and they would score small or stable markets favorably (Woo and Cooper, 1981). A different approach might involve adding factors to be considered in gauging market attractiveness. For example, a regionally based small business might include strong regional sentiments as a determinant of market

attractiveness. Or, the potential to sway governmental agencies might be assigned a dominant weight for a local competitor analyzing "outsiders."

The discussion here is suggestive, and should be viewed with caution. What is needed is more formal and structured efforts to test whether businesses are engaged in such practices. We also need to establish that the use of such modified tools does result in superior performance.

A Strategic Tool For Small Businesses

Our intent is to demonstrate a potential direction to generate new strategic tools for small businesses. We chose to illustrate the process by developing a matrix to help small businesses design and implement strategies to combat competitors in the globalizing market. As competition becomes global in many industries, small businesses will face global or multinational businesses competing in their markets, highlighting the need to develop defensive strategies (Hamel and Prahalad 1985; Hout, Porter, and Rudden 1982; Ghoshal 1987).

TABLE 1
STRATEGIC DEFENSIVE MOVES

ATTACKER / DEFENDER	DOMESTIC	MNC	GLOBAL
DOMESTIC	*DOMESTIC RETALIATION *DOMESTIC POSITION DEFENSE	*GOVERNMENT ASSISTANCE *EXPORTING TO MNC MARKET *TURN INTO AN MNC	*GOVERNMENT ASSISTANCE *BECOME MORE GLOBALIZED *FORM JOINT VENTURE
MNC	*ESTABLISH LOCAL PRESENCE *COUNTER-ATTACK *ABANDON MARKET	* COUNTER-ATTACK IN MNC'S HOME MARKET * COUNTER-ATTACK IN MNC'S WEAK MARKETS	*GOVERNMENT ASSISTANCE *POSITION DEFENSE *INTER-NATIONALIZE *FORM JOINT VENTURES
GLOBAL	*ESTABLISH LOCAL PRESENCE *COUNTER-ATTACK *ABANDON MARKET	*COUNTER-ATTACK IN MNC'S LOCAL MARKETS *COUNTER-ATTACK IN MNC'S WEAK MARKETS *ABANDON MARKET	*SEEK GOVERNMENT HELP *COUNTER-ATTACK *FORM J.V. *ABANDON MARKET

Table 1 is meant to help small businesses design competitive defensive strategies when attacked in their markets. The matrix suggests that before formulating a strategic response, a small business needs to accurately classify its competitor as one of the three types--domestic, multinational (also referred to as multidomestic), or global. For example, a small domestic business attacked by a global corporation has a set of three possible responses. If the global competitor is locally based, the first choice is to seek governmental assistance (e.g., antitrust legislation might be invoked). If the global competitor is not locally based, governmental assistance is still an option. Other options include an attempt to become more global and formation of joint ventures (if resources and time are sufficient), or abandoning the market (retreat). Similar analyses can be done for each of the nine combinations in the matrix. While large businesses face similar choices in these situations, the order of their preferences may differ. For example, a large business might be reluctant to seek governmental help for public relations reasons. Large businesses may also have strategic options that are not feasible for smaller businesses. For example, a large domestic competitor attacked by a small domestic business might internationalize in this situation, thus balancing the potential loss of sales at home by increases in sales abroad.

Closing Remarks

The contribution of this paper will be measured by its generation of further debate and research efforts about small business strategies. If such a debate yields broader and deepened insights into small business strategies, the strategy literature will become more applicable and relevant to a wider range of businesses.

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WHAT SMALL BUSINESSES IDENTIFY AS THEIR MARKETING CHALLENGES: A NARROW OR BROAD VIEW OF MARKETING?

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ABSTRACT

Over the past decade and a half, the industrialized nations have undergone major restructuring; large companies have eliminated thousands if not millions of jobs. Whatever growth in employment that has occurred has come in small, entrepreneurial businesses. Yet, small businesses continue to face changing customer expectations and competitive threats. Owners/managers increasingly report that marketing difficulties are their largest problem area. This study investigated small business operators' understanding and use of marketing, focusing on major decision challenges. Marketing is still considered mostly as promotion, and small business owners report most problems with promotion decisions. Pricing is still competitor-based, but product assortment is becoming more consumer driven.

INTRODUCTION

Because of small and/or entrepreneurial business ventures' increasing importance to the structure of the economy of the United States, there has recently emerged within the marketing discipline a major research stream which focuses on these firms' problems and successes. How small businesses relate to their customers and competitors occupies the interest of a growing body of academics and practitioners. Some researchers attempt to identify reasons for the success or failure of small and/or entrepreneurial enterprises (Franklin and Goodwin, 1983; Ibrahim and Goodwin, 1986; Hofer and Sandburg, 1987; Galbraith, McNabb and Stephenson, 1992). Who are these firms, and why are they of such interest to marketing educators today?

Small Business Defined

According to Carson and Cromie (1990), a small business is one which has one or more of the following characteristics:

1. Management is independent; managers are usually owners as well.
2. Ownership and capital provision is in the hands of one person or a small group.
3. Operations are mainly local, but markets are not necessarily so.
4. Within its industry, the firm's relative size is small (measured either in sales, number of employees, or some other comparison).

Furthermore, the owner of a small business is often an expert in some industry or craft, and more often than not has not had any formal business management training or education. With regards to the fourth criterion, this research imposed an arbitrary upper limit to employee size: only firms with fewer than 100 employees were included in the sample.

Concern of Marketers

Over the last nearly two decades, every one of the OECD countries has undergone a major industrial restructuring, resulting in high unemployment, particularly among white-collar middle managers (Arzeni 1992). Large firms in the industrialized nations have drastically reduced jobs and are not planning to hire more managers. What growth in employment that has been taking place has occurred in small to medium-sized businesses, particularly new businesses. Arenzi concluded that one of the keys to improving economic performance in the future--of being able to compete successfully in the highly competitive global marketplace--is to shift from a managerial to an entrepreneurial society. In such a society, innovation no longer emerges from corporations run by managers. Instead, the sources of creativity and competitive strengths stem from fast-growing small firms run by innovative entrepreneurs. We believe that this shift is underway now, and that as marketing educators, we must devote greater research attention to small businesses and entrepreneurship. This study reflects that concern.

Finally, while the number of failures among all business enterprises has risen rapidly during the recent recession, it is obvious that many more firms remain in business than have failed. Because problems with marketing have increasingly been mentioned as a major failure/success factor among small businesses, research is needed to better assess how managers and owners of such businesses perceive marketing and the marketing challenges of their firms.

OBJECTIVES FOR THE STUDY

This research study was prompted by an awareness of the lack of consensus regarding how small business owners/managers consider marketing activities. The researchers, one of whom directs the campus-based Small Business Institute, work regularly with all types of small businesses, including manufacturers, retailers and wholesalers, and service firms, providing guidance and counselling.

Our primary objective for this study was to identify what decisions were mentioned when small business owners/entrepreneurs considered marketing. Further, we sought to explore the problems which owners/entrepreneurs brought to mind when asked to consider the challenges they faced about product mix, pricing, promotion and location/distribution. Were such respondents relating a rather robust, full sense of marketing decisions and actions or were their responses narrow and limited, so as to be a possible contributing factor to business failure?

The researchers were seeking to discover not only the commonly mentioned aspects of marketing among small business owners/entrepreneurs, but also what aspects they mentioned rarely or not at all. Analogous would be their degree of sophistication about financial problems: did they only acknowledge that they had no money in the till at the end of the day, or were they concerned about inadequate lines of credit, deficient cash flow and/or the portion of receivables beyond 60 days?. Answers to these questions have been the focus of some of the studies cited above. For example, the suggested success/fail factors appear to fall across the broad range of business management activities and programs. In some studies, specific marketing activities were identified as the most important factor or factors, while other studies have not mentioned marketing at all. Stephenson (1984), Ram and Forbes (1989), Kinsey (1987), Peterson (1989) and Hisrich (1992), among others, all point to problems with marketing as the greatest difficulty facing small business operators and/or entrepreneurs. On the other hand, other researchers have cited such diverse factors as firm size and/or age, personal factors of the owner/entrepreneur, problems with finance, planning, and others. Bracker and Peterson (1985) identified firm size, product or service form, industry maturity, and the age of the firm as significant success factors.

And, some researchers have reported a mix of reasons for success. Among these are Nahavandi and Chesteen (1988), who identified strategic planning deficiencies and the impact of outside consulting as critical factors in venture success, while Cragg and King (1988) found that the quality of planning activities, market orientation and the characteristics of the owner/manager were associated with small business success. Roitman, Emshoff and Robinson (1984) listed the inadequacy of the financial and human resources needed to implement product ideas and market strategies as major barriers to the entrepreneurial firm's success. Rocha and Khan (1984) and Peterson (1984) recognized the interrelatedness of several recurring problems confronting small business, but identified none as a major contributor. James Chrisman (1988) summarized the major problems that were identified in nine major small business surveys conducted during the time period 1978-1984; the problems ranged from financing, accounting, long-term planning, advertising and promotion, to taxes, inadequate sales, employee motivation and capital.

The present study does not attempt to associate groups of successful and unsuccessful businesses to possible causal factors. No categorization of the respondent firms contacted was made according to any defined measure of "success." Instead, the aims of this study are more modest: to learn how owners/entrepreneurs refer to the marketing tasks of their firms when prompted.

The Importance of Marketing

Marketing is increasingly being noted as a critical factor for the successful small business owner (Mendelssohn, 1991; Ram and Forbes, 1989). In one study, sixty-eight percent of the respondents viewed the lack of a marketing plan as a frequently experienced problem (Weinrauch, Pharr, Mann and Robinson, 1989). Stephenson and Kahle (1992) found that "reaching and maintaining customers" was the highest rated critical success factor out of 25 issues. Dodge and Robbins (1992) analyzed Small Business Institute reports in which problems of a marketing nature were clearly the most numerous. Savitt (1990) identified the choice of marketing programs as being among the five key factors that affect the survival of small, growing entrepreneurial firms. Joniak's (1989) study of 530 small firms reported that counseling on marketing was the most often requested assistance program. Reilly, Wychoff and Brock (1989) reported marketing problems leading other business assistance inquiries by nearly two to one.

DESIGN OF THE STUDY AND DESCRIPTION OF SAMPLE

The data for this research study were gathered during the Summer of 1992. A convenience sample of small businesses (firms with less than 100 full-time employees) was given in-person interviews by students in two sections of an undergraduate marketing course taught by one of the

researchers. Student interviewers were provided with a structured interview guide containing five situation-related, open-ended questions, and three classification items, and were trained in data gathering techniques by in-class role-playing. To control interviewer bias, data gathering was restricted to no more than three respondents per interviewer. Students were given the choice of selecting those small business they wished to contact. This resulted in a sample which was somewhat skewed toward retail businesses close to a large urban campus which offered products and services of interest to college students (e.g., clothing, computers, typing services, sporting goods, audio equipment and the like).

Of the 282 completed interviews, a total of twenty were rejected for the final data analysis. Some of the rejected subject firms did not qualify as small businesses; rather, they were either branch offices or stores of major national and/or international enterprises or had more than the 100-employee maximum. Other rejected interviews were duplicated responses resulting from more than one student contacting the same business. The data were analyzed using traditional content analysis techniques. Responses were assigned to more obvious interpretive categories and groupings of response themes.

Of the 262 usable responses, a clear majority of respondents (125) classified themselves as owners, co-owners or proprietors of the firm. Another 61 had titles of managers/administrators (Table 1).

Table 1: Categories of respondents' titles

Title	Number	% Responses
Owner/Co-Owner/Proprietor	125	47.7%
Managers/Administrators	61	23.3%
Presidents	34	13.0%
Sales/Mrkt. Mngrs./Sales Dir.	15	5.7%
Vice Presidents	4	1.5%
Partners	4	1.5%
Buyers	2	0.8%
Other	17	6.5%
TOTALS	262	100.0%

Merchandise retailers were the largest single category of business types included in the study: 130 responses or 49.6% of the sample. The next largest category (37.7%) was Service firms, which included such operations as hair salons, insurance agents, restaurants, gardeners, etc. (Table 2).

Table 2: Breakdown of business types

Category	Count	% Responses
Merchandise Retailers	130	49.6%
Service Firms	99	37.7%
Manufacturers/Processors	13	5.0%
Distributors/Wholesalers	8	3.1%
Associations/Organizations	4	1.5%
Not Otherwise Identified	8	3.1%
TOTALS	262	100.0%

PRESENTATION OF FINDINGS

The study involved qualitative response data on five situation-related, open-ended questions. The questions asked were:

1. What decisions come to mind when I say "Even small businesses need to make marketing decisions?"
2. What are some of the challenges your firm faces in deciding the proper assortment of goods (or services) to sell?
3. What challenges does your firm face in setting and adjusting the prices of the goods (or services) you sell?
4. What challenges exist in communicating effectively to your customers, and prospective customers, the advantages offered by both your company and what it sells?
5. What challenges does your firm face because of its location and the need to get goods to customers (or the need to service your customers)?

Q 1. What Decisions Come to Mind.

As commonly supposed, for many small business owners, "marketing" means advertising/promotion--communicating to customers and prospects. Roughly half of the sample gave answers which fell into the response cluster which included advertising, promoting yourself (the firm), "getting the word out," or getting customers in the door. A fairly high proportion of the sample--52 responses, 20 percent--acknowledged the need to define their target market and know who their customers are. Third in the list of key decisions was pricing, with 45 responses (17 percent), which included such answers as: having a good price, knowing how much to charge, setting reasonable prices, and offering discounts and special price offers (Table 3).

Table 3: What are marketing decision challenges?

Response Grouping	Count	% Responses
Promotion	130	50%
Customer Identification	52	20%
Pricing	45	17%
Which Products to Sell	40	15%
Knowing Competition	22	8%
Generating Referrals	22	8%
Location Decisions	14	5%
Developing Promotion Ideas	13	5%
Determining Firm's Image	10	4%
Planning, Goals, Strategy	9	4%
Providing Customer Service	7	3%

(all others had less than 5 responses)

Promotion, targeting specific customers, pricing, and having the proper assortment of products to sell were the most commonly offered responses. On the other hand, rarely considered was a sense of defining an appropriate strategy for the business which would make the promotion, target customers, pricing, product- assortment elements coordinated. Nor was research of the market or competitors mentioned by name much, although both the needs to identify customers and to know competitors were voiced. Similarly, the notion of creating the proper specific image for a business was subordinated to the generalized promotional goal of "telling others about us", or "getting the word out". Planning as an aspect of marketing, too, was rarely considered.

Q 2. Challenges Selecting Assortments.

When making product assortment decisions, small business owners are more likely to rely on customer-based factors than on their own intuition; these decisions are likely to be based on what are perceived to be customers' tastes and/or suggestions, rather than respondents' personal preferences. On the other hand, there does exist a tendency to emphasize the here-and-now of what is selling, rather than the future sense of predicting trends and styles. When competitors are mentioned, the reference is more likely to be in "beating" them, than matching them in assortment, quality or distinctive offerings. The sense of finding high-margin or profitable merchandise/services was rarely mentioned. Nearly three times as many respondents mentioned the need to stock what sells or to clear out slow movers, than did those who expressed problems with finding quality goods to sell or goods that offered higher margins. Perhaps small business operators are more turnover and sales oriented than profit oriented. Table 4 displays the distribution of response groupings.

Table 4: Response groupings on assortment challenges

Response Grouping	Count	% Responses
Determining customers' tastes, acceptable price points	67	26%
Stocking what sells	33	13%
Offerings better than competitors	29	11%
Assortment width, variety	19	7%
Offerings that fit image	17	6%
Determining product mix	13	5%
Forecasting future trends	13	5%
Finding quality suppliers	11	4%
Finding goods with high margin	11	4%
Best inventory level	10	4%

Q 3. Challenges Setting Prices.

Respondents are apparently acutely aware of the need to price competitively; 51 percent of the sample identified having competitive prices as the largest challenge they faced in setting and adjusting their prices. Competition was by far the most frequent reference; it was mentioned more than twice as often as costs. Only one-quarter of the sample mentioned having a set margin or mark-up rule to assist them in the pricing challenge. Curiously, the market's ability to pay was mentioned less often than either competitor's prices or costs. Perhaps this is because it is easier to quickly compare what the store down the street charges rather than to ascertain by surveying customers if the price is "within bounds."

Following the 51 percent of the sample's mentions of the need for monitoring and meeting their competitors' prices, 60 (23%) reported challenges in keeping mark-ups (including keystoning) at traditional levels. Another 35 respondents (13%) reported challenges with setting prices according to what the market could bear or afford. Table 5 displays the distribution of responses to the price challenges question.

Table 5: Distribution of responses on pricing challenges

Response Grouping	Count	% Responses
Meeting competitors' prices	134	51%
Maintaining mark-ups	60	23%
Determining affordability	35	13%
Maintaining suggested prices	18	7%
Keeping prices fair, stable	17	7%
Setting price/quality	15	6%
Pricing for volume	9	3%
Pricing for traffic	8	3%
Pricing to reflect seasonality	6	2%

Q 4. Communications Challenges.

Respondents placed a high value on the need for customers' referrals; 42 subjects (16% of the sample) responded they found it important to generate positive word-of-mouth "advertising" by their customers, and to develop customer referrals or recommendations. This response grouping was followed by one which included such problems as explaining what makes them better or different from their competitors (13%). Communicating the store's image and/or reputation was the third most-mentioned response category (Table 6).

Overall, the promotional emphasis expressed by the sample was more toward comparisons and points of difference, than of explaining about one's business or products alone. A high value was placed on the personalized attention and individualized service which small businesses are able to offer.

Table 6: Distribution of communications challenges

Response Grouping	Count	% Responses
Word-of-mouth	42	16%
Competitive advantage	34	13%
Customer relationships, store image, reputation	32	12%
Educating the customer	16	6%
Staying in promotion budget	14	5%
Salespersons' lack of skill	11	4%

Q 5. Location/Distribution Challenges.

Of all five challenge-area questions included in the study, far fewer respondents reported having problems with either location or distribution factors. Perhaps this is because relocating requires a major effort and is, therefore, not considered on as frequent a basis as product, promotional and pricing decisions. The largest single grouping of concerns related to parking and/or access: 25 respondents, 10% of the sample. Another 23 respondents (9%) complained that their present location did not render them very visible, or that they were "off the beaten path," generally hard to find. Only 12 respondents (5%) felt that their location was too close or too similar to their major competitors' locations (Table 7).

Table 7: Responses to location challenges

Response Grouping	Count	% Responses
Parking, access, traffic	25	10%
Visibility	23	9%
Too close/similar to competitors	12	5%
Too far from some customers	12	5%
Problems with signage	10	4%
Violence, crime in area	8	3%

CONCLUSIONS

While the economy of the United States is becoming increasingly dependent upon small and medium-sized, entrepreneurial businesses to generate the new jobs needed for full employment, many of those firms are failing. One of the major reasons cited for small business failures is the business owner/operator's inability to understand or apply effective marketing strategies and techniques.

This study was conducted in an attempt to identify the challenges/problems that small business owners/operators are having which they identify as marketing problems. Open-ended questions were employed to permit respondents to identify problems in their own words. Findings supported the contention that small business owner/operators are generally unaware of the full scope and power of the marketing concept, and that they tend to still view the major marketing decisions as primarily promotional activities. Rarely is marketing identified with creating strategies, planning, the research process or creating a business image. Pricing decisions, for example, continue to be competitor rather than consumer driven. On the other hand, these small business owners/entrepreneurs are becoming increasingly aware of making product line and product mix decisions based on what their customers need and want, rather than on what is available or what the operator believes should sell. At the same time, a surprising number of respondents reported an awareness of the need for target marketing and competitive analysis.

From the standpoint of implications for further research, we believe that this study's results warrant replication on a large-scale, descriptive, field survey basis. Although these results tend to support other small sample findings, they do not permit us to make sweeping generalizations about the critical success factors for small business in the United States. That goal, however, is coming nearer; expansion of this study will contribute to successful achievement of it.

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MARKETING AND LAW

LEGISLATION, PRODUCT LIABILITY AND ADVERTISING: DANGEROUS OMENS IN THE GLOBAL ENVIRONMENT

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Introduction

Recent changes in the Soviet Union and Eastern Europe, combined with the changes in the European Economic Community have increased the pressures on our markets, our marketing system, and our legal system, as we try to factor in the necessary conditions for competing in the global economy. Marketing strategists must react to or try to anticipate changes in the marketing environment that are not under the control of the firm, especially those reflecting consumer trends, economic issues, and government policies that have a direct impact on competitive advantage. Survival in a global economy increasingly mandates that operations conform to the baseline requirements of all the potential markets for the firm's products. The need to maintain a level playing field among all the global competitors drives each nation desirous of receiving the fruits of global productivity to conform their economic environment to emerging standards.

Product Liability Trends

Without minimizing the differences that still separate our legal and economic systems from those across the seas, a balanced view of the major trends, epitomized in the recent actions taken concerning product liability issues, reveals a strong movement toward legislating a uniform code of conduct across countries (See, e.g., Liebman 1986; Linger 1990; Nilles 1985; Rocher 1990; Schneebaum 1989; Shettler 1986; Thieffry et al. 1989). That is the good news that promises some hope of standardization of the rules in the product area across diverse countries and cultures as the realities of global marketing make their impact felt.

The bad news is that the European Community's adoption of strict liability in a general duty of safety (Council Directive 1985), and the United Kingdom's criminalization of strict liability issues (U.K. Consumer Protection Act 1987), which we still relegate to civil actions, are very ominous signs. If criminality can be assigned to behavior without regard to the intent or state of mind of the individuals involved, we will have moved very far down the slippery slope to a police state. If, as seems likely by the current legal trends and the desirability of leveling the playing field in global marketing, we demand that more and more sanctions be incorporated into formal laws with criminal consequences, we will simply create a broader class of potential "criminals." Unfortunately, our system of justice cannot handle those we currently have. Yet, we seem destined to give it a try. This seems remarkable given that the most visible systems of government predicated on such total control of its citizenry by laws, i.e., the "police states" of the Soviet bloc, have crumbled under their own weight. Surely, the successes of the "free market" approach have been remarkable enough to warrant greater respect and more cautious intervention than it has received, especially when compared to the dismal failures of our ideological opposites in the "centrally-controlled" Soviet bloc.

The current concern, however, is not with the use of the legal system, per se, which has been shown to be necessary and beneficial in correcting many of the deficiencies and extreme perversions possible in a "free market" system. The problem is in the insidious expansion into areas less and less extreme or perverted using reasonings and interpretations that themselves seem extreme or perverted and possibly to extend the force of criminal sanctions onto non-willful acts using the marketer's own speech as the bludgeon.

Advertising Trends

Advertising and commercial speech, in general, have long since adjusted to the loss of First Ammendment protections normally afforded speech in this country. The threat of a standardized rule of strict liability in the areas of product safety, normally should be good news for advertisers whose messages have increasingly been used to support product liability claims. In the products liability area, advertising has been increasingly used as evidence by plaintiffs in pursuit of damages, compensatory and punitive (Dugan 1989). Dugan enumerated the ingenious ways this has been done (1989, p.228):

> *. . . (1) They have claimed that the advertising created an express or implied warranty that the manufacturer breached by selling an unsafe product. (2) They have argued that the advertising involved fraud, deceit, or misrepresentation, so*

they were injured when they relied on such ads. (3) They have charged that, negligently or otherwise, the manufacturer produced an unreasonably dangerous product whose advertising, instead of warning consumers, lulled them into feeling that the product was safe. (4) They have combatted the defendant's response that the product was being misused by showing similar uses in the product's advertising. (5) Finally, they have justified their requests for punitive damages by introducing evidence of advertising that allegedly ignored all risks to consumers.

The global trend toward strict liability, in theory, should eliminate such use of advertising because strict liability does not require either misleading representations nor reliance by the consumer. Paradoxically, as Dugan points out, while advertising should not be involved in cases brought in strict liability jurisdictions (1989, p.230):

. . .Yet frequently it is. Marketing practices can influence a court's decision as to whether the product is unreasonably dangerous. Do advertisements show the product being used safely? Can consumers engage in the same activities in their own use without running unnecessary or unanticipated risks? Do warnings or disclaimers accompany the advertising? Courts often want to answer such questions.

In fact, one of the few protections for advertisers that did exist, puffery, has been eroded significantly. The definition of puffing increasingly requires some proof that the consumer did not actually believe it (Richards 1990). Combine that with the trend toward more expansive interpretations of deceptiveness that don't even require that the advertiser make an explicit claim, puffed or otherwise, to be considered guilty of deception, and we are perilously close to "kangaroo court and witch hunt" trial standards, (Stern 1992, p.72):

. . .Advertisements frequently use poetic license to say one thing and mean another, borrowing literary tactics to convey messages by means 'other than or in addition to' the words. Both literature and advertising share similar goals of getting inside audiences' heads and inspiring them to experience things in fresh, new ways. . . . Artistic creativity shapes advertisements that function by stimulating consumers ***to go beyond what is depicted and to use their imaginations*** *to infer further meanings. However, advertising creativity may be less permissible than literary ingenuity because it is capable of deceiving consumers. Therefore, careful analysis of literary tactics is* ***required to protect the public from artful deceivers.*** *(Emphasis added)*

Considering such subjective aspects as the literary form of the communication and its interpreted impact as a whole, significantly increases the exposure to liability based on literary "experts" or authorities opinions of the impressions created or imaginations stimulated in diverse people by an advertisment (Stern 1992). This approach is reminiscent of the infamous "witch hunt treatise" which expounded in depth on the methods for determining if someone was possessed by a witch. If someone "in authority" said you were possessed, that was enough. Your protestations of innocence were actually used as further proof that the witch possessed your tongue and prevented you from admitting it! The European spectre of criminal consequences just makes this appalling trend more ominous. Do we really want to be held responsible for the myriad subjective interpretations and imaginings that might be placed on our messages as the benchmark for possible criminal liability?

As we continue to move toward the European model to standardize our approach to marketing in diverse market systems, the number and significance of legal actions will probably escalate. The effect on the regulatory and court systems will be to overburden already overburdened systems and further hobble the very source of our economic prosperity, the "free market system." This seems an unfortunate and untimely expansion of legal restraints on our system and threatens to seriously encumber the very characteristics that have allowed the "free market" approach to prosper.

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CONTROVERSIAL ISSUES SURROUNDING DIRECT-TO-CONSUMER ADVERTISEMENTS OF PRESCRIPTION DRUGS

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Issues concerning the use of direct-to-consumer (DTC) advertisements of prescription drugs are explored. In addition, the background of the pharmaceutical industry as well as the history of DTC advertisements of prescription drugs are detailed.

Faced with increasing foreign competition and the rise in the availability and popularity of generic drugs, U.S. pharmaceutical companies introduced new promotional tactics a dozen years ago when they began advertising prescription drugs directly to consumers (Colford 1985). In addition to the fiercely competitive market conditions, pharmaceutical companies recognized in the 1980's that Americans were becoming increasingly more health-conscious. Thus, the times were ripe for the $33 billion prescription drug industry to begin exploring the costs and benefits of increasing promotional efforts directed at consumers (Gladwell and Farhi 1990). For years the industry, had spent considerable sums on publicity efforts directed at consumers while all advertising efforts had been directed at health professionals through medical journals and magazines.

A storm of controversy over whether it is ethical, logical, and in the interest of society for pharmaceutical companies to advertise prescription drugs directly to the consumer has been brewing since the advertisements first appeared in 1981 (Neumann 1988). Major influential groups including the American Medical Association, the American College of Physicians, the American Society for Clinical Pharmacology and Therapeutics, the American Society of Hospital Pharmacists, and the American Association of Retired Persons oppose advertising prescription drugs to consumers (Cohen 1988). However, the American Pharmaceutical Association has a policy stating that there is nothing wrong with direct-to-consumer advertising of prescription drugs by manufacturers if the advertisements do not mention drugs by name (*American Druggist* 1988). In addition, the American College of Obstetricians and Gynecologists supports the advertising of prescription contraceptives (Miller, Barrett and Bradburn 1989).

The pharmaceutical industry, providing only lukewarm support for direct-to-consumer advertisement of prescription drugs, also appears to have some doubts about the relative costs and benefits of such advertising. Indeed, advertising prescription drugs directly to consumers appears to be supported considerably more by the advertising industry and the media than by the pharmaceuticals industry (*Adweek's Marketing Week* 1988; *Consumer Reports* 1984). Consumer attitudes about advertising in this product category appear to be mixed because consumers fear increases in drug prices caused by the advertising while at the same time wanting more information about prescription drugs (*Consumer Reports* 1984; Hiestand 1988; Neumann 1988).

The purposes of this paper are: (1) to explore the background of the pharmaceutical industry which lead to direct-to-consumer advertisement of prescription drugs; (2) to briefly outline the history of direct-to-consumer prescription drug advertising; and (3) to summarize the controversial issues surrounding this type of advertising.

Background

A number of circumstances came together in the early 1980's leading prescription drug manufacturers to experiment with direct-to-consumer advertising. Chief among the circumstances was the tremendously competitive marketing environment. Recent increases in the number of new products have made competition more intense in the pharmaceutical industry (*Business Week* 1984). Competition is 80 fierce in the pharmaceutical industry that drug makers now spend as much or more marketing drugs as they do developing them (Levine 1987).

The FDA made it easier for prescription drugs to become over-the-counter products in 1972 (Miles 1984). Many of the drugs currently advertised are for non-life-threatening conditions (baldness, allergies, wrinkles, etc.) and may eventually become over-the-counter products. Some industry experts believe advertising the product as a prescription drug will set up credibility for the product for its over-the-counter introduction.

Recently, doctors have lost influence in prescribing drugs because of controls coming from health maintenance organizations and third party insurers coupled with the increase in the availability of generic drugs with the related pressures for cost savings. Generics save the consumer about 25 percent per prescription (Spalding 1986). Generic drug makers have more than doubled their share of the

market since 1980 (Miller, Barrett and Bradburn 1989) In addition, *Television/Radio Age* (1987) reports that doctors have become more receptive to patient's requests and demands for generic drugs in recent years. Thus, Rogers (1986) reports that brand-name advertising could be helpful to the pharmaceutical companies facing increased competition from lower-priced generic prescription drugs.

Another reason why pharmaceutical companies are turning to the consumer with their advertising is that the number of medical journals and magazines is growing at a tremendous rate, thus making it more and more difficult to capture the attention of doctors. "In 1966 there were 230 journals taking advertising; today there are more than 630. Add to that a growing number of throwaway magazines that individual drug companies produce for doctors. The result is that the typical physician receives between 60 and 100 medical and surgical publications a month," (Deutsch 1989). The tab for space in these journals and magazines in 1988 was $373 million (Deutsch 1989).

In addition to the above reasons for advertising prescription drugs directly to consumers, the broadcast industry envisions the potential for millions of dollars of new advertising revenue. Without the support of the broadcasting industry, direct-to-consumer advertising of prescription drugs may not have become an issue.

Finally, many companies are taking advantage of consumers' new-found health consciousness by adding consumer pull strategies to their push strategies directed to health professionals (*Adweek's Marketing Week* 1988). Four types of health-related information can be relayed with pharmaceutical advertising: (1) the existence of a disease; (2) the availability of treatment; (3) possible side effects; (4) the risk level involved in taking drugs (Masson and Rubin 1986). The next section will explore the history of direct-to-consumer advertising of prescription drugs.

History

The Food and Drug Administration (FDA), under the authority of the Drug Amendments of 1962, regulates prescription drug advertising to consumers (Masson and Rubin 1986). In addition, the Federal Trade Commission (FTC), the regulator of the vast majority of advertising in the United States including the advertisement of over-the-counter drugs, also has jurisdiction over most prescription drug advertisements (*Consumer Reports* 1984). The FTC, however, has lagged behind the FDA in considering the issues related to direct-to-consumer advertisement of prescription drugs (*Consumer Reports* 1984).

Product-specific advertisements of prescription drugs directed to consumers first appeared in late 1981 with print advertisements for Merck, Sharpe & Dohm's Pneumovax and for Boots Pharmaceuticals' Rufen (*Consumer Reports* 1984). Shortly after the first manufacturer-sponsored advertisements appeared, Peoples Drug Stores ran full-page advertisements in the *Washington Post* for Burroughs Wellcome's Zovirax, a prescription ointment for treatment of herpes simplex virus. Prior to 1981, prescription drug manufacturers advertised only to doctors through advertisements in medical journals and medical trade magazines (*Business Week* 1984; *Consumer Reports* 1984).

The FDA requires that all traditional prescription drug advertisements to physicians include a "brief summary" of side effects, warnings, contraindications, and precautions for the drug (*Business Week* 1984; Colford 1985a; *Consumer Reports* 1984). A contraindication is a patient condition that makes use of a drug inadvisable (Masson and Rubin 1986). The purpose of this information is to provide prescribing physicians with balanced information about the drug as stated in the Federal Food, Drug, and Cosmetic Act (Cohen 1988; *Consumer Reports* 1984). The FDA has in the past required the same "brief summary" for advertising prescription drugs directed at consumers.

In February 1983 the Food and Drug Administration, fearing that the pharmaceutical industry had opened a "can of worms," called for a voluntary moratorium on such advertising until research on the effect of the benefits and risks could be conducted and new guidelines adopted (*Business Week* 1984; Colford 1985; *Consumer Reports* 1984). Advertisements based only on price, usually run by retailers rather than manufacturers, were exempt from the moratorium as well as advertisements in the form of "institutional," "corporate," or "health care" messages (Sheffet and Kopp 1990). These messages did not mention either the product name or the ailment to be treated and thus did not trigger the "brief summary" requirement for complete side effect information (Sheffet and Kopp 1990). The moratorium was backed by the pharmaceutical industry, Congress, and the FDA (Colford 1985a). In fact, an overwhelming margin of pharmaceutical companies later told Congress they opposed advertising prescription drugs to consumers (Colford 1985a). A major reason why the drug-makers were reluctant in the early 1980's to pursue advertising to consumers was that the industry was already spending more than half a billion dollars (Colford 1985a) annually to advertise to medical professionals. Because of the lack of support from the drug companies, the FDA did not pursue the idea of rule changes (Colford 1985a).

Several drug-makers, however, were still interested in pursuing direct-to-consumer advertising during the moratorium. In order to get around the moratorium, these pharmaceutical companies began airing commercials on "health education" targeted at influencing high-risk viewers and listeners to see their doctors for tests and treatment (*Business Week* 1984). One company, Hoechst-Roussel Pharmaceuticals, ignored the moratorium and ran a four-week, 14-market campaign in 1985 (Colford 1985a).

Under pressure from the White House Office of Management and Budget (OMB) during the Reagan Administration's deregulation of many industries, the Food and Drug Administration ended the 30-month moratorium in September of 1985 (Colford 1985a).

For the next two years, the pharmaceutical companies which chose to advertise directly to consumers stayed with the "health education" type of advertisements. However, on September 16, 1987 Sandoz Pharmaceuticals Corporation launched hard-hitting full-page advertisements for the anti-allergy prescription drug Tavist-1 (Stern 1987). The advertisements were purportedly aimed at doctors, but, Sandoz chose to run the advertisements in 25 newspapers nationwide rather than in medical magazines or journals (Stern 1987). The campaign was suspended after less than a week at the insistence of the FDA which said the claims of Tavist-1 being less likely to cause drowsiness had not be documented (Stern 1987).

After the advertisements for Tavist-1 ran, the FDA again announced plans to review its standards for mass-media advertising of prescription drugs. However, by December of 1987, the FDA had decided against a review of the regulations (Colford and Gordon 1987). The FDA stance appeared in 1987 to mean that proposals for change in prescription drug regulation would have to be initiated by the industry.

In the late 1980's a few small companies, most notably Lexis Pharmaceuticals which runs advertisements for birth-control pills in some magazines, have tried including all of the "brief summary" information in their advertising (Deutsch 1989). Recently, the large drug manufacturers have also tried including the "brief summary" information in their print advertising.

Colford and Gordon (1987) report that CBS-TV formed an industry wide group to study how to open mass media to prescription drug advertising. The group, known as the Prescription Drug Advertising Coalition, consists of 54 advertising, media, and pharmaceutical companies (Deutsch 1989). The Prescription Drug Coalition believes that a brief warning about the risks of a brand name drug accompanied by a toll-free number that consumers can call for more information is just as effective in providing a balance of information to the viewer as "brief summaries" (Gladwell and Farhi 1990).

In late 1991, the Food and Drug Administration actively solicited comments on proposed guidelines for prescription drug advertising. A major criticism of the FDA's proposed guidelines for continued insistence on medical education in the advertisements is that the advertisements are protected by the First Amendment (Colford and Mandese 1992). In February 1992 Colford and Mandese reported that the FDA backed away from its plan to issue advertising and promotional guidelines for pharmaceutical companies. The industry had been expecting proposed guidelines in January of 1992. Although the FDA has backed away from advertising guidelines, it has recently increased investigations of drug companies. Stuart Lee Friedel, a partner with the law firm of Davis & Gilbert, New York, says that FDA investigators have shown up at the offices of advertising agency executives and homes of ex-agency executives in search of records related to drug companies (Colford and Mandese 1992). The investigative tactics of the FDA led to the formation of the Coalition of Healthcare Communicators made up of the American Association of Advertising Agencies, Pharmaceutical Advertising Council and other medical, health, and pharmaceutical companies. The FDA requirement of "brief summaries" appears to be one of the most controversial issues surrounding the use of direct-to-consumer advertising of prescription drugs. In addition, Hoff (1984) outlines five other major problem areas related to advertising prescription drugs directly to the public: (1) cost implications; (2) liability concerns; (3) the potential for patient confusion; (4) effects on the patient-physician relationship (5) appropriateness or ethics. The following section will discuss each of these issues.

Controversial issues

A wide variety of opinion is found concerning the major issues surrounding the advertisement of prescription drugs to consumers. In almost every instance, conflicting data supports each side of the issues.

Brief Summaries. One of the major problems with advertising prescription drugs directly to consumers is that the "brief summaries" are often times very lengthy spreading over several pages of small print or several minutes of very boring broadcast time (*Consumer Reports* 1984; Miller, Barrett and Bradburn 1989). Advertisers have found the requirement both unwieldy and unpalatable for consumer advertising (*Business Week* 1984).

Cohen (1988) believes the "brief summary" lists in print advertisements would be ignored by readers just as the

warning in cigarette advertisements is ignored. DeBenedette (1986) reports that an American Medical Association trustee, John Dawson, MD, believes the brief summaries have too much technical information about side effects for the average reader. Masson and Rubin (1986) argue that since doctors still make the final decision on which drug to prescribe the "brief summaries" are unnecessary in consumer advertising. Some predict that a court case challenging censorship by a government agency will result from the controversy.

Cost Implications. There appears to be no clear answer as to whether direct-to-consumer advertising would increase or decrease the cost of prescription drugs. Rogers (1986) reports that advertising directly to consumers my cause a rise in cost to the consumer. On the other hand, Masson and Rubin (1986) suggest that expanded advertising would reduce drug prices by stimulating competition. Shugar (1986) suggests that industry and media, which stand to benefit the most, tend to believe that such advertisements will pay for themselves by increasing product sales as informed consumers obtained new treatments through their doctors. The three companies marketing the popular smoking cessation nicotine patch spent a combined $18.5 million on magazine advertisements (Donaton 1992). Sales of the nicotine patches are soaring with shortages reported in some parts of the United States (Donaton 1992).

If advertising of prescription drugs does lead to an increase in overall prescription drug usage, someone will have to pay for these additionally-purchased drugs, whether lower-priced or high-priced, thus leading to higher insurance premiums and taxes (Cohen 1988).

Hoff (1984) explains that advertising directly to consumers only adds to what pharmaceutical companies have to do; it does not allow the prescription drug manufacturers to eliminate something else of equal cost. Promotional and informational programs directed to physicians, dentists, pharmacists, and nurses cold not be eliminated because the professionals must know about the product in order to prescribe it (Hoff 1984).

An alternative solution to passing the entire cost of advertising through to the consumer is for research-based pharmaceutical companies to cut back on research and development in order to absorb the added costs (Hoff 1984).

Hoff (1984) states that there is no proof that advertising prescription drugs will actually increase sales. On the other hand, *Business Week* (1984) reports that approximately one year after Pfizer began running advertisements for consumers to see their doctors concerning diabetes test, Pfizer's diabetes treatment experienced an estimated 15.4 percent increase in sales.

Television/Radio Age (1987) reported that current advertising by prescription drug manufacturers is plagued by low recall of the actual message. Consumers tended to confuse disease-related advertisements with public service campaigns. Recall, however, was highly influenced by experience with the affliction represented in the advertisements *(Television/Radio Age* 1987).

Drug manufacturers also appear to be somewhat concerned about the "free-rider" problem (Masson and Rubin 1986). A advertisement which does not mention a specific drug by name may increase demand for a class of drugs, but the benefits would be shared by all makers of similar drugs whether or not they contributed to the cost of the advertisement (Masson and Rubin 1986). *Business Week* (1984) reports that new products appear to be prime targets for consumer advertising. In addition, Edmondson (1987) reports that advertising the availability of treatments, but not naming specific drugs (general focus advertising) is a strategy that works whenever a company has a unique product and there is a widespread condition while Colford and Gordon suggest that using "education" advertisements should usually be used by a manufacturer if it has the only or the leading drug to treat the ailment.

Cohen (1986) suggests that with the greater competition in the pharmaceutical industry, companies may feel forced to advertise once competitors begin advertising brand-name drugs. The cost of not advertising and the possibility of losing one's market share could be greater than the cost of advertising (Cohen 1988). Large drug-makers which could afford to absorb the cost of advertising initially could force smaller companies out of business thus leading to less competition and eventually higher prices (Cohen 1988).

Liability Concerns. Advertising directly to the consumer would likely lead to increased liability insurance premiums for drug companies (*Business Week* 1984; Colford 1985a; Hoff 1984; Rogers 1986). "When manufacturers begin to advertise specific products direct to consumers there may be an implied warranty which is magnified by advertising -- especially on television where the impact can be significant," (Hoff 1984), p. 574). Advertising directly to the public may make the prescription drug manufacturers more liable if a problem with the drug later develops (Hoff 1984). In addition, repetition of prescription drug advertisements may crate a consumer perception of the product being more than it really is (*Consumer Reports* 1984; Hoff 1984). "While the financial costs of liability insurance, litigation and increased quality control procedures may be passed on to consumers in the form of

higher drug prices, the costs of damaged corporate reputation and product liability exposure are nontransferable," (Sheffet and Kopp 1990, p. 52).

Consumer Reports (1984) recommends that the FDA ban advertisements for prescription drugs on the market less than three years because these drugs would not have been on the market long enough to establish a safety record.

The Potential for Patient Confusion. With the complexity of product information, direct advertising of prescription drugs to consumers may crate confusion about the industry's products (*Consumer Reports* 1984; Hoff 1984). The American Medical Association views a little pharmaceutical learning as a dangerous thing because there are so many nuances that patients cannot understand (Miller, Barrett and Bradburn 1989). However, supporters of product-specific advertising of prescription drugs claim the advertisements can make the public aware of issues about medications and educate people about diseases and state-of-the-art treatments without confusing them. Critics argue that this type of advertising mislead consumers and that the advertisements bring economic considerations into a sphere where they do not belong (Miller, Barrett and Bradburn 1989). Judith Brown, health analysts with the American Association of Retired Persons believes advertising for over-the-counter drugs has been confusing people for years and that advertisements for prescription drugs will do the same (DeBenedette 1986).

Doctors appear to be concerned about the time they may have to spend answering advertisement-prompted questions about products which are not pertinent to the patients case (*Consumer Reports* 1984).

Related to the topic of the potential for patient confusion is the controversy over whether consumers even need additional information about prescription drugs provided through advertising. The FDA cites an independent study showing that a mere nine percent of surveyed consumers view advertising as an appropriate way to disseminate information about prescription drugs (*Consumer Reports* 1984). However, *Business Week* (1984) also reports that an FDA study released in April 1984 shows that consumers want more data on prescription drugs and that consumers believe advertising may be a good way to get that information. Cohen (1988), however, cites an inherent conflict between a promotional advertisement and the provision of adequate and objective drug information.

Drug companies already send media kits to the media and hold news conferences to spread the word about prescription drug breakthroughs. The resulting news stories have created traffic jams in physician's offices with patients demanding the new drugs, often before the drugs are even available to the public. In addition, Neumann (1988), a physician, notes that consumers often arrive in his office with newspaper clippings, pieces of paper on which are scribbled drug names copied from radio and television reports, and books about diseases with underlined passages about the "best" drugs. *The Physicians Desk Reference* (PDR), a comprehensive volume describing prescription drugs with their dosages and possible side effects is a best seller at bookstores around the nation even though physicians are not buying them; they get it free. In addition, there are many popular magazines devoted to health. As Neumann (1988) points out, the people who want to be involved in their drug treatments are already plugged in to sources about medications. The rest of the population most likely will not respond to direct advertising any way (Neumann 1988).

Effects on the Patient-Physician Relationship. *American Druggist* (1988) reports that doctors anticipate direct-to-consumer advertising of prescription drugs causing all kinds of problems for the patient-physician relationship. Since drug companies must rely on doctors to prescribe their products, some drug companies are leery of a backlash if doctors believe their authority to prescribe the appropriate medication is undermined (*Business Week* 1984). According to *Business Week* (1984), Neil B. Sweig, then drug industry analysts a Sherson Lehman/American Express, predicted that if doctors disliked an advertisement, the companies could lose 10 percent of their prescription sales. However, *Adweek's Marketing Week* (1988) notes that doctors like it when disease-related advertising sends more patients to their offices for treatment.

A major concern for health professionals is that consumer-patients may demand prescriptions when a prescription is inappropriate for the particular ailment (*Consumer Reports* 1984). Others are concerned about changes in the patient-physician relationship if consumers demand a certain treatment based on brand recognition or price (*Business Week* 1984; Rogers 1986). On the other hand, Tamara J. Erickson, pharmaceutical unit manager at consulting firm Arthur D. Little Inc., was quoted by *Business Week* (1984, p. 81), "Doctors are simply going to have to get used to patients who just don't sit there and say 'Yes, doctor' and 'No doctor.'"

Appropriateness or Ethics. Advertising, especially on television, of certain types of prescription drugs may be inappropriate (Hoff 1984). Drugs mentioned by Hoff (1984) as being inappropriate include psychotropic products like anti-psychotics and tranquilizers, anticancer agents which are toxic, antibiotics resulting in the development of

resistant strains of bacteria, oral contraceptives, abortifacients, and anabolic steroids. *Consumer Reports* (1984, p. 393) proposed that the FDA ban direct-to-consumer advertisements for "psychoactive drugs, and for drugs that create dependence, that are apt to be abused, or that are known to be overused." Banerjee (1983) reports that spurious and/or harmful drugs have been extensively advertised in many countries. Hoff (1984) points out that pain and hope often override good common sense and that advertisers should not take advantage of this pain and hope.

Rogers (1986) reports that the president of Lifetime Medical Television, Tom Rockwell, believes there could be a relationship between direct-to-consumer advertising of prescription drugs and drug abused. Cohen (1988, p. 375) suggests that the promotional nature of advertising may lead to increased per capita drug consumption in "our already overmedicated society."

Conclusions

A storm of controversy surrounds the use of direct-to-consumer advertisements of prescription drugs. Drug manufacturers appear to be uncertain about the limits of regulation by the Food and Drug Administration as well as their own liabilities associated with advertising prescription drugs directly to consumers.

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MAKING THE MARKETING OF HIGHER EDUCATION MORE ETHICAL

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The ethical behavior of all institutions is increasingly being challenged. Higher education is no exception to this intensified scrutiny (Wilcox and Ebbs 1992). Many of the possible abuses stem from the accelerated use of marketing techniques by colleges and universities as they attempt to recruit and retain students (Lovelock and Weinberg 1989, 412-415; Simmons and Laczniak 1992). In this paper, several ethically troublesome areas of student admissions and college program marketing are highlighted. The case for the utilization of marketing methods, applied in an ethical manner, is also set forth. Then drawing on a sampling of the frameworks described by Laczniak and Murphy (1993), the application of moral reasoning to problem areas of admissions marketing is briefly illustrated. The paper concludes with a discussion of some newer ethics models as well as questions that require research investigation as college marketing becomes the growth sector of higher education administration (Hayes 1991).

The paper begins by putting forward several descriptive scenarios that lay out possible ethical problems in college admissions marketing. These vignettes deal with potentially troubling areas such as fixing tuition prices, special admits for athletes, kicker grants in financial aids, sexy videos, etc. These scenarios are then analyzed throughout the paper as ethical theory is being developed.

Marketing and Higher Education: Friend or Foe?

Marketing by colleges and universities is not universally seen as an appropriate and dignified activity for higher education. Some critics contend that any benefits achieved by marketing will be short-lived and the losers will be the universities, faculty and students (McNamara 1985). Most observers would also agree that promotional activities which provide relevant information regarding the college-choice process, such as open houses, catalogs, brochures and focus groups with prospective students, are a legitimate marketing activity. However, when the marketing involves non-informational items, elaborate promotions, or misleading advertising their efficacy comes into question.

Why Marketing is Needed in Higher Education

The idea that higher education marketing must extend past student advertising and recruiting is not a revolutionary concept. For instance, it has long been recognized that currently enrolled students shape the image of the college that is projected to prospective students (Gorman 1974). Such perceptions also influence the college choice decision (Laczniak, Simmons, and Durvasula 1991). As students are the lifeblood of the university, marketing is necessary to attract those new students. Universities now engage in complete "institutional marketing" to be effective. This requires full commitment of the entire university including academic and non-academic departments, administration, faculty, alumni and all related publics (Pelletier 1985).

Why Universities Need to Be Ethical

Universities ought to market ethically especially because acting properly is what institutions dedicated to the development of intellectual and personal character should strive for. Being ethical is the "right" thing to do. Along with this definitive, basic tenet, there are other pragmatic reasons. First, universities that market ethically will maintain a distinctive credibility with its pool of prospective students and influencers. Second, it is critical to have an ethical admissions officers to ensure a quality fit between the student and the college of choice. This means attempting to retain a good strategic fit between the institutions and the students, even if it requires turning away some willing, tuition paying but academically inappropriate students in the short-run. Such ethical marketing will help ensure the future viability of student flow because the college will then retain students and alumni that are satisfied and willing to help recruit future students.

Another reason why universities need to market ethically is to develop the support of key constituencies such as faculty and the alumni. Donors may give financial support in exchange for an altruistic feeling or a feeling that they paid back their alma mater (Knight and Johnson 1981). When top professors choose to move to a new institution, one would assume that they will be more prone to select an ethical institution. Where a faculty member teaches reflects upon their self-concept, so being associated with an ethical

university could be an important factor (Hossler, et. al. 1990).

Finally, unethical behavior of specific universities could lead people to look upon all universities more critically. The idea is that the public may feel "if one is doing it, what's to say they all aren't and the others just haven't been caught yet". All colleges may suffer for the mistakes of a few. People tend to generalize to a group based on the proven behavior of a few (Engel, Blackwell, and Miniard 1990). The abuses of government grants by a handful of universities has contributed to a reduced public esteem for all of higher education (Cordes 1991).

Frameworks for Ethical Decision Making in Higher Education

Frameworks for analyzing ethical behavior in marketing are receiving growing attention (Laczniak and Murphy 1993; Smith and Quelsh 1992). Marketers operating in the growth industry of higher education marketing need to be aware of them to better deal with their ethical problems.

Utilitarianism is the most common ethical theory understood and used today. The basic premise of several forms of utilitarianism is that the payoff produced by a decision should outweigh the negatives of that decision. This is classic cost-benefit analysis. Compared to other systems of philosophy, utilitarianism is easy to use, flexible and in reality a variation of what administrators do regularly in making choices involving trade-offs (Laczniak and Murphy 1991).

Besides utilitarianism, there are some other short-hand decision rules marketers can use to help judge the appropriateness of marketing decisions (Laczniak and Murphy 1991). Application of these rules to the scenarios where utilitarian analysis was applied may lead to different conclusions about the appropriateness of the actions taken. Such ethical "rules of thumb" include:

The Golden Rule: act in a way that one would expect others to act toward you.

The Professional Ethic: take only actions which would be viewed as proper by an objective panel of your professional colleagues.

Kant's Categorical Imperative: act in a way such that the action taken under the circumstances could be a universal law of behavior for everyone facing those same circumstances.

The TV Test: always ask, would I feel comfortable explaining this action on TV to the general public?

Models of Marketing Ethics Useful to Higher Education

The purpose in featuring these more comprehensive models is to make those academics interested in higher education marketing more aware of their usefulness in better understanding ethical issues unique to college marketing. In addition, as marketers become more active in integrating ethical concerns into the service sector (Lovelock and Weinberg 1989), college administrators should not be laggards in this regard. There have already been too many publicized, and perhaps exaggerated, critiques of higher education (Sykes 1988; Anderson 1992). A failure to integrate ethics into the high profile marketing campaigns of colleges and universities would be disastrous.

As evidence of how more comprehensive models might be used in higher education, in the paper we briefly describe applications of the work of Ferrell and Gresham (1985) and Hunt and Vitell (1986). These approaches have been characterized by others as the contingency and reasoned action models (Laczniak and Murphy 1993). Importantly, such applications are a matter requiring subjective, but philosophically informed, judgement. Nevertheless, the models can provide normative guidance to ethical questions in higher education.

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JUST HOW FAR CAN THE SALES REP GO?
THE LEGAL LATITUDE FOR UNETHICAL BEHAVIOR

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Introduction

It is often assumed that legal limits provide ethical limits as well. In the sales area, reliance on the law to define or describe what is appropriate can allow an organization's sales force to run ethically amuck. While numerous and varied factors contribute to determinations of the legality of certain actions, they don't go far enough to define ethically appropriate behavior. Intent, knowledge level of the client/buyer, content of written and verbal communications, may influence a legal determination. That legal determination, however, leaves a lot of latitude for sales representatives to engage in ethically questionable behavior. There is a whole range of behaviors which may be legally acceptable, yet judged by others (clients, sales managers, peers) as unethical. Thus, the firm, when setting guidelines for ethical behavior must go well beyond the law to formulate policy.

A sales representative's dealings with a client presents legal risks in three significant areas: (1) fraud, (2) breach of contract, and (3) promissory estoppel.

Fraud

Fraud is an intentional perversion of the truth for the purpose of inducing another in reliance upon it to part with something of value. The following are required elements: (1) a statement or representation made must be false, (2) the person making the statement must know it is false, (3) the receiver must be deceived, and (4) the receiver must suffer some damage (Calamari 1977)

The courts have long recognized that some forms of deceit may be employed without being subject to legal redress. Although the actions may be unethical, the law, in balancing the interests of deterring fraudulent actions and encouraging individuals to act prudently, imposes no liability.

Warranty Breach of Contract

A firm my a liable if statements made by it's sales force are false, even if the actions do not constitute fraud. Such statements may be determined to be part of a contract and represent a warranty. The requirements for warranty breach of contract are: (1) whether or not a warranty was provided, and (2) whether or not the goods or service performed in accordance with the warranty.

Warranties may be expressed (affirmations made as a basis for the exchange) or implied (suggest reasonable expectations for the product). This becomes complicated when the implied warranty is for a particular purpose. The sales rep's knowledge of the intended use is an essential element of the implied warranty as is the knowledge of the buyer. If the sales rep knows the product will not perform for the intended use, the firm may be liable. Conversely, if the buyer should know better, the firm may not be held liable (Price Brothers V. Philadelphia Gear Corp. 1981)

Promissory Estoppel

Even absent expressed or implied contract terms, a firm may be liable for representations of it's sales force under promissory estoppel. Essentially, the firm is prevented from raising the lack of a contract as a defence. In the end, the courts may find that the sales rep had some responsibility to the client and breached that duty. The duty is not merely to be honest, but to foresee damages which may be incurred if claims made prove to be false. Promissory estoppel provides protection only to individuals who may reasonably rely on the claims of the sales rep. Thus, the more a client knows, the more leeway the sales rep has to make false statements.

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LOGISTICS AND MARKETING CHANNELS

ORGANIZATIONAL CHARACTERISTICS AND THE ADOPTION OF INNOVATIVE WAREHOUSE AUTOMATION TECHNOLOGIES

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Introduction

The productivity enhancing benefit of technological innovation, including that of automation, is recognized by practitioners and academicians alike. Several authors have suggested a link between organizational performance and innovativeness. Yet, particularly in logistics operations, where experts believe that there are abundant potential for productivity enhancements, there is a surprising lack of empirical research addressing the role of organizational influences in the adoption of new automation technologies.

The primary purpose of our study was to examine empirically the influences of organizational characteristics on the adoption of innovative warehousing automation technologies. Specifically, we sought to 1) examine how adopters and non adopters might differ in their organizational characteristics, 2) which organizational characteristics might be uniquely associated with the different stages of adoption of these devices, and 3) how these characteristics may be associated with the rate of implementation of these devices.

Empirical examination of these organizational characteristics on warehouse automation might be useful because it could help in the formulation of marketing strategy by manufacturers of such devices including robotics, Automatic Storage and Retrieval Systems (ASRS), etc.

We begin our paper with a brief discussion of the organizational innovation literature, followed by a discussion of a mail survey which was conducted to test the study hypotheses.

Types of Technological Innovation in Warehouse Automation

Although innovation has been variously defined, the common characteristic of these definitions is the potential adopter's perception about the innovation. Thus, an "innovation refers to any good, service, or idea that is perceived by some as "new." In many cases, innovation involves new technology and is perceived to have the potential for altering the existing patterns of production or consumption or create new patterns of consumption. Innovations of this type are often referred to as "discontinuous" innovations, and typical examples are microcomputers, electronic mail, and robotics. Furthermore, adoption of innovation refers to the decision to become a regular user of the good or service.

In the warehousing industry, experts believe that the rate of diffusion of technological innovations has been rather slow. While this situation was initially associated with the lack of global competition, the persistence of the situation despite recent changes in the competitive environment call for consideration of other factors, such as organizational influences.

Organizational Characteristics Related to Technological Diffusion

Increasingly, innovativiness has been linked to organizational performance. While this recognition suggests that a firm must be "innovative to gain a competitive edge in order to survive or grow", the decision to adopt and implement an innovation could be contingent upon a host of organizational characteristics, including organizational structure, top management attitude, and organization of the buying process.

Structural effects includes mechanistic structures that are believed to enhance adoption of innovation and organic structures which are believed to retard adoption but enhance implementation of technological innovation.

Top management attitude toward innovation is viewed as a crucial organizational determinant of organizational adoption of innovation. It may be reflected in several ways such as their innovativeness or relative earliness in adopting new technology, risk taking behavior, or unwillingness to undertake an activity involving some uncertainty.

With respect to organization of the buying process it is believed that participation in the buying process, (eg., initiator, influencer) remains the same over all purchases,

but the participants change. Further, participation in the buying process affects the importance of an individual's stake in the purchasing decision, suggesting that the involvement of individuals from different functional areas of the firm may affect the adoption rate.

Methodology

Sampling Procedures

An extensive pilot study was conducted to understand what constitutes an innovative automation device in the warehousing industry, to find out who are likely users of such devices, and to determine the reliability and validity of the construct. Next, a six page questionnaire was developed with inputs from academic and industry leaders and mailed to members of the Warehousing Educational and Research Council (WERC) after a pretest.

WERC members were used for the study because initial investigation showed they were potential users of innovative warehouse automation devices. Participants were given a standard list of automation devices and asked to indicate if their firms currently used any of such devices in their a) logistics operations and b) materials handling operations. Non-users were asked to answer a few questions about their adoption plans for these devices. Those responding yes to the screening question were then taken through a series of questions about the level, extent and rate of adoption of various types of warehouse automation devices. Other parts of the questionnaire elicited information about the organization and functional participation in the buying decision process.

The majority of the respondents were from manufacturing firms, primarily in the food, chemical, electronic, and pharmaceutical industries.

Analysis and Findings

Organizational differences between adopter and non-adopter of innovative automation devices were examined by means of a logistic regression. This was deemed appropriate given the categorical nature of our dependent variable. This analysis was supplemented with a three group multiple discriminant analysis to determine the organizational effects on the stage of the firm in the adoption process.

The results of the logistics analysis of organizational characteristics of adopters and non-adopters revealed only a few statistically significant associations with the adoption decision. Only one structural effect, size (as proxied by number of employees) was associated with the adoption decision ($p<.01$). Centralization, a measure of mechanistic organizational structure was only marginally associated with the adoption decision ($p<.06$). Also, one top management attitude variable, innovativeness, was found to be associated with the adoption decision ($p<.05$)

Next, multiple discriminant analysis was conducted on the organizational variables to determine which organizational characteristics might be associated with the stage of the firm in the adoption stages. The results of such analysis revealed significant association between organizational characteristics and the adoption stage, particularly with size variables. The number of employees ($p<.001$) and annual sales ($p<.001$) were both positively associated with adoption stage. One structural variable, affects of bureaucratic red-tape was also associated with adoption stage ($p< .02$), while complexity was only marginally associated with the adoption stage ($p<.07$).

A closer look at the direction of these organizational influences revealed that adopters tended to have a larger number of employees suggesting that as the number of the work force increases, especially when it reaches 3,000 employees, firms become more interested in automation in place of labor. The volume of sales appeared to be a poor predictor of the diffusion process, as it suggests no consistent direction in is influence. But the size of the stock keeping facilities or warehouse appeared to parallel that of the work force size. This might suggest that from a marketing strategy viewpoint, targeting and promotion of information needs could be more effectively identified on the basis of work force size than sales revenue, as does the size of the warehouse.

The final analysis involved regressing the rate (percentage of firms installing at least one device) of implementation of innovative warehouse automation against the organizational characteristics. To control for multicollinearity among variables, a step wise regression model was used. This analysis revealed only one organizational characteristic, involvement of marketing managers in the buying decision process ($p<.01$)to be associated with the rate of implementation. This finding would suggest that firms that are customer driven tend to involve marketing managers in the buying process and also tend to implement innovative warehouse automation devices at a faster rate than non customer driven firms.

Conclusions

The result of our study suggest three major findings about the influence of organizational characteristics on the adoption of innovative automation technologies. First, the study results suggest that organizational size, as proxied by the number of employees and top management attitude

toward risk are positively associated with the decision to adopt or to not adopt an innovative warehouse automation device.

Second, the diffusion process appears to be associated with more organizational characteristics than the adoption decision. The study results suggests that firms in the adopter stage or the agenda stage are larger, reflect more bureaucratic red tape, and greater complexity in organizational structures than non-adopters who have no adoption plans.

Finally, the study results suggest that firms that involve marketing people in the buying process tend to implement innovative automation devices at a faster rate than firms that do not involve marketing personnel.

Discussion

Despite the exploratory nature of our study, the results have significant implications for practice and research in industrial marketing. From a practitioner viewpoint, our results suggest that looking at organizational influences on the adoption of innovation may be a useful way to identify potential prospects, especially those who are most likely to be adopters. In the warehousing industry, diffusion of innovative automation devices has been described as slow among firms in the United States. The study results suggest further potential users who are in the process of adopting these devices could be persuaded with an effective marketing strategy. Identification of these prospects should be based on functional measures such as size of the work force or inventory keeping units, rather than sales dollars. This implication is to be expected, given the labor intensive nature of warehousing operations.

From a research perspective, the study results suggest that the rate of implementation is positively associated with the involvement of marketing people in the buying decision process. This suggests that customer driven firms tend to implement innovative automation faster than non customer driven firms. While this suggests a potentially important role for market orientation on innovation, we hesitate to assert this view strongly without further empirical validation. Thus, we suggest more research into the functional roles and participation in the purchasing decision making process and their impact on adoption of different forms of innovative warehouse automation devices.

References available upon request.

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THE COSTS OF CARRYING INVENTORY: A SURVEY OF SELECT FORTUNE 500 COMPANIES AND THEIR DIVISIONS

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Introduction

Authorities in the logistics area have long stipulated the importance of the costs of carrying inventory. Given the desired level of customer service, knowledge of the costs of carrying inventory (CCI) is essential for optimization of the total logistics system within the firm and within the channel of distribution.

The costs of carrying inventory are those costs associated with carrying a stock of inventory. In general, those costs include capital costs, service costs, storage space costs, and inventory risk costs. The costs of carrying inventory are usually expressed as a percentage of the value of inventory.

While it is unlikely that firms would have identical values for the (percentage) costs of carrying inventory, especially given the different range of investment opportunities (capital costs) available to each firm, the range of previous estimates of inventory carrying costs utilized in text books and hand books is so wide (Aljian, 1958, 12 to 34 percent; Coyle, Bardi, and Langely, 1988, 25 to 30 percent; and Stevenson, 1990, 20 to 40 percent) that almost any logistics configuration or inventory policy can be justified by choosing a number in the published range of estimates.

Given the importance of CCI to the optimization of logistics systems, do organizations utilize CCI? There is a growing belief, supported by the work of Stock and Lambert (1987) who note "...in many companies inventory carrying costs have never been calculated, even though these costs are both real and substantial." The lack of use or calculation of the costs of carrying inventory suggests that these organizations are managing their logistics systems without the knowledge to scientifically optimize them.

To investigate the issues noted above, a questionnaire was prepared and distributed. The following sections describe the survey methodology and response, and report the results of the survey.

Survey Purpose and Methodology

The purpose of the survey is to summarize the values for CCI reported by the participating organizations and to evaluate whether the responses appear to be accurate. Other researchers such as Stock and Lambert (1987) have demonstrated that reported values for CCI are often inaccurate and usually understated. Second, the responses are evaluated to determine whether organization or division size influences the reported value of CCI. Do larger organizations with their presumed greater resources compute CCI more accurately?

Third, the values reported for CCI are tabulated according to the accounting methodology utilized in their computation. Theoretically, CCI is based upon the variable manufactured costs of inventory. To the extent that inventory value includes fixed costs, the reported values of CCI can be biased. The survey notes the proportion of organizations using cost and costing methods that might bias reported CCI.

The survey covers two broad groups of multi division companies. The first group includes the largest 20 of the Fortune 500 companies engaged in manufacturing and their affiliated manufacturing operations, divisions, or companies. To broaden the descriptive range of the survey to include smaller organizations, the second group, the smallest 20 of the Fortune 500 companies, are also included in the survey.

By contrasting the two groups, the survey investigates whether significant differences arise in the utilization of CCI between the top and bottom 20 corporations of the Fortune 500 and whether significant differences can be observed across divisions of larger and smaller corporate structures.

Because of diversification efforts, many large corporations today have extensive financial operations. Divisions that are unlikely to incur significant physical inventory carrying costs in their operations, such as financial, insurance, or mortgage companies affiliated with the selected Fortune 500 companies, are not included in the survey.

Survey Response

Over a period of three months, the survey was repeated twice. The second round deleted the names of past respondents. In all, 66 responses were received from the 40 companies contacted. By company group, responses came from 80% (16) of the Top 20 and from 60% (12) of the Bottom 20 companies. Overall, 70% (28) of the 40 companies contacted answered the survey.

Survey Results

In the following sections, the survey results are presented. First, the mean value of inventory carrying costs by company and division size are reported. Second, the relationship of the size of company or division sales to the value of inventory carrying cost is examined. Third, the impact of accounting methodologies on the value of reported CCI is assessed.

Reported Value of Inventory Carrying Costs

As noted earlier, it is likely that firms with significantly higher percentage costs of carrying inventory would view their logistics system differently than firms with lower carrying costs. For example, firms with lower percentage CCI could afford higher levels of inventory, support greater warehousing, and ship in larger quantities to reduce transport costs. Clearly, as noted in the Introduction, accurate knowledge of inventory carrying costs is essential for optimal configuration of the logistics system.

Given the importance of inventory carrying costs, do firms accurately calculate CCI? Furthermore, do the reported values of CCI suggest underestimation of the costs of carrying inventory?

The survey results are revealing (Table 1). The average cost of carrying inventory is reported at about 18%, a value at the low end of the standard textbook estimate.

An analysis of variance between the Top 20 and the Bottom 20 firms indicates that the mean responses from the two groups are not significantly different. That is, the mean value for CCI for the Top 20 of 18.41% (Table 1) is not significantly different from the Bottom 20 mean value of CCI of 16.11%. The value for the F statistics is .2272, a significance level of .6381. In other words, we can reject the hypothesis that the two samples come from populations with significantly different means.

Note that the mean value for CCI for small divisions is nearly the same for both Top 20 and Bottom 20 corporations (16.04 versus 16.11). A division is considered small if it has sales of $260 million or less. The average size of the small divisions is $125.8 million. The small division category ranges from $1 million in sales to $260 million. Paradoxically, small divisions in the Top 20 corporations are smaller (mean sales = $89.5 million) than the small divisions (mean sales = $169.3 million) in the Bottom 20 corporations.

TABLE 1
INVENTORY CARRYING COST (CCI) BY COMPANY AND DIVISION SIZE

	CCI MEAN	CCI STD DEV
ALL FIRMS	17.95	9.50
TOP 20	18.41	10.09
LARGE DIV.	19.43	11.61
SMALL DIV.	16.04	5.20
BOTTOM 20	16.11	7.25
LARGE DIV.	NA	NA
SMALL DIV.	16.11	7.25

The mean value results for small divisions indicates that division size below $260 million annual sales does not influence the value of CCI. However, the large divisions at the Top 20 companies have the largest mean value for CCI. Is the larger value for CCI significant?

In Table 2, the mean value for costs of carrying inventory (CCI) is shown for large and small divisions regardless of corporation size. The larger divisions have a reported mean of 19.43%--nearly 3.4% larger--than the reported mean of 16.07% for smaller divisions. However, the difference, while relatively large, is not statistically significant (.3925 level). Therefore, based upon the results shown in Table 2, we can conclude that the value of inventory carrying costs (CCI) is independent of division size.

Evidently, the size of the overall corporation, and the size of the division, do not significantly impact the reported value of inventory carrying costs for the Top 20 and Bottom 20 corporations of the Fortune 500 companies. However, the calculated value reported for the costs of carrying inventory is substantially below the mean value of

TABLE 2
COSTS OF CARRYING INVENTORY (CCI) BY DIVISION SIZE

DIVISION SIZE	CCI MEAN	CCI STD DEV
TOTAL	17.95	9.50
LARGER DIVISIONS	19.43	11.61
SMALLER DIVISIONS	16.07	5.88

F statistic with 1, 23 degrees of freedom = 0.7596; 0.3925 level of significance.

CCI utilized in text books and handbooks. Why is the reported value of CCI lower than commonly expected?

Could the lower value of CCI reflect the lower borrowing rate in the 1990's? While the rate of interest has declined significantly in the last few years, the capital costs of carrying inventory is dependent on opportunity costs. Only if the firm has no investment opportunities greater than the cost of borrowing would the capital costs equal the interest rate of borrowing. It is difficult to believe that the largest companies in the country have no investment opportunities that do not offer a return in excess of the prime rate.

However, if the organizations are incorrectly calculating CCI using only the borrowing cost of money and not the opportunity cost of capital, then CCI could be biased downward significantly. Of the responses with calculated values of CCI, how many report an opportunity cost of capital different from the prime rate?

Only 16% of the respondents reported a positive value for opportunity cost. The average value reported was 4.74%. It is hard to believe that the investment horizon available to the large organizations completing the survey is so limited. Even if the respondents viewed opportunity cost as an "add on" to the financial cost of capital, the sum of the opportunity cost and the financial cost of capital is only 13.18%. (The average value for the financial cost of CCI was 8.45%, about equal to the prime rate during the period of the survey).

Therefore, we can conclude that CCI is downward biased because of the low values imputed for capital costs. In their analysis of the reported versus actual CCI values in six sample companies, Stock and Lambert (1987) demonstrated that capital costs are often significantly underestimated.

To summarize our conclusions to this point, the value reported for inventory carrying costs in this survey (18%) is substantially below the values used in most textbooks and handbooks. The low value for opportunity cost of capital reported by respondents suggests serious under estimation of a key cost component--opportunity costs--of inventory carrying costs by many organizations. Consequently, on the basis of the survey results, it appears that CCI, when it is used, is significantly underestimated.

Furthermore, the low value for CCI does not appear to be influenced by company size or division size. No significant differences in mean value by corporate or division size as measured by sales were found in a oneway analysis of variance of the reported values for CCI.

Impact of Accounting Methodology on CCI Values

In their review of inventory carrying costs Stock and Lambert (1987) emphasize that estimates of inventory carrying costs should include only those costs that vary with the quantity of inventory held. As a consequence, direct costing methods, which divide costs into fixed and variable components, provide information which most closely reflect the inventory values needed to correctly compute CCI.

In absorption, or full costing methods, fixed manufacturing overhead is included in the inventory value. Most manufacturers use full costing methods instead of variable manufactured costs. Coyle (1988) notes that "the most relevant measure of value for inventory decision making is the cost of goods sold or the variable manufactured cost..." To the extent that the value of inventory held is overstated (by full costing), the costs of carrying inventory, which is usually calculated as a percent of the value of inventory, tends to be biased downward.

Costs can also be computed on the basis of standard costs or of actual costs. Standard costs are predetermined and usually based upon a sample or estimate. Actual costs reflect the true or actual costs of each operation.

The tabulation of costing methods used by the respondents is shown in Table 3. Almost three quarters of the Top 20 organizations tend to use absorption costing with standard costs. While half of the Bottom 20 use direct costing methods, nearly three-fifths use standard costs. Only a

TABLE 3
METHODS REPORTED FOR COSTS AND COSTING

COSTING	TOP 20	BOTTOM 20
DIRECT	21.7%	54.5%
ABSORPTION	74.0%	45.5%
OTHER	4.3%	0.0%
COSTS	**TOP 20**	**BOTTOM 20**
ACTUAL	17.4%	30.7%
STANDARD	73.9%	61.5%
AVERAGE	8.8%	7.8%

minority of firms use direct costing with actual costs.

Since the most accurate calculations of CCI are likely to arise with direct costing methods supported by actual costs, it appears that some bias in CCI estimates may occur routinely in the organizations surveyed. Given the tendency to over value inventory with absorption costing methods, the reported value for CCI is likely to be biased downward.

The results of this survey suggest that the value for CCI is often seriously understated. Part of the understatement problem may be a consequence of the wide spread use of absorption costing methodology coupled with the standard costs used in most manufacturing organizations.

However, the main source of underestimation appears to be the neglect or underestimation of opportunity costs. The work of Stock and Lambert (1987) also supports the importance of correctly calculating capital costs. In their review of the six firms, the correctly calculated capital costs alone exceeded or equaled the previously utilized value of CCI.

Furthermore, Stock and Lambert discovered that the six companies had underestimated the value of CCI by a factor of two. The mean average of CCI used by the six companies was 15.42 percent. After the calculation of CCI was done more accurately, the six company mean was 30.391 percent. The more correct range of value for CCI for the companies was from 14 to 43 percent. Prior to the study, the company range of estimates for costs of carrying inventory was 8 to 25 percent, which is very similar to the one standard deviation range of 9 to 27 percent reported in this survey.

Therefore, while the use of absorption costing may include fixed costs which could bias downward the percentage value calculated for the costs of carrying inventory, especially in the storage, risk, and service component costs of CCI, the combined size of the storage, risk, and service costs are much less significant than capital costs. Consequently, we conclude that the low estimates of CCI returned in the study arise primarily from underestimates of capital costs rather than from full cost accounting methodologies.

Summary

The value reported for inventory carrying costs in this survey (18%) is substantially below the values used in most textbooks and handbooks. The low value for opportunity cost of capital reported by respondents suggests serious under estimation of a key cost component of inventory carrying costs by many organizations. Consequently, on the basis of the survey results, it appears that CCI, when it is used, is significantly underestimated.

The low value for CCI does not appear to be influenced by company size or division size. No significant differences in mean value by corporate or division size as measured by sales were found in a oneway analysis of variance of the reported values for CCI.

The responses to this survey can be summarized as the following:

1. The companies participating in the survey tend to seriously underestimate the costs of carrying inventory as a percentage of the value of inventory.

2. Most companies in the survey significantly underestimate the capital costs of carrying inventory.

3. The majority of companies utilize costing methods that can bias downward the costs of carrying inventory as a percentage of the value of inventory.

4. The size (in terms of sales) of the organization or the division does not influence the reported value of the costs of carrying inventory.

Conclusions

The most significant fact revealed by this survey is the low estimates for the costs of carrying inventory reported by the majority of respondents. The standard treatments of the costs of carrying inventory used in most textbooks emphasize the importance of the concept to optimization of the firm's and the channel's logistical system. Without an accurate informed knowledge of the costs of carrying inventory, the logistical systems are unlikely to be as cost effective as they could be.

Based upon the responses to this survey, most businesses should be encouraged to expend more efforts to improve the estimates of their costs of carrying inventory. The survey suggests that such efforts are likely to significantly increase the calculated values for CCI. The more accurate estimates of CCI will in turn support improved decisions in the optimization of the total logistics system.

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POWER AND COMPLIANCE: AN INVESTIGATION IN A CHANNEL BEHAVIOR SETTING

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Abstract

In a channel of distribution, a successful influence attempt results in the target complying with the wishes of the source. This article investigates the relationship between the target's perception of the sources's power bases, the target's desire for autonomy, and the importance the target places on the decision variable that is being influenced, and the target's probability of complying when the source uses a request influence strategy. More specifically, this article presents the results of an ploratory model of compliance in a manufacturer/ manufacturer's representative channel of distribution.

Introduction

The study of power in marketing channels of distribution has entered the third decade as an area of emphasis in the channel literature. In the recent literature, the study of channel behavior has focused on the relationship between power and the actual influence attempt (Frazier and Summers 1984, 1986, Gaski 1984, 1986 and Gaski and Nevin 1985). While investigations into the frequency of specific influence strategies in various channels of distribution had shed light on the relationship between power and influence (Frazier and Summers 1984, 1986), little has been done to determine the factors that affect the probability that the influence will be successful.

It is the purpose of this article to investigate the relationships between some of the factors that increase the probability that the target will comply with the wishes of the source when the source attempts to influence the behavior of the target. This paper takes an investigative approach to the phenomena of successful influence attempts in order to develop a basic level of understanding.

Influence Strategies

While investigating power in an influence attempt, Gaski (1984, 1986) and Gaski and Nevin (1985) make the distinction between exercised and unexercised power; "the term exercised (or activated or achieved power) refers to the actual alteration of behavior" (Gaski 1984 p. 24). On the other hand, Frazier and Summers (1984, 1986) offer their findings under the more common term of "influence strategies" to indicate "the alternative means for applying power" (p. 169). Whether one uses the term "exercised power" or "influence attempt," the common thread is the investigation into the attempt of the source to influence the behavior of the target. (For the purpose of consistency, the term influence attempt, rather than exercised power will be used throughout the remainder of this paper.)

Frazier and Summers (1984) isolated six different influence strategies in the automobile channel of distribution: information exchange, recommendations, promises, threats, legalistic strategies, and requests. The different strategies were divided into two general influence approaches: strategies based on altering perceptions (information exchange and recommendations) and strategies not based on perceptual change (promises, threats, legalistic strategies and requests).

While the authors found that information exchange is the most commonly used strategy (followed by requests), factors inherent to request strategies make it a more interesting strategy to investigate. Specifically, the information exchange strategy centers around a "discussion on general business issues and operating procedure to try to alter the target's general perceptions of how the target firm might be most profitably operated" (p. 45). Therefore, the source is not attempting to influence (gain compliance) on a specific issue, but rather, is merely attempting to lay the groundwork for general agreement in the future. On the other hand, the request strategy "refers to those situations where the source merely informs the target of the action(s) it would like the target to take without mentioning or directly implying any specific consequences of the target's subsequent compliance or noncompliance" (p. 47). In the request strategy, when the source mentions specific actions the target should take, this results in an issue specific consequence of compliance/noncompliance. It is the issue specificness of the request strategy that makes this strategy an interesting area for further investigation.

By focusing on the request strategy it is possible to measure the variables that affect the target's probability of complying with the wishes of the source on a specific issue at a specific point in time. Since power and other variables that affect compliance are perceptual, including some historic account of the relationship, these perceptions can and do change. Therefore, by "freeze framing" the relationship between the source and target, researchers are more likely to be successful in the exploratory research necessary to find the variables that affect compliance.

Empirical Study

Constructs

The primary impetus of this study was to determine how selected variables affected the target's probability of compliance with the wishes of the source when the source utilized a request strategy to influence the behavior of the target in a channel of distribution. The first set of variables believed to affect compliance in a channel of distribution was the target's perception of the source's power bases as defined by French and Raven (1959): expert, referent, reward, legitimate and coercive.

Two other variables were measured as possible determinants of the target's probability of complying with the wishes of the source: the importance the target places on the decision variable the source is attempting to influence (issue specific importance) and the target's desire for autonomy.

Issue specific importance is the importance the target places on the task that is being influenced. Recall that the use of the request strategy implies that an influence attempt is made on a specific issue, with no promise of rewards or threat of punishment for compliance or noncompliance. If the target considers a particular decision variable to be extremely important to the success of his/her business, the probability of the target complying with the wishes of the source should decrease. Desire for autonomy is defined as the target's desire to operate within the current domain of decision making without outside interference. Therefore, if the source offers no promise of rewards for compliance, or punishment for noncompliance, the target's desire to make business decisions without outside influence should have an impact on the target's probability of complying with the wishes (request) of the source.

One of the primary objectives of this study was to determine how the variables discussed above affected the target's probability of complying with the wishes of the source. In addition, this study wanted to investigate the relationship between the exogenous variables. Specifically, what set of relationships between the constructs is able to develop the best fitting model of behavior? The goal of attempting to determine the relationships between the variables within the model is similar to Gaski's (1986) attempt to explore the interrelations among the bases of power. However, this attempt goes one step further in as much as all relationships within the model are subject to scrutiny. Of course, the relationships found must be able to be logically (post hoc) explained.

Sample

The channel that was chosen to develop the theory of channel power utilized manufacturer's representatives to distribute plumbing, heating and air cooling equipment to industrial building contractors. This channel was chosen because the manufacturer's representatives in the channel operate a very small office (typically fewer than three employees), thus, there was little problem in identifying the key informant for the organization.

Test

A list of manufacturer's representatives servicing the heating, plumbing and air cooling industries was obtained and 1464 representatives were sent a mail questionnaire with instructions that it was to be completed by the highest ranking member of the organization. In addition, since it was possible (probable) that the manufacturer's agent represented more than one manufacturer, a method had to be developed to insure that the respondent consistently referred to one and only one manufacturer while completing the questionnaire. The respondent was instructed to base responses on the manufacturer that represented the largest portion of total profitability (the average response was 44% of total profits). This method was chosen because the manufacturer representing the greatest portion of the agent's total profitability is more likely, in the actual business environment, to attempt to influence the agent. In addition, agents should be more dependent upon manufacturers representing a greater proportion of total agent profitability.

Two separate waves of questionnaires were mailed. The total number of responses was 540 for a response rate of 37%. Of the 540 total responses, 477 were usable, and 63 were unusable.

Analytical Technique

The computer programs PACKAGE (Hunter and Cohen 1969) and LISREL (Joreskog and Sorbom) were used to estimate the measurement and causal parameters of

the constructs. The analysis of the measurement model consisted of demonstrating the unidimensionality and reliability of the measures (Danes and Mann 1984, Anderson and Gerbing 1982). A sample of the items used to measure the constructs of interest and summary statistics are available upon request.

Causal Model

The objective of this analysis was to explore the data to determine the best fitting model of the relationships between the varibles developed in the study. To this end LISREL's automatic modification option was used; only parameters that were significant at the .05 level were selected.

LISREL processed twelve iterations until fixing on the model that best represented the data. In addition, it was determined that the relationships presented introduced explainable (yet heretofore unpresented) results. The final model is presented in Figure 1. The parameters, standard errors, and p-values of the "best" fitting model are presented in Table 1.

Figure 1

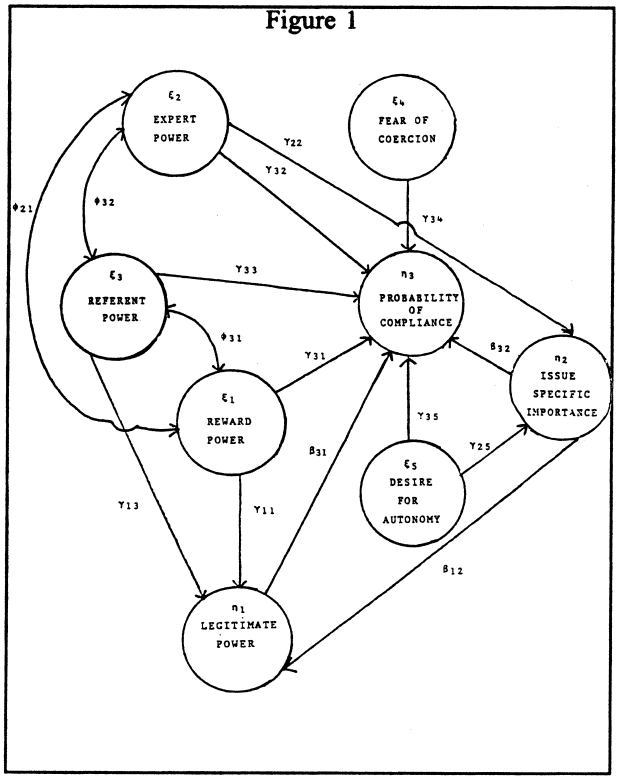

Table 1
Causal Parameters*

	Parameter Estimate	p-value	Standard Error
β_{12}	-.030	p=.359	.084
β_{31}	.447	p<.001	.036
β_{32}	-.359	p<.001	.040
Γ_{11}	.117	p<.001	.045
Γ_{13}	.268	p<.001	.045
Γ_{22}	-.278	p<.001	.037
Γ_{25}	.448	p<.001	.039
Γ_{31}	.008	p=.413	.036
Γ_{32}	.117	p<.001	.034
Γ_{33}	.115	p<.001	.038
Γ_{34}	.089	p<.001	.033
Γ_{35}	.077	p<.019	.037
ϕ_{21}	.090	p=.023	.045
ϕ_{31}	.008	p<.001	.049
ϕ_{32}	.180	p<.001	.046

*X^2 = 7.32 with 12 d.f.
G.F.I. = .996
A.G.F.I. = .989
R.M.S.R. = .019
p = .836

Theoretical Implications

The model suggests that the target's perception of the source's bases of power (reward, expert, referent, legitimate and coercive) have a positive effect on the probability of the target complying with the wishes of the source. However, the strength of the relationship between reward power and compliance is almost zero. It appears that the data suggests that reward power has no effect on compliance. It is interesting to note that Gaski (1986) (and also Howell 1987 who reanalyzed the Gaski data) found no causal relationship between reward power and the dependent variable attributed power. While a detailed explation is beyond the scope of this paper, it is possible that attribtuion theory may hold the key to understanding the relationsip between reward power and compliance (and the other dependent varialbes isolated by past reasearchers). Specifically, rewards within the channel may be attributed internally. According to Kelley (1967) a person will attribute causality either internally (the person assumes responsibility) or externally (the person places responsibility on external factors). It is easily seen that the

noncoercive sources of power (with the exception of reward power) must be attributed to external factors. Indeed expert power, referent power, and legitimate power are all "attributed" to the source from the target. However, reward power may be attributed to either internal or external factors. If the target attributes rewards externally (to the source), then reward power would be a source of power and would be positively related to attributed power and compliance. However, if the target attributes rewards internally, then rewards are seen as a result of the target's own hard work, not coming from the source, and therefore would not affect the target's perception of the source's power, nor would it affect the target's probability of complying with the wishes of the source.

Gaski (1986) and Howell (1987) found that legitimate power was the only source found directly related to attributed power. Similarly, this study found that the path coefficient between legitimate power and compliance was considerably stronger than the path coefficients from any of the remaining bases of power.

The target's desire for autonomy also produced a relatively weak relationship with compliance. However, some interesting relationships are suggested between some of the exogenous variables and legitimate power and issue specific importance. The analysis suggests that a strong relationship exists between referent power and legitimate power (this differs significantly from Gaski's findings yet is consistent with Kasulis and Spekman (1980). There are a number of possible explanations for this relationship. First, the relationship between referent power and legitimate power may be a mere correlation due to the fact that both power sources are part of noncoercive power (Hunt and Nevin 1974).

Another explanation is goal congruity as discussed by Lusch and Brown (1982). The authors suggested that noncoercive power may not be viewed as power in the traditional sense, but rather may increase the probability that the target assimilates the goals of the source. That is, if the target perceives the source to possess high referent power, the target may follow the advice of the source due to the fact that the goals of the source are indeed the goals of the target. If this is the case, the relationship between referent power and legitimate power may be causal due to goal congruity. This explanation possesses an intuitive appeal.

The data also suggest a weak relationship exists between reward power and legitimate power. Again, this relationship may be due to the Hunt and Nevin coercive/noncoercive dichotomy, or to goal congruity (Lusch and Brown 1982).

Next, the data suggest an interesting (and strong) positive relationship between the target's desire for autonomy and the issue specific importance the target places on the decision variable the source is attempting to influence. The relationship, given the nature of the constructs, is logical. An autonomous channel member (by definition) desires to run his/her business without outside interference. Due to this desire to run their organization without outside interference, a highly autonomous channel member would place more importance on any issue that the source was attempting to influence.

The final relationship suggested by the analysis was a negative relationship between expert power and issue specific importance. An intuitively appealing explanation exists for this relationship. The more the source is perceived to be an expert by the target, the less the target will perceive that control of that decision variable is important to the target's business success. For example, if the target perceives the source to be an expert in the area of product pricing, and the source recommends a pricing strategy to the target, there is a high probability that the target will follow the advice of the source. This relationship becomes increasingly important given the results of the Beta matrix.

The Beta matrix suggests a strong negative relationship between the importance the target places on the decision variable the source is attempting to influence and the target's probability of compliance. This, coupled with the discussion above concerning expert power and importance, provides great insights into compliance in a channel of distribution. The more the target perceives the source to be an expert, the greater the probability of the target complying (via the Gamma matrix), the less important the target perceives the decision variable to be (again via the Gamma matrix), and as importance decreases, the probability of compliance increases (via the Beta matrix). Collectively it appears that perhaps the most important criteria for increasing the probability that the target will comply with the wishes of the source is that the source establish himself/herself as an expert in the eyes of the target.

The next relationship presented in the Beta matrix is a strong positive relationship between legitimate power and compliance. Given the nature of our understanding of the bases of power, this relationship is expected and is totally consistent with Gaski's (1986) findings. The more the target perceives the source to have the legitimate right to influence a particular decision variable, the greater the

probability the target will comply with the wishes of the source.

Finally, the Beta matrix suggests that a weak negative relationship exists between the importance the target places on the decision variable the source is attempting to influence, and the target's probability of compliance. While the relationship is expected, it is surprising that the relationship is so weak. However, it does not appear wise to ignore this variable in future research efforts due to the relationships between issue specific importance and expert and legitimate power.

The degrees to which the exogenous variables were correlated was also estimated in the analysis. The Phi matrix indicated a strong correlation between reward power and referent power (again consistent with Gaski 1986), a modest correlation between expert power and referent power, and a weaker relationship between expert power and reward power (somewhat contrary to Gaski's findings).

This may suggest that while the individual sources of power have something in common, it is probably more prudent to consider each source of power individually (or in separate one-on-one relationships such as that between referent power and legitimate power) than as part of a grander construct such as noncoercive power.

Conclusions

While the relationships offered in this manuscript were found due to a quantitative search of the data, and the explanations are post hoc, the findings nevertheless offer potential insight into the intricacies of the relationships between power and complinace. These findings are not offered as and end but rather as a beginning of further discusion and exploration of the realionship between theses and other variables in the study of channel power.

References available upon request.

MODELLING THE EFFECTS OF CUSTOMER SERVICE PERFORMANCE ON PURCHASE INTENTIONS IN THE CHANNEL

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Marketing has been conceptualized and accepted as an activity directed at satisfying needs and wants through exchange processes. The hope is that a satisfied customer will be more likely to repurchase, leading to increased sales and market share for the firm. To achieve customer satisfaction, most firms rely on the integration of the "four p's" of marketing, namely product, promotion, price and place. Marketing is considered the primary functional area in the firm that works to satisfy a firm's customers.

In spite of the emphasis many firms place on the four p's of marketing, the role of "place" in the marketing mix and its impact on market share has been neglected both in practice and in the marketing literature. However, physical distribution can contribute to the success of the firm, and, like marketing, can work to enhance important performance measures such as customer satisfaction and market share. Industry has generally failed to recognize the importance of customer service provided by physical distribution to customer satisfaction, and has not effectively integrated customer service with the other components of the marketing mix (Sterling and Lambert 1987).

The primary purpose of this research was to address the effect that customer service has on some important measures to a firm's success in the market in a process model of purchase intentions. The model examines the importance of physical distribution customer service as it relates to customer satisfaction, the main objective of the marketing function, and to customer attitudes and repurchase intentions. The model details the variables that moderate the effects of customer service on purchase behavior.

LISREL was used to test the hypothesized process model and the results support the view that physical distribution customer service performance is very important to a firm's success. Examining firm performance across a host of marketing and physical distribution attributes suggests that physical distribution is at least as important in the satisfaction process as are the remaining marketing attributes. Physical distribution performance has a significant effect on satisfaction, attitudes, and purchase intentions. This situation validates the argument that it is important for companies to focus on distribution as a vital ingredient in formulating company strategy. Efforts to integrate customer service and marketing may help a firm as it attempts to develop a competitive advantage in the marketplace.

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TRANSPORTATION COSTS AND SERVICE QUALITY: AN EXAMINATION OF COMPETING HYPOTHESES

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Abstract

The tradeoff concept in transportation and logistics is a well-accepted and conventional paradigm for describing the relationships between business and economic variables in logistics systems. For example, the use of premium transportation to enhance customer service is well known. As such, the increased transportation costs may be more than offset by customer time-related or service attribute benefits, by the stimulation of demand, or by channel of distribution coordinative benefits. Thus, it has been generally believed that higher levels of transportation service quality require greater transportation expenditures in a tradeoff-type relationship. This paradigm has been extended recently to the strategic level of management decision making.

However, the descriptive value and veracity of a tradeoff hypothesis for transportation service quality has been questioned recently by a competing "excellence hypothesis". In such a paradigm, increased service quality, greater customer services, and lower transportation costs are all pursued simultaneously. Such a view has at least three forms or levels of thought in suggesting that the total transportation cost of service quality might be lower with higher levels of service quality. However, in this paper, specific hypotheses were used to test generically the overall "excellence" hypothesis against the conventional "tradeoff" hypothesis.

A benchmarking methodology was used to examine cost, efficiency and services measures in the U.S. domestic passenger airline industry. The data consisted of quarterly observations of the 13 largest U.S. airlines. Nine consecutive quarters were used, beginning with the fourth quarter of 1987 when the U.S. DOT began to report airline service performance data. The transportation cost variables were measured by seven categories of airline expenditures including those relating to flying operations, passenger service, air traffic servicing, maintenance, promotion, administration, and total transportation cost per passenger. Also included in the analysis were strategic measures of firm efficiency such as operating ratios, profit per passenger, asset turnover, etc.

Service quality was measured in terms of "perceived" and "actual" service quality. Perceived quality was measured by the percentage of complaint-free passengers including total complaints, complaints dealing with the flight itself, and complaints relating to baggage handling. The actual measure of performance was the percentage of flights that arrived on-time during the period. The best quality performers were benchmarked against the worst quality performers with statistical tests being used to ascertain whether airlines that performed well on certain service dimensions also performed well on other dimensions of service and on operating, efficiency, and financial dimensions.

In general, the overall results support the excellence hypothesis for the airline industry. The results were remarkably consistent across all four measures of service quality and with respect to perceived and actual service quality. The best service quality performers also display a differential competitive advantage for both costs and service levels. No evidence was found that airlines trade off higher service quality with higher transportation costs or lower services in other areas. Excellence in one area seems to engender excellence elsewhere.

INTERRELATIONSHIPS BETWEEN STRUCTURAL AND RELATIONAL DIMENSIONS

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This study examines the interrelations between designed or purposive structure and emergent relational norm of channel governance system. The impetus for this study comes from the rich channel literature base incorporating political economy and relational exchange perspective (cf. Achrol, Reve and Stern 1983; Dant and Schul 1992; Dwyer and Oh 1987; Dwyer, Schurr, and Oh 1987; Dwyer and Welsh 1985; Kaufmann and Dant 1992; Stern and Reve 1980).

Hypotheses

Relying on the extensive works of Hall (1962, 1977), Hage and Aiken (1968), and the political economy perspective (Achrol, Reve and Stern 1983; Dwyer and Oh 1983; Dwyer and Welsh 1985) the key dimensions of instituted channel structure have been posited as: *formalization* (the degree to which explicit rules and procedures are used for decision making), *centralization* (the extent to which the decision making is concentrated), and *participation* (the degree of participation by others in decision making). Based on extant channel literature, the following hypothesis is suggested reflecting the internal relationship between these dimensions:

H1: In a bureaucratic structure, centralization will be negatively related to formalization and participation.

Next, based on Macneil (1980, 1981) and Kaufmann and Stern (1988) it has been suggested that conflict-handling mechanism will be predicated on the emergence of relational norms (Dant and Schul 1992; Dwyer, Schurr and Oh 1987; Slusher 1978). The key dimensions of relationalism have been identified as: *Solidarity* (relative importance attached to trust as against arms-length bargaining and enforcement norm), *Role Integrity* (greater complexity of exchange in a relational setting compared to the simple exchange process in discreet settings) and *Mutuality* (greater importance attached to the long term payoffs rather than results of individual transactions). The relationship between these dimensions is captured in the following hypothesis:

H2: In a structure characterized by relational norm, solidarity, role integrity and mutuality will be positively related with each other.

Finally, the relationship between bureaucratic structure and relational norm is posited to be negative (Achrol, Reve and Stern 1983; Dant and Schul 1992; Dwyer and Oh 1987, 1988; Dwyer, Schurr and Oh 1987; Dwyer and Welsh 1985; Stern and Reve 1980). Bureaucratic structure would tend to advocate more discreet exchange norms, whereas relational norms are more likely to occur in less bureaucratic settings. Consequently the following hypothesis is suggested:

H3: Bureaucratic structure will be negatively related to relational norms.

Method

The data were collected through a nationwide self administered questionnaire from marketing and sales managers of pharmaceutical industry. The dimensions of bureaucratic structure were operationalized using the works of Dwyer and Oh (1987, 1988) and Dwyer and Welsh (1985). The dimensions of relational norms were measured using scales developed by Kaufmann and Dant (1992). The data were analyzed using structural equations (Jöreskog and Sörbom 1984) and correlational methods. The scale items for all the constructs were checked for reliability, convergent and discriminant validity, and were found to perform well.

Results

The results strongly support the hypothesized relationships. The λs associated with the dimensions of bureaucratic structure and relational norms were in the hypothesized direction. The βs were also in the hypothesized direction (i.e., negative). The overall fit indices of the model were well within the acceptable range: GFI=0.97, AGFI=0.87, RMSR=0.02 and NFI= 0.95 (Bagozzi and Yi 1988).

The relationship between bureaucratic structure and relationalism supports the theoretical thrust of the political economy and relationalism literatures. These empirical findings are important for the channel governance structure in that they show these two aspects of governance systems **not** to be complimentary.

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HORIZONTAL SELLING ALLIANCES: THE EFFECT OF ORGANIZATIONAL DISTANCE AND MUTUAL TRUST ON DYADIC WORKING RELATIONSHIPS.

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Horizontal selling alliances are cooperative efforts between two or more independent sales organizations, at the same level of the value chain, aimed at the joint initiation and maintenance of customer relationships. Marketers faced with complex, uncertain, and rapidly changing environments are increasingly forming these alliances to augment the skills and resources of their own multi-functional selling teams (Smith and Barclay 1990). When successful, these alliances can result in strategic flexibility, increased competitive advantage, and greater account coverage, sales, and customer satisfaction. Anticipated benefits may not be realized, however, unless partner sales representatives choose to work together and work together effectively in managing joint territories and account opportunities.

This issue of "effective relationships" between partner sales representatives was found in preliminary interviews to be a key concern of alliance participants in the computer industry. This issue is also important from an academic perspective because: relatively little research has been done on alliance implementation issues (Lane and Beamish 1990), horizontal marketing alliances (Achrol, Scheer, and Stern 1990), or team selling (Smith and Barclay 1993).

Conceptual, theoretical, and empirical evidence in the strategic alliance, working relationship, and selling literatures point to two relatively unexplored concepts that may be particularly important for understanding effective selling partner working relationships: mutual trust and organizational distance (cf., Achrol, Scheer, and Stern's 1990; Ford 1984; Hakansson 1982). Sales representatives also identified trust as the critical factor differentiating effective from ineffective relationships and that lack of trust was due to differences in motivations, goals, and approaches to the selling situation resulting from differences in the culture, strategies, and systems of the partner organizations.

A conceptual argument is made that the primary components of trust, trustworthiness and trusting behavior, should be separated as distinct concepts and dimensionalized. Thus the study addresses two fundamental research questions: 1.) How do organizational differences, perceptions of trustworthiness, and trusting behaviors impact the effectiveness of selling partner working relationships?; and 2.) Which dimensions of organizational differences, perceived trustworthiness, and trusting behaviors are most important in explaining relationship effectiveness?

Drawing primarily on social exchange theory and the IMP Interaction Approach, a conceptual model is developed linking mutual satisfaction (a subjective effectiveness outcome) in a nomological network with key dimensions of organizational distance, mutual perceived trustworthiness, and mutual trusting behavior as well as three other constructs from the literature: mutual perceived interdependence, mutual perceived equity, and functionality of conflict resolution.

The research model is operationalized as a multiple indicator structural equation (causal) model and tested using Partial Least Squares and dyadic, self-report data collected by mail survey from both computer sales representatives and their selling partners.

Organizational differences, particularly differences in reputations for professionalism and job stability, were found to play a modest role in affecting perceptions of partner trustworthiness. However, these differences had little indirect impact on the mutual satisfaction of the partners, perceived relationship continuity, or perceived task performance. Dimensions of perceived trustworthiness were found to be key determinants of mutual satisfaction, primarily through the intervening trusting behaviours of relationship-specific investment, communication openness, and forbearance from opportunism. In addition, perceived equity and perceived interdependence were found to be key determinants of satisfaction.

One implication of these results is that sales representatives should put time and effort into developing partner relationships and make their efforts known to their partners. Managers might facilitate this process by encouraging team building activities such as regular account or territory planning sessions where investments and commitment can be demonstrated. Other management and sales representative prescriptions are discussed for developing effective selling partner relationships.

From an academic perspective the study makes four key contributions. First, the study enhances current concept-ualizations and measures of perceived trustworthi-

ness, trusting behavior, and organizational distance that could be applied in other individual-level marketing relationship contexts. Results of the study suggest it may be particularly fruitful to examine these constructs at lower levels of abstraction. Second, the study adds to the relatively few empirical studies of dyadic marketing relationships (e.g., Anderson and Weitz 1992). Third, it successfully utilizes both relationship-level (key-informant) and aggregated individual-level (second-order) data to overcome the convergence problems often experienced with key-informant data (e.g., Phillips 1981). Finally, conceptual and mathematical approaches were devised and evaluated for aggregating individual-level responses to create second-order relationship-level data. These approaches could be used in other studies of mutuality in close relationships.

CHANNEL POWER: A PROPOSED MULTIDIMENSIONAL PERSPECTIVE

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Abstract

Taylor (1992) suggests that existing conceptualizations and operationalizations of power in the channels literature are based on a unidimensional conceptualization of channel unit interaction. The following discussion extends this argument by demonstrating how the current conceptualizations of power (1) fail to capture the larger domain of power and (2) understate that portion of power which is captured by the current conceptualizations by failing to distinguish between appropriate conditions of power. We present an alternative multidimensional power conceptualization which purports to overcome these limitations.

Introduction

Managing the relationships among fims within distribution channels is assuming increasing importance in today's organizations due to a number of well-documented marketplace trends (Anderson and Narus 1990). However, critics have argued that channel researchers have yet to develop a conceptualization of power which adequately explains dyadic channel relationships (Frazier 1983a, Gaski 1984). Frazier (1983a) suggests that power has been consistently defined in the marketing literature as the ability of one channel member to influence the decision variables of another. Within the literature, at least three distinct approaches are used to measure the construct; (1) attributed influence (c.f. El-Ansary and Stern 1972; Etgar 1977, 1978; Frazier 1983a; Hunt and Nevin 1974; Lusch and Brown 1982, Wilkinson 1974), (2) sources/bases of power (c.f. El-Ansary and Stern 1972), and (3) dependence. The dependence approach can further be broken into three sub-approaches; (a) economic (c.f. Anderson, Lodish, and Weitz 1987; Brown, Lusch, and Meuhling 1983; El-Ansary and Stern 1972; Etgar 1977; Kale 1986), (b) role performance (c.f. Frazier 1983a; Frazier, Gill, and Kale 1989; Frazier and Summers 1986; Hunt and Nevin 1974; Lusch 1976; Skinner and Guiltinan 1986), and (c) transactional cost analysis (c.f. Heide and John 1988).

However, marketing's current operationalization of the power construct is not free of criticism. In short, Frazier (1983a) suggests that marketing's operationalizations of the power construct are limited to relationships (cognitive) which the participants (managers) are able to perceive. Gaski (1984) similarly notes that the marketing literature consistently considers power to be a function of perception. Gaski further identifies two predominant limitations in the marketing literature's treatment of channel power; (1) the confounding of hypothetical constructs, and (2) low explained variance in models of channel behaviors.

Power and conflict are intimately related in the current conceptualization of channel relationships (see Gaski 1984 for a comprehensive review). Conflict is understood in the marketing literature to result from channel members having exclusive or incompatible goals, values, or interests (Brown and Day 1981), and possibly to be the dominant form of interaction between parties within a marketing channel (Thomas and Pondy 1977). This common view holds that (1) conflict is an outcome of power (Anderson and Narus 1990; Brown, Lusch, and Meuhling 1983; Frazier 1983a,b; Frazier, Gill, and Kale 1989; Frazier and Summers 1984,1986; Gaski 1984,1986; Gaski and Nevin 1985; Lusch and Brown 1982) and that (2) conflict is best modeled as a process (Eliashberg and Michie 1984, Gaski 1984, Pondy 1967, Thomas 1976).

Alternative Conceptualizations of Power and Conflict

Taylor (1992) demonstrates that Dahl's (1957) definition of power provides the dominant exemplar in the marketing literature. Dahl (1957, 202-3) defines power as, "A has power over B to the extent that he can get B to do something that B would not otherwise do."

Barnes (1988) argues that Dahl's definition points researchers first to the individual social relationships which exist in dyadic exchanges, and then to the effect of the power exercised in the relationship-the effect being the compliance of one of the individuals in the relationship with the requests/demands of the other. Bachrach and Baratz also criticize marketing's (Dahl's) conceptualization of power is that it does not account for cases in which power is exercised by confining decision-making to relatively "safe" issues in which there is no threat to the

existing power structure. Bachrach and Baratz state that the central point is that people or groups have power whenever they can create or reinforce barriers to the public airing of policy conflicts. Thus, Bachrach and Baratz (1970) introduce the *mobilization of bias* as a vehicle to account for this control of the decision-making agenda. They define the mobilization of bias as a set of predominant values, beliefs, rituals, and institutional procedures that operate systematically and consistently to the benefit of certain persons or groups at the expense of others. In marketing, the mobilization of bias could correspondently be viewed as a basis for an alternative operationalization of power which overcomes the restriction that power can only be considered in relation to decision criteria that decision-makers are aware of (perceptual/cognitive variables).

Lukes (1986b) also provides a critical anaysisis of Dahl's definition of power. First, he argues that it is difficult to see how the term "extent" in the definition can be uncontroversially measured since degrees of changing B's behavior depend both on the context and the researcher's perspective. Lukes (1986b, p. 2) cites the following questions to clarify his first criticism of Dahl's conceptualization, "Do I change your behavior by getting you to do the same thing in a different way? If I get you to run or jump, which is the greater change?" Second, not every change in behavior can be attributed to power (i.e., how does Dahl's conceptualization account for successful *requests* or persuasive *advice* or convincing *arguments*). Further, Lukes suggests that Dahl's conceptualization fails to provide answers for questions concerning unintended results, such as when A gets B to wait at the bus stop simply by taking the last seat on the bus. Third, this definition fails to distinguish between A's merely having *more* power than B versus A's having power *over* B. Lukes provides as an example of this third criticism the situation whereby A deprives B of desired resources. The deprivation of resources is an example of power *over* another specific channel member versus the *potential* to exert power through the possession of greater power (see Gaski and Nevin 1985 for a comprehensive marketing-based discussion of this third criticism). Finally, Lukes questions the assumption that the presence of conflict or resistance is endemic to power. Lukes argues that such is not the case because power can be used to avert or preempt conflict and that power and conflict can be cooperatively held and exercised. Thus, Lukes argues that Dahl's approach focuses on the idea of A's "power over" B and thus fails to completely capture the domain of power.

This discussion forms the basis for Taylor's (1992) conceptualization of the power construct and its relation to conflict as broader than the traditional paradigm in channels research. The gist of Taylor's (1992) criticism of marketing's current treatment of power, conflict, and their relationship is that restricting specific investigations of conflict to either perceived or manifest processes overlooks potentially important effects which may be due to other levels of the dynamic conflict "process" (e.g., unobserved conflict). To support his arguments, Taylor (1992) builds on the work of Bachrach and Baratz (1962), and, more specifically, the distinction between elitist versus pluralistic viewpoints of power. Taylor demonstrates that marketing has traditionally relied on the pluralistic perspective. Bachrach and Baratz (1962) characterize the pluralistic perspective as unidimensional because it fails to account for the possibility that serious, but latent, power conflicts are potentially manipulatable. Based on these arguments, Taylor (1992) calls on marketing researchers to adopt an elitist perspective in discussions of channel relationships as a two-dimensional conceptualization of the power construct which will allow marketers the ability to incorporate nonperceptual domains into discussions of power.

However, Lukes (1974) further argues that Bachrach and Baratz do not go far enough in criticizing conventional social science conceptualizations of power. Lukes specifically suggests (1) that Dahl's conceptualization of power is one-dimensional, (2) that Bachrach and Baratz's proposal is two-dimensional, and (3) proposes an alternative view of power which he argues is three-dimensional. Lukes, in addressing the one-dimensional view of power, argues that such a perspective essentially views power, influence, and control as synonymous constructs. He further argues that conflict is assumed to be the key criteria used to establish empirical measures of power in the one-dimensional view. Taylor (1992) argues that the treatment of power in the marketing channels literature is appropriately described by the one-dimensional perspective. In this view, control mediates power/dependence and satisfaction in decision making (Skinner and Guiltinan 1985), and conflict subsequently moderates satisfaction (Anderson and Narus 1990).

Lukes proposes that Bachrach and Baratz's two-dimensional typology of power embraces a larger number of constructs than the one-dimensional view, as it includes coercion, influence, authority, force, and manipulation. Lukes (1974, pp. 17-8) defines these constructs within the context of a two-dimensional view as follows: (1) coercion-"...exists where A secures B's compliance by the threat of deprivation where there is a conflict over values or course of action between A and B"; (2) influence-"...exists where A, without resorting to either a tacit or an overt threat of severe deprivation, causes B to change his

course of action"; (3) authority-where "...B complies because he recognizes that A's command is reasonable in terms of his own values-either because its content is legitimate and reasonable or because it has been arrived at through a legitimate and reasonable procedure"; (4) force-where "...A achieves his objectives in the face of B's noncompliance by stripping him of the choice between compliance and noncompliance"; and (5) manipulation-is "...an aspect or sub-concept of force (and distinct from coercion, power, influence and authority), since here compliance is forthcoming in the absence of recognition on the complier's part either of the source or the exact nature of the demand upon him."

In the two-dimensional perspective, power and conflict relationships are mediated by two dimensions, one perceived and one not perceived by target organizations. The domain of these dimensions extends one-dimensional perspectives such as Dahl's to Lukes and Bachrach and Baratz's view that power involves both decision-making and nondecision-making (e.g., controlling agendas through failures to make decisions or act on issues). This suggests that identifying potential issues which nondecision-making prevents from becoming actual issues is critically important to the two-dimensional view of power and conflict.

Lukes praises Bachrach and Baratz's two-dimensional view of power as a major advance in the conceptualization of the power construct. However, he identifies three criticisms. First, he suggests that the concentration on overt or actual behavior based on concrete situations of conflict may provide a misleading view of how individuals, groups, and institutions succeed in excluding potential issues from the decision-making process. Lukes argues that the mobilization of bias (controlling the domain of decision-making) is manifested not only in individual acts of choice, but also in the socially structured and culturally patterned behaviors of groups and in institutional practices (such as in the organizational cultures of channel participants). Thus, Lukes suggests that the two-dimensional view is similar to the one-dimensional view in that it adheres to a methodologically individualistic view of power; i.e., it assumes that individuals *make the decision* to either decide or not decide pertinent issues.

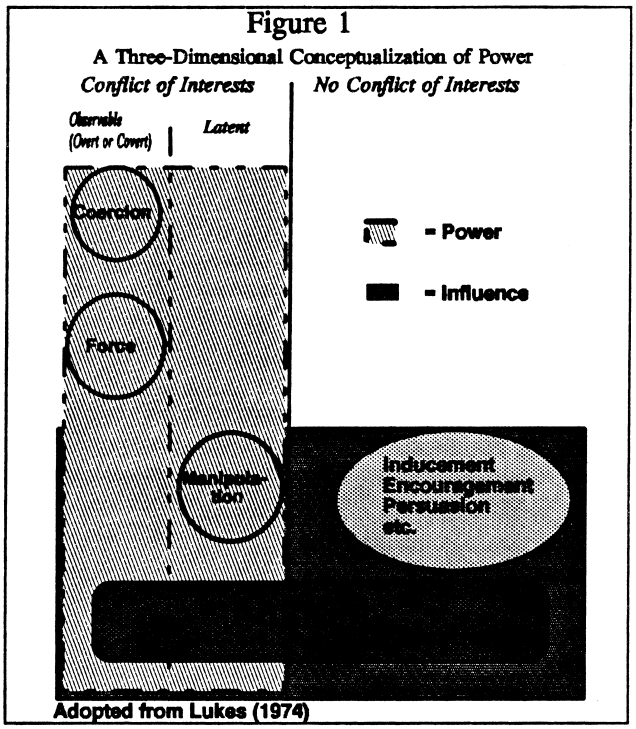
Second, the argument for actual conflict as a precondition for the existence of power is viewed as inadequate for two reasons; (1) manipulation and authority as defined above may not involve such conflict, and (2) the assumption that power is only exercised in situations where overt or covert conflict exist overlooks the possibility of one actor potentially exercising power by influencing, shaping, or determining the wants of another actor. In other words, the two-dimensional perspective ignores the most potentially efficacious use of power which is to prevent conflict from arising in the first place (i.e., the "mobilization of bias").

Third, Lukes argues that the two-dimensional perspective suggests that if individuals do not perceive any grievances to exist, then their interests are not harmed by the use of power. The two-dimensional perspective thus assumes that consensus is the absence of grievances and consequently this perspective rules out the possibility of contrived or manipulated consensus. Lukes characterizes this unactualized potential conflict as latent conflict, which he suggests "...consists in a contradiction between the interests of those exercising power and the *real interests* of those they exclude" (1974, p. 24). Thereby, Lukes indicates that power can be exercised even though the target does not recognize or perceive there is the use of power of influence.

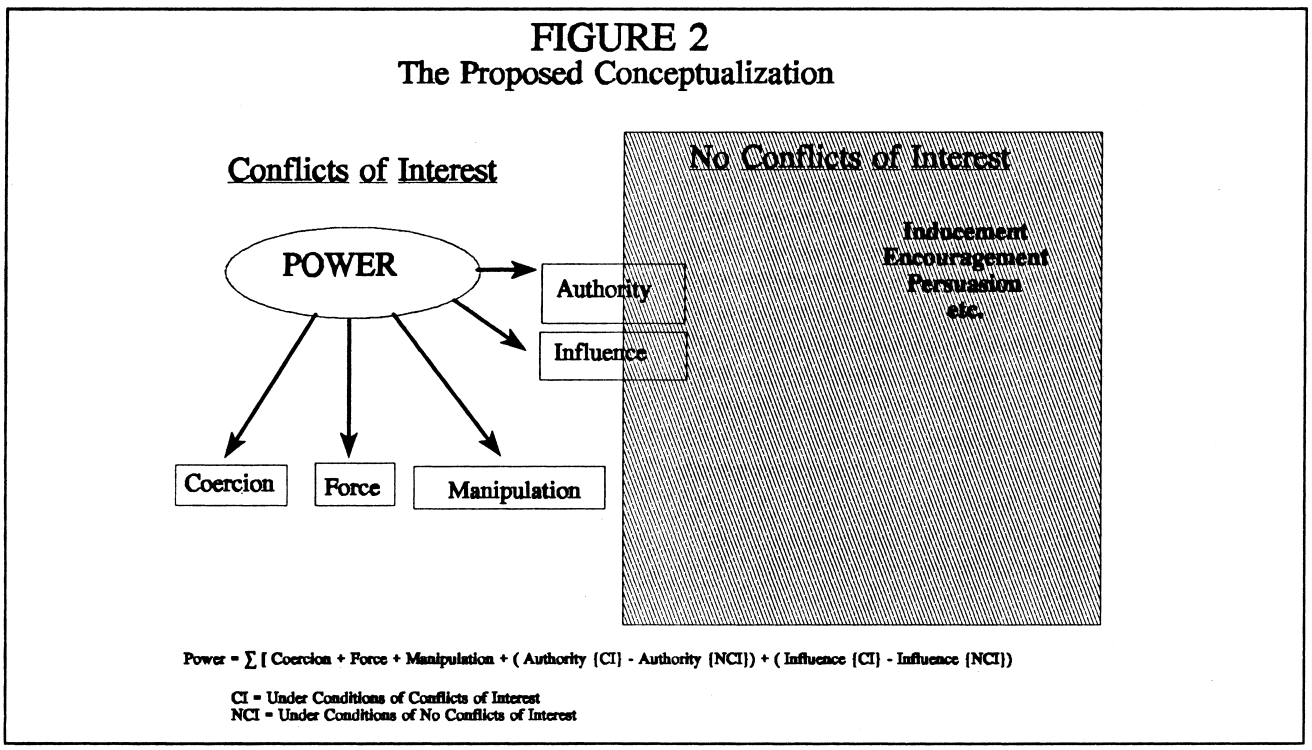
Lukes thus proposes a three-dimensional scheme of power which incorporates and differentiates between such constructs as power, coercion, force, manipulation, authority, influence, and the different dimensions of conflict. Figure 1 presents Lukes' three-dimensional conceptualization of power. The main implication of Lukes' conceptualization is that it suggests that marketing's current theory of power confuses influence and power by failing to distinguish when influence contributes to power and when influence does not (i.e., when influence exists in the absence of power). The distinction as to whether or not a conflict of interests is involved dictates whether influence and authority are a form of power. The key to Lukes' distinction is that power does not exist unless there is a conflict of interests. Rather, only influence or authority may be present in the absence of a conflict of interests. As is shown in the conflict of interests section of Figure 1, we suggest only observable (perceived or manifest) conflict of interests are reflected in marketing's current one-dimensional perspective. Bachrach and Baratz's extension of the power/conflict conceptualization is reflected in Figure 1 by the latent section of conflict of interests. This area is where the nonperceptual influences on decision making are captured (see Taylor 1992).

The Proposed Conceptualization of Power

Our proposed operationalization of power is defined in Figure 2. Power is herein conceptualized as a multidimensional construct defined as the summation of five subordinate constructs; (1) authority, (2) influence, (3) manipulation, (4) force, and (5) coercion (see the



section on Bachrach and Baratz for definitions of these constructs). Further, power is only present under conditions of conflict of interests between channel members in dyadic relationships. A caveat is necessary concerning both authority and influence; both of these constructs can occur under conditions of both conflicts of interests and no conflicts of interests. Thus, a further construct is required to differentiate the conditions of conflicts of interests versus no conflicts of interests in dyadic channel relationships. While such a construct is beyond the scope of the current discussion, we incorporate the necessity of such a construct in a complete operationalization of our conceptual model. Interestingly, we suggest this conceptualization provides an explanation for why marketing research has failed to exhibit higher explanatory power in explanations of power/conflict relations (c.f. Frazier 1983a; Frazier, Gill, and Kale 1989; Gaski 1984; Schul and Babakus 1988). Specifically, marketing's practice of operationalizing power as a function of dependence or influence (c.f. Frazier 1983a,b; Gaski 1984) appears to significantly understate power. First, current measures of channel power fail to account for authority and influence under conditions of no conflicts of interests. Second, we posit that the contribution to explained variance of coercion, force, and manipulation are not captured in the current paradigm. In



other words, even if we have perfect measurement techniques, the dominant one-dimensional conceptualization of power/conflict presently constrains our ability to explain variance in power because (1) we currently fail to capture coercion, force, and latent conflict of interests in existing models, and (2) we fail to account for the dimensions of influence and authority outside of the definition of power proposed herein (see Figure 2).

For example, Anderson and Narus (1990) provide a most recent model of distributor and manufacturer firms working partnerships which we suggest demonstrates the traditional one-dimensional conceptualization of power and conflict which currently dominates the marketing literature. These authors specifically define influence as power (1990, p. 43). They further state that "...the firm's perception of its dependence *relative* (italics not added) to its partner's dependence on the relationship is a construct of greater interest in marketing channels. It is the *relative dependence* (italics not added) that determines the extent to which a firm will have influence over, and be influenced by, its partner" (1990, p. 43). They define relative dependence as "...a firm's *perceived difference* (italics added) between its own and its partner firm's dependence on the working relationship" (1990, p.43). Further, these authors argue that influence, or power, is a primary consequence of relative dependence. Concerning conflict, they argue that conflict "...represents the overall level of disagreement in the working partnership" (1990, p. 44). These authors posit a positive causal relationship between influence and conflict. Thus, to the extent that these authorities typify recent marketing literature, we find support for our assertion that marketing indeed subscribes to a one-dimensional perspective of power and for our critique of current marketing theory.

Our conceptualization should assist marketing researchers by providing an operationalization of power which captures a larger proportion of explained variance than can be captured with the current models of channel relations. Specifically, scales to measure power could be developed based on the five subordinate constructs identified. Summing the items used to operationalize the five subordinate constructs will add the contributions of authority, manipulation, coercion, and force to the variance explained by measures of influence.

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1.The names of the authors are alphabetized to reflect equal contributions to the manuscript.

MARKETING INFORMATION SYSTEMS

A NEURAL NETWORK APPROACH TO PATTERN RECOGNITION IN MARKETING DATA ANALYSIS: AN ANALYSIS OF BOTH THE POSITIVE AND NEGATIVE ASPECTS OF SYSTEM PERFORMANCE

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Introduction

Neural network research in artificial intelligence, although reported mainly in computer science literature, is being pursued by scientists in a variety of disciplines throughout the world (Hopfield 1987). A neural network is an artificial intelligence approach to computing that is characterized by interconnected, parallel functioning neurons with an operating design philosophy based on the biological brain. With newly available software, this type of network can be trained to accept independent variable values as input, and by determining its own heuristic for their relationship, estimate dependent variable values as output. Common terminology used to indicate this type of neural network processing include: adaptive systems, parallel distributed processors, neurocomputers, and natural intelligence (Stanley 1989). Particularly, where prediction is the main objective, neural analysis is finding marketing applications in place of, or in addition to, multivariate techniques such as multiple regression, discriminant analysis, and logistic regression. This is not to suggest that statistical analysis is in danger of becoming obsolete. Neural analysis can only be expected to provide limited insight into data, and will only be appropriate in a small subset of applications.

The purpose of this paper is to demonstrate the neural approach by way of an illustrative example, and examine the question of its usefulness in comparison to traditional statistical and rule based methods. Since this newly available technique is currently being applied to business applications, the details of its operation should be of interest to a wide range of academic and applied marketing researchers.

Network History and Structure

Although software and hardware products have only recently become commercially available (Hwang 1989, Cortese 1988), the study of neural networks has a long history in mathematical research. The early work of McCulloch, Pitts, and Hebb in the 1940s formed the basis for neural computer theory. In 1943, McCulloch and Pitts showed that a network composed of binary valued neurons can be treated by means of propositional logic and can be capable of performing calculations. Hebb (1949) suggested the mathematical mechanism by which such a network could be trained. Thus, it was determined that a neuron network could be modeled, but theory had to wait for technology to progress before practical applications could be considered.

Neural research progressed slowly until by the seventies and early 1980s, it had reached a low point. By that time the artificial intelligence research paradigm focused almost exclusively on sequentially programmed, rule based expert system approaches (e.g., LISP, PROLOG). In the early 1980s, Hopfield's research renewed interest in neural applications (Hopfield 1982, Hopfield and Tank 1985).

The typical computer simulated neural network consists of user defined layers (sets, fields) of nodes (neurons) and their connections (Zeidenberg 1987). Neurons in artificial networks are organized into layers with every neuron in a given layer connected to each neuron in the next higher and next lower layer, but not connected to others on the same layer (Josin 1987).

Training (Learning)

To understand how an artificial neural network operates it is helpful to review how a biological neuron network functions. Artificial neurons are intended to function similar to biological brain neurons which receive signals from many other neurons through synapse connections which regulate how much of the incoming signal is passed to the neuron. Each biological brain neuron cell has the ability to store and discharge a small electrochemical charge. The neuron receives the discharges of adjacent neurons through hair-like receptor extensions of the cell body (dendrites). When the incoming impulses accumulate to equal the neuron's threshold firing (activation) frequency, it releases its stored charge through a projection from the cell body called an axon. The axon passes the charge through synapse connections to adjacent cells. The synapse connections regulate how much of the incoming signal will be passed to the adjacent neuron dendrites. Higher firing frequencies cause greater excitement in other connected neurons. Scientists theorize that patterns of firing excitement in large aggregates of neurons are the basis for brain functioning in memory and learning.

Psychologists have several learning theories which may be related to biological neuron function (Dollard and Miller 1950). Approaches such as classical conditioning (stimulus-response) (Watson 1925), operant conditioning (reinforcement) (Skinner 1966) and cognition modified by

experience (Bolles 1975) can all be conceptually represented by neural associations of input patterns with output patterns.

At a fundamental level all neural networks learn patterns through association. Training a computer simulated neural network to perform this response consists of presenting representative input-output pairs to the network repeatedly and allowing the system to progressively adjust its internal values until it maximizes its ratio of output matches. A trained network can then be applied to a hold-out validation sample to test the network's ability to predict. The validated trained network can then be used in an application to analyze new input data values and estimate corresponding output.

In a marketing research application, neural networks can be used to recognize the pattern in survey responses (e.g., one input neuron per survey question or construct indicator) and predict dependent variables such as group membership or identifying demographic characteristics (e.g., one dependent variable per output neuron). While training, each level's individual neurons (and combinations of neurons) compete with each other for the right to recognize an input pattern from the previous level. Since the initial connection weights begin as random, some will initially respond more to certain input units, and to certain aspects of the input pattern. As the learning proceeds, the weights are adjusted (according to a learning rule considering error feedback) to increase the connection of associated pairs at the expense of unassociated pairs. Thus, over time, different combinations of neurons come to recognize different properties of input patterns, and their relationships with target output patterns.

The network utilized in this study "learned" by having error signals propagate backwards through the network, modifying the network so as to minimize error with the target output value. The software controlled learning mechanism is based on the early research of Hebb (1949). Hebb's basic learning rule for training networks states that the synaptic connection weight changes between neurons are proportional to the product of the synaptic activities of both the sending and receiving cells. The Delta Rule extends Hebb's basic rule by changing the connection weights to reduce the difference between training data output values and the network's actual output values. Mathematical details of this type of back-propagation algorithm are beyond the scope of this paper, but can be found in Jones and Hoskins (1987), and Lippmann (1987).

An Illustrative Example

To demonstrate the development of a neural network for a marketing application, an available data set was chosen which relates consumer financial services usage to choice of specific financial service providers. The data was collected by a telephone survey of randomly selected "main household financial decision makers" within a specific market area. The data set is part of a larger study investigating the relationship between consumer financial portfolio characteristics and their consideration of offerings from institutions other than their main financial services provider. In this paper, the data set will only be used to illustrate the development of a neural network. Contributions to the financial services literature will be left for later studies which utilize standard statistical hypothesis testing procedures.

Although statistical procedures are valuable tools of research, there are situations where only response prediction is required. In such situations, managers may be willing to consider a neural heuristic. Applied applications such as credit card application scoring systems already use neurocomputing for this type of decision making (Smith 1988).

To illustrate how well the neural network can detect patterns in data, its response will be compared to an appropriate statistical approach. Normally the data available for this study would require the use of discriminant analysis, which is the appropriate statistical technique when the dependent variable is continuous or dichotomous and the independent variables are metric (Hair, Anderson and Tatham 1987). However, if the populations are not normally distributed with identical covariance matrices, logistic regression (LOGIT) with maximum likelihood estimators (MLEs) should be utilized (Press and Wilson 1978). Logistic regression was chosen for use in the comparison because assumptions of multivariate normality of explanatory variables and equality of covariance matrices were not justified. Press and Wilson also found that logistic regression with MLEs may outperform discriminant analysis, even when these assumptions can be made.

In order to compare the neural approach to the logistic regression MLE approach, a simple neural representation was designed which applied one input neuron to each of six survey questions, six to eight neurons in the internal hidden layer, and one output layer neuron (representing single versus multiple patronage of financial institutions).

The training data contained the values of six (four point scale) independent variable survey questions, paired with the coded 0 or 1 group membership dependent response. An arbitrarily chosen respondent (training fact, sample observation from the data) might be seen by the network as input (1,1,0,0,3,2) paired with an output response of (0). Another respondent might be (2,2,2,0,1,1) with a (1) output. In the learning stage the neural network tries to match the output by progressively adjusting neuron connection strengths and firing rates.

The data was randomly split into two parts, the first 100 observations termed Group A, and the remaining 98 termed Group B. Using both the neural and LOGIT approaches,

models were developed based on Group A data and tested on Group B (Table 1). It is common in statistical models to estimate parameters using a portion of the data in one phase, and then to apply the estimated model to a hold-out sample. Here the neural network trains on Group A and is applied to predict Group B. Similarly, the LOGIT procedure estimates model parameters from Group A and is applied to predict Group B.

Reversing the groups was suggested by Press and Wilson (1978), in their comparison of LOGIT and discriminant methods. For the neural network study, a second test was done reversing the Groups (i.e., developing models on Group B and validating on hold-out Group A)(Table 2).

For each model, measures of performance were calculated for comparison. Included are: total percent correctly predicted, Somer's δ (an index of rank correlation between predicted probabilities and observed outcomes), the "C" index (the concordance between predicted probabilities for the group of true positives and predicted probabilities for the group of true negatives), sensitivity (the proportion of true positive predicted positive), and specificity (the proportion of true negatives predicted negative).

Results

When the (Table 1) trained network was used to predict the (0,1) output on the validation sample (Group B), the network scored 91.8% correct. For comparison, the SAS "LOGIST" procedure was used to similarly derive a model on Group A (this time using logistic regression with MLEs) and test its predictive ability on Group B of the data. These results are also indicated in Table 1 (86.7% correct). Table 2 represents the results when the data sets were reversed (i.e., the models were derived from Group B and tested on Group A).

An Examination of Tables 1 and 2 reveals differences in the results between the MLE Logistic Regression Model (LOGIT) and the neural network approaches. Both in Table 1 and Table 2, the LOGIT approach was slightly inferior in percent correctly predicted. A more vigorous test of predictive performance was made by examining predictive concordance and predicted probability to actual correlation.

For both Table 1 and 2 for the neural and LOGIT models, concordant and discordant pairs were identified and the concordant rates ("C") observed. A pair of observations (0 or 1) is judged concordant if the higher value (1) has a higher predicted score than that of the lower value (0). In the Table 1 validation set there were 1440 paired comparisons of a true 1 to a true 0. The concordance rate was (1270/1440) =.88 for the LOGIT model, and (1301/1440) = .90 for the neural model. In Table 2 a similar pattern emerged with C equal to .85 (LOGIT) and .88 (neural). The concordance measure, like the overall correct prediction rate, indicates slight superiority for the neural model.

The Somer's δ statistic, a rank order correlation of predicted and actual values, also indicated a slight superior performance for the neural model. In Table 1, Somer's δ for the validation data was .76 for the LOGIT model and .81 for the neural model. Table 2 results were δ = .72 (LOGIT) and δ = .75 (neural). Comparison of the correlation coefficients again show better performance for the neural model with the magnitude of differences indicating slightly stronger differences than the C or overall correct classification rate.

Greater differences in the models' performance did emerge, however, from a decomposition of classification into sensitivity and specificity. In predicting true positives to be positive (sensitivity) the rate was 88.3% for the neural to 61.1% for the LOGIT in Table 1, and 64.3% (neural) to 42.9% (LOGIT) in Table 2. Specificity rates (the proportion of true negatives predicted to be negative) were shown to be almost identical for the two models in both tests.

Conclusions and Implications

The purpose of this paper has been to examine the potential of neural network artificial intelligence models for pattern recognition in marketing data. The "tests" presented were offered as evidence of the potential usefulness, rather than as proof of the superiority of a neural network over a statistical method. Indeed, a predictive ability comparison of test results indicates that the neural approach results were not significantly different than the appropriate statistical approach for this data set.

The advantage of the LOGIT approach include: 1) a simple interpretable model, 2) widely understood theory and assumptions, 3) known rules for the type of data that are appropriate, and 4) modest computation time.

In contrast, the neural model is not interpretable. Neuron connection weight is not an accurate indicator of the relative importance of a given neuron in the solution (i.e., they can not be interpreted as variable coefficients in regression). The value of each neuron in a layer is calculated by multiplying the values of each neuron in the preceding layer by the appropriate weight and summing the results. This value is then passed through a non-linear saturating transfer function. If the resulting output is in the saturation portion of the transfer curve, then even inputs with large weights connecting them to that output will not have a significant influence. Thus, the sensitivity of an output to a given input is an unknown function not only of the weights but of the present value of all the inputs.

A second potential problem with much of the available neural network development software is the lack of stated limitations and basic data assumptions. Neural analysis is often presented as only requiring some underlying pattern

structure between the independent and dependent variables (i.e., non-random data). Actually, there are similarities between the underlying mathematics of statistical regression and neural feedback approaches (Smith 1988) which lead to the need for system developers to recognize many of the same underlying data assumptions. While poor neural predictive performance is most often blamed on weak pattern in the data, it also can be caused by lack of linear independence, and lack of orthogonality.

A final related set of problems include lengthy computer runs for training times and lack of theoretical optimal design. While not all neural approaches will require unreasonable training times, their iterative approach to developing a model solution will require more run time then a statistical approach. Without some way of determining optimal network design, (e.g., numbers of hidden layers and neurons) the user may try training with many setting and never knows if the next setup might perform better. While a neural network may be able to predict pattern in the data, little insight into the nature of the pattern can be gained. With both statistical and expert system approaches, the user has more access to understanding the mechanics of what is happening and why.

While the results of this study could lead to applications in marketing, they do not suggest use of neural networks in the advancement of marketing theory. Neural analysis will not be a replacement for appropriate statistical methods. Limited examples of applied applications exist where accurate identification or classification might be the only requirement. Neural networks might be employed to screen new product concepts after having been trained on information describing successful new ventures. In the sales management area, account or territorial data could be used to train neural models to identify accounts or territories offering the greatest market potential. In the financial services industry, there is currently at least one commercial offering of a neural network model for "credit scoring" (screening credit applications). Similar, forecasting situations exist in such areas as market segmentation, vendor selection, prospect screening, promotion approach selection, and resource allocation. Neural networks could also be trained to pick advertising executions, select sales personnel, and screen job applicants.

While this paper has demonstrated a neural network in comparison to a standard statistical approach, an expert system is also a possible alternative. In "prediction only" applications, the cost and efficiency of letting a network train itself may be preferred to the lengthy time often required in developing and maintaining an equivalent expert system (time spent defining the decision rules of experts, time spent entering, debugging, and validating the system code, and time spent keeping the decision rules current).

Neural modeling is still in its infancy, and interest, applications, and software capabilities are growing rapidly. The results of this study suggest that while pattern analysis and prediction using marketing data will be another area of neural model application, caution should be used. "Black box" software does not eliminate the need to understand the theoretical underpinnings and assumptions of the analysis method. This study did not identify any advantage for a neural approach over a statistical approach in this type of marketing application. Once the model was developed, both the neural and statistical methods could predict the validation data set in seconds. But, the statistical method will always be faster in finding the best fit model, and the statistical method results will be interpretable.

TABLE 1
LOGIT Model (A) versus NEURAL Model (A)

Model Derived from Training Set (A)		
	LOGIT	NEURAL
Total Correct	92.0%	100%
Sensitivity	64.3%	100%
Specificity	96.5%	100%
Somer's δ	.88	1.0
Concordant Rate	.94	1.0
Model Tested on Validation Set (B)		
Total Correct	86.7%	91.8%
Sensitivity	61.1%	83.3%
Specificity	92.5%	93.8%
Somer's δ	.76	.81
Concordant Rate	.88	.90

TABLE 2
LOGIT Model (B) versus NEURAL MODEL (B)

Model Derived from Training Set (B)		
	LOGIT	NEURAL
Total Correct	89.8%	100%
Sensitivity	66.7%	100%
Specificity	95.0%	100%
Somer's δ	.85	1.0
Concordant Rate	.93	1.0
Model Tested on Validation Set (A)		
Total Correct	89.0%	90%
Sensitivity	42.9%	64.3%
Specificity	96.5%	94.2%
Somer's δ	.72	.75
Concordant Rate	.85	.88

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MARKET PRICING OF REAL ESTATE UNITS: A KNOWLEDGE-BASED SYSTEM APPROACH

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Abstract

In this paper, the authors contend that the area of real estate pricing is often learned from an inefficient trial and error process. To address this problem, a knowledge-based expert system (REPRES) was developed by the authors. The knowledge base and inference engine logic of REPRES are described in the paper. Use of this expert system, in which the user is directed to the price of a given home using either a market or cost approach to pricing, should result in improved quality of real estate pricing, facilitate accumulation of further knowledge about the real estate pricing process, enhance communication between users of REPRES and customers, and assist in training individuals who are unfamiliar with the logic and knowledge base of real estate pricing. Validation results indicate REPRES has accomplished these goals. The authors conclude with a discussion of the implications of such an expert system to real estate pricing and real estate modeling research.

Market Pricing of Real Estate Units: A Knowledge-Based System Approach

The determination of market price for new and resale houses, condominiums, and townhouses is a major real estate activity. Factors which affect this determination include, among others, the type of unit (single family, condominium, townhouse), number and type of rooms, features (fireplaces, walk-in closets, and a garage as a few examples), neighborhood/location, and size and type of yard.

Determination of the price of a unit is often a qualitative judgment on the part of someone who has considerable experience in real estate (an expert) or possibly by someone with little experience (a novice). Thus, a computer system that models the processes followed by experts in real estate market pricing would be of value to novices in learning the qualitative judgments involved and of value to experts in leveraging their time.

This paper describes REPRES (Real Estate PRicing Expert System) a knowledge-based system developed by the authors[1]. The REPRES system uses expert system methodology to codify and synthesize prior research, theory, and expertise in a decision and training aid for evaluating real estate price. As such, REPRES was designed to fulfill four purposes. First, it should improve the quality of real estate pricing. By asking questions about the various factors that affect price, REPRES should not only lead the user through the decision making process, but also generate introspection into the pricing process within that application. Second, REPRES should facilitate accumulation of further knowledge about the real estate pricing process. This can be accomplished by the modification of rules and addition, deletion, or revision of knowledge as experience and/or pricing theory changes. Third, the system should enhance communication between users developing price estimates and the customers with whom they interact. By displaying the logic the system used to reach a decision, such communication should be improved. Finally, it should assist in training individuals who are unfamiliar with the logic and knowledge base of real estate pricing.

In the following sections, the assembly of REPRES's knowledge base from multiple sources of published research, expert experience, and practitioner experience is described, as well as its structure and content. Such application of expert system technology is well documented in various areas such as, agriculture, chemistry, computer systems, geology, law, medicine and business (Burke et al. 1990; Comer 1974; Harmon and King 1985; Lilien and Little 1976; Lodish 1971; Mentzer and Gandhi 1992; Newquist 1986; Rangaswamy et al. 1987; Rangaswamy et al. 1989; Steinberg and Plank 1987; Stevenson, Plath, and Bush 1990; Waterman 1986). REPRES's features and interaction will then be presented. This is followed by a discussion of its implementation and validation. Implications of such an expert system in real estate are also discussed.

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[1]Although the expert system used to develop REPRES is rule based, REPRES is considered a knowledge-based system since it incorporates the experience of several experts and numerous literature sources of knowledge (Burke et al. 1990).

Knowledge Base

Development of the knowledge base first required definition of the problem domain of REPRES. Once this was accomplished, components of the knowledge base were developed. The knowledge base was constructed with input from three experts in real estate pricing theory and practice, published literature on real estate pricing, and input (via in-depth interviews) from practitioners involved in real estate pricing at six separate real estate agencies in four separate localities.

Problem Domain

Harwood (1986) and Karvel and Unger (1991] summarized the work of numerous others (AIREA 1987; Benson 1984; Bettes and Ely 1982; Boyce and Kinnard 1984) in categorizing real estate pricing approaches into a market approach, a cost approach, or an income approach. Both the market and cost approaches look at the characteristics of the property - where the market approach attempts to estimate the market value of these features and the cost approach tries to estimate their cost. The income approach departs from this approach to estimate the potential income stream from a property to set its price.

Since the purpose of REPRES is to provide a means to replicate the process through which an expert determines the price of a home and not a commercial property, the problem domain was limited to the market and cost approaches.

Home Pricing Factors

A review of numerous sources (AIREA 1987; Benson 1984; Bettes and Ely 1982; Boyce and Kinnard 1984; Harwood 1986; Karvel and Unger 1991) and interviews with three experts identified the following factors that are considered in determining home price via the market or cost approaches: style of home; number, type, and size of rooms (such as foyer, living room, den, kitchen, dining room, family room, bedrooms, baths); other types of space (such as basements, attics, porches, sun rooms, garages, and decks); bathroom and kitchen features; appliances; size and type of yard; and neighborhood/location.

System Logic Structure

For REPRES to function accurately, experts enter the system (via password access) and provide their estimates of the market value/cost of each of the features given in the previous section. This input is neighborhood/zoning specific and can be saved for future use. Subsequent users (real estate agents and/or potential home buyers) enter the system and answer questions about home features. The result is a conclusion concerning home price and financing information.

The Inference Engine

The knowledge base described in the previous sections was implemented on a 286 personal computer, with VP-Expert, a versatile expert system shell. An expert system shell can be described as a software platform that provides an inference engine, knowledge base creation capability, and user interface that could be used to implement specific expert system applications as the respective domain knowledge is encoded. VP-Expert is a rule-based expert system shell that uses a backward chaining inference engine. While an example-based system provides a quick method for prototyping an expert system, a rule-based system provides greater flexibility in knowledge representation and use Rangaswamy et al. 1987). The REPRES inference engine has a total of 50 rules that lead the user through the real estate pricing process.

The purpose of the expert system is to lead the user through the types of questions an expert would ask to determine the price of a given home. The result is a conclusion as to the price of the real estate unit, with a summary of the answers given by the user. Again, this is the type of feedback an expert would provide to a customer in the pricing process. The system then goes on to ask questions about financing and makes an estimate of the expected monthly payments for such home financing. Thus, the expert system acts as an expert would in a similar situation and helps the user learn from the experience.

Implementation

Expert system implementation is an iterative process of use, feedback, and updating (Burke et al. 1990). Thus, any expert system should continue to evolve. To date, REPRES has been implemented in three real estate agencies. All organizations provided useful feedback on the improvement of REPRES. Although the bulk of these suggestions were in the communication area, i.e., making the screen displays from REPRES more easily understood by a novice, several suggestions for improving and broadening the logic were provided. These implemented suggestions made the revised version of REPRES more applicable to a wider array of real estate situations.

Validation

Validation should include verification of the substantive contents of the knowledge base, comparison against expert

judgment, and whether use of the system results in improved decisions. Validation of the substantive contents entailed comparison of the logic and statements of REPRES to previous literature in the area of real estate pricing (AIREA 1987; Benson 1984; Bettes and Ely 1982; Boyce and Kinnard 1984; Harwood 1986; Karvel and Unger 1991).

Comparison against expert judgment and whether REPRES improved decision making has been tested by appropriate individuals. To date, the revised version of REPRES which resulted from the implementation stage has been used in two interactive seminars. The first seminar involved 14 individuals with considerable experience in real estate pricing (i.e., experts) and the other seminar involved 18 real estate practitioners who participated to learn more about market pricing.

In the expert seminar, suggestions from the participants were made on the knowledge base and the logic of the inference engine, all of which have been incorporated into the version presented in this paper. Once these changes were made, the experts were subsequently asked three months later to again evaluate REPRES. Of the original 14, 12 experts participated. After use, these experts were asked a single question, "Does REPRES produce results similar to what you would reach using your own expertise?" with a scale of 1 equals strongly disagree and 7 equals strongly agree. Respondents were asked to base their answers on a comparison of actual pricing decisions made by themselves compared to decisions reached by REPRES. The average response was 6.22, with a standard error of 0.25. Further, none of the respondents gave an answer of less than 5, indicating strong agreement between REPRES and the experts.

As part of the second seminar, the participants were shown how to use REPRES. After the seminar, respondents were given a copy of REPRES to keep, on the condition that they would answer a single question on its use three months later. This single question was "Has REPRES improved your ability to develop market prices, i.e., do you make better pricing decisions with REPRES?" with a scale of 1 equals strongly disagree and 7 equals strongly agree. Respondents were asked to base their answers on a comparison of actual pricing decisions made by themselves previous to their exposure to REPRES compared to similar decisions reached with the use of REPRES. All 18 participants responded, and the average response was 6.01, with a standard error of 0.19. Again, none of the respondents gave an answer of less than 5, thus indicating strong agreement that REPRES had improved pricing decision making.

Implications

In this paper, the knowledge base and inference engine logic of an expert system for real estate pricing has been developed and presented. Implementation and validation of the system were also discussed.

While even novices recognize the critical relationship between setting price and successfully marketing a home, mastering the process often requires a prohibitive time investment. Time is often one of the resources least available to novice realtors.

Prior to this decade, realtors developed pricing expertise through the trial and error of learning the factors that influence price. Error consisted of lack of sale from too high a price or dissatisfied sellers if the home sold for much less than the seller perceived it to be worth. In the last few years, the advent of expert system computer software has put the potential to quickly learn this process, under the guidance of an expert, into the hands of novices.

To provide logical structure to the pricing decision process of the novice, REPRES was developed by the authors. It is expected that this approach will help solve much of the market pricing training problem faced by realtors. Validation efforts to date supports this expectation.

From a broader real estate research perspective, the continued successful application of knowledge-based system technology to real estate situations pushes forward our understanding of real estate and disseminates this knowledge to the real estate discipline. As our understanding of successful and unsuccessful real estate applications of knowledge-based systems expands, the appropriate role of these systems in real estate (i.e., where they can be applied and where more traditional approaches are superior) will be better delineated.

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INFORMATION SHARING IN THE U.S. ELECTRONICS INDUSTRY: A PRELIMINARY REPORT

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Introduction

Marketing academicians continually refine the very definition of marketing, however the philosophy at American Express is simple: *"Marketing is simply the art of connecting the unconnected* (Ryan 1989). Central to connectivity is information. Glazer (1991) points out that in marketing theory and practice, relatively little formal attention has been paid to the effects of the transformation from a "matter and energy" resource dominated era to an "information economy." Technology has enabled phenomenal growth in the production and distribution of information. Marketing may have been a latecomer to the information age, however marketing information systems have developed to become important not only to their developing firms for their internal value, but also as critical ties between companies and their customers. Both practitioners and academics have recognized the importance of access to information (Peters 1991). Anderson and Hoyer (1991) emphatically state that "Today the intelligence dependence of organizations in securing and sustaining survival...transcends all other priorities. The effectiveness of marketing strategy...is...directly proportional to the quality (of information) on which it is based" (p.38). Glazer (1991) notes that knowledge or information itself has emerged as an asset in its own right, often with significant market value at the same time that the current boundaries between traditional conceptual categories have blurred, such as between the firm and the outside world.

In this preliminary report, the researchers investigate the phenomenon of information sharing in the U.S. electronics industry, an industry where one might expect considerable sophistication in both management and computerized marketing information systems. We very briefly explore a selected background of marketing information systems, developing dimensions of information sharing and operative variables for testing by survey research. We then describe a computerized disk by mail survey methodology and sample set and present the preliminary findings of the data analysis. The paper concludes with suggestions for further research.

Abbreviated Literature Review

A system of gathering, organizing, reporting and using data as useful information is implied in Porter's value chain. Without it, there is little of value to communicate within organizations or their channels of supply and distribution. "Simply defined, a marketing information system is an organized set of data that is managed using multiple origination points, entries and outputs. Used wisely, it can help improve revenue, market opportunities, positioning and customer support" (Mayros 1990, p.97). There is, however, scant research which documents the incidence of use of marketing information systems, particularly in the sharing of information between channel partners. There are nevertheless many examples of their uses.

In consumer products marketing, marketing information data bases help companies determine who their customers are and how to satisfy their needs (Loro and Spethmann 1991). These authors suggest that data-driven partnerships develop from information gathered or otherwise available to a marketer, but few relationships (only 10%) are to a point where getting information is a major force of the marketing effort. Marketing data bases are also useful in identifying new groups of potential customers (Violano 1989). In the realm of business-to-business marketing, marketing information systems can assist in similar ways including providing services that increase the bonds between companies. Among the abundant examples of successful utilization of marketing information systems include Inland Steel's order tracking system (Glazer 1991) and Corning's information network (Roush 1991).

Information gathering from customers and heightened information sharing beyond the traditional behavior of an arm's length business relationship enables these companies to enjoy increased synergy of working together in more of a "partnership" (Boughton 1991). *HBR* editor Rosabeth Moss Kanter, writing in the *Planning Review* (1990), suggests that as leading companies are faced with imperatives to cut costs and improve quality, they are, citing TRW's V.P. John Marshall, starting to treat suppliers as their partners. Stevens (1990) notes "...when alliances reach this level--when suppliers and customers are joined at the planning and production systems--that things can

really get challenging." He suggests that the obstacles are not so much technical as philosophical and cultural, and that companies are not used to negotiating the sharing of information, that they find it hard to place a value on. The strategic implications of knowledge as a valuable asset are the topic of an important article by Glazer (1991), who develops a framework for valuing information. There are abundant examples of data based firms that make their living by gathering data from enterprise, sorting and manipulating it, perhaps showing it in the context of similar information gathered otherwise, and selling information back to original sources and other interested parties. These examples include R. L. Polk's vehicle data, SAMI's wholesale product movement reports, Neilson's and others scanner data and dozens more.

Tom Peters (1991) noted in his analysis of the *Harvard Business Review's* World Leadership Survey that information exchange between companies is a vital linkage necessary to be competitive in today's business world. He observes, however, that there is a gap between business people's agreement that information needs to be shared and the same group's degree of information sharing. While information sharing is becoming more common place, it is yet to be the rule.

Appropriate information exchange is necessary to build and maintain strategic alliances. Strategic alliances should be useful to organizations that seek increased specificity of organizational strategic direction, control of overall costs, and product differentiation (Takac and Singh 1992). There is scant evidence of the incidence of strategic alliances in any industry.

The observations and prescriptions suggested by the various authors lead the researchers to ask several questions. We found a lack of studies that described characteristics of companies that shared information versus those that do not, so we ask what types of companies are sharing information. We are interested to learn what are the results of information sharing, how much information sharing exists, is information sharing confined to the context of a recognized strategic alliance, and is information sharing related to satisfaction and relative profitability?

Hypotheses and Research Design

To explore the above research questions, the following hypotheses were developed:

Research Question 1: What types of companies are sharing information?

H_1null: There is no difference in the amount of information sharing between buyer and seller firms and the size of supplier companies.

H_1alt: There is a difference in the amount of information sharing between buyer and seller firms and the size of supplier companies.

H_2null: There is no difference in information sharing between buyer and seller firms and the fraction of total product purchase requirements by the buyer from the selling companies.

H_2alt: There is a difference in information sharing between buyer and seller firms and the fraction of total product purchase requirements by the buyer from the selling companies.

Research Question 2: Is information sharing confined to the context of a strategic alliance?

H_3null: There is no difference in the types of information sharing among selling companies that consider themselves to be in a strategic alliance with their customers and selling companies who do not identify themselves as being in a strategic alliance with their customers.

H_3alt: There is a difference in the types of information sharing among selling companies that consider themselves to be in a strategic alliance with their customers and selling companies who do not identify themselves as being in a strategic alliance with their customers.

Research Question 3: Is information sharing related to higher overall satisfaction and/or profitability?

H_4null: There is no difference in the overall satisfaction level of selling companies that share information with customers and those that do not.

H_4alt: There is a difference in the overall satisfaction level of selling companies that share information with customers and those that do not.

H_5null: There is no difference in the overall self-reported profitability levels of selling companies that share information with customers and those that do not.

H_5alt: There is a difference in the overall self-reported profitability of selling companies that share information with customers and those that do not.

The hypotheses were tested using correlation, regression and factor analyses.

The Questionnaire

The researchers used computerized disk by mail surveys. Surveys were prepared using Sawtooth Software's Ci2 programming language. This language allows researchers to program complex questionnaires that appear simple to respondents, and are easy for respondents to complete unassisted at their PCs. The recipient inserts the diskette into a PC and types "Q" to start the program. No computer

expertise was needed to answer the survey, but it was recognized that some people are still uncomfortable with computers even in a simple format. Instructions and questions appeared on the screen, along with ranges of possible responses in either analog or digital scales. The Ci2 program led the participants through the questionnaire, automatically branching to the correct next question as needed. The logic for branching was programmed by the researchers and did not require the respondent to follow complicated instructions to "skip" to sections that were not applicable to them, as is necessary in traditional printed survey questionnaires. The researchers felt that the computerized disk by mail survey approach would likely garner a higher response rate than a printed questionnaire of similar length, especially due to the relative newness of interview disks and the expected tolerance and/or curiosity by electronics industry executives of the methodology itself.

The questionnaire was lengthy; it contained 145 questions counting all logic branches. The questions relevant to this paper are summardetailed in Appendix A. Many of the questions posed were in the context of the relationship between the respondent's company and a customer firm of the respondent's choosing. At the beginning of the questionnaire, we asked the respondent to think of one of his/her company's most important customer firms that purchases a component from the respondent's company that the buyer's company then used in further processing, manufacturing, or assembly. The respondent was asked to type in a fictitious name for this customer company to insure a greater feeling of confidentiality and therefore subsequent candor on their part. The computerized questionnaire then inserted the respondent supplied phony name in appropriate places on selected subsequent questions to ensure that the questions were clear and consistent in the context of this particular customer. Although this limited the focus of these questions to that single customer, it enabled the researchers to develop a more detailed understanding about that particular relationship. In Appendix A, the customer company is referred to as "the buyer" and is placed in brackets. Also, to keep the references to the product in question consistent, the respondent was informed that the product being sold to "the buyer" was referred to as *Product X*.

Profile of Sample

Surveys were mailed to Vice Presidents of Marketing of U.S. companies that were identified by S.I.C. code as being in the electronics industry and publicly traded on the New York, American, or NASDAQ stock exchanges. These firms numbered 520. Reminder postcards were sent one month after the initial mailing to stimulate additional responses. Fifty-one survey diskettes were undeliverable; the mailings were returned marked forwarding expired. Fifty-nine diskettes were returned of which fifty-four were usable. The overall response rate was 12.6%. While this fraction is low in absolute terms, it is not unusual for the target population, and there may have been other factors contributing to the response rate as well.

The response rate may have been affected by the top level nature of the targeted respondent. Senior industry executives are notoriously difficult to reach (Masters 1986), and response rates from such targeted populations are typically quite low. This may produce a sample response error, and the effect is unknown. Also affecting the response rate could be a low degree of computer comfort among this senior manager survey population. Senior managers have been found to have less comfort in hands-on use of personal computers than lower level managers, technical support personnel and administrative staff that typically report to such senior executives (Palmer 1989). Other factors that may explain some response function could be confidentiality concerns within a highly competitive industry, concern over potential viruses from a contaminated survey diskette (Note: to reduce out of pocket costs, the researchers used recycled disks that were reformatted and relabeled, but did not always look perfectly new), and the long length of questionnaire (145 questions). The researchers determined that mean expected completion time would be fifteen minutes, and so advised the targeted respondents on one of the opening screens. The data revealed that actual mean session time recorded by the Ci2 software exceeded the initial estimate by more than five minutes. Some respondents may have intended to complete the survey but gave up when the process took more time than they had anticipated. The software is also non-interruptable, and a survey cannot be restarted if it is interrupted in process. Therefore if a respondent decided to look at an opening frame and determined that they didn't have time to complete it at that particular session, they would not be able to restart it later and might very well have abandoned their intentions at that point. There is also some possibility that the lack of response may be in part attributable to lack of familiarity with or lack of interest in the various topics of the survey such as just-in-time inventory and manufacturing systems, strategic alliances, information sharing and others. One such example of this was recently noted by Hebein and Marks, who were confounded by a response rate of under ten percent on a survey concerning inventory carrying costs. In following up with a subsequent three question postcard mailed to the initial nonrespondents, the authors reported that a substantial majority of non-respondents to the original survey did not compute or did not use any inventory holding cost models or E.O.Q. estimates. The authors suggested that the

reported lack of use of these ideas that had been previously thought to be commonplace may reflect a lack of sophistication, a lack of adequate or affordable data, or simple lack of interest in the research topic by much of the original sample. In our research, a V.P. of Marketing may have little direct knowledge of or interest in many of the subjects of the survey and thus not complete the survey.

Results

Data were analyzed using SPSS-PC Version 4. First the fourteen relevant variables were tested for normality. Six did not demonstrate a normal distribution, and since skew variables are a problem in parametric statistics, non-linear data transformation processes were employed, including squares, square roots, or natural logarithms. Subsequent tests of normalcy demonstrated that the distributions of the transformed variables were not skewed. Attempts to condense information sharing variables into one composite using factor analysis suggest that the six sharing questions do not form a unitary dimension. A similar factor analysis replacing the variables with their transformed versions as needed was performed, with similar results. Crosstabs were run to generate Pearsons correlations among all variables. A summary of the paired crosswise correlations is presented at the end of the text as Table I, and the prefix "X" indicates a normalized variable.

In our first research question we seek to find out what types of companies are sharing information, and investigate related hypotheses. The correlation output shows that larger companies, represented by size of employer (SIZEMPLY) and sales volume (SALESVOL), shares more on the triad of regular reported information (INFORREP), providing helpful information (HELPINFO), and frequency of information (FREQINFO) provided. Therefore H_1null must be rejected, and H_1alt
accepted: there is a difference in the amount of information sharing between buyer and seller firms and the size of supplier companies. This may be attributable to larger companies having greater information resources available, and perhaps greater sophistication in the use of these resources.

The researchers had suspected that in circumstances where a major buyer represented a substantial portion of the total sales of a component that there would be an incentive to share information with this buyer. However the fraction of a supplier's total sales of the specified component (SHARSALE and XSHARSAL) appears unrelated to all six measures of information sharing (INFORREP, SHARTECH, HELPINFO, FREQINFO, SHARPROP and PASSEFF), so H_2null cannot be rejected: there is no difference in information sharing between buyer and seller firms and the fraction of total product purchase requirements by the buyer from the selling companies.

The second research question seeks to determine if information sharing is confined to the context of a strategic alliance. The correlations show that strategic alliance (STRAALLI) is related to sharing technical information (SHARTECH and XSHARTEC), but not so clearly with any other type such as limited proprietary information (SHARPROP and XSHARPRO). The evidence therefore partially supports the construct, but not completely. H_3null cannot be rejected, but the alternate should not be accepted either, as the evidence is inconclusive and calls for further investigation.

In research question three we asked if information sharing is related to higher overall satisfaction and self-reported relative profitability. H_4null, there is no difference in the overall satisfaction level of selling companies that share information with customers and those that do not, should be rejected and the alternative accepted that there is a difference, as the data show that satisfaction (SATISFD) is correlated to sharing both helpful information (HELPINFO) and limited proprietary information (SHARPROP and XSHARPRO), although there is no significant difference for the other four measures of information sharing.

In this final research question we sought to determine if there would be a difference in the self-reported relative profitability of the relationship between sellers and buyers. The correlation matrix does not show significant relationships between the measure of profitability (PROFITBL and XPROFITB) and the various measures of information sharing, save the transformed measure of limited proprietary information. Therefore H_5null cannot be rejected; there is no difference.

Subsequent to performing the correlation analyses, a varimax rotated factor analysis was performed to refine the results, once with the raw variables, and once with the transformed variables. The technique of placing all the variables in a factor analysis is useful to get an idea of what dimensions are working in the data. The results are usually not reportable, but they give a good starting point. This is especially true if we remember that these variables are not necessarily measuring exactly what is intended, but rather research subjects' subjective appraisals of these items. The implications of these analyses, after rotation, are as follows:

Factor 1 showed that satisfaction goes with the "we are good business partners" sharing triad (sharing helpful information, high frequency of sharing information, and limited sharing of proprietary information), explaining 27.1% of variation.

Factor 2 showed that regular reports of operations are found in large companies (sales volume and normalized number of employees), explaining an additional 13.8% of variation.

Factor 3 showed that part of strategic alliance (.52) is paired with smaller companies selling to larger buyers (share of sales and normalized size comparison), explaining an additional 13.1% of variation.

Factor 4 showed that another part of strategic alliance (.57) is paired with the sharing of technical information (normalized), explaining 10.4% of variation.

Factor 5 showed that sharing efficiencies with the buyer increases the reported relative profitability of the relationship for the seller, explaining a final 8.3% of variation, for a cumulative total of the five factors of 72.7%. These factors are complimentary and confirmatory of the correlation analysis.

Following completion of the factor analysis, multiple regression was performed with the dependent variable of strategic alliance. This regression provided further confirmation of the results of the correlation and factor analyses. To whit, the R^2 for sharing technical information was .28 while the normalized variable showed .29. The R^2 for share of sales was .38, with the normalized variable at .37. Betas were significant at .0001 or better in all cases. Space limitations preclude inclusion of all the tables and output, but they are available on request from the authors.

Conclusions and Recommendations for Further Research

In this preliminary study the authors noted that while information sharing has been widely prescribed in both the business and academic press, no reports were found describing characteristics of firms that engage in the practice. Hence we sampled a population of electronics components manufacturers with a computerized interview disk that included questions related to information sharing. The response rate to the survey was low, and so we must be careful about generalizing the results. The basic findings include:

- firms that share data tend to be larger than those that do not,
- the fraction of a supplier's total sales of the specified component appears unrelated to information sharing,
- strategic alliances seem to be related to the sharing of technical information, but not necessarily to other types of information,
- satisfaction is correlated with sharing both helpful information and limited proprietary information, although there is no significant difference for the other four measures of information sharing, and
- self-reported relative profitability of a relationship does not seem to be related to the various measures of information sharing.

The implications of only large companies participating in information sharing or small companies when they deal with large companies suggests that information and other resources may be important. Strategic alliances as reported by this survey sample seem to relate more to technical information sharing and less to other dimensions that the literature suggests are important in long term success. Additional information is needed about how strategic alliances are being implemented in practice, and what benefits they reap. Satisfaction seems to be related to positive feelings about traditional values oriented information sharing. This will make interesting research: is satisfaction just feelings or is it related to more substantive outcomes? More objective measures of profitability may be indicated, since the expected relationship between self-reported relative profitability and information sharing did not reveal any significance. Future studies on this topic are needed and should include both additional industries and dimensions of information sharing, as well as objective measures of outcomes.

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Appendix A

RELEVANT QUESTIONS ASKED

Variable	Question and Scale
SIZEMPLY	About how many people are employed by your company, including any parent, branches, divisions and/or subsidiaries? <10, 10-24, 25-99, 100-499, 500-999, 1,000-2,499, 2,500-4,999, 5,000-9,999, 10,000-19,999, >20,000.
SALESVOL	What was your company's total sales volume last year? An estimate is O.K. $1 million, $1-4.9 million, $5-9.9 million, $10-49.9 million, $50-99.9 million, $100-499 million, $500-999 million, >billion
SIZEUTOB	In terms of last year's sales volume, how large is your company relative to [this buyer]? Your company x Times Larger — This buyer x Times Larger |----------| 500 100 50 25 5 = 5 25 50 100 500
SHARSALE	What share of your company's annual sales of PRODUCT X are sold to [this buyer]. < 1 %, 1 to 9.9 %, 10 to 24.9 %, 25 to 49.9 %, 50 to 74.9 %, 75 to 89.9 %, 90 % or >
BYSHARX	What share of [this buyer's]'s annual purchases of PRODUCT X do you estimate that they purchase from your company? < 1 %, 1 to 9.9 %, 10 to 24.9 %, 25 to 49.9 %, 50 to 74.9 %, 75 to 89.9 %, 90 % or >
INFOCHAN	All exchanges of information that take place between your company and this buyer go through designated channels of communication. Strongly agree — Strongly disagree |----------|
INFORREP	This buyer requires that your company provide them with regular reports on various aspects of your operations. Strongly agree — Strongly disagree |----------|
STRAALLI	Your company is in a "strategic alliance" with [this buyer]. Strongly agree, Agree somewhat, Neither agree nor disagree, Disagree somewhat, Strongly disagree
SHARTECH	Your company and this buyer share technology and/or other information thought to be helpful. This includes improvements and efficiencies. Strongly agree, Agree somewhat, Neither agree nor disagree, Disagree somewhat, Strongly disagree
HELPINFO	Information thought to be helpful to the other party is routinely offered. Strongly agree, Agree somewhat, Neither agree nor disagree, Disagree somewhat, Strongly disagree

FREQINFO Exchange of information takes places frequently and informally. not only according to the prescribed agreement.
Strongly agree, Agree somewhat, Neither agree nor disagree, Disagree somewhat, Strongly disagree

SHARPROP Your company and this buyer share LIMITED proprietary information with the other.
Strongly agree, Agree somewhat, Neither agree nor disagree, Disagree somewhat, Strongly disagree

PROFITBL From your company's perspective, how profitable is the relationship with this buyer relative to deals with other buyers?
Exceptionally Profitable ---------- Exceptionally Unprofitable

SATISFD Overall, how satisfied is your company with [this buyer]?
Extremely satisfied, Very satisfied, Satisfied, Neither satisfied nor dissatisfied, Dissatisfied, Very dissatisfied, Extremely dissatisfied.

Correlations	INFORREP	SHARTECH	XSHARTEC	HELPINFO	FREQINFO	SHARPROP	XSHARPRO	PASSEFF
SIZEMPLY	**-.4121***	-.2546	**-.3136***	**-.3216***	**-.3481***	-.1650	-.1756	-.1398
XSIZEMPL	**-.4047***	**-.2794***	**-.3321***	**-.3343***	**-.3524***	-.1793	-.1880	-.1602
SALEVOL	**-.3744***	**-.2702***	**-.3188***	-.2744	**-.3571***	-.2039	-.2120	-.1216
SIZEUTOB	-.1141	-.0274	-.0228	.0019	-.0527	-.0828	-.0901	-.0182
XSIZEUTO	-.0996	.0016	.0096	.0287	.0373	-.0462	-.0546	-.0307
SHARSALE	-.2160	-.0853	-.0937	.1790	.3105	.1497	.1568	-.0822
XSHARSAL	-.1961	-.1272	-.1290	.1890	.2301	.1039	.1099	-.0476
BYSHARX	.2254	-.1202	-.1846	-.2653	**-.2760***	-.1533	-.1354	-.1713
STRAALLI	.0108	**.5616****	**.5668****	.1517	.2707	.2632	.2406	.1988
SATISFD	-.1170	.0049	.0996	**.3853***	.1907	.2869	**.3247***	.1214
PROFITBL	.1698	-.0128	.0378	.2043	.1147	.2402	**.2719***	-.2562
XPROFITB	.1672	-.0144	.0279	.2149	.0639	.2376	**.2713***	-.2520
Correlations	INFORREP	SHARTECH	XSHARTEC	HELPINFO	FREQINFO	SHARPROP	XSHARPRO	PASSEFF

Pearsons Correlations
Significant at .05 with *, .01 with **.

GAINING A MARKETING ADVANTAGE USING QUALITY INFORMATION TECHNOLOGY (QIT)

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Abstract

Information systems often have been viewed as having little or no effect upon the decisions of higher management other than cost. Few considered the added tangible or intangible value possible from strategic computing. As such, Information Technology (IT) functioned as a support or service activity, and only its lack of smooth operation was of concern. Information Technologies were thereby subordinated to management's main areas of interest. Increasing competition in the marketplace, however, has caused many organizations to realize the new strategic role of information systems. Consequently, strategic information systems, computer systems which significantly change the organization's external competitive position and internal productivity, have gained prominence in industry.

Applying these principles to the university environment is rarely discussed and, even more rarely, instituted. The purpose of this paper is to show the major error of this omission and how the use of Quality Information Technology (QIT), and managing accordingly, can have a major effect on the culture of your university and the way it does business.

Introduction

Initially employed in business to improve the efficiency of handling high volume, daily business transactions, information systems (IS) have evolved over the last three decades to a position of strategic importance in many corporations and, more recently, universities. Early information systems rarely influenced the decisions of higher management; as such, Information Technology (IT) functioned as a support or service activity, and only its lack of smooth operation was of concern. Information Technologies were thereby subordinated to management's main areas of interest. Increasing competition in the marketplace and a few well-published successes, however, has caused many organizations to realize the new strategic role of information systems and the opportunity to utilize Quality Information Technology (QIT) to gain competitive advantage. Consequently, strategic information systems, computer systems which significantly change the organization's external competitive position and internal productivity, have gained prominence in industry. Few considered the added tangible or intangible value possible from strategic computing.

Quality Information Technology (QIT) focuses on the customer's needs. Esoteric programs which are not used have no value. QIT means the result of the technology being utilized changes the business operation and makes it better. QIT crosses organizational boundaries and results in process improvement on a measurable and continuing basis. Rarely do financial aid, admissions, registration, bursaring and academic advisement report to the same organizational segment. Together they depict the enrollment process.

To be truly effective, QIT involves all appropriate employees and empowers them to act in concert to improve the processes by supplying them with access to data and the ability to convert the data into information.

Applying these principles to the university environment is rarely discussed and, even more rarely, instituted. The purpose of this paper is to show the major error of this omission and how thinking of computer application systems as strategic, and managing accordingly, can have a major effect on the culture of your university and the way it does business.

University Environmental Analysis

The university environment is more interesting than the corporate America. Contrary to common belief, the university is not merely an educational institution. It is a business and political institution whose purpose is to educate and conduct research in order to advance the knowledge base of the universe. Because some 3500 institutions of postsecondary education have basically the same mission and similar product, the need to achieve competitive advantage is strong. In the education industry as well as other more publicized industries, such an advantage can be gained by product differentiation, cost leadership, or by providing "better" services.

The outsider often may not view universities as operating in a highly competitive environment. In the areas of recruitment/admissions, development/university relations, and financial aid awards, the external environment can be supercharged competitively. Recruitment specialist design and conduct road shows throughout the country to attract the best and the brightest from a dwindling pool of quali-

fied high school graduates. "Compensation" packages for highly desired recruits incorporate scholarships, grants and loans either need-based or scholarship driven. Following the models designed by the leading athletic directors, the recruitment of academic All-Americans is as intense as football recruiting and less controlled by outside agencies. No NCAA reviews recruiting of academic stars. In addition, major development campaigns of $400 million and up are becoming common place among private research institutions. These fund raising efforts have become even more competitive because of the decline of federal funding for research and the decreasing student pool.

The recruitment of researchers, faculty and skilled administrative personnel has also become highly competitive. The compensation packages include graduate assistants, computing facilities, research laboratories, home financing at below market rates, employment for spouses and country club memberships. These perks are in addition to salaries of at least 25% above their current level. There are over 50 vacancies for Deans of Business Schools. The deals being negotiated, while not quite at the Wayne Gretzky or Dan Marino level, contain long term commitments for salary, benefits, tenure, resource and budget support, directorships on local corporate Boards and a "no-cut" contract. The need to create and utilize strategic systems in support of these new realities is a prime focus of leading institutions.

Competitive Advantage From Information Systems

The concept of using information systems to obtain a competitive advantage dates back as far as the 1960's. However, "only since 1982 has there been a systematic pattern of structural changes and market-share changes achieved by information technology" (McFarlan, quoted in Rosenberg,1988,p.60).

One example is the domination of the Apollo and Sabre airline reservation systems owned by United and American Airlines respectively. Together these systems command 80% of the market and have left competitors scrambling for the remaining market share.

Computer systems are strategic systems only if they change business performance in a positive manner. A useful concept for examining competitive advantage is the value chain which views a university's activities from a systems perspective beginning with recruits and ending with alumni. An understanding of this concept should cause leaders to look beyond their internal operations for opportunities to strengthen ties and obtain efficiencies. High School counselors, donors, government agencies and suppliers are all affected by strategic systems. The ultimate market value of the university's product is the amount consumers are willing to pay for it. A company is profitable only if the value it adds to the product exceeds its cost. Information systems can increase profitability by lowering costs, increasing value or both (Porter and Millar,1985,pp.149-160).

The added value gained by the higher education student is difficult to measure. In fact, the measurement has probably been ignored for fear the truth will hurt. After all, if a student enters college with a 1450 SAT, subsequently graduates, and then gets into a distinguished graduate school, can we definitely attribute that "success" to the institution? Would not a 1450 SAT student have succeeded had he or she attended any institution? No one retests the graduating student to view his or her SAT at graduation. A college admitting a student with a 1000 SAT who tests at 1450 at graduation has truly received added value. Would this not be a marvelous recruitment advertisement, resulting in competitive advantage?

Product Differentiation

Computer aided design allows manufacturers to lower costs by speeding design time and reducing engineering input. Some drug store chains have successfully differentiated their product by providing customers with an on-line prescription history at all their pharmacy locations through a computer network. Digital Equipment Corporation has been successful in both lowering costs and differentiating their computer products with the use of their expert system, XCON, which allows computers to be custom designed to individual customer requirements (Boon,1988,pp.191-201).

Higher education institutions can and do differentiate their product. They just do not realize it. We assume this is not intentional on their part, since obviously, institutes of higher education expend enormous amounts of energy and resources in attracting their best students. The characteristics of institutions are publicized in their brochures. The climate, locale and kind of physical facilities; the faculty-student teaching ratio; the size of the institution; its diversity of offerings and research faculty; the quality of their support systems; the jobs received by their graduates, along with the graduate schools they attend are a few of the differentiations noted.

Internal Effects From Strategic Information Systems

Information systems can also impact the internal operations of a University. Systems can significantly change its operations, adding quality to the output of the university, and increasing productivity and effectiveness in all areas involved as measured by agreed upon service cycles. Systems which enable these types of changes are strategic necessities.

For example, a Campus Directory is a basic system and a strategic necessity. It consists of consolidated biographical data on all persons and/or companies of interest to the university (such as employees, students, alumni, vendors, etc.), and a centralized repository for the addresses of everyone listed. It is a more efficient structuring of data and avoids the problems associated with redundant data collections. Likewise, Facilities Directory, Student Records, Registration and Human Resources systems are strategic necessities, and required for the university to function. These systems will be discussed in the later sections of this paper.

Typically, strategic systems impact both the external and internal environments of an organization. For example, an information system which improves the University's management of cash flows and accountability could lead to significant increases in net revenue and market share due to the University's enabled ability to compete on tuition.

Compared to older types of information systems, the magnitude of change or impact of strategic systems upon the University is substantially higher. They add revenue and improve the University's cash flow position by fundamentally changing the way it does business. Strategic information systems must be critically linked to the goals of the University. Their performance often determines the attainment of strategic business goals - such as increasing net revenue and/or enrollment by specified percentages. A strategic system can fundamentally change the way a University conducts business, competes for students, and relates to their customers and suppliers. In sum, strategic information systems have the following three prominent characteristics: magnitude of impact, linkage to strategic educational and business goals, and restructuring of operations and relationships with faculty, students, staff and suppliers.

As we explore strategic systems our focus will be on leveraging the University's business performance through the use of strategic information systems. But first, a brief inquiry into the nature of strategy and its management.

Strategy and Strategic Management

Strategies are courses of action a University can pursue in its attempt to achieve established goals and objectives. A strategy is also a plan which integrates the major goals, policies and actions of the University into a unified, cohesive whole. For example, well-formulated strategies can enable a University to effectively focus and allocate its resources into a viable and competitive strategic posture based upon relative internal strengths and weaknesses, anticipated changes in the external environment, and contingent actions of other competitors. It is interesting to note these competitors are not necessarily limited to other colleges and universities, as we show in the following analysis.

A major concern of strategic management is the identification of opportunities and threats present to the University. In the dynamic sense, it tries not only to identify opportunities for adapting to changing market pressures, but also possibilities for changing those competitive forces. We, therefore, expect strategic systems to be opportunistic in nature, exploiting weakness in the competition and, taking advantage of internal organizational strengths and advantageous market conditions.

We have just described the typical Western definition and understanding of the term strategy. Consider the following perspective: "The Japanese don't use the term strategy to describe a crisp business definition or competitive plan. They think more in terms of strategic accommodation or adaptive persistence, underscoring their belief that corporate direction evolves from an incremental adjustment to unfolding events" (Pascale, quoted in Turpin,1992,p.51). Perhaps this alternative definition suggests that the University can benefit from a more flexible and variable approach during its process of strategic formulation. Of course the political dynamics, culture and resources involved will determine the viability of this type of strategic orientation.

We conclude, therefore, that a successful strategy for a University enables a complementary set of services and organizational structures which meet the needs of its customers, and the competitive forces unique to the business of higher education.

The Competitive Forces on Universities

Michael Porter's Competitive Analysis Model (Porter,1980,p.4) provides a framework for studying the nature and level of competitive processes. In his model we are concerned with the relative strengths and weaknesses of the forces which determine the level of competition within an industry. Porter's model has proved useful in facilitating strategic thinking and also in analyzing the competitive context in which Information Technology can be successfully exploited. Porter identifies five forces as determining the dynamics of industry competition.

(1) the threat of new and potential entrants,
(2) the threat of substitute products and services,
(3) the bargaining power of suppliers,
(4) the bargaining power of customers and buyers, and
(5) the intensity of rivalry among competitors.

The motivation behind applying this type of analysis is to identify those forces which can be potentially leveraged by strategic information systems to gain a competitive and sustainable advantage in the higher education marketplace. The goal is to create a favorable competitive environment by shifting the balance of threatening and negative forces to the University's advantage. The following is a brief example of Porter's model to illustrate the potential impact of strategic information systems on the competitive position of Universities.

Potential Entrants

Who are the potential entrants in the higher education business? They are new state schools, private colleges and universities, other specialized (technical) colleges and, a major entrant, corporations. As an alternative to traditional academic institutions, the technical colleges offer relatively quick and inexpensive certificate and degree programs for most vocational and paraprofessional careers. Corporations are offering training to their workers to make them more valuable on site and specifically geared to corporate need. Both of the above have the ability to compete favorably on price and convenience making them a significant threat to the economically burdened state and private colleges and universities.

Substitute Products and Services

Possible substitute products and services are quite varied and numerous. Examples include the military, correspondence and TV/video courses, home education, and alternative approaches to higher education such as a "College Without Walls". Here again the success and proliferation of the above substitute products and services in the marketplace are based upon their ability to compete favorably on price, convenience and quality.

Suppliers, Customers and Buyers

In the higher education industry, we can group the academic suppliers, customers and buyers because they are effectively the same entity. Suppliers of colleges and universities can be thought of an their course of students, such as high-schools, businesses and the adult, and college age populations. In terms of bargaining position the latter groups are in relatively strong positions because the traditional college age population is shrinking, there are numerous colleges and universities to choose from, and the rising costs of higher education, which has made it one of the most significant purchases of families today.

Rivalry Among Competitors

The threats posed by potential entrants, the increasing number of substitute products and services, the shrinking college age population, and rising costs of providing higher education are all negative factors in terms of the University's position in the marketplace. We thereby expect the industry to be intensely competitive with colleges and universities jockeying for advantageous market position. Rivalry includes recruiting in all areas of the national and international marketplaces by public and private institutions. More than ever, differentiation to sell a particular institution will become paramount.

Improving the "Product" from Universities

In its competition with Japan, American industry, particularly manufacturing, has learned the hard way that "to improve the product you've got to improve the process" (Runkle,1991,pp.67-72). Consider the concerns of the major customer of higher education, U.S. businesses. Their major message to the University is quite simple: improve your core capabilities in curriculum development and teaching, in other words get relevant to changing business dynamics; produce graduates who know and can make business processes work, and more importantly have contemporary knowledge of methods to make them work better. Perhaps this is the central issue to address in answering the question of why America has lost its competitive manufacturing and product development dominance to the Japanese over the past twenty years.

Strategic Systems Implementation: First Steps

Deciding the service order of new systems, or systems to be replaced or maintained will determine resource allocations. Since strategic planning is primarily a resource allocation model, a plan with organizational involvement must be created. Within the plan, a priority setting mechanism for strategic information systems implementation and scheduling is necessary so the journey to a better university can begin. Economic, political, social and logical forces must be considered.

Economic: For universities seeking quick gains, the expected net revenue and longevity of funding necessary to complete the project become determinants.

Political: What is the perceived image of the project within the university and how high in the organization is the sponsor of the system?

Social: The strategic system could be used to "score points" with a particular manager or area of the organization. A high probability of success is a necessary consideration because you must build upon success in order to continue with additional systems.

Logical: Is the database design optimal? Are the data structures sufficiently flexible to permit access by other systems? The choice by information system professionals

would be to begin with foundation systems and expand from there. From directories, you build to an enrollment management or human resource system.

The resulting priority schedule will certainly reflect the dynamics of the above forces. It is best to start with basic fundamental systems, and build upon their success. A proven track record of successful strategic implementations makes it easier to request continued funding for future systems.

Conclusion

Creating competitive advantage through the use of Quality Information Technology (QIT) is a new area of study, especially at universities. Many of the recommendations in the literature are based on untested theories, conjecture, and anecdotal evidence. Using published accounts of information systems providing competitive advantages to the owners, Boon has analyzed how these systems were developed and utilized (Boon, 1988, pp. 191-201). In 11 of 14 cases studied, he found systems were not initially developed with the idea of creating a competitive advantage, but rather, were intended only to improve the efficiency of internal operations. It was only later someone within the organization, and in no case was this individual an IS professional, recognized the potential for using the system to achieve broader corporate goals. Such recognition often coincided with changes in the external environment. For example, in the case of airline reservation systems, the impetus was the threat of travel agents uniting to create a reservation system independent of the airlines. This finding suggests the effort to develop new information system applications may be misguided - at least until all existing systems have been examined for potential to create a competitive advantage. For example, a computerized student registration system allowed students to register earlier and more comfortably, avoiding crowds and long lines. An unexpected end result was a better cash flow because students wanted to guarantee their course selection and therefore, paid their registration fees immediately. Incidently this enabled the University to meet its operating expenses in the latter part of the summer without having to borrow funds as was usually done. The moral of the story - sometimes you get lucky!

In his survey of the literature, Boon reports one interesting empirical finding which may be an appropriate concluding observation for this paper. In one survey, 55% of the respondents reported there was no recognized process for identifying opportunities for applying information technology. "The lack of appropriate planning, lack of top management support, difficulty in assessing tangible benefits and other priorities were major inhibitors" (Boon, 1988, p. 194). These results suggest any of the various suggested organizational and management concepts presented could be successful in facilitating the development of information systems which provide a competitive advantage. The important aspect is not so much the specified approach as it is the explicit recognition of the goal and development of a systematic approach to its attainment.

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EUROPEAN CONTRIBUTIONS TO MARKETING THOUGHT

MARKETING THOUGHT IN A POSTMODERN ERA

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Abstract
Initially dismissed as one among many intellectual fads, postmodernism now occupies a prominent position in all manner of academic disciplines. This paper examines the nature of postmodernism, explores its implications for marketing thought and evaluates the likelihood of a postmodern marketing revolution. It concludes that although postmodernity has much to offer the marketing discipline, a paradigm shift is possible but unlikely.

Introduction
Few terms have been so widely used, and abused, in recent years as "postmodern", "postmodernism" and "postmodernity". Appropriately, if somewhat cynically, described as "something that seems to entail buildings which have been constructed of Lego by the Mayor of Toytown and novels about novelists experiencing difficulty in writing novels" (Watkins 1991), the postmodern condition appears to have infected almost every arena of late-twentieth century intellectual endeavour (e.g. Featherstone 1988; Silverman 1990; Rosenau 1992). For the marketing academician, however, perhaps the most intriguing aspect of postmodernism is the pivotal role played by marketing related phenomena. A glance at any of the copious analyses of the concept reveals that the accoutrements of marketing comprise the very essence of the postmodern condition. Postmodern advertising campaigns are two-a-penny; postmodern shopping malls occupy almost every corner of the landscape; postmodern products are developed and distributed; postmodern price wars are waged and customer services provided; and postmodern shoppers purportedly indulge in a frenzy of marketer induced consumption. Indeed, as the manifold "shopping" epithets clearly testify - "shop 'till you drop", "when the going gets tough, the tough go shopping" and, singularly appropriately, "I shop therefore I am" - the urge to consume is a characteristic feature, perhaps the characteristic feature, of the postmodern age.

Given the hegemony of postmodern discourse in today's intellectual milieu and the prominent part played by marketing artifacts and practices, it is not surprising that the concept has attracted the attention of a small but rapidly growing number of marketing scholars. Broadly speaking, these contributions can be divided into three major categories. The first involves the use of the term as a chic synonym for "changed", "complex" or "new", often with respect to the dramatic political and economic upheavals of recent years - events in eastern Europe, the new world order, the rise of protectionism, fundamentalism, environmentalism etc. (Sonderlund 1990; Rothman 1992). The second strand stems from the sub-discipline of consumer research, where the term is closely associated with the advent of "naturalistic" or "interpretive" approaches to consumption activities, and the seemingly internecine struggle for control of the subject area (Sherry, 1991; Hirschman and Holbrook 1992). The third category of marketing research comprises "genuine" attempts to grapple with postmodernism (as it is understood in Europe) and includes such noteworthy contributions as those of Venkatesh (1989), Ogilvy (1989), Firat (1991) and Cova and Svanfeldt (1992).

Insightful though the last of these and several analogous analyses have proved, they have tended to be rather fulsome in their praise of the postmodern condition, somewhat sanguine in their assessment of its implications and, not least, seemingly preoccupied with the concept's ramifications for marketing practice rather than marketing theory. As this paper will endeavour to demonstrate, postmodernism has very serious implications for extant marketing thought, though it also offers a number of important conceptual attractions. However, before discussing the nature of postmodern marketing thought and assessing the likelihood of a postmodern marketing revolution, it is necessary to outline the principal properties of postmodernism and the postmodern condition.

The Postmodern Condition
In light of its ascendency in so many areas of intellectual endeavour, it comes as little surprise to discover that the postmodern condition has attracted manifold highly divergent - and, it has to be said, often less than illuminating - attempts to define its distinguishing features. According to its leading exponents, postmodernism consists of "incredulity towards metanarratives" (Lyotard 1984), "heterotopia" (Foucault 1986), "contrived depthlessness" (Eagleton 1986), "a series of perpetual presents" (Jameson 1985), "excremental

culture" (Kroker and Cook 1988), "bottomless fragmentation and ephemerality" (Harvey 1989), "the production and distribution of public attention" (Bauman 1992), "a regime of signification" (Lash 1988) and so on ad infinitum.

If, however, there is a lack of consensus - indeed clarity - on the nature of postmodernism and postmodernity, most authorities agree that it represents some kind of reaction to, or departure from, modernism and modernity. Dating from the Enlightenment of the eighteenth century and the debate between the ancients and the moderns, the project of modernity comprised an extensive effort to develop rational science, universal laws, absolute truths and, through the accumulation of objective knowledge, overthrow the irrationality of myth and religion (Turner 1990). Although the modern movement was far from monolithic, its archetypal exemplars - the architecture of Le Corbusier and Mies van der Rohe, the novels of Lawrence and Joyce, the art of Picasso and Pollock, the economics of Marshall and Keynes, the philosophy of Russell and Popper, the management principles of Taylor and Ford etc. - were all characterised by objectivity, rationality and universality. The project of modernity, in short, embraced the idea of progress, rejoiced in the power of reason, lauded scientific discovery and technological innovation, espoused the ascent of man, anticipated freedom from oppression and held that, once its fundamental laws and mechanisms were understood, the physical and social world as we know it could be analysed, planned and controlled (Smart 1992).

By the late 1960s-early 1970s, however, the modernist vision of ineluctable progress, scientific achievement and freedom from oppression had begun to pall. The counter-culture movements of this period, increasingly cognisant of modernity's less than illustrious legacy (death camps, nuclear weapons, environmental pollution, neocolonialism and so on), ushered in an era of widespread revolt against the authority, aspirations, assumptions and artifacts of the "establishment". In architecture, the austerity of the "glass box" International Style was replaced with the ornamentation, colour, pastiche and eclecticism of, amongst others, Sterling, Venturi, Jencks and Johnston. In philosophy, the rigour of logical positivism was undermined by the neo-pragmatism of Rorty, Feyerabend's ethos of "anything goes" and, thanks to Kuhn, the objectivity of scientific endeavour was exposed as a sham. In science, the certainties of the modern era gave way to a heightened appreciation of the inherent indeterminacy of the natural world (chaos theory, fractal geometry etc.) and the bizarre sight of the scientific elite expounding on spirituality and religion. In the arts, the distinction between high and low culture has been denuded (opera stars topping the hit parade, museums of the music hall and so on), participation substituted for contemplation (street art, body art, the "happenings" of Christo) and linear narratives abandoned for montage, flashback, disorientation and a decentred view of the subject (the tendency, for example, in contemporary fiction for the narrator to "step outside" the narrative and address the reader directly). In management, meanwhile, flexible work practices have been elevated over the specialisation of labour, hierarchical management structures have been superseded by flat or matrix organisations, labour relations are increasingly characterised by consensus rather than confrontation and the Fordist model of mass production reputedly replaced by the computer-aided customisation of the post-Fordist era (Harvey 1989).

Just as the project of modernity was by no means monolithic, so too the condition of postmodernity is less than clear cut and far from settled. Some see it as a continuation of modernism (Berman 1983), others consider postmodernism to be a complete break with the past (Bell 1976). Some regard it as degenerative and destructive (Habermas 1985), others rejoice in its cynicism and irreverence (Baudrillard 1988). Some draw distinctions between "postmodern", "postmodernity" and "postmodernism" (Featherstone 1991), others treat the terms synonymously (Jencks 1989). Indeed, some of the purportedly distinguishing features of postmodernism - discontinuity, ambiguity, self-referentiality etc.- are indistinguishable from those normally associated with modernism, thereby compounding the confusion over the concept's domain (Harvey 1989). In general, however, it can be contended that the postmodern condition is characterised by the celebration of scepticism, subversiveness, irony, anarchy, playfulness, paradox, ephemerality, fragmentation, style, spectacle, self-preoccupation and, above all, by hostility towards generalisations (such as the totalising "metanarratives" of Marx, Weber and Freud, and, naturally, attempts to generalise about postmodernism!). Postmodernists reject attempts to impose order and coherence upon the chaos and fragmentation of reality. Instead, they argue, we should accept that knowledge is bounded, that our capacity to establish meaningful generalisations is limited and, rather than seeking the impossibility of universal truths, we should rejoice in the ephemerality, contingency and diversity of the physical and human worlds as we experience them, be comfortable in the absence of certainty, learn to live without definitive explanations and recognise that the objectives of the Enlightenment project are utopian and unattainable.

Postmodern Marketing Thought

Although, as Firat (1993) has cogently demonstrated, the postmodern condition is apparent in all manner of marketing practices, marketing thought remains comparatively uncontaminated by postmodern perspectives. As the title of arguably the best known marketing management textbook clearly illustrates, the conceptual underpinnings of the discipline are predicated on the essentially modernist assumptions of analysis, planning, implementation and control (Kotler 1991). Academic marketers, in the main, maintain that an external reality exists; that it can be understood, modelled and manipulated; that meaningful generalisations can be derived; and, predictions ultimately made. Whether it be the 4 Ps, SWOT analyses, marketing planning procedures, new product development processes, Maslow's hierarchy of needs, the EBK model of consumer behaviour, the trickle-down model of fashion diffusion, the strategic matrices of Ansoff, Porter and the Boston Consulting Group, Copeland's classification of goods, the typologies of retailing institutions, hierarchies of advertising effects or whatever, the vast majority of marketing conceptualisations are basically modernist in orientation. They represent attempts - admittedly imperfect attempts - to make universal statements about marketing related phenomena.

The modernity inherent in marketing scholarship is nowhere better illustrated than in the frequently recycled legend of the marketing concept and its development. From the primordial soup and primeval swamps of the "production era", through the primitive life forms and neanderthal practices of the "sales era", to the homo-sapiens and utopian vistas of the "marketing era", the archetypal modernist metaphor of ineluctable progress and the ascent of man comprises the received wisdom on marketing's "evolution" (Gilbert and Bailey 1990). Equally teleological premises underpin the manifold models of the marketing development of the firm. These typically involve three, four or five stages of marketing evolution, commencing with the crudity and ignorance of the pre- or incipient marketing phases, through the advances of the early and reactive marketing phases, to the sophistication of the explicit or proactive marketing stage and the bestowal on an organisation of the ultimate accolade of "marketing orientated" (Carson 1985).

A postmodern perspective on marketing theory would not only challenge the above evolutionary conceptualisations (or their copious analogues, such as stage type models of internationalisation), but it would also question the bulk of marketing generalisations. If, as noted earlier, postmodernism is defined as incredulity towards metanarratives, then bemusement is likely to be the postmodernist's reaction to many of marketing's theoretical achievements. Granted, not every conceptual accomplishment would necessarily be swept away by the tidal wave of postmodernism. Models based upon a cyclical, rise and decline metaphor, which would include such marketing standbys as the product life cycle, wheel of retailing, fashion cycle, innovation diffusion and adoption etc., may be exempt according to some - but by no means all - commentators on the nature of modernity and postmodernity (Jencks 1989). Nevertheless of the totality of marketing generalisations, comparatively few would escape the censure of the postmodernistically inclined.

Given the time invested in, careers made by and (apparent) achievements of modern marketing, one suspects that most academicians might be unwilling to man the barricades of the postmodern revolution. A moment's reflection, however, suggests that the postmodernist's scepticism towards extant marketing theory is not entirely misplaced. Despite decades of research, the validity, reliability, universality and predictive power of the product life cycle, Fishbein's behavioural intentions model, Maslow's hierarchy of needs, the Howard-Sheth model and so on, are far from established (Foxall 1984; Wood 1990). Likewise, the teleological legend of the evolution of the marketing concept has been exposed on numerous occasions and the utility of stage type models of the firm/ internationalisation etc. has been challenged more than once (Fullerton 1988; Chell et al 1991). Indeed, even the strongest advocates of prominent marketing principles acknowledge that, when put to the test, the performance of the wheel of retailing, Porter's generic strategies model, the hierarchy of advertising effects and so on is far from perfect, though dignity is usually preserved through allusions to the pedagogic utility of the conceptualisation and assertions that with a modicum of additional research a superior version of the model is attainable (Brown 1991; Speed 1989; Barry and Howard 1990).

The reality, of course, is that the propagation of debatable concepts - even with all the appropriate health warnings and assurances of achievements to come - is counterproductive at best and pernicious at worst. The notion of the retail hierarchy, for instance, has given rise to decades of conflict between urban planners and retail organisations and impeded the introduction of innovative retailing concepts (Dawson 1982). It is not unknown, furthermore, for perfectly sound products to be killed off because of management's belief in the existence of a product life cycle (van Rossum 1984). A recent evaluation of the Boston matrix, moreover, concluded that, "It is a real worry that the original matrix is

seductively simple, and the temptations and risk of using it off the shelf are real...Those who now use it may be boxed in terms of restrictive assumptions about both the nature of market and competitive dynamics...It is a badly taught, outmoded and discredited orthodoxy, which is seductive and dangerous for our young managers of tomorrow" (Morrison and Wensley 1991). Given the reflexive nature of knowledge - what Giddens (1984) terms the "double hermeneutic" - where the very existence of a concept influences and alters the phenomena to which it refers, the dangers inherent in inappropriate theorising are clear.

Postmodernism, in sum, exposes the inherent limitations of many extant marketing models and theories. It asks not only whether exposure to the Boston matrix causes "cows" to be milked and "dogs" put to sleep unnecessarily, or whether the inordinate failure rate of new products is due, not to the inadequacies of the products themselves, but to companies' slavish adherence to marketing's misconceptualisation of the NPD process. It also asks the all-important question of whether companies/products/campaigns etc. succumb because they stray from the path of marketing righteousness, as marketers are wont to assume, or because the path itself is heading in the wrong direction. Postmodernism, in other words, implies that the fundamental issue to which we should address ourselves is not marketing myopia but the myopia of marketing.

Postmodern Marketing Revolution?

Although postmodernism provides a salutary, if harsh, reminder of the conceptual shortcomings and limitations of our discipline, a postmodern marketing revolution is unlikely to occur unless the concept offers more than the opportunity to indulge in a bout of scholarly recrimination and self-flagellation. Indeed, a philosophy which appears simply to deny and denigrate the theoretical achievements of modern marketing is likely to find few adherents, particularly when it appears to offer so little in return. The premises of postmodernity, what is more, are unlikely to escape close scrutiny and vigorous denunciation, especially when all manner of successful products/campaigns/companies etc. can be held up as exemplars of modern marketing and the adoption of the marketing concept. In this respect, a backlash against the neo-Nietzschean nihilism of postmodern perspectives is already apparent in a number of social sciences, such as politics and sociology (Norris 1992; Pangle 1992), and Bouchet (1992) has recently emphasised that marketers should not be excessively uncritical in their enthusiasm for postmodernity and the postmodern condition.

Postmodernism, however, does more than merely provide a welcome challenge to the sacred cows of marketing thought. It offers a number of significant attractions for academic marketing and provides the conceptual basis for issues with which the discipline is currently endeavouring to grapple. In the first instance, postmodernism holds out the prospect of a rapprochement between marketing theory and practice. If, as has often been noted, the practices of marketing are becoming increasingly influenced by postmodern perspectives (Firat 1991), there is a danger that traditional, modernist marketing conceptualisations will become further divorced from "reality" than they apparently already are (Sheth et al 1988). That being the case, marketing practitioners may well turn to other academic specialisms which appear to offer more meaningful insights into (say) the consumption behaviour of "post-shoppers".

Second, with its emphasis on academic ecumenism and epistemological plurality, postmodernism rejoices in and provides a rationale for the latterday fragmentation of marketing thought - Hirschman's (1986) humanism, Mick's (1986) semiotics, Kelly's (1989) existentialism, Morgan's (1992) critical theory and so on. Indeed, when it comes to much-debated issues like realism versus relativism, subjectivism versus objectivism and positivism versus interpretivism, postmodernism suggests it is not a question of either/or but of both/and.

A third and perhaps the most important attraction of postmodernism, however, concerns the philosophical underpinnings that it provides for many of today's much-vaunted marketing restoratives such as "micro-marketing", "maxi-marketing", "database marketing", "wrap-around marketing", "value-added marketing" and "relationship marketing". Although the premises of these panaceas are many and varied, they all possess one of two basic components: (a) an emphasis on dealing with the customer as an individual; or (b) a desire to retain existing customers, products or services rather than creating them anew. With regard to the former, however, the primacy of the individual - "different strokes for different folks", "do your own thing", "there is no fashion only fashions" - is precisely what postmodernism presupposes. Whereas modern marketing is predicated on the development of meaningful generalisations about consumers in the mass (or sizeable segments thereof), postmodernism emphasises the uniqueness, diversity, plurality and idiosyncrasy of each and every individual. In terms of the latter, likewise, postmodernism is characterised by a predisposition towards the old, the established, the tried-and-tested, the recycled and, as noted earlier, the "perpetual present". The complete opposite, in other words, of the progressive,

modernist odyssey for the new and improved, the innovative, the futuristic, the "washes whiter" and so on.

Despite the considerable attractions of postmodern marketing thought, it remains to be seen whether a conceptual revolution will occur. As Barnes (1982) has shown, Kuhnian-style paradigm shifts are rare in the social sciences (Kuhn (1970), of course, was at pains to stress the inapplicability of his model to human phenomena). The undeniable achievements and, after decades of research, the sheer inertia of modern marketing scholarship are sufficient to ensure that it will not be readily dislodged, particularly by a philosophy which appears primarily to propose navel gazing and the deconstruction or denigration of marketing's academic accomplishments. A plethora of marketing philosophies, where postmodernism is just one perspective among many, is perhaps the most likely outcome. According to Foxall (1990), indeed, such plurality is to be welcomed as it is only through the advocation and interaction of competing philosophies that scientific "progress" (if such a thing is possible) can be attained.

Conclusion

In recent years, the tidal wave of postmodernism has swept over all manner of academic disciplines ranging from anthropology to women's studies. As marketing phenomena play a central role in the postmodern condition, marketing academicians have not been slow to board this intellectual bandwagon, though the bulk of analyses thus far have concentrated on marketing practices rather than marketing theory. This paper has examined the nature of postmodernism, noting its serious consequences for marketing thought. Set against this, the concept provides a means of addressing some of the key issues on the current academic research agenda. Although a postmodern revolution or paradigm shift in marketing thought is possible, only time will tell whether the concept provides a new approach to marketing understanding or, in keeping with its espousal of ephemerality, it too will evaporate in the heat of academic debate.

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A REAPPRAISAL OF FRANCHISING ACROSS NATIONAL BOUNDARIES IN FOREIGN MARKET ENTRY MODE ANALYSIS

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Abstract

The traditional view of international franchising presented in foreign market entry mode analysis literature is that it ubiquitously involves a contractual, non-equity, non-direct association between the market entrant and host country entities. However, by describing the variety of organizational forms of international franchising employed by franchising firms today, this paper demonstrates that such a perspective is somewhat limited in scope. Franchising entrants can, and do invest equity in local operations, both at the sub-franchisor level and at the unit level. As a consequence, many of the assumptions currently held of international franchising as a foreign market entry mode must have their relevance challanged. A re-evaluation of international franchising in foreign market entry analysis literature is therefore merited.

Introduction

Once a firm has decided to operate its business function outside its domestic environment it has to select an organizational structure, or institutional arrangement, to service each foreign market so that predetermined objectives can be achieved. This selection of optimal foreign market entry mode has been described as a `frontier issue' in international marketing (Anderson and Gatignon, 1986), since the method chosen can have a major impact on the entrant's short- and long-term performance, not only in individual countries penetrated, but on its global operation as a whole.

A variety of foreign market entry modes are available to would-be entrants, including: exporting; the so-called `new forms of investment',[1] contractual arrangements that fall significantly short of majority entrant ownership (such as licensing, management contracts, turnkey contracts, international subcontracting and contractual joint ventures); equity joint ventures and wholly-owned subsidiaries.

Although a substantial body of literature has accrued describing the various merits and demerits (or benefits and costs) of these entry modes,[2] recent academic consideration of one such `new form of investment', franchising across national boundaries, remains limited. This is despite evidence that over the last three decades firms have increasingly employed this institutional arrangement in their internationalization process (Kaynak, 1988). Furthermore, much of the work that has been carried out to date in this area seems to have viewed international franchising as merely being domestic franchising extended to the international environment. Such an outlook may have impeded a full academic appreciation of this foreign market entry mode in the literature. The aim of this paper, therefore, is to demonstrate that the perspective of franchising across national boundaries currently held by market entry theoreticians has been somewhat simplistic and to lay some of the groundwork so that a more appropriate and comprehensive analysis can begin.

The Traditional View of International Franchising

The term franchising has many connotations and there are many different interpretations and descriptions of this business method (see, for example, Bradley, 1991; Euromonitor, 1987; Hoffman and Preble, 1991). However, emphasis is placed here on business format franchising (often referred to as second generation franchising) since this "seems to be the basis of all successful [international] franchising operations during the last three decades" (Götberg, 1989; confirmed by Sanghavi, 1990; Welch, 1989) and because market entry analysis literature concentrates on this business form.[3]

Although several different definitions of business format franchising (henceforth franchising) have been advanced, the International Franchise Association (IFA) encapsulate the main characteristics when they describe it as being: "a contractual relationship between the franchisor and franchisee in which the franchisor offers or is obliged to maintain a continuing interest in the business of the franchisee in such areas as know-how and training, wherein the franchisee operates under a common trade name, format or procedure owned by or controlled by the franchisor, and in which the franchisee has made or will make a substantial capital investment in his business from his own resources".[4] Franchising has thus been depicted as a hybrid organizational form, located somewhere between the extremes of vertical integration and completely independent operations (Thompson, 1991). It involves decentralized ownership and control at the production or final sales stage of a service together with centralized provision of such elements as know-how and brand-name promotion (Rubin, 1978). Although the parties to the arrangement are

independent (Adams and Mendelsohn, 1986; Caves and Murphy, 1976; Rubin, 1978), transactions that take place between them can be likened to those of intra-firm vertical integration (Norton, 1988) because features of the arrangement encourage the agent (the franchisee) to act in the interests of the principal (the franchisor). These features include unilateral termination clauses in the franchise contract (Rubin, 1978), the residual claimant status of the franchisee (Mathewson and Winter, 1985), hostage effects and asset specificity (Klein, 1980; Williamson, 1983), and reduced agency costs associated with monitoring and policing the contract (Brickley and Dark, 1987; after Fama and Jensen 1983). This arrangement therefore provides the franchisor with greater control than would occur in fully market transactions whilst avoiding some of the costs associated with full integration (Harrigan, 1983). Consequently, franchising has been regarded as a growth strategy which benefits the franchisor in terms of access to (franchisee) capital at lower risk and cost sharing; rapid market penetration at relatively lower cost than establishing ones own distribution network; economies of scale; and access to a network of motivated entrepreneurs (Hall and Dixon, 1989; Hoffman and Preble, 1991).

This perspective is presented by managerial economists and practitioners who have based their studies on companies which have confined their franchise systems to domestic markets only. It may be fair to suggest, however, that recent descriptions of franchising in the foreign market entry mode analysis literature has merely extended this domestic experience to the international environment. For example, Oman, in outlining a taxonomy of international market entry modes, describes international franchising in similar terms to the IFA's domestically oriented definition, when he says that "franchising may be regarded as a particular type of licensing or technical-assistance agreement. The franchisor usually provides the *locally owned* franchisee with a `package' including not only trade-marks and know-how but also local exclusivity and management assistance, in return for a down payment fee, royalties, and compliance with certain corporate regulations" (1984, p.15, emphasis added).[5] Other researchers similarly regard franchised operations in the host country as being independent from the franchisor in respect of ownership (for example, Götberg, 1989; Hoffman and Preble, 1991; Kaynak, 1988, amongst others) and, implicit with this, that the franchise arrangement is negotiated with each franchisee in the host country on an individual basis.

This clearly stated separation of ownership between the entrant, the franchisor, and the local entity (the franchisee) must infer that franchising, when applied internationally, is a contractual, non-equity, non-direct form of international investment. Certainly this is how it appears to have been treated recently by foreign market entry mode analysts (for example Anderson and Gatignon, 1986; Contractor, 1990; Czincota and Ronkainen, 1988; Erramilli, 1990; Root, 1987; Young, 1987; Young *et. al.*, 1989). The advantages and disadvantages, as described in this literature, of using franchising to access non-domestic markets reflects this point of view. To illustrate this, Table 1 is presented.

Initial observations of firm behaviour today indicates, however, that this traditional view of international franchising may not be entirely realistic. To explain this statement, it is pertinent to describe the different institutional arrangements available in practice to a franchising entrant.

Different Forms of International Franchising as an Entry Mode[6]

International franchising can be categorized broadly into one of the following five institutional arrangements.[7]

In **direct international franchising** the market entrant, the franchisor, transfers his business package (or format) directly to each individual unit (i.e. the sales outlet or production facility) in the host country. This can be done at arms-length by concluding franchise contracts with independent parties (franchisees), or it can be arranged hierarchically, by establishing franchisor-owned (i.e. company owned) units. These units can be referred to as external and internal franchisees respectively (Götberg, 1989). In this arrangement, all elements of the back-up and support that these units receive is provided directly by the franchisor from the home country.

However, the franchisor can also set up a wholly-owned branch or subsidiary in the host country in order to service, police and monitor the units created by direct international franchise contracts. This arrangement is termed **direct international franchising with subsidiary**.

Alternatively, the franchisor may establish a wholly-owned subsidiary in the host country to act as a sub-franchisor. In this arrangement, the subsidiary develops, services, polices and monitors its own sub-system mix of sub-franchisees and company owned units within a designated territory, using the business package provided by the franchisor. This is called **subsidiary international franchising.**

Similarly, a joint venture between the franchisor and a local partner can either be the franchised operation, or it can itself sub-franchise, in which case it again develops, services, polices and monitors its own sub-system mix of sub-franchisees and company-owned units under the dictates of a master franchise agreement. This is **joint venture international franchising.**

Finally, the franchisor can opt for **master international franchising.** This is a fully arms-length contractual arrangement in which the franchisor grants to

a single, totally independent entity in the host country the exclusive right to use the franchisor's business package either to open its own units or to sub-franchise within the host country or designated territory.

Some of the literature describing franchising in the international context does mention these arrangements in passing. For example, Walker and Etzel (1973) acknowledge area franchises and unit franchises (interpreted here as master franchising and direct franchising respectively). Welch (1989) identifies master franchising; Hoffman and Preble (1991), subsidiary and master franchising. Hackett (1976) excludes only the subsidiary international franchising option and also the possibility that the franchisor can also own sub-franchisees when it has equity in the sub-franchisor. However, Aydin and Kacker (1990), for example, do not recognise any of these arrangements at all, merely implying that all activity is direct international franchising. There is also little attempt in this literature to describe or define the terms used, or to fully explore and analyze the significance of these various franchising forms to foreign market entry mode analysis. These are oversights which need addressing before international franchising can be fully appreciated as a foreign market entry strategy.

International Franchising and Resource Commitment in the Local Market

A firm that is using, or has decided to use, international franchising as part (or all) of its internationalization process will have to decide, for each market being entered:- (1) which of the above institutional arrangements of international franchising should it deploy; (2) what amount of equity, if any, should be taken up in the sub-franchisor (in the case of joint venture international franchising); and (3) how many franchisees (in direct international franchising, with or without supporting subsidiary) or sub-franchisees (in joint venture and subsidiary international franchising) should be external to the franchisor and how many internal (i.e. the proportion of franchised to company owned units).

A franchising entrant's response to these three decisions can be conceptualized by placing each of its foreign market penetrations on Figure 1. This diagram attempts to demonstrate that, in real foreign market entrances using international franchising, the percentage equity that the franchisor has commited to a particular host country on entrance can, in theory at least, range along a continuum. This percentage equity can be zero at one extreme (master international franchising and direct international franchising in which each unit established is external, i.e. franchisee-owned) through to fully 100 per cent at the other, where all units and support facilities in the host country are franchisor owned (which can occur in direct international franchising, with and without supporting subsidiary, and in subsidiary international franchising). The global system of an international franchisor can, therefore, consist of a number of sub-systems, each located on a different position on this diagram depending on the international franchise arrangement used and the degree of equity committed. Clearly, this position of each sub-system is not fixed on Figure 1 but can change through time. Direct international franchising can become subsidiary international franchising gradually, for example in the case of a local company-owned subsidiary that is set up first to service existing franchisees then later develops its own sub-franchisees. Similarly, the proportion of internal to external franchisees or sub-franchisees in each market can evolve. Indeed, some authors have suggested that there may well be a life cycle effect in international franchising entry strategy. For example, Hackett (1976), Young *et.al.* (1989) and Welch (1989) propose that franchisors penetrate foreign markets with internal, company-owned units as a market testing strategy before `beginning major franchising efforts'.[8] Conversely, others concur with the domestically oriented observation of Lillis, Narayama and Gilman (1976) and suggest that international franchising is an inexpensive method of testing market potentials in a country prior to making a more substantial financial commitment (Hoffman and Preble, 1991; Root, 1987).

Conclusion

What the above account has attempted to demonstrate is that franchising, when used to extend a company's activities to non-domestic markets, can be institutionally more complex than the traditional view of this entry mode would suggest. Foreign market entrance using international franchising cannot always be regarded as a purely `arms-length' contractual arrangement between the entrant and a totally independent host country entity. This only occurs in master international franchising. In each of the alternative forms, the franchisor can, and does, invest equity in sub-franchisors and in units (internal franchisees and sub-franchisees).[9] It must therefore be unrealistic to view international franchising as always being a non-equity, non-direct investment activity. Indeed, as the proportion of internal to external franchisees increases in a given sub-system, at a certain point along the horizontal axis of Figure 1, *market entrance using several of the international franchising forms can effectively be regarded as foreign direct investment.*[10] At this point (and possibly earlier) many of the characteristics presupposed by the `traditional' view of international franchising, such as being a low capital outlay, low risk and low control market entry mode, for example, must begin to have their relevance challanged.[11] As a consequence, many of the assumptions

held by researchers regarding both the application of franchising as an international growth strategy and the motivation behind its deployment may require re-examination.

*** A full reference list of acknowledged citations is available from the authors.**

Footnotes

1. An expression coined by Oman (1984) and used, for example, by Hennart (1989).

2. Young *et.al.* (1989) comprehensively survey the literature of each of these entry modes.

3. The main characteristics of business format franchising are very similar to other operational forms of franchising, however, and much of what follows applies equally to all the franchising business methods described to date.

4. Quoted from Baron and Schmidt (1991).

5. Oman, in accord with many other researchers, refers here to the franchise agreement as a special type of licence. However, Konigsburg (1987) and Perkins (1987) argue that the two terms are legally distinct. Given some of the issues raised in this paper, this distinction becomes of special relevance in the context of foreign market entry mode analysis and, consequently, the two terms should not be used synonymously.

6. Both the practice and study of franchising are impeded by the confusing terminology surrounding the subject. In order to introduce uniformity, Konigsburg (1987) has outlined a lexicon of recommended terminology to which this paper conforms throughout.

7. This section is based on literature that describes the legal aspects of extending franchise systems to international markets (see, for example, Abell, 1990; Mendelsohn, 1992) and also draws on preliminary observations of UK-based franchisors operating overseas and non UK-based franchisors operating in the UK.

8. Hackett (1976) p. 71.

9. It is noted that franchisor ownership of units in a system is a well documented phenomenon, observed in both the domestic context (Brickley and Dark, 1987; Caves and Murphy, 1976; Norton, 1988; Thompson, 1991) and internationally (Aydin and Kacker, 1990; Brooke, 1986; Hackett, 1976; U.S. Chamber of Commerce, 1988; Walker and Etzel, 1973; Welch, 1989). However, unlike the domestic context, there has been little effort to analyze or explain patterns of franchisor owned to franchised units in the international context.

10. Despite this possibility, market entrance which involves a high (or total) proportion of internal to external units, or where equity is being invested in another form in the host country, should still be regarded as international franchising. This is because it is merely the institutional mode of transfer of the entrant's business format that differs between hierarchical and 'arm's-length' transactions (i.e. whether the transfer takes place within the firm or in the open market). The essential characteristics of the transferred business will remain the same and the consumer can perceive no apparant difference between franchisee-owned and franchisor-owned units in the system. Indeed, this is one of the aims of the franchisor (Sanghavi, 1990). Furthermore, this package can be transferred to sub-systems with entirely internal units in one and entirely external units in another, while equally, individual units in one country can be easily transformed from being franchisor-owned to company-owned and *vice versa.* The term 'international franchising' can embrace each of these eventualities.

11. The perspective of franchising put forward by managerial economists still retains its relevance in each country sub-system, i.e. between the sub-franchisor and any sub-franchisees. However, it is argued here that this view cannot automatically be held when franchising across national boundaries involving equity commitment is considered.

Table 1 Advantages/Disadvantages to the Entrant of Franchising Across National Boundaries Described in the Literature

Advantages	**Suggested By** (amongst others):-
Low risk, low cost entry mode.	Brooke (1986); Götberg (1989).
Ability to develop new and distant international markets, relatively quickly and on a larger scale than otherwise possible.	Bradley (1991); Götberg (1989); Root (1987); Young *et. al.* (1989).
Using highly motivated business contacts with local market knowledge and experience.	Bradley (1991); Götberg (1989); Root (1987).
Creating additional turn-over with small investments in, for example, personnel, capital outlays, production and distribution.	Bradley (1991); Götberg (1989); Young *et. al.* (1989).
Precursor to future direct investment in the foreign market.	Götberg (1989); Hoffman and Preble (1991); Root (1987).
A standardized, worldwide company profile and brand image is created generating economies of scale in marketing to international customers.	Brooke (1986); Götberg (1989); Root (1987).
Disadvantages	
Lack of full control over franchisee's operations resulting in problems with cooperation, communications, quality control, etc.	Götberg (1989); Root (1987); Young *et. al.* (1989).
Limitations on franchisor's profit.	Götberg (1989); Root (1987).
Costs of creating and marketing a unique package of products and services recognised internationally.	Götberg (1989).
Costs in protecting goodwill and brand-name.	Götberg (1989).
Problems with local legislation, including transfers of money, payments of franchise fees, and government imposed restrictions on franchise agreements.	Götberg (1989); Root (1987).
Disclosing internal business secrets and knowledge may create a potential future competitor.	Götberg (1989); Root (1987); Young *et. al.* (1989).
Risk to the company's international profile and reputation if some franchisees under perform.	Götberg (1989).

Figure 1.

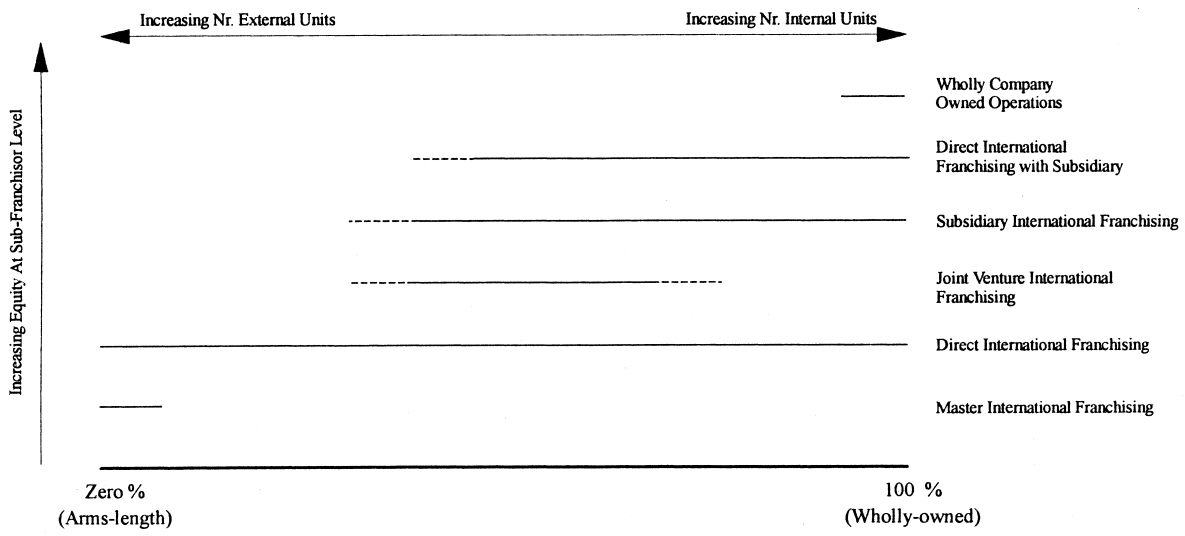

Figure 1. Spectrum of Franchisor Ownership Levels Possible in Host Country for each International Franchise Arrangement

COMPETITIVE RETAILING STRATEGIES IN GERMANY: AN EMPIRICAL STUDY

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1. Introduction

Ten years ago, most retailers in Germany were sceptical about long-term, strategic planning in the retail industry. They were convinced that the success of a retailer depends on the ability to adjust quickly to changes in consumer behaviour, legal developments, technology and competition. Some retailers were afraid that strategic plans could lead to inflexibility. Recently, however, this attitude has changed, probably because of rising competition, an increase in the concentration process in retail trade and international retailer expansion (Mueller-Hagedorn, 1987).

Furthermore, in times of increasing market saturation, stores tend to resemble one another and offer comparable products at comparable prices, thereby losing profile. Many retailers fear a "crowding-out of competition" in the nineties and the question frequently asked is how customer loyalty can be established. Store positioning becomes more and more important.

Porter's competitive strategies (1980) are now almost classical concepts that are often discussed with respect to periods of stagnating economic growth when the forces driving industry competition gain in importance. Porter discusses three potentially successful strategic approaches to outperforming other firms:

- overall cost leadership
- differentiation
- focus (serving a particular target group especially well either by differentiation or by lower cost).

According to Porter's concept, many retail specialists (Tietz, 1992) anticipate a polarization between low-price mass merchandisers[1] and "higher-priced", "high value offer"-retailers. The fundamental question posed by this paper is whether these two diametrical strategies are successful. The effectiveness of price leadership on the one hand and a differentiation strategy on the other is analysed. The following investigation takes into consideration both the retailer's as well as the consumer's evaluation of the different retail strategies.

2. Price Leadership and Differentiation Strategy

Porter (1980, p.3) declares that "the essence of formulating competitive strategy is relating a company to its environment". Key features that determine the strength of the competitive forces and hence profitability should be analysed. Structural determinants of the intensity of competition among retailers may be the:

- threat of new entrants in the same retail firm category or other types of retail firms which still exist on the market (efficient forms of retailing are imitated relatively rapidly)
- bargaining power of manufacturers (the higher the strength of the retailer's demand-based power the lower the intensity of competition)
- bargaining power and behaviour of consumers (do the retailers meet the needs and shopping motives of the consumers?)
- threat of substitute retail types (15 years ago, many retailers in Germany did not anticipate the emergence and success of teleshopping or factory outlets. Today some futurologists think that the "cyberspace" supermarket[2] will crowd out the traditional supermarket at the beginning of the new century (Popcorn, 1992, p.143)).

A "price-leadership" strategy in retailing entails the following considerations:
Retailers which attempt to achieve a price-leadership need a high market share. They must be able to offer price reductions: they either have to sell the same brands as their competitors or they have to offer a nearly equivalent assortment at lower prices. This objective indicates that retailers should:

- have an "efficient scale" for the purpose of exerting market power. "Efficient scale" does not only refer to the absolute amount of turnover of the company. The structure of the retail-portfolio must also be adequate. A "healthy portfolio" means that there is only a small number of retail outlets belonging to the segments of "dogs" and "question marks".
- consistently obtain rebates and special conditions, discounts on advertising costs, free rack jobbing etc.,
- explore cheap supply sources (e.g. re-imports, knowledge of brokers)
- have effective theft-controls,

- have an efficient stock control, high rates of stock turnover,
- cut expenses on store design and services,
- select cheap, rented property,
- use electronic point of sales equipment and other state of the arts technology,
- and - in contrast to Porter - advertise extensively on price.

It is critical that a retailer's managerial policy stringently aims at a low price-leadership-strategy. This is, however, not sufficient. It should be emphasised that a retail firm which wants to be successful with a low cost (or price) strategy needs a high market share and a rapid stock turnover. Therefore a large number of consumers must recognise and remember the low prices. The influence of the price image on the choice and the evaluation of stores must be analysed.

Price image of stores

The price image of a store can be defined as the consumer's evaluation of the store as to whether it sells products at favourable prices or not (Nystroem, 1970). Simon (1989, p.251) emphasises that the **price image** in retail management is vital, because consumers do not remember the prices of all relevant products. If a customer plans to buy a product whose price he does not know, the price images of stores will often influence his choice of stores.

There are two competing hypotheses which attempt to explain consumers' formation of price images. The first thesis (which is prevalent in the older literature) contends that a consumer's price image of a store is affected by prices of a few products, particularly those that are on price promotion and/or that are advertised (Simon, 1989, p.252), i.e., promotions of well-known branded products give the impression that the rest of the stores assortment is low-priced as well. Recent research supports the second thesis that consumers are not deceived by price deals but that they perceive overall price levels of stores accurately. Consumers are able to differentiate between price promotions and the normal price-level (Diller, 1981, p.58).

For this reason, strategic thinking should not be directed toward individual products but toward building a good price image (i.e.**generally** favourable price perceptions) of the store (Simon, 1989, p.253).

Lenzen's (1984) empirical study showed highly significant positive correlation between price images and actual purchases. The influence was extremely strong when consumers had incomplete information on the prices charged for the same product by different stores. In such a situation, consumers must rely on the price image or must explicitly compare prices in different stores.

Most empirical investigations were conducted in the food sector (Diller, 1981; Lenzen, 1984, Hamm, 1993). In this sector, consumers know many different brands; they have a distinct perception of the real prices or they have a "feeling" for fair prices. In the non-food sector, knowledge of prices is not so strongly developed because people do not buy shopping goods as frequently as convenience goods in the food sector. Despite this fact, consumers also have clear price performance expectations in the non-food sector. Following the empirical findings mentioned earlier, it is to be supposed that non-food retailers not only have to offer price-promotions, but also have to offer a **generally** low price-level. In addition, consumers must perceive an economy-priced assortment. A non-food retailer who wants to pursue a price-strategy and tries to hold down cost, must be wary of a "junk-goods-image". Consumers should have a positive evaluation of the merchandise, the value for money-ratio. It is not sufficient only to sell cheap goods; quality must be adequate as well. Furthermore, it would be interesting to analyse if store design influences price-image perceptions.

The differentiation strategy

Porter (1989) argues that pursuing one of the three generic strategies is in essence, more successful than, as Porter puts it, being "stuck in the middle". Nevertheless, there are certain dangers which may cause the strategies to fail. Diller and Kusterer (1986, p.105) point out that, among other risks, the discount concept can easily be imitated by other competitors.

In contrast to price leadership, approaches towards differentiation can take many forms, but all with the aim of creating a distinct, clear and consistent image. Store image can be defined as the way in which the store is experienced in the shopper's mind, partly through its functional qualities and partly through an aura of psychological attributes (Berman and Evans, 1989, p.457). The price-image is only one attribute of the overall store image. Numerous non-price factors contribute to a store image:

- merchandise attributes (assortment, quality, brands, etc.),
- customer service attributes,
- communication attributes,
- personnel attributes (knowledge, personality, friendliness of personnel),
- physical attributes (store exterior, general interior, store layout, all forms of visual merchandising, theme- or ensemble setting, displays etc.)

- general attributes (tradition of the firm, target market sought etc.).

The totality of these factors determines the overall image of a store. Due to the manifold possibilities of combining the marketing-mix instruments as discussed, many retailers have the chance to create a unique image. One differentiation-strategy is to offer a "specific emotional benefit": This is the subjectively experienced contribution to the quality of life of the consumer conveyed by the place of purchase (Weinberg, 1986; Groeppel, 1991). Shops that create buying experiences for their customers should be full of surprises, evoke a generally pleasurable atmosphere and should adjust the whole marketing-mix to the central values of consumers (like communication, nostalgia, nature, health, etc.)[3].

Differentiating means the creation of a unique store image, that is, in consumer's mind, a retailer has to be placed in a niche relative to competitors based on its perceived image. Store positioning maps (e.g. by multidimensional scaling) should lay the foundation for differentiation strategies[4].

Research problem

The price strategy as well as the differentiation strategy of retailers should be analysed from the point of view of consumers as well as from the point of view of retailers. The research hypo-theses are as follows:

From the retailer's perspective:
If retailers stringently follow either a strategy of price leadership or a strategy of differentiation, they will be more successful than those retailers who are "stuck in the middle".

Independent variables: Business managers' attitudes towards each strategy
Dependent variables: Key numbers (e.g.: turnover per square meter)

From the consumers' perspective:
Consumers will favour those retailers who follow either a strategy of price leadership or a differentiation strategy over those retailers who are "stuck in the middle".
Independent variables: Strategies of the retail firms
Dependent variable: Consumers' images of the firms

3. Empirical findings

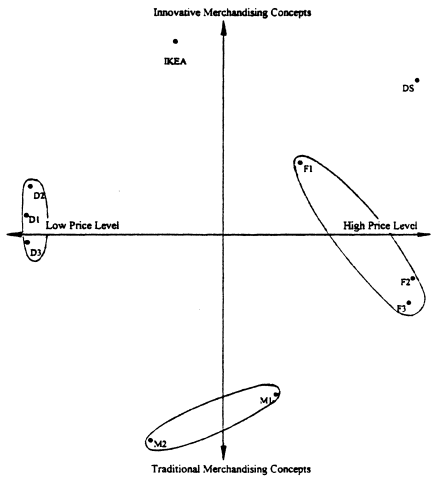
3.1 Results of the research on consumers

In July 1992, nearly 500 consumers in Paderborn, Germany, were interviewed, firstly, about the perceived similarity of 10 furniture retail stores belonging to different retail categories and secondly, more detailed about their impressions and attitudes towards one only of the 10 furniture retailers. Rating scales formed the basis of the research instrument. The surveys were conducted in the homes of the test subjects. The statistical procedures were executed with the programs SPSS/PC+ and UCINET 3.0.

3.1.1 Multidimensional scaling

The MDS-procedure was conducted with UCINET 3.0. A two-dimensional solution was chosen. The stress value of Kruskal is 0.03 and can be characterized as excellent. Figure 1 shows the plot of stimulus space.

Figure 1



Legend:

D = Discounters	M = "In the Middle"	F = Specialized Retailers	DS = Design Shop
D1 = SB-Moebel	M1 = Osthoff	F1 = Finke	(= Wohnen&Ideen)
D2 = Roller	M2 = Voss	F2 = Ruhe	
D3 = Suedring	F3 = Schoppe		

The horizontal axis of the stimulus plot can be labelled as the price dimension, the vertical as the intensity of innovative merchandising concepts. Furthermore, this store positioning map suggests a classification of the 10 stores into five segments according to their plotted proximity. The first group consists of the three discounters Roller, SB-Moebel and Suedring, the second group of only one member: IKEA and the third group consists of the firms Osthoff and Voss[5] which are two furniture warehouses.

Although the group membership of Finke may be arguable, Finke, Schoppe and Ruhe are grouped in one segment[6]. These three retailers belong to the traditional category of specialized retail trade. The differences between Finke on the one hand and Schoppe and Ruhe on the other hand are discussed later. Finally, one store, Wohnen & Ideen, a design-oriented furniture shop, comprises the fifth group.

The MDS-analysis was conducted mainly to analyse the similarity of the 10 different retail firms and to classify the objects into discrete market segments. As mentioned before, all discounters are perceived similarly. IKEA as well as Wohnen & Ideen (the "design-shop") have outstanding positions in the plot. Osthoff and Voss, the retailers of the third group, can be characterized as those firms who are "stuck in the middle" because they can neither be classified with the low price retailers, nor do they offer innovative merchandising concepts. Of course, it is easier to explain a MDS-plot when information about not only the overall similarity but about the detailed evaluation of various image dimensions of the firms is derived as well. Therefore, in the following section, the images of the new formed segments will be investigated.

3.1.2 Analyses of the different images of the retailers

The test subjects were given a large number of different questions on their impressions of and attitudes towards the stores. Each test subject had to evaluate only one of the 10 stores.

Initially, factor analyses[7] were applied to all item- and statement batteries to avoid implicit weighting and to establish primary dimensions (see the following table). The denotation of the different factors is in boldface.

Table 1: Results of the factor analysis of image statements

The furniture retailer:	
- offers high-quality products - has distinctive, unique products - offers the latest fashion - does not offer "junk goods" - offers goods that are not available in other shops	**"special assortment"**
- offers a reasonable supplementary assortment (i.e. goods related to the main assortment) - customers are not kept waiting	**"good service"**
- invites browsing - has an appealing shop design / product presentation - presents the furniture in its daily environment - has exciting attractions - it is easy to find one's way around the store	**"exciting shop-design"**
- offers competent and friendly advice - could be my employer if I were engaged in the furnishing trade - is a traditional and respected firm - has skilled personnel	**"advice and PR"**
- offers consistently low prices - offers "fair" prices to the customers - does not demand excessively high prices - serves people who want to save money but do not need to do so	**"price level"**
- has good special offers	

Table 2: Results of the factor analysis of the impression profile (items)

extraordinary, original, striking, appealing, full of life, special, varied, intimate, compelling, relaxing	**"unique"**
assorted, clear	**"easy to orientate"**
well-priced	**"well-priced"**

In a second step, an analysis of whether the consumers have different attitudes towards the 5 retailer groups was undertaken. If the same importance is attached to all image dimensions that were derived from the factor analyses the following ranking can be stated (1=best image, 5=worst image):

1. Specialized retailers (Schoppe, Finke, Ruhe; n=85)
2. Design-shop (Wohnen & Ideen, n=42)
3. IKEA (n=44)
4. "In the middle" = (the "uncommitted") (Osthoff, Finke; n=85)
5. Discounter (Roller, SB-Markt, Suedring; n=130).

This result shows that the discounters which follow a low price strategy are inferior to all other retail categories. According to this ranking, on "superficial inspection", the thesis *"Consumers will favour those retailers who follow either a strategy of price leadership or a differentiation strategy over those retailers who are 'stuck in the middle'"* cannot be confirmed.

A closer look at the results shows that price leaders do indeed have to be aware of a "junk goods image". This result is in keeping with Porter's warning that a low price strategy can easily translate into a "junk goods image" unless adequate attention is paid to quality. In other words, price alone is not decisive. IKEA which can be counted to the category of discounters as well, is evaluated

Table 3: Image Comparison between discounters, "in the middle", IKEA (oneway)

Independent / Dependent	*Mean Group D "Discounters"*	*Mean Group M "in the middle"*	*Mean Group I "IKEA"*	*Total Group D*	*Total Group M*	*Total Group I*	*Comparisaon of Significance Group D -Group M*	*Comparisaon of Significance Group D - Group I*	*Comparisaon of Significance Group M - Group I*	*Homogeneous variances*
unique atmosphere	-0,936	-0,204	0,334	139	88	46	0,000	0,000	0,000	yes
easy to orientate	-0,060	0,109	-0,277	139	88	46	n.s.	n.s.	0,033	no
well-priced	0,442	-0,326	0,750	139	88	46	0,000	0,044	0,00	yes
special assortment	-1,043	-0,079	0,057	127	76	46	0,000	0,000	n.s.	no
service	0,048	0,136	-0,781	127	76	46	n.s.	0,000	0,000	no
exciting store-design	-0,763	-0,149	0,565	133	80	40	0,000	0,000	0,000	yes
price promotions	0,638	-0,081	0,626	133	80	40	0,000	n.s.	0,000	yes
advice and PR	-0,798	0,314	-0,311	99	70	37	0,000	0,002	0,000	yes
price level	0,670	0,148	0,394	99	70	37	0,000	n.s.	n.s.	es

significantly more positively than the other discounters and those retailers who are "stuck in the middle". IKEA is not only perceived as fairly priced, but the assortment and the store atmosphere are also evaluated positively. Store atmosphere and assortment are very important image dimensions. A regression analysis between all image dimensions (including all price aspects) (= independent variables) and the statement "I do not like the shop at all ...I like the shop very much" (= dependent variable) shows that the shop-appeal is influenced only by the uniqueness of the assortment, by an exciting store atmosphere and by the evaluation of the communication-mix (evaluation of the advice of the sales personnel, public relations). The multiple regression coefficient is 0.805. Due to these results, it is more sensible to formulate the following relation:

If a store's low price strategy is to be successful it needs to differentiate itself in some significant way (in the minds of consumers) from other discounters.

As far as the comparison between retailers who pursue the differentiation strategy and retailers who are uncommitted ("stuck in the middle") is concerned, the hypothesis from the consumers' perspective can be confirmed. Table 4 shows that the traditional specialized retailers are evaluated significantly better than the retailers who "stuck in the middle". The same applies to the designer-shop that holds a special position in the MDS-Plot. Wohnen & Ideen received the best evaluation with regard to the uniqueness of the assortment and the poorest marks with regard to the price level. This retailer pursues the differentiation strategy very consistently. The success of this retail policy is dependent on two prerequisites: The retailer has to offer permanently distinct and unique products which are not available in other shops. In addition, the firm needs enough consumers who are willing and able to pay the required high prices.

Table 4: Image Comparison between "in the middle", specialized traders, the "design shop" (oneway)

Independent / *Dependent*	*Mean Group M "in the middle"*	*Mean Group F "Specialized traders"*	*Mean Group DS "Design-Shop"*	*Total Group M*	*Total Group F*	*Total Group DS*	*Comparisaon of Significance Group M - Group F*	*Comparisaon of Significance Group M - Group DS*	*Comparisaon of Significance Group F - Group DS*	*Homogeneous variances*
unique atmosphere	-0,204	0,655	1,013	88	133	45	0,000	0,000	0,003	yes
easy to orientate	0,109	0,259	-0,510	88	133	45	n.s.	0,001	0,000	no
well-priced	-0,326	-0,2736	-0,686	88	133	45	n.s.	0,029	0,008	yes
special assortment	-0,079	0,782	0,968	76	118	45	0,000	0,000	n.s.	no
service	0,136	-0,036	0,528	76	118	45	n.s.	0,019	0,000	no
exciting storedesign	-0,149	0,607	0,394	80	123	41	0,000	0,001	n.s.	yes
price promotions	-0,081	-0,499	-1,023	80	123	41	0,000	0,000	0,000	yes
advice and PR	0,314	0,615	0,213	70	99	36	0,020	n.s.	0,013	yes
price level	0,148	-0,503	-1,152	70	99	36	0,000	0,000	0,000	yes

Table 5: Image Comparison between Schoppe, Finke, Ruhe (oneway)

Inde-pendent / *Depen-dent*	*Mean Schoppe*	*Mean Finke*	*Mean Ruhe*	*Total Schoppe*	*Total Finke*	*Total Ruhe*	*Compa-risaon of Signifi-cance Schoppe - Finke*	*C ompa-risaon of Signifi-cance Schoppe - Ruhe*	*Compa-risaon of Signifi-cance Finke - Ruhe*	*Homo-geneous variances*
unique atmos-phere	0,805	0,504	0,681	43	50	40	0,036	n.s.	n.s.	yes
easy to orientate	0,312	0,365	0,068	43	50	40	n.s.	n.s.	0,037	no
well-priced	-0,662	0,348	-0,633	43	50	40	0,000	n.s.	0,000	yes
special assort-ment	1,085	0,605	0,818	36	43	32	0,000	0,022	n.s.	no
service	0,237	-0,530	0,303	36	43	32	0,000	n.s.	0,000	yes
exciting store-design	0,577	0,850	0,423	37	42	38	0,05	n.s.	0,11	yes
price promo-tions	-0,785	-0,057	-0,765	37	42	38	0,000	n.s.	0,000	yes
advice and PR	0,928	0,340	0,592	33	32	33	0,003	n.s.	n.s.	yes
price level	-0,591	-0,117	-0,801	33	32	33	0,014	n.s.	0,000	yes

As mentioned before, retailers have many means at their disposal which can create a unique image. Table 5 demonstrates the differences between Schoppe, Ruhe and Finke. All are evaluated very positively, but, the MDS-solution should be borne in mind, Ruhe and Schoppe lie very close to each other whereas Finke is located further away from them. Table 5 shows that Finke is evaluated more positively than the other two competitors with regard to the price dimension, the service activities and the store design.

3.2 Results of the research on retailers

Again, factor analyses were applied initially to the statement batteries that measure the attitudes of retail managers towards different marketing strategies in order to avoid implicit weighting and to establish primary dimensions. The denotation of the different factors is in boldface.

Table 6: Results of the factor analysis of business managers' attitudes

"Attitude towards market segmentation"

I would like to serve only one or a few customer segments in an optimal fashion, even if I run the risk of alienating a large segment of the clientele.

The broader and more conventional the line of products, the better.

I have to cater for a broad spectrum of tastes. (-)*

I would like to please as many customers as possible by my business policy. (-)*

A furniture retailer should not sell furniture, but life styles.

"Attitude towards a cost-intensive service"

The setting-up and repair service of my firm is trained continuously, despite higher costs.
My furniture store rejects offering specific services and guarantees and instead sells furniture at lower prices. (-)*
I feel more like an indoor decorator who offers his customers complete solutions, and les like a trader.
Thorough quality controls by my personnel are a matter of course for me, despite costs and time.

"Attitude towards a pleasant shop atmosphere"

My shop should be a place of purchase for my customers. They can spend their spare time in a more reasonable way elsewhere. (-)*
We gather information on other social areas as well, like on the latest fashion, on new art, etc.
The more extraordinary the shop design and the presentation of the goods,the better.
My motto: To strike a happy medium is always appropriate. (-)*

"Attitude towards trademarks and brands"

This furniture store should only deal with branded goods.
You pay more unnecessarily for branded goods.We buy only imitation goods. They are as good as branded items.

"Attitude towards trends"

In this furniture store, the assortment is always oriented towards the latest fashion trends.

"Attitude towards price setting and conditions"

We are a furniture store for customers who want to save money but do not need to do so.
My motto: Sell the furniture at the lowest possible price.
When selecting my manufacturers, the terms of sale (e.g. discounts) play the most important role.
I like buying furniture from Eastern Europe or South-East Asia. Despite the fact that I have to expect a higher number of substandard goods, the furniture is still cheaper.
I constantly observe my competitors and adjust my prices and my line of products in relation to the strongest competitor.

"Attitude towards related assortment"

Nowadays, a house furnishing firm has to offer supplementary lines of products (such as glass or porcelain).

(-)* = negative factor loading

Table 7: Final Cluster Centers

Factor	*"In the middle" n=14*	*"Price-leaders" n=12*	*"Differentiators" n=9*
market segmentation	-0,430	-0,500	0,764
service	0,619	-0,866	0,425
store atmosphere	-0,729	0,140	0,688
trademarks/brands	-0,062	-0,518	0,923
trend orientation	0,612	-1,046	-0,107
prices/conditions	0,242	0,514	-1,107

As a second step, a hierarchical cluster analysis (Ward algorism) was used to classify the different retailers into discrete market segments. The following table shows the results of the cluster analysis.

Interpretation of the cluster analysis

Three clusters can be differentiated. The first cluster can be regarded as the **"Price-leaders"**. The retailers of this segment are interested only in selling their furniture at the lowest possible price. The strategic thinking is stringently adjusted to this target. These retailers need to cater for the taste of a broad clientele. They are neither interested in cost-intensive service nor do they like to offer expensive branded goods. The second segment, the **"Differentiators"**, can be characterized as quite the reverse of the "price leaders". These retailers want to sell high-quality goods which meet the life-style of the clientele. In addition, they like to create an appealing store atmosphere and try to offer generally good service. Yet, members of this cluster do not follow the latest fashion. In the third group there are retailers who cannot decide between the price- and the differentiation strategy. They are **"stuck in the middle"**.

In a third step, the thesis about the economic success must be analysed:

If retailers stringently follow either the strategy of price leadership or the strategy of differentiation they will be more successful than those retailers who are "stuck in the middle".

It is not possible to use an analysis of variance to investigate significant differences in economic ratios between the three clusters due to the small sample and due to the fact that not all of the retailers disclosed their turnover. Nevertheless, according to tendency, in the retailing sector, Porter's thesis can be confirmed (see the following table).

Porter (1980, p.43) points out that in some industries, the "problem of getting caught in the middle may mean that the smaller (focused or differentiated) firms and the largest (cost leadership) firms are the most profitable, and the medium-sized firms are the least proftibale. This implies a U-shaped relationship between profitability and market share". Though today this controversial thesis is still discussed, - according to the empirical findings - it can be applied to this investigation.

4. Final discussion

The following findings can be noted:

- The primary attitude dimensions towards different marketing instruments are suitable criteria to classify retailers.
- The research on retailers supports Porter's thesis that managers have to decide either to pursue the differentiation strategy or price-leadership. It is advisable, of course, to emphasize this result by bigger samples or by other branches.
- The image analysis on consumers does not yield such a clear picture. Research on consumer behaviour indicates that indviduals are becoming more self centered and show a greater need for self expression. Demographic, economic and life-style changes have led to a "new type of a consumer" who strives after self-actualization and attempts to demonstrate and realize individuality through his/her purchases. In

Table 8: Economic ratios and retailer segments (qm = squaremeter)

Economic ratios	"In the Middle"	"Price-Leaders"	"Differentiators"
Turnover	DM 6.787500,-	DM 33.233.333,-	DM 4.328570.-
Total area	5618 qm	9268 qm	2241 qm
Turnover/total area	DM 1208 per qm	DM 3585 per qm	DM 1932 per qm
Sales area	4107 qm	5884 qm	1592 qm
Turnover/sales area	DM 1653 per qm	DM 5648 per qm	DM 1892 per qm
Sales personnel (n)	24	61	13
Turnover/personnel	DM 282812 per p.	DM 544809 per p.	DM 332967 per p.
Sales area/personnel	171 qm per p.	97 qm per p.	122 qm per p.

addition, the new consumers wish to conduct their shopping in an out-of the oridinary ambience. Probably, this new life-style is the reason for consumers' negative evaluation of cheap furniture discounters. For this reason, from the consumers' point of view, it is not sufficient only to offer low prices. IKEA has an outstanding position in the MDS-plot because IKEA (in Germany) does not only offer cheap goods but an intimate and extraordinary store design as well.

- Ruhe and Schoppe have very positive images. Nevertheless, both retailers should try to develop a more distinguished profile, as they have nearly the same position in the MDS-plot. The competitive situation of Finke can be characterised as promising if Finke does not neglect to offer high-quality, unique products in the future and if Finke continues to develop an extraordinary shop atmosphere.

Prospects for further investigations:

In this paper, only the most important results could be discussed. Space limitations prohibit an analysis of statistical details[8]. In the future, separate investigations from the consumers' perspective as well as from the retailers' perspective should be conducted. From the consumers' perspective new studies should investigate the relationship between store-atmosphere, store design and the evaluation of the price-level. From the retailers' point of view studies about the effectiveness of various differentiation-strategies will be useful (Esch, 1992). Retailers who are uncommitted need information about the influence of different marketing instruments on store-positioning maps in order to choose the right strategy.

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[1]Of course, "overall cost leadership" cannot simply be equated with "price leadership". A low cost retailer does not have to sell at a low price - he simply has to operate at the lowest relative cost. In contrast to that, a price-leader must have very low costs - otherwise this retailer is unable to offer price benefits. Price-leaders in retailing have to cut their costs by securing the best possible conditions of delivery and payment.

[2]The key word is "virtual reality". Computer-controlled pictures and perceptions create a synthetic, 3-dimensional, interactive world which can be seen, felt, heard and touched by the human being. Consumers do not have the feeling of sitting in front of a computer at home, but - by the so-called "Home-Reality-Engine" - they can call up different programs and get the impression of real-life shopping in a supermarket or in the most exotic shops of their preference.

[3]A famous example for a successful emotional benefit strategy in retailing is the "BodyShop". Because we have to contend with problems of pollution, energy shortage and the depletion of natural resources, the BodyShop shows concern for these natural factors and sells cosmetics made entirely of natural ingredients (animal testing of products is not allowed).

[4]Store positioning enables a retailer to determine how consumers perceive the company relative to its competitors.

[5]In August 1992, one month after the interviews, the retail firm Voss was taken over by Osthoff.

[6]In fact, the distance between Finke and Rube is smaller than the distance between Finke and Wohnen & Indeen.

[7]This and the following statistical procedures were conducted with SPSS\PC+.

[8]For further information see Groeppel (1993).

A COMPARATIVE STUDY OF MARKETING IN HUNGARY, POLAND AND BULGARIA

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1. INTRODUCTION

This paper describes some of the results of a twelve month comparative analysis of marketing environments, attitudes, organisation and strategies in the three Central European countries of Hungary, Poland and Bulgaria. All are in the process of transition from centrally planned to market-led economies. The transition process has been in progress for different lengths of time, implemented in different ways by each country and met with varying levels of success. The paper investigates the impact of the moves towards free market economies on the competitive and marketing environments of the countries concerned.

2. ECONOMIC COMPARISON

The progress towards a free economy depends on many factors including the state of the economy, the effect that the changes have on the living standards of the population and the understanding and application of marketing activities. The issues are inextricably linked and need to be mutually supportive. If the economy is not strong then opportunities may be difficult to exploit because of lack of investment. If the living standards of the population decrease this may reduce commitment to further progress towards a free economy. However, expenditure on and knowledge of marketing can alleviate adverse trading positions. The investment in the issues has to be finely balanced. This balance is very different in each of the countries under investigation and is discussed below based on data taken from various sources including government sources, The Economist and PlanEcon Business Reports.

Hungary has the best opportunity for a quick and continuous movement towards a free market economy with the least adverse impact on the population's living standards because of its stronger economy and the relatively small effect on the GDP that the move towards a free economy has so far had.

Poland and Bulgaria on the other hand saw large reductions in their GDPs which has inevitably had a greater adverse impact on the living standards of the population. Poland, however, has recently seen a remarkable recovery in its economy and is making considerable progress to successful implementation of a free market economy. It is in Bulgaria where industry is experiencing a continuing decline in ROI and many companies are now facing bankruptcy. This has been as a consequence of past greater reliance on trade with former COMECON countries, the collapse of this traditional market and adverse trading situations with Western countries.

There is an additional problem in Bulgaria in that the vast majority of its industry is still state owned. This means that managers have no practical knowledge of marketing or its importance in a competitive situation. Poland on the other hand has total government commitment to the free market economy but faces such economic problems that the concept may lack credibility.

3. METHODOLOGY

In the first phase of the research, a series of in-depth interviews were conducted with the senior executives responsible for marketing in companies in each of the three countries. These interviews were used to collect preliminary data and to design the questionnaires used in the second, quantitative phase of the research. In this second phase questionnaires were sent to a sample in each country constructed using the type of industry, the state of ownership (state/privately owned; home/overseas owned), and the size of the company, as representative criteria. In all 2311 responses were received, 894 from both Hungary and Poland, and 523 from Bulgaria.

4. THE NATURE OF THE MARKET PLACE AND SIGNIFICANT CHANGES

It is essential in order to understand the relationship between marketing and the progress towards the free market that both the current nature of the market place and the likely important changes are assessed.

4.1 The Growth Rate of the Market

The most commonly encountered market is a mature but unstable one with 39% of all respondents falling into this category. There are, however, differences in the individual country situations. Whereas in Hungary mature but unstable

markets dominate, Poland and Bulgaria mainly have mature and relatively stable markets. Bulgaria also shows a large number of established but growing markets. These relate to the political situation described above. In Bulgaria the market is still dominated by fairly large state owned, companies and the relatively little structural change that has taken place could well explain the stability of the market place. Hungary has had a free market economy for the longest time and because of its geographic position is more exposed to Western competition. This could explain the unstable nature of its domestic market.

4.2 Customer Wants and Needs

The majority of respondents (43%) indicate a homogeneous and undifferentiated market. This is seen to a greater extent in Hungary than in the other two countries. The greatest degree of market segmentation was found in Poland, while Bulgaria has a propensity for individual customisation. The lack of segmentation in Hungary could indicate furthest progress in market development and the search for economies of scale, whereas Bulgaria is still in the early stages of market development where the cost and benefits of customisation have not been fully explored.

4.3 Changing Customer Requirements

Almost exactly half of the respondents sense only a slow change in customer requirements but there are significant national differences. In Hungary, rapid change is identified while in Bulgaria the main view is that no change is expected. These again reflect the political situation where Bulgaria is still strongly influenced by the large state-owned monopolies and where Hungary is exposed to Western influences. Poland occupies an intermediate position where only slow change is expected.

4.4 Technological Change

The majority of the respondents foresee slow technological change. This view is reflected in both Hungary and Poland. Bulgaria shows a distinct polarisation of views, respondents expecting either rapid technological change or none. This is possibly related to the division of companies into the large state owned ones and the fairly large number of small entrepreneurial ones.

4.5 The Degree of Competition

The majority of respondents (58%) see the competition as being increasingly intense. This is the nature of their entry into free market economies. The national differences are again striking. Hungary and Poland agree with the overall view which is also consistent with the mature and turbulent market to which the Hungarian companies are exposed. Bulgaria sees the competition is seen as being only moderate or nonexistent. This could reflect the dominance of the large state-owned companies.

4.6 Competitive Change, Barriers to Entry and Exit

Overall responses indicate almost equally slowly changing (38%) and fluid (40%) competition and this reflected the situation in both Hungary and Poland. In Bulgaria competition is established and firmly entrenched. Again this is consistent with the strong presence of the large state-owned companies. The competitive situation is closely related to the ease with which foreign competitors can enter and leave the home market. In Hungary there was relatively free entry and exit which is consistent with the rapidity of change in competition and the instability of their market. In Poland the barriers are seen to be high and hence they see most of their new competition coming from domestic competitors or extremely powerful overseas competitors. In Bulgaria entry and exit were seen to be possible but costly, again consistent with the domination of large state-owned companies and government policies.

4.7 Summary

The nature of the markets faced by both Hungary and Poland show rapid changes in the intensity of the competition and customer expectations while the technological support will be changing less quickly. Hungary has less differentiated markets and with lower entry barriers than the other two countries is perhaps more exposed to Western competition. Poland has higher barriers to entry and as a consequence has more stable markets and a higher degree of market segmentation. Bulgaria exhibits slow change in its competitive situation and with high barriers to entry has a mature but stable market. Few changes in the needs of Bulgarian customers are foreseen.

5. THE CHANGING MARKETING ENVIRONMENT

5.1 The Overall Picture

The most frequently quoted factors were that customers will increasingly demand better quality and reliability (96% agreement), domestic and international competition will increase (86% and 77% agreement respectively), that customers would demand increasing choice (83% agreement), and that there would be an increased pressure on costs (82% agreement). These high priority factors are consistent with the progress towards free market economies where competition is a fact of life and customers will be more exposed to an increasing variety of Western goods which often will be of superior quality. The home

companies will need to match this variety and quality which will often have been produced by more cost effective methods, hence the expected pressure on costs. The variety of goods will also engender the emergence of different market segments whose particular needs match the different product characteristics. Agreement to this view was expressed by 66% of respondents and is reflected in the view that there would be a need for increasing customisation of both products and services (70% agreement). Given that progress towards a free market economy involves the breakup of large state monopolies and the emergence of smaller more entrepreneurial companies the expected increase in the power of the distributors and retailers (60% agreement) is not surprising. There was fairly strong agreement that there would be more rapid technological change (53% agreement) and that this would be reflected in shorter life cycles (42% agreement) and shorter lead times to market for new products (65% agreement).

5.2 Differences Between the Three Countries

The most obvious differences between Bulgaria and the other two countries is the large percentage where no opinion was expressed on the issues raised and the group which took the middle ground concerning views on the likely impact of the factors. This could well reflect the lack of progress towards a free market economy and the implications of this.

The most important differences were the emergence of increasing customer choice and the consequent need for increasing customisation of products and services. Bulgaria shows least agreement with the propositions which could possibly be explained by the continuing domination of the large stated owned companies and the consequent lack of affordable customer choice in the market place. Poland feels most strongly that increasing customisation is becoming important and that this will have a big impact. Again a possible explanation is the rapid progress towards a free market economy in contrast to the Hungarian point of view where such progress has already been made. An associated difference is seen in the attitude towards the pressure on costs. Here Hungary and Poland show the strongest concern regarding the increased pressure on costs whereas Bulgaria shows the least. This is consistent with realisation that customisation and serving different market segments are costly.

There are significant differences concerning technological change. In Hungary increasing technological change is considered an important issue, but it is in Poland where it is considered of least importance and the least impact. Bulgarian companies expect it to have the most impact. This possibly reflects the products which dominate the commerce of the countries. Views on both the length of the product life cycle and lead times reflect these views on technological impact.

Significant differences are found concerning the increasing power of the retailers and distributors. In Hungary this is considered to be the most likely and in Bulgaria least likely. The dominance of the large state owned companies in Bulgaria and their relatively strong positions would explain the Bulgarian view. It would, however, be expected in Poland with the break up of the former state monopolies into smaller entrepreneurial units that retailers and distributors would have and increasing role.

6. CONCLUSIONS

The overall picture indicates that there will be a need for better quality and reliability of goods and that greater variety will be demanded. All countries see an increasing pressure from both domestic and international competition and a greater emphasis on customisation and a consequent increasing pressure for cost reduction. Hungary saw its markets as being more unsegmented and being increasingly dominated by the power of the retailers and distributors. It foresaw that technological change would be important and that this could be a factor in the efforts to match Western efficiency. Poland foresaw a more segmented market and increasing customisation with the consequent pressure for cost reduction. It sees technological change as having less importance and the increasing power of distributors being of marginal significance. Bulgaria sees the future in targeting individual customers with the fewer products being available. This is more of a product orientation than the other two countries. The consequence if this direct approach is the relatively low power of retailers and distributors.

THE QUESTION OF MARKETING IN CENTRAL AND EASTERN EUROPE

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Abstract

This paper examines recent changes in Central and Eastern Europe (CEE), and in particular how these changes affect the consumer. The changes might make it possible at last to embark on real marketing in CEE, but only if we remain well aware of what we are doing. The paper analyses a number of interrelated issues, and focuses on the factors which are critical when judging both the marketing environment and the consumer. It applies in particular to the 'front line states' of Poland, the Czech Republic, Slovakia and Hungary.

The paper looks at the theoretical framework which governs marketing wherever the function is carried out. It then briefly examines the relevance of the political and economic changes in CEE, as determinants of the external environment within which marketing operates, and looks at practical options for marketing at this time.

The paper explores 'the consumer' in CEE, looking at the 'marketing mix' through his/her eyes, and formulates prerequisites for companies to succeed using a marketing orientation. It then examines the reality of the Central and East European situation, and surveys the problems already hampering the practice of marketing. It recommends various types of research into those elements and areas which are still likely to mislead or hamper the marketeer.

The main argument of the paper is that marketing in CEE ought to go back to the basics of serving the consumer reliably, and building a lasting profitable relationship between company and customers/consumers.

Examples and explanations given in the paper are based both on extensive study of the relevant literature and on interviews and discussions carried out during very recent teaching and research visits to CEE countries by the author making due comparison with information derived from visits during the command economy period.

The valuable contributions made by two senior marketing colleagues from Budapest and Prague are gratefully acknowledged.

Introduction

At the Conference of the Strategic Planning Society in London in October 1992, Mr. Floris Maljers, Chairman of Unilever NV, outlined his company's philosophy on marketing in Eastern Europe: entering the market from within, building brands, only having the best, and aiming to be run by local management, are seen as essential to acting responsibly in the changing environment in Central and Eastern Europe (CEE).

This is one way for a company wishing to enter the market in (one of) the former Comecon states to proceed. Unilever's wish to act responsibly in Eastern Europe contrasts markedly with short-term-profit- oriented trading, honeymoon-with-the-West-led operations by what are often described as 'cowboys', and the purely production-led approach to the market which the East was used to during its 45 years of communism.

Is there a chance for marketing as we know it in Europe and the US, or should we put a question-mark to 'Marketing in Central and Eastern Europe'?

This issue is examined here by looking at the marketing concept, and at what marketing stands for, then studying the situation in Central and Eastern Europe and the marketing environment. This marketing environment allows only a few practical options for marketing strategy and marketing mix. The paper reviews the consumer's perception of the marketing mix, and formulates a number of pre-requisites for the marketing orientation to succeed. After comparing everyday reality with the marketing prerequisites it emerges that for success, both consumer and manufacturer need to be educated, and that the judgement when and how to apply sophisticated marketing techniques is very important. This means not only being aware of the economic opportunities, but also having cultural empathy and a deep understanding of consumer, infrastructure and history.

1. Marketing

As a business function, Marketing in CEE should in theory operate like Marketing in any other context. The marketing concept implies striving to operate with a consumer focus,

a consumer orientation. The underlying thought is that potential (or current) customers, when offered products for which they have a (manifest or latent) wish or need, and when offered these in the right combination of product features, price, availability etc will be more willing to purchase these products than just any product that rolls off the assembly line. This new or increased purchasing, becoming a habit, will in the long term, contribute favourably to the company's profitability, all else being equal.

Marketing thus seeks to contribute to the company's long term profitability. Sophisticated marketing management employs the strategic planning cycle (Analysis, Planning, Evaluation, Control), as well as marketing tools such as Market Research, Competitive Analysis, Market Segmentation and Targeting, Product or Brand Positioning, and Branding itself. Ultimately the strategy is executed by varying the elements of the marketing mix so that a holistic and internally consistent offering appears, with the desired consumer appeal.

One could argue that in 1776 when Adam Smith said that 'consumption is the sole end and purpose of production', he was in fact describing the Marketing concept. Often the marketing concept is referred to as marketing orientation, or being market-led. There is consequently a natural tendency to think that in transferring from a command economy to a market economy, the states of CEE will somehow need to start with marketing in all its complexity; the tendency to make such statements is reinforced by the slovenly habit of referring to selling (particularly selling into export markets) as "marketing". Having seen what is actually happening and what is possible, one must take a step back from such easy prescriptions and analyse whether indeed it is first to our sophistication in marketing that these countries should be encouraged to turn.

This analysis calls for an explicit statement of what marketing is and can hope to contribute:

1. Marketing consists of a set of techniques and a propensity to use them. Most academic work on marketing seeks to refine the techniques, reconcile apparent conflicts, assess relative effectiveness and account for the observed power of techniques.

2. It is companies (and individuals in them) which have a marketing orientation; to say a country acquires a market(ing) orientation is simply shorthand for saying that most companies operating in the country become marketing-oriented, within a market-driven economy.

3. The benefits of adopting a marketing orientation arise in two areas - and these should be kept quite distinct; they are taken as being that:
   a) the company adopting a marketing orientation improves its medium to long-term competitive position
   b) a country in which many companies adopt a marketing orientation is likely to reap significant economic benefits; it was one of the main weaknesses of the communist system that it gave no scope for market(ing) orientation

4. An immediate consequence of the foregoing is that although a country may seek to achieve the economic benefits of the marketing orientation, there is nothing that the government can do directly to achieve this result; it must work by creating the conditions under which companies can and wish to adopt a marketing orientation. This is particularly the case in the current CEE political climate which is in principle sharply against any form of central direction and intervention by the state.

5. 'Of course', it is assumed that companies act rationally, ie according to their strategic plan : it is believed that in the medium and longer term this is true of those companies which survive. The behaviour of short-lived and irrational competitors however has to be taken account of; it is treated as part of the problem with which the rational company has to deal.

The entrepreneur and the inward investor should take a very critical look at whether and how they should apply marketing techniques. There are alternatives. One that is much used, for instance, is simply producing and "dumping" as much as one can get away with, moving on from one trading deal to the next on a opportunistic basis. Economics dictates that if they are to do anything different there has to be a pay-off in profit terms. It is indicative that in Hungary currently most investments are made in trading and in retailing, not in manufacturing. Hence investments are not made in building up industry - and profits are often repatriated, not invested.

Behind this paper, then, is the question whether conditions in CEE yet offer enough economic benefit to justify companies adopting marketing and spending money on applying sophisticated marketing techniques.

2. Central and Eastern Europe

CEE is in turmoil. It is now a commonplace that all is in rapid change - indeed the situation changes day by day. For present purposes CEE comprises the countries between Western Europe and the former USSR, i.e.

- the 'front line states' of Poland, the Czech Republic and Hungary
- the second wave, of Slovenia, Slovakia and Bulgaria
- the slower developers: Romania, former USSR republics, former Yugoslav republics, Albania

It must be stressed that the countries of Central and Eastern Europe do not form a unity; even within the above groupings each and every country is different:

1. different, due to their different starting point:
   - different historical development, associations and alliances
   - different cultural heritage
   - different past roles in Comecon
2. different in the stage of development from command to demand economy, and different in pace
3. different in practices.

These differences mean not only that the countries have different current positions and different short term prospects, but most likely will also contribute to their having different long term futures. There are however some aspects in common - the most notable of which are change, urge for progress and unpredictability.

3. The Environment and Infrastructure for Marketing

Unpredictability is not unique; West European markets are by no means predictable. CEE markets, however, are persistently and pervasively unpredictable and this is the first factor which marketing needs to take account of. Furthermore, the economies are not in a good state.

From the viewpoint of trying to run a company, the changes that can be observed throughout CEE are

- removal of the certainties which arose from state control
- increases in disruption to production
- challenge to the traditional production orientation
- action against the exploitation of monopoly positions
- reversal of the significance of hoarding - no longer a cost-free buffer, now a high-cost investment in inventory which may rapidly become obsolete
- competition, especially from companies with a different thought pattern

Information and communications are problems. Marketing information in scarce and unreliable; and poor communication manifests itself in all services taken for granted in the West, e.g. telephone, rail and road transport etc, all of which are usually inadequate.

The amount of catching up to be done - and by implication the time that will be required to do it - can be gauged from the following chart from Globus:

EASTERN EUROPE HAS TO CATCH UP
Ownership per 1000 inhabitants, 1988

Car		Telephone		Television	
12	Romania	74	Poland	169	Roman.
51	USSR	76	Hungary	189	Bulgaria
112	Poland	100	USSR	261	Poland
127	Bulgaria	102	Germ.East	276	Hungary
166	Hungary	119	Romania	282	Cze/Slo
175	Cze/Slo	130	Cze/Slo	308	USSR
225	Germ.East	190	Bulgaria	373	Germ.E
		In comparison:			
473	Germ.West	451	Germ.West	386	Germ.W

Table 1: Catching up:
Consumption Figures CEE vs (W)Germany, 1988

Access to consumer markets is now generally allowed - albeit sometimes with serious tariff barriers, and there is direct contact between foreign sellers of industrial goods and end-users; restrictions on foreign direct investment are being eased, and changes are being made to the legal structure to facilitate forms of economic links and trading which resemble those in the West. Some markets however still do not exist everywhere, e.g. capital markets and information markets.

These changes, which establish conditions essential to the functioning of market economies, are not all that is required for the good functioning of marketing. There is also a need for entrepreneurs prepared to invest and take risks, and for consumers prepared to respond and reward those who give them what they want. And whilst the changes are accompanied by much enthusiasm for freedom and entrepreneurship (providing a fast buck for the happy few in the process) both established industry and the consumer are going through a period of unpleasant temporary hardship.

4. Marketing Strategy and Marketing Mix
The Practical Options

Whatever strategic choices one contemplates, the problems of the infra-structure have a considerable effect on which elements of the marketing mix can be deployed and in what ways. The following generalised observations, will make this clear.

The **product** factor in the marketing mix is not the most manageable one. Both manufacturing and retailing are in transition. Manufacturing industry is gearing itself up to survive in the free market. Manufacturers are busy looking for finance, busy trying to retain those managers who possess entrepreneurial traits, busy trying to renew their

supply lines and make them reliable, within or outside the Russian connection. In summary, they are trying to survive.

Intellectually the need adopt an orientation of competitiveness is accepted, but achieving it is nearly as difficult as finding the time and money for updating the often very ancient and obsolete equipment and technology.

Some well-directed Joint Ventures in Hungary illustrate changes for the better: for instance in the market for fruit yoghurts, where poorly packaged, poorish quality local products (priced at 13 Hungarian Forints (HUFs)) used to compete with Austrian imports at HUF 60-80. Now good quality, better packaged Hungarian produced Danone retails at HUF 30, and has stimulated local production of yoghurt on a par with the Austrian imports in product and packaging - at HUF 29-31.

Similarly Douwe Egberts, having bought Omnia, Hungary's best coffee brand, is showing true consumer orientation in roasting coffee and producing advertising to Hungarians' taste, positioning the brand midway between the 'old' cheap and poor Hungarian brands and the German/Austrian imports, immediately diminishing the attractiveness of these brands.

Pricing decisions are always difficult to take: in the present transitory situation the market value of products is highly volatile, and unusual skill will be required to set prices at levels which produce the best sustained flow of profits. A number of factors contribute to this:

- inflation changes the value of the złoty/krone/forint in people's pockets from day to day
- the true cost of a product cannot be properly determined until the artificial prices of all raw materials, energy and labour are corrected
- there are radical disparities in costs for different channels in the distribution chain; retailing costs vary from the no-tax/no-rent ubiquitous street trader (especially common in Poland) to the low-rent/not-yet-privatised state shop, and to the high-rent private enterprises who may face 50% to 70% interest rates to finance their stocks and shopfittings
- there are recurrent hiccups in the distribution chain
- there are ebbs and flows in consumer attitudes, particularly when products are more readily available, and scarcity value is dissipated.

Retailing is a particular area where change is rapid but is by no means as simple as political pronouncements would have one believe. State-controlled cooperative stores and supermarket chains are being broken up and sold off. There is a danger that this will destroy the internal logistics chains of these organisations and that the new owners - very often in fact the existing managers, will fail to set up a coherent alternative and will rapidly encounter supply difficulties (and cash-flow difficulties) which they cannot survive.

Advertising is visibly increasing rapidly in the CEE countries - but is also fraught with pitfalls. TV, radio, billboards and press shout out company and brand messages. Often only the corporate brand name of a company is seen on the billboards - the company might be biding its time and building recognition in preparation for selling its products through its chosen channels when it judges the time is ripe.

5. The consumer

In the command economy the consumer did not count. Everything was production driven. A marketing concept was alien and consumer orientation was non-existent.

Consumer choice is the major difference confronting the citizen - that is the availability of choice, plus openness in spoken and written word. This seems beneficial since most sophisticated consumer marketing is based on influencing consumer choice. And choice is now present in all four elements of the marketing mix: different products, different prices, different channels, different methods of promotion - all in sharp contrast with 45 years of one product made to do the job (or not) at fixed price available (or not) at a fixed place, and usually not promoted.

However, the irony of the consumer situation in CEE is that whilst previously consumers often had money but the system did not make enough of the goods for them to spend it, now they are faced with prices and the temptations of Western alternatives but left with so little money and such erratic supply that the choices they can make are minimal and give producers far less reliable information than in the West.

6. Prerequisites for the marketing orientation to succeed

The argument of this paper is that in the rapidly changing and unfamiliar environment of CEE it is important to go back to basics. Many of the factors which are so universal in the West that they tend not to be reiterated, do not apply in the East as it now is. (This does not imply that I agree with the oft stated view that CEE should be treated like a developing country.) To uncover such factors one needs to start from a consideration of what is needed if marketing orientation is to be successful.

The prerequisites, I propose, are as follows:

a) customer decisions on purchasing have to affect the profitability of the company. Under the communist system this factor was absent - indeed the long term future of the company did not depend on profit. Even after the first liberalisation of Hungary in 1968 there was no incentive to market orientation: unprofitable companies were bailed out by the state, there was a captive Comecon market, there were no market economy experts, and excess profit was confiscated.

b) customers' purchasing decisions have to be related to aspects of the product or the brand which are under the control or influence of the company.

c) repeat purchasing must be possible in practice, i.e. the consumer seeking to purchase the same product/brand as last time must both be able to recognise the product as being from the same company and also be physically able to obtain it through accessible channels of distribution

d) the company must be able to make changes to elements of the marketing mix without excessive cost, controls or delays

e) the company must also have access to data through which to observe the effects of these changes on demand.

As e) suggests, this model of how marketing works is implies a similarity to classical theories of economics which stress the significance of purchase (usually focussing on price) as a signal in a chain of communication leading from consumer to producer. Marketing however goes beyond classical economics in taking into account the effect on consumer behaviour of non-tangible-product related factors of psychological, sociological and practical nature - particularly the 'added value' factors of those contributing to "brand identity" and the effectiveness of promotional activity.

7. Comparing Reality with the Marketing Prerequisites

As we look at the stated prerequisites, there seems hope that many of them will fall into place in the foreseeable - if not immediate - future. Governments have already made significant headway toward removing distortions in factor a) above - and as privatisation proceeds and subsidies end this will become the least of the problems. Factor d), the ability of companies to make changes, is of limited impact to Western firms and will also cease to be an issue for local firms, except in relation to raising the investment needed.

In relation to prerequisite b) there may at the moment be episodes which appear to show capricious behaviour and companies may feel that whatever they do has little effect on sales, but the cause of this is likely to lie more in the distribution systems and in wildly oscillating competitive offerings, than in any deep-seated irrationality of the consumers. Naturally producers will have to be prepared to find out about and cater for the image-aspects which people seek in their products - but this is good marketing.

The disrupted distribution infrastructure is a factor which it is most difficult to quantify and to foresee a solution for. It is this factor which most frequently leads to problems with prerequisite c), i.e. to great uncertainty as to whether repeat purchasing was a practical possibility. Without consistency and transparency in the distribution system, actual sales become almost ineffective as an indicator of what the public wants.

8. Conclusion

For marketing theorists, companies' attempts to apply Western marketing methods in CEE will provide major research material. Although the command economy has come to an end, the market economy has not arrived in full: the CEE countries are in a state of transition. The consequence for marketing is that both companies and theorists will need to go back to first principles: consumer orientation will pay off, but nineteenth century methods can still make millionaires.

Evidence gathered so far suggests that best timing for the introduction of Western style marketing will depend on a combination of factors, including developments in consumer attitudes, education of consumers about market behaviour, and development of managers to understand how to manage and exploit choice. These factors need to be monitored market by market and country by country.

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THE EFFECTS OF DEMOGRAPHIC VARIABLES ON MEASURING PERCEIVED RISK

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Abstract

Despite the importance of demographic variables which affect consumers' behaviour and the 30 years tradition of perceived risk research, the effect which demographic variables have on risk perception and reduction has not been consistently identified. In a survey of 180 purchasers, the effect of three demographic variables; age, gender, and social class, on 10 risk statements and 16 risk reducing strategies was measured. Age significantly affected risk perception and reduction; strategies became more useful as age increased. Gender proved to be the most important demographic variable. Nearly all the risks and risk reducing strategies were significantly less important and less useful for the males than females. Social class had a less marked effect than gender, but still produced significant differences although there was no consistent effect. Overall, the differences were significant enough to allow the rejection of the null hypothesis that demographic variables would have no effect on risk perception and reduction. Implications in terms of perceived risk measurement and possible use in segmentation are discussed.

Introduction

Some of the most commonly used variables in almost all market research assessing consumer buying patterns are demographic variables. Their importance has also been long established in segmentation studies because of their prime influence on consumer behaviour and their ease of measurement. Given their obvious importance, it seems unusual that their effect on risk perception and reduction has not been fully established. Clearly, demographic factors might greatly influence the measurement of risk perception and reduction and, if this is so, researchers need to be aware of its potential influence before designing their questionnaires and samples. In addition, variations in risk perception and reduction caused by demographic factors could be used in market segmentation to design more tailored and effective risk reducing marketing mixes. A review of the literature provided surprisingly little conclusive evidence for the effects of demographic variables on risk perception and reduction. Accordingly, this study was designed to contribute further evidence for the effects of demographic variables.

Cunningham (1967) reports that age was significantly related to perceived risk only in the case of one of three products, headache remedies. Younger people were less likely to be high in perceived risk for headache remedies than were older people. In a study by Toh & Heeren (1982) people between the ages of 15-24 perceived most risk, followed by those aged 25-44, while those over 54 perceived the least amount of risk across six generic product categories (Toh and Heeren 1982). This finding is not in keeping with Kogan and Wallach (1964) who found that older people, when presented with risky situations, are likely to be more conservative in their actions. This apparent paradox was explained away by the authors taking purchase frequency into account. A greater percentage of consumers aged 54 and over had bought generics than any of two other age groups. Another possible explanation for the inverse relationship between age and perceived risk for generic grocery products, is the relative unimportance of the social and psychological components of risk in their lifestyles. This is likely to be much lower for older people compared with their younger counterparts who are more image conscious. Since the product concerned used in this study (ie breakfast cereals) was not considered to be high in psychosocial risk, which is suggested to be lower for older consumers, the hypothesis was put forward that; H_1 - as age increases so will perceived risk.

Phillips and Sternthal (1977), in reviewing the existing literature on age differences and information processing, concluded that older consumers are likely to process less information than younger consumers for two major reasons. First, older consumers are less capable of processing large amounts of information. Secondly, due to greater market experience, older consumers are more capable of distinguishing between relevant and irrelevant information for familiar products. Katona and Mueller (1955) have also concluded that the greatest amount of information search is likely for individuals under 35 years of age and the least for older consumers (Swartz and Stephens 1984). The hypothesis can then be proposed that; H_2 -as age increases risk reduction/information search decreases.

In a study of the purchase of lawn mowers, women tended to perceive higher levels of risk than men and were concentrated in groups which emphasised convenience,

physical, financial and performance aspects of overall risk (Kumpf 1978). Men, on the other hand, tended to emphasise the social and psychological dimensions of risk or tended to be in the low risk groups (Kumpf 1978). Researchers of perceived fashion risk and self-esteem of males and females, found eleven factors were derived for females, eight for males (Winakor, Canton and Wolins 1980). By contrast, the results of one study showed that gender does not affect perceived risk for grocery generics in any consistent way (Toh and Hereen 1982).

Little evidence is available for the effect of gender on risk reduction, however, the more the male householder dominates the purchase decision of a car, house and TV, the less time is spent in information search (for a residence and TV) and the less reliance is placed on builder reputation (for a house) and guarantees (for a TV) as risk reducers. The alternative hypothesis which can be proposed is that; H_3 risk perception and reduction will vary by sex of respondent.

Although Bauer (1967) has suggested that risk perception may vary according to social class, Cunningham (1967) found no significant relationships between perceived risk and the occupation of the head of the household. In contrast, Mitchell and Greatorex (1988) found that on the whole a lower socio-economic (C_2DE) group of consumers rated the perceived risks in wine drinking significantly more important than did the higher socio-economic (ABC_1) group. The hypothesis which can be tested is that; H_4 - risk perception will vary by social class.

While the literature on the effect of age and gender on risk perception and reduction is scant, much more work has been done on assessing the effects of social class on risk reduction/information search. A major finding of one study was that mid/high socio-economic status (S.E.S.) subjects seemed to be more accomplished information processors than low S.E.S. subjects (Capon and Burke 1980). They sought more information in general, especially under high perceived-risk conditions, and more testing agency and price information in particular. This finding is congruent with results from Capon and Kuhn's (1979) study which showed subjects with low education levels to be less able than more highly educated subjects to complete successfully a simple proportional reasoning task that required the calculation of unit prices for grocery products. Robertson (1970) also concluded that lower social class consumers shop less and tend to depend more on word-of-mouth communications. Farley (1964) suggests that the information-processing cost for low socio-economic status (S.E.S.) is higher, because of their relative educational and financial deprivation, and that they may have less competent information processes than those of higher socio-economic status. Consumer durables survey data confirm that low S.E.S. consumers use less information than higher S.E.S. consumers (Claxton, Fry and Portis 1974; Thorelli 1971; Udell 1966). Some researchers (Devin and Greenberg 1972) found that middle class consumers were more likely to rely on media sources, while lower class consumers were more likely to rely on personal sources such as salespeople. Recently, Mitchell and Greatorex (1989) reported that UK consumers in higher social classes rated risk reducing strategies less important than C2DE consumers, although differences were not always statistically significant. Other researchers (Ward, Wackman and Wartella 1977) have concluded from their studies, that types of information sought by consumers of different social classes did not differ at all! What varied, they said, was the number of sources of information; upper social class women used more sources of information than did lower class women. Hugstad et al. (1987) concluded that social class is only a minor intervening variable and only in very selected situations. From the evidence on risk reduction and information search, the alternative hypothesis might be proposed that H_5; - risk reducing strategies will be used more by higher socio-economic groups; H_6 - personal sources of risk reduction will be more useful for lower socio-economic groups.

Having outlined the literature and rationale for the hypothesis there remains the question of which product should be chosen to test these hypotheses. The product needs to be purchased by all gender, age and socio-economic groups which suggests some reasonably low-value commodity purchase. It would be desirable for the product to have a large variety of brands and be in a highly competitive market to allow consumer choice to be fully developed. It would also be helpful if the product class was using or had used some or all of the standard risk reducers such as free samples, advertising, trial sizes, endorsements, etc. A slight preference for an fmcg good was demonstrated because it was felt that the results might then have wider implications. A reasonably low risk product was chosen in order to provide a better test of the demographic variables' affects. If changes are evident for a low-risk product, then these changes are much more likely to be seen for higher risk products than vice versa. Although there are numerous products which satisfy the above requirements, breakfast cereals were chosen since they possessed more potential for obtaining internationally applicable results because of the number of international brands in the market from companies such as Kellogg and Nestle.

Methodology

Reading the literature on perceived risk and risk reduction as well as trade literature and Mintel market reports

allowed the development of some initial ideas about possible risks and risk reducing strategies which might be meaningful. These were refined in a limited number of focus groups before being tested with a pilot sample of respondents (n=30). The final questionnaire was highly structured and included 10 risk statements and 16 risk relievers (see tables 2 and 3 for statements). Risks were assessed on a 1-5 importance scale while risk relievers were assessed on a 1-5 usefulness scale. Two questions on the questionnaire, one factual, concerning the number of household members who eat breakfast cereals, and one subjective, concerning the importance of taste, were included in the questionnaire in two different forms. When the responses to the different questions were correlated, significant correlation coefficients of 1.00 and 7.01 respectively were obtained and give some limited evidence for the questionnaire's reliability ($p<0.01$). Face-to-face interviews took place over a two week period outside 3 supermarkets in the chosen area (Boustani 1990). For some questions flash cards were used. The quota sample was chosen to represent each of the main variables being tested, namely age, gender and social class. It also reflected the proportions of these within a 50 mile radius of Bognor Regis, according to the latest census data for the area. TheSouth East was chosen because it represents one of the highest per-capita consumption of breakfast cereals in the UK. The specific sampling unit was supermarket cereal purchasers within the area. The sample of 180 respondents was broken down as follows; (* AB = High; C_1C_2 = Middle; DE = low socio economic group.)

Table 1: Demographic Quotas of Sample

	Age				Social Class*		
	15-24	25-44	45- 64	65+	A B	C_1 C_2	D E
Female	14	27	20	32	36	41	16
Male	13	26	19	29	33	38	16
TOTALS	27	53	39	61	69	79	32

Table 2: Average Perceived Risk Ratings According to Respondents' Age, Gender and Social Class

RISKS	Age Groups				Gender		Social Class		
	15-24	25-44	45-65	66+	M	F	AB	C_1C_2	DE
Taste of the breakfast cereal	1.41	1.53	1.72	1.79	1.74	1.55	1.62	1.61	1.75
Nutritional value	2.93*	2.68*	2.15*	2.12*	2.61*	2.23*	2.57*	1.95*	3.22*
Product favoured by family/friends	4.30*	3.40*	3.46*	4.25*	4.45*	3.26*	3.84	3.96	3.50
Design/style/illustration of packaging	4.44	4.57	4.54	4.74	4.64	4.56	4.59	4.68	4.41
Product favoured is similar to that consumed by people you respect/ admire	4.89	4.76	4.74	4.93	4.93	4.74	4.83	4.86	4.78
Buying the cereal which proved to be best value for money	3.19	3.43	3.87	3.25	3.36	3.50	3.78*	3.29*	3.00*
Feeling good about buying the cereal	4.56*	4.70*	4.49*	4.13*	4.72*	4.17*	4.59	4.32	4.41
Quality of the cereal	2.70	3.11	2.80	2.61	3.17*	2.47*	2.78	2.68	3.19
Easy/Quick to prepare	2.04*	2.57*	3.10*	3.39*	3.18*	2.60*	2.71	3.17	2.56
Low price	3.26	3.42	4.08	3.85	3.71	3.66	4.12*	3.73*	2.63*

* denotes significance at the 5% level using ANOVA. (1 = Very important 5 = Unimportant)

Results and Discussion

Age

ANOVA tests on individual risks showed that age did significantly alter on some risk statements (see table 2). The younger age group considered the taste risk very important with a gradual decrease in importance as age increased. A similar significant difference (p=.005) was found between age and nutritional value; thus, the hypothesis put forward that the older generation will tend to be more conservative and risk averse than the younger people, which corresponds with the findings of Kogan and Wallach, (1964) can be accepted with respect to the physical risk. Overall, however, there is little evidence to support the alternative hypothesis that perceived risk increases with age.

Table 3: Average Risk Reducing Strategies Usefulness According to Respondents' Age, Gender and Social Class

	Age Groups				Gender		Social Class		
Risk Reducing Strategies	**15-24**	**25-44**	**45-65**	**66+**	**M**	**F**	**AB**	**C_1C_2**	**DE**
Description of packaging	3.85	3.83	3.82	3.67	4.11*	3.46*	3.64*	3.78*	4.06*
Unbiased information concerning product (e.g. which?)	4.67	4.75	4.64	4.72	4.85*	4.57*	4.67	4.68	4.84
Reputable image of the store	4.59*	4.10*	3.90*	3.74*	4.45*	3.59*	4.09	3.87	4.16
Choose a well-known brand	3.93*	2.83*	2.59*	2.41*	2.78	2.57	2.61	2.56	3.09
Choose the cheapest brand	5.00	4.98	4.26	4.41	4.28	4.06	4.48*	4.15*	3.53*
Advice of the shop assistant	4.48	4.25	4.92	4.92	4.93	4.97	4.93	4.96	4.97
Choose the most expensive brand	4.26	4.68	4.03	4.30	4.41*	4.06*	4.10	4.29	4.38
Recommendation of family/friends	4.33*	3.77*	3.31*	3.31*	4.60*	3.54*	4.20	4.04	3.75
Company reputation	3.63	3.28	3.51	3.74	3.95*	3.27*	3.54	3.61	3.72
Special offers	3.93	3.87	3.85	4.25	3.85*	3.25*	3.55	3.66	3.22
Trial sizes	4.52	4.49	4.74	4.77	4.60*	3.44*	4.04	3.96	4.00
Advertising	4.11	4.23	4.00	4.05	4.79*	4.51*	4.77	4.44	4.87
Money-back guarantee	3.59	3.09	3.38	3.72	4.68*	3.56*	4.03	4.06	4.34*
Free sample	4.56	4.89	4.79	4.92	4.05*	2.88*	3.57*	3.56*	2.91
Shopping around	4.81	4.77	4.97	5.00	4.91*	4.75*	4.84	4.84	4.78
Endorsement	4.83	4.79	4.98	4.99	4.98*	4.83*	4.99	4.81	4.94

* denotes S.D. at the 5% level using ANOVA. (1 = Very useful 5 = Useless)

When considering the risk reducing strategies individually a few did show significant differences. Table 3 shows the results obtained. Even though store image was an unpopular risk reliever, it was noted that the older respondents (65+ age band) considered the strategy more useful than the 15-24 age band. It could be that older respondents have had more time to gain experience about different retail outlets and are more confident in using a reputable image as a risk reliever. Alternatively, the usefulness of this factor may reflect the restricted mobility of the older age group. With possibly no alternative convenient food store, older consumers reduce the cognitive dissonance of not getting value for money by artificially inflating the importance of a reputable store image to justify their repeated purchasing in that store. Some limited evidence to confirm this comes from the usefulness of the shopping around strategy. Shopping around in order to find the cheapest, etc., was found not to differ significantly with age; however, it was noted to be more useful for the younger respondents (i.e. 15-24) and least popular with the over 65's. Choosing a well-known brand proved to be a very useful risk reliever amongst the different age bands and the older generation did appear to favour the strategy more. A significant difference was

observed between 15-24 year olds and the two latter age bands (i.e. 45-64 and 65+) for the usefulness of company reputation (p=.001). The fact that the breakfast cereal market is mature could explain why the older generation preferred this strategy. Having grown-up eating cereals manufactured by Kellogg or Weetabix, for example, the customer feels guaranteed that the company will provide them with a product of high standard to which they have been accustomed. In summary, only 3 of the 16 RRS showed any significant variation with age and of these only one in the hypothesised direction. The evidence is insufficient to accept the hypothesis that as age increases risk reduction decreases.

Gender

Unlike previous research (Wu et al. 1984; Cunningham 1967; Toh and Heren 1982), this research found that risk did vary significantly with gender and the initial hypothesis that risk will vary with gender can be accepted. The findings show that males perceive less risk. This result is perhaps rather surprising for one might have thought the lack of experience with the purchase of breakfast cereals would serve to increase perceived risk. However, it appears that ignorance may not only be blissful, but also may result in lower risk perception. Because men do not usually have the repeated task of purchase, their knowledge of different types of cereals and the pro's and con's of each could be less. This could result in less risk being perceived because they are unaware of the problems. Alternatively, men could simply have a higher tolerance for the risks involved and therefore perceive less risk. This second alternative would imply a 'true' gender difference, rather than differences based upon the experiences of genders.

Females considered nutritional value to be significantly more important than the male respondents, (p=.037 see Table 2). This result corresponds with expectations that females are generally more conscious about what they eat. Easy/quick to prepare also differed significantly (p=.002) with females considering this to be more important. This result is interesting for one might have expected the reverse. Males might want something easy/quick to prepare in the morning when in a rush to get-off to work, however, females who have motherly responsibilities to prepare breakfast for the family, in addition to doing other activities, might have a greater need for a quick, easy to prepare breakfast cereal. Even if she does not prepare it herself, it is still her responsibility to have something that the family, namely the children, can prepare for themselves quickly and safely. The above results would appear to suggest that segmenting the market according to gender could prove effective. For instance, when aiming at males the nutritional content, quality, ease of preparation and psychological risks might be stressed more.

The gender of the respondent, in the main, did affect the risk reducing strategies employed, thus, one can accept the hypothesis put forward that risk reducing strategies will vary with gender. Significant differences were noted between the sexes for most strategies, including: choosing the most expensive, taking the recommendations of family/friends, company reputation, special offers, trial sizes, advertising, money-back guarantees, free samples, shopping around and endorsements. Table 3 clearly shows that females had a clear preference towards these strategies. Consequently, strategies need to be orientated to those preferred by the different sexes. For example, manufacturers should continue to target their advertising at females and provide them with more free samples, trial sizes, etc.

Social Class

When individual risks were considered, perceived risk did vary significantly with social class, for the variables nutritional value, best value for money and low price (see table 2) and this is sufficient to allow rejection of the hypothesis that perceived risk will not vary by social class. From the limited evidence, it would appear that the risks increase in importance for the lower social groups.

Overall, the evidence suggests that risk reduction does vary slightly with class of respondent, but there is very little evidence to support the hypothesis that risk reducing strategies will be more used by higher social groups. There is also very little evidence to support the second hypothesis that personal sources will be more important for lower social groups. Of the two personal risk reducers, ask the shop assistant's advice and asking the recommendation of family and friends, only the latter showed any change in mean usefulness; it increased in usefulness the lower the social class, but not significantly so.

Implications

The fact that any significant differences were shown to exist between the different ages and social classes and especially genders is all the more important given the fairly low-risk product class under investigation and the relatively small sample sizes (minimum n=27). Although at present unproven, it might be reasonable to propose that for riskier goods of higher value that the effects of demographic variables on risk perception and reduction will be greater. Subsequent research might wish to test this hypothesis. If substantiated, the implications for risk measurement could not be ignored. Clearly, researchers would be unable to treat male/female samples as homogeneous and the effect of age and social class on risk perception would have to be controlled for or taken into account when analysing data on a whole sample basis.

Providing subsequent research can confirm the findings here, there could be segmentation implications. For example, it would appear that for a seemingly genderless product such as breakfast cereals significant perceptual differences can be shown. Further research might show significant attitudinal and behavioural differences which could be used to segment the market and offer a more tailored product. If these differences exist on the gender unrelated products, perhaps they also exist for others, e.g. coffee, sugar. The advantage to the marketer of pursuing these differences, particularly those based on risk perception, is that he can begin to move what are essentially commodity purchase into the value added purchase bracket by highlighting the risk involved in their purchase. An interesting extension of the gender-related perceptions is to consider them in the context of 'unisex' products/services such as jeans or hairdressers. In what ways do risk perception and reduction alter between the sexes for these sorts of products? Knowing such information could lead to increasing demand from both sexes by reducing the risk associated with the purchase of unisex offerings. There is also the question of how do gender-related perceptions affect the numerous and major joint-purchase decisions. These major purchases are usually of extremely high value e.g. houses, cars, electrical goods, jewellery etc. The high profitability of these markets would seem to justify the expense associated with such research.

The evidence from this research is not conclusive about the effects of various demographic variable on risk perception and reduction not least because it is difficult to discern which of the findings presented reflect the choice of product group rather than the variables being tested. However, given the relative ease with which these variables can be measured and the on-going interest in the perceived risk concept, it should not be difficult to amass the evidence required to make some definitive statements about the effects being studied here. One implication or recommendation is therefore that each future consumer perceive risk study carried out should measure the demographic variables in as many comparable ways as possible and report their effects. This would not appear to be an onerous undertaking, yet would greatly benefit the literature.

Conclusion

The research has examined the effect of age, gender and social class on risk perception and reduction for a relatively low risk product, breakfast cereals. All demographic variables have some significant effect with the most significant differences being seen for gender. Marketing academics and practitioners need to be aware of the effects such obvious factors have on the measurements they make, in order to control for their influence. The research had added additional evidence to help identify these variables' effects, but more research is required before conclusive statements can be made.

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ROLE UNCERTAINTY AND MARKETING PERFORMANCE IN SERVICE FIRMS

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Abstract

Commentators on service organizations often argue that in multi-site firms, branch level, facility-managers tend to make a trade-off between operations and marketing demands. This paper employs a role-theoretic approach to examining some of the problems that these managers face in determining decision-making priorities between operations and marketing. Furthermore, the material is presented around a naive model which attempts to suggest that the role uncertainty of facility managers impinges upon their ability to generate market-orientation at the line level in service firms[1]. The approach used to conceptualize this tenet draws from the extant literature in industrial psychology/sociology, organizational theory/design, and services marketing, in an attempt to explicate some of the organizational determinants of "operations myopia".

Introduction

Most service firms find it prudent to decentralize activities and responsibilities toward the service delivery part of their organization. This has spawned a wide variety of problems for these firms which often have multi-site branches, offices, outlets and such like, because it begs the question of how best to control and implement the marketing effort. Indeed, this has recently formed the basis of one of the Marketing Science Institute's (1990) research priorities under the remit of optimum ways and means of "organizing and managing services marketing functions". In writing on this subject, Gronroos (1980) has suggested that the departmentation of marketing is inappropriate for effectively introducing marketing to a service firm. His interest however, focuses upon the marketing function in the sense of all the activities of a service firm's employees, which influence the preferences of target customers towards service offerings. It is fair to suggest that such firms need an organizational entity responsible for some marketing activities (possibly in the form of a department), but a very significant amount of the marketing effort is generated by the "part-time marketer" (Gummesson, 1990). Examples of these individuals can range from top management to people in all other departments, and also external players such as dealers, consultants, media, investors and a host of other stakeholder groups. One part-time marketer in particular will be examined; the branch-manager. Given that certain responsibilities are decentralized to the field in service firms, then branch managers become a valuable strategic resource in their role as "part-time marketers". For the purposes of this paper, and in accordance with previous work, branch managers will be labelled facility managers, and the authors will employ a role-theoretic approach to examining the problems that these managers face in determining decision-making priorities at the field-level.

Within service organizations there are primarily two bases for cost: operating costs and organizing costs[2]. It has been suggested that the problems associated with the latter, may lead to a future crisis for senior executives in service organizations (Mills, 1986). Therefore, the implementation of the most appropriate organizational form, and the role of marketing within the service firm are crucial contemporary issues on the management agenda.

Service Organizations

It is well-known that in the general literature, researchers have long endeavoured to address the issue of co- o peration and integration within organizations (eg. Lawrence and Lorsch, 1967; Van de Ven et.al., 1976). More recently however, several studies have specifically considered the role of marketing, and its relationship with other organizational constituencies (eg. Hutt and Speh, 1984; Ruekert and Walker, 1987; Shapiro, 1985; Taylor and Anderson, 1979; Wind, 1981; Wong et.al., 1992). As a result, various prescriptions of the heightened role required of marketing in "organizations of the future" abound (eg. Ames and Hlavacek, 1989; Day 1991). Our present concern is the potential barriers to the implementation of such prescriptions.

While organizational design theorists have frequently studied service organizations (eg. Galbraith, 1977; Nutt, 1976), examination of the organizational role of marketing within the service firm has been limited until relatively recently (Blois, 1983; Booms and Bitner, 1981; Gronroos, 1980, 1983). This specific area of interest has begun to generate a body of research, which while limited in volume, contains a number of conceptual frameworks and empirical studies (eg. Bateson, 1990; Berry and Parasuraman, 1991; Gummesson, 1991a; Johnson et.al., 1986; Lovelock, 1981). The merits of suitable structures for service organizations have been discussed by several writers (cf. Gummesson, 1991b; Mills et.al., 1983), and this work suggests that three management functions are instrumental in creating and delivering services. These are

operations, marketing and human resources management, or the "Service Management Trinity" (Lovelock, 1991). In adopting this framework, figure 1 at the end of the paper details a general comparsion between the structures of a manufacturing and a services-based company[3].

In this example, the service firm is split between the corporate functional areas of the "trinity", and facility-managers in units or "factories in the field" (Levitt, 1972). The facility-manager's primary responsibility is to effectively integrate and coordinate the effort of the unit, toward achieving the organisation's desired goals and functional aims (Dittrich, 1988; Martin and Berman, 1987). The interdependence between each of these "trinity" functions is extremely strong, stemming from the technologies employed in the production, delivery and consumption of services (the "servuction system"; Langeard et.al. 1981). These elements take place simultaneously due to the intangible nature of service output, and therefore service effectiveness warrants strong operations, marketing and human resources integration at the unit level. Berry and Parasuraman (1991) argue that the ability to "turn marketing into a line [unit] function", is a critical concern for contemporary service firms. Heskett (1986) reinforces this by suggesting that successful service firms are "lean at the top, have limited hierarchy and co-ordinate marketing and operations at low levels in the organization". It is this final point of marketing/operations co-ordination which provides many problems for management practitioners (O'Neill, 1987; Rooney, 1987), and is currently providing stimuli for empirical study (eg. Bressand, 1989).

In driving marketing "down the line" to the unit level, the task of facility-managers at multi-site units (as "part-time marketers"), is to coordinate marketing efforts with operational priorities (Northcraft and Chase, 1985). However, this may tend to set an agenda for relegating marketing activities below that of operations (Lovelock et.al., 1981). If it is readily accepted that marketing must work in conjunction with other functions in the delivery of services (Martin and Berman, 1987; Zeithamil et.al., 1985), then an investigation to explain the situational determinants of this "operations domination" (Orsini and Karagozoglu, 1988) is necessary. As such, this paper proposes a conceptualization of this marketing/operations trade-off and the approach adopted has not yet been empirically tested, but nevertheless uses deductive reasoning to explain some of the key associations and interrelationships.

Facility Managers

Marketing effectiveness and operations efficiency tend to describe the polarization of orientations within service firms. The latter has been characterized by Schneider (1980) as "bureaucratically-oriented", and is the antithesis to coherent market- orientation (Piercy, 1992). In the same vein, Bateson (1989) suggests that the "servuction system" tends to be operations dominated, and is managed by facility-managers for the benefits of the efficiency systems and processing elements, as opposed to necessarily ensuring effective service delivery to customers.

One of the many reasons underlying this behavior is that in certain situations, the facility- manager may receive instructions from different corporate, organizational constituencies which are not consonant and which are therefore traded-off against one another (eg. Bateson, 1989; Richards, 1987). If these instructions conflict, they may generate a number of potential problems for the facility-manager, who must ultimately determine which, or subset of instructions to implement, or alternatively negotiate with the corporate constituencies in order to resolve the conflicts. The issue can become one of role uncertainty for the facility-manager, and the consequences of these hierarchical and conflicting directives can manifest themselves in stressors such as role conflict and role ambiguity. The consequences of such role stressors may be a deterioration in job performance and reduced marketing effectiveness, causing many problems for the organization as a whole. The rest of this paper briefly explicates role theory and applies it to the facility- manager to generate insights into some of the problems associated with role uncertainty.

The role episode

Implicit within the structuring of organizations is the division of labor, where individuals are given roles, tasks, duties and responsibilities. The requirements of these roles (behavior expectations) are determined by a role-set which communicate this in the form of a sent- role, to the role-incumbent, known as the focal-person. The focal-person's received-role comprises the perception of these expectations (Katz and Kahn, 1978). There is a feedback loop which expresses the degree to which focal- person behavior corresponds with role- set expectations. Figure 2 at the end of the paper illustrates the role- episode for the facility-manager.

If the focal person in this role analysis is the facility-manager, then the role set is predominantly composed of senior managers at regional, divisional, and corporate levels, together with the heads of functional constituencies, and top management. This role-set is likely to determine the role expectations of the facility- manager in each unit. These expectations are sent to the focal- person (facility-manager), and are translated by him/her into perceptions or cognitions which form the basis of exhibited behavior. How closely the sent and received roles match is an empirical question.

The role-episode is at its simplest when a role consists of one enacted activity, which is conducted in a single

sub-system of an organization, and the role-set is situated in the same organizational sub-system (Katz and Kahn, 1978). In the case of facility-manager, none of these conditions is likely to apply. For the facility-manager the role- episode is an extremely complex and heavily interactive process.

The sent-role effectively contains constituency goals, instructions and directives from the administrative core (Thompson, 1967). A rational view would suggest that these multiple constituency such goals would be consonant and unidirectional. However, this may not be the case and goals may often be conflictual in nature (Anderson, 1981). These ideas are analagous to Edvardsson and Gustavsson's (1990) model of discrepancies between formal and subjective goals: where formal goals are formulated at top management level (this information can be elicited from content analysis of goal descriptions, strategic plans, policy documents, and the like) and subjective goals describe how managers perceive organizational goals. It follows that subjective goals are likely to have the greatest impact upon performance, because decisions are taken to implement them based upon interpretations of formal goals. Therefore, subjective goals become the real unit goals. The "imperfect compatability" between goals (Minkes, 1987) may not necessarily be detrimental, but effectiveness does depend on the ability to determine agreed tactics in spite of goal conflict. The situation may become one of applying the dominant coalition concept (Cyert and March, 1963; Simon, 1960), to the ranking of incompatible goals from the multiple constituencies. The consequence over time may be role conflict - that is, logically incompatible role demands made upon the facility-manager by the role-set.

Role conflict

From a rational perspective, multi- functional communications from higher- level decision-makers suggest consistency between the goals of the "strategic trinity" functions. However, when these instructions are conflictual, deficits occur and the scenario for "operations myopia" (Bateson, 1989) can arise in facility- manager's goal-setting, which can permeate through the whole operating unit (Richards, 1987).

This topic has re-emerged as an area of interest to marketing researchers in recent years (cf. Behrman and Perreault, 1984; Lyonski, 1985; Shamir, 1980; Michaels, et.al., 1987; Singh, 1993; Solomon et.al., 1985), in terms of the extent to which expectations of role-set members are unclear, or in conflict with one another. However, a major problem with role theory research, despite its quantity and significance, is that it has produced unclear and sometimes ambiguous findings with a significant amount of unaccounted variance within some results (Jackson and Schuler, 1985), and important gaps still exist with the development of the theory (King and King, 1990).

Empirical research on role conflict has tended to select roles for which some polarization of differences amongst role-senders seemed likely, and then to demonstrate that such differences were stressful for the focal-person, and produce consequences such as low levels of job satisfaction, anxiety, tension, turnover and burnout to name a few. In explaining this, it may be useful to employ instrumentality theory (Fishbein, 1967; Graen, 1969). This conceptualizes the relative attraction an individual perceives between a number of alternatives. Each alternative is measured on a scale of +1.00 to -1.00, and the scores reflect the relative attraction of each one for a person. Positive values reflect the desire to pursue an alternative, and negative values indicate the opposite. In applying this theory, the facility-manager associates scores to constitutency instructions which reflect their relative attraction. Therefore, in order for role conflict to exist there must be a tendency toward operations instructions attracting a high positive score, whilst marketing instructions will tend to draw a lower score, but still nevertheless positive. Therefore, both preferences are deemed attractive and cannot be reconciled. If the value for marketing instructions were negative however, then role conflict would not arise.

Role ambiguity

Furthermore, in this attempt to push marketing "down the line", facility- managers are likely to suffer role pressures which can result in role ambiguity. Generally, this is an outcome associated with a lack of the clear information required to fulfill the role-set expectations. Although facility-managers have responsibility for marketing, they may have difficulty articulating this into explicit tasks, as well as suffering from a lack of information upon which to base marketing decisions and organize activities. Evidence suggests that in an information- intensive role (such as the facility- manager), role ambiguity is highly probable (Michaels et.al., 1987). This may be associated with consequences such as reduced job performance, organizational effectiveness and individual well- being (Donnelly and Ivancevich, 1975; Goodell et.al., 1991; Mitchell and Larson, 1987).

In addition, hierarchical level tends to act as a moderator between role ambiguity and such consequences because the higher the focal-person's level, the more likely ambiguity will affect a greater portion of the job (Fisher and Gitelson, 1983). The reason that this is likely in this case is because at higher levels (such as facility-managers), jobs are connected to the external environment and its uncertainties and turbulence affect role-clarity.

Job performance

The outcome of these role stressors is that there may be suboptimization in both job performance (Brief and Aldag, 1976; Parasuraman, 1981) and marketing performance (Ross, 1991), because operations goals will be primary, at the expense of marketing aims (Lovelock et.al., 1981). The outcome for the individual can be recognized at two distinct levels. First, in cognitive terms, role ambiguity and conflict can hinder performance because of the inability to engage in the most appropriate behavior. That is, a scenario of trying to satisfy all constituencies and do everything that is expected, without adequate information. In these cases tasks are likely to be ineffective, "misdirected or insufficient" (Michaels, et.al., 1987). Second, in terms of individual motivation, performance is likely to be less than a possible optimum because role ambiguity and conflict are negatively associated with effort: performance and performance: reward expectations (Jackson and Schuler, 1985). This suggests that the facility-manager may lack motivation to improve performance until greater role-clarity has been sought and achieved.

Conclusions and implications

It is not the authors' intention in this paper to suggest that marketing should dominate organizational decision-making, or that facility- managers should be proselytized from operations to marketing, but that a balance should be struck between constituency functions within a service firm. The ultimate aim of this effort should concentrate on the effective production, delivery and consumption of services to target customers in the marketplace. This coordinated effort has been advocated by writers in the aim of providing consistency and improvements in services (Zeithamil et.al., 1985).

It may be only by empowering facility-managers and training them as multi-functional, and not "operations myopic" decision-makers, that improvements can occur. This implies that strategists should increase their understanding of the role of the facility-manager in the organizational context, and be aware of the fact that he/she is an agent for change. Furthermore, from a control point of view the "loose-tight" principle (Peters and Waterman, 1983) needs to apply. This suggests autonomy, entrepreneurship and innovation at the unit-level should be encouraged, whilst being monitored from the administrative core. This is familiar to some firms where revenue-responsibility is decentralized to the facility-manager, which provides the operation with the benefits of autonomy in decision-making, (Lovelock et.al., 1981), whilst still harnessing the advantages of corporate support.

Additional points can be raised from this paper. For example, the focus of this work has been the facility-manager and not explicitly unit level, front-line personnel such as customer-contact staff. Nevertheless, facility-managers may inadvertently generate role conflict and ambiguity for their employees, and pass on role problems without attempting to resolve them. Furthermore, this conceptualization could be extended even further to encompass the role of facility-manager in internal marketing (George, 1990) and internal customer service to employees, since, "understanding and implementing effective internal customer service processes are two important steps to achieving a unit level market-orientation" (Marshall, et.al., 1992).

Nevertheless, the authors anticipate that the marketing and organizational issues and implications raised in this paper, may explain some of the problems and barriers inherent in developing and implementating a market-led, customer-driven orientation in a wide variety of service contexts. Having developed this conceptualization from extant literature, the next phase of research will be to synthesize this model with the findings of fieldwork interviews and empirical tests with all the key actors influencing perceptual determinants of the behavior of facility-managers, and assess their impact upon the role stressors of ambiguity and conflict. The ultimate aim will be to identify any significant association between these measures and overall marketing performance.

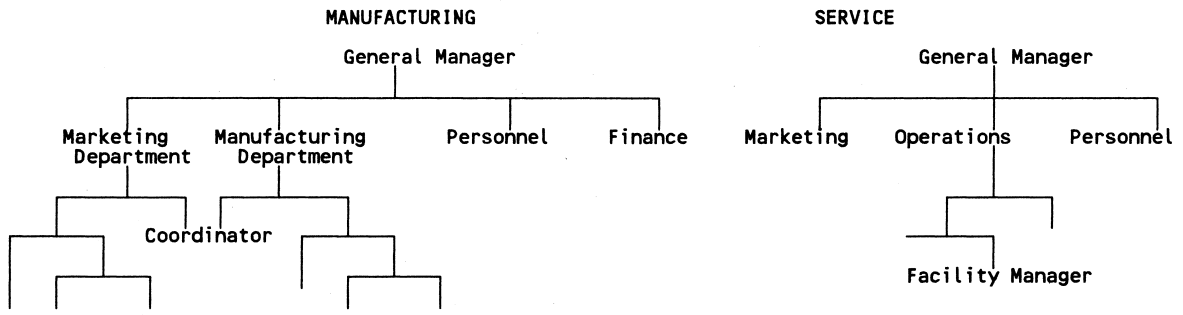
*** A full reference list of acknowledged citations is available from the lead author.**

[1]The authors gratefully acknowledge Professors Evert Gummesson (University of Stockholm) and Bo Edvardsson (Service Research Center, University of Karlstad) for providing guidance on the conceptual material detailed within this manuscript.

[2]Operating costs *per se* are traditional outlays associated with the direct/indirect operational expenses of the firm. Organising costs, however, are incurred from the allocation of tasks and work roles which derive from the selected organizational structure.

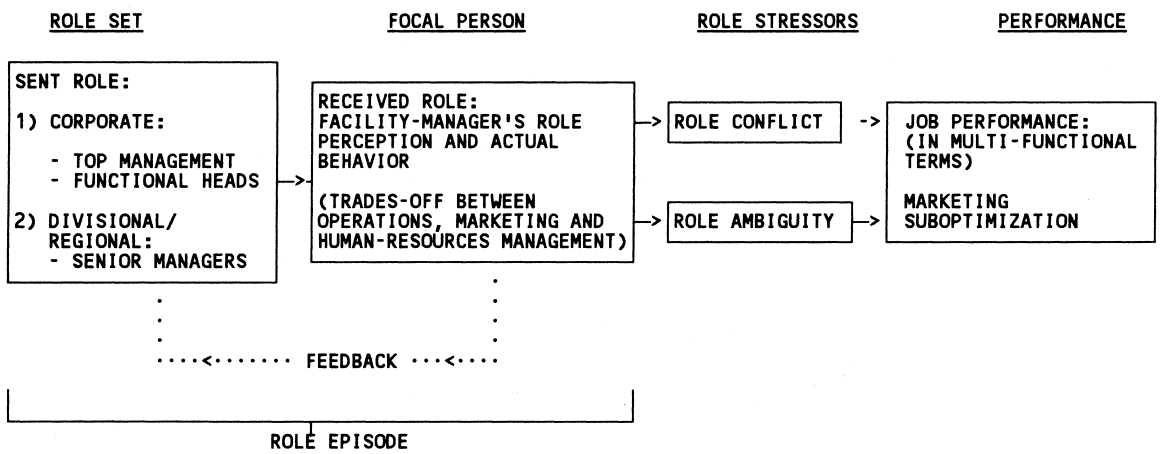
[3]Obviously alternative forms do exist, but these structures tend to be "typical" of a broad number of firms in that within most organizations, the functional form is likely to exist at some point in the colnfiguration (Piercy, 1985; Richards, 1987). For example, the authors have conducted research with facility-managers in the financial services industry (bank/building society branch managers) where this service firm structure is common.

FIGURE 1 ORGANIZATIONAL STRUCTURES
(COMPARATIVE "TYPICAL" MANUFACTURING AND SERVICE FIRM)



Source: Adapted from Bateson, J.E.G. (1989), Managing Services Marketing: Text and Readings, The Dryden Press, Chicago, p. 485.

FIGURE 2 ROLE UNCERTAINTY OF FACILITY MANAGERS



PROCESS ISSUES IN CUSTOMER SATISFACTION MEASUREMENT AND MANAGEMENT

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In the conventional literature of marketing the measurement of customer satisfaction, and the appropriate reaction to these measurements by management, is central to the implementation of the marketing concept and implicit in recent conceptualizations of market orientation. This centrality is reflected in the widespread advocacy of customer satisfaction measurement in the prescriptive practitioner literature, and the adoption of customer satisfaction management approaches.

This paper suggests that there is a major lacuna in the conventional treatment of customer satisfaction management, relating to the organizational implications of such systems and their adoption by management.

This paper poses three challenges to the conventional view of customer satisfaction measurement and management strategies.

First, we argue that the conventional view of customer satisfaction measurement and management is dominated by the development of analytical technique, while a multidimensional processual view leads us to conclude that greater attention should be given to behavioral and organizational process attributes, and the consistency between these and the analytical process dimension.

Second, this view is reinforced by adopting an internal market perspective which recognizes the internal customer, and mirrors the attributes of external customer satisfaction/dissatisfaction in internal customer satisfaction/ dissatisfaction.

Third, exploratory interviews with executives suggest that there are many organizational and behavioral barriers to the effective implementation of customer satisfaction measurement and management, which go far beyond the simple resistance to change and are largely ignored in the conventional literature.

This suggests a very different management agenda required in this area, compared to that currently recognized. We conclude with a preliminary research model currently being tested through survey and case study research.

STRATEGIC AND OPERATIONAL MARKET SEGMENTATION

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There can be few models of analysis more widely used in marketing than of market segmentation. The view taken in this paper is that the conventional explication of market segmentation ignores many of the issues most critical to the operational use and implementation of segmentation. We suggest the need to distinguish more systematically between organizational levels in segmentation - the strategic compared to the managerial/operational; and, between the internal and external issues implicit and unavoidable in implementing segmentation strategies.

This argument is grounded in exploratory workshop discussions with exceutives attempting to operationalize market segmentation in their planning. These data suggest problems in the application and implementation of segmentation reling not to the analytical techniques used, but to organizational context, and lead to the model proposed here.

This argument implies that segment targets should be evaluated not simply in the conventional terms of external market attractiveness, but also in terms of their internal compatibility with the structure and processes of the organization in question. Developing the scope of the market segmentation concept in this way is potentially rich in implication for both practitioners and academic researchers, and we identify both diagnostic models for executive use and a number of conceptual issues for marketing scholars.

OPENING OF THE EASTERN BLOC COUNTRIES TO INBOUND TOURISM

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ABSTRACT

The impacts on international tourism demand of the recent political and economic upheavals which have taken place in Eastern Europe are considered. Substantial changes in previously established patterns of travel to the Eastern bloc countries have occurred. Data on the sizes of the inbound international tourism markets are presented for the former Soviet bloc countries and these are compared with corresponding destinations in Western Europe in order to provide a yardstick of progress in tourism development. Opportunities for the development of the tourism markets in Eastern Europe and the constraints on their growth are considered. In particular, it is clear that a general lack of marketing expertise and marketing education opportunities will restrict potential growth.

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