

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

B.J. Dunlap *Editor*

Proceedings of the 1990 Academy of Marketing Science (AMS) Annual Conference



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"Psychic Stock: Retail Inventory for Stimulating Demand"
Paul D. Larson
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Second Place
"How to Improve Service Quality by Increasing Customer Participation"
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Award-Winning Competitive Papers

"The Art of Time"
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FOREWARD

It has, indeed, been an honor to edit DEVELOPMENTS IN MARKETING SCIENCE, Volume XIII, the PROCEEDINGS of the 1990 Annual Conference, Academy of Marketing Science, held in New Orleans, Louisiana. This was an excellent learning experience. I enjoyed working with the Track Chairs, authors and discussants throughout the world who provide the excellence on which the Academy is founded. It has been an exceptional pleasure to work with Naresh Malhotra, Vice-President of Programs, who has contributed tremendously to the professionalism and high quality of the Academy of Marketing Science conferences over the years. Collaboration with Robert A. Peterson and Ajay K. Kohli was enjoyable. They are commended for their laborious, yet fine work.

This volume contains 134 refereed papers. The Competitive Sessions were reviewed in the usual, double-blind refereed process by two or more individuals qualified in the given area. For the 1990 Conference, the overall acceptance rate for Competitive Session papers was approximately 40%, reflecting rigor in the review process. Based upon the evaluation and recommendations of Reviewers and Track Chairs, papers accepted for presentation at the conference have been grouped into relevant marketing areas. They appear in this PROCEEDINGS alphabetically by track and, within tracks, alphabetically by author(s).

Publishing the PROCEEDINGS depended directly, or indirectly, on the help of many individuals: the Program Chairman and Co-Chairman, the Track Chairpersons, the Vice-President of Programs, the authors, reviewers, coordinators, typists and others who faced serious time and resource constraints, as well as numerous guidelines. Special thanks are offered to Dr. John McCreary, Dean, Forsyth School of Business, for his support and contribution of resources, Ms. Sandy Jenkins, Secretary, Department of Management and Marketing, for assisting me in carefully proofing and in enhancing the attractiveness of the lead pages, and Ms. Jeannie Phillips, Departmental Assistant, Western Carolina University. A big "hats off" is offered to Ms. Pam Clark, Departmental Assistant, who was instrumental in helping me remain efficient when shipping and receiving the voluminous paperwork involved in preparing the PROCEEDINGS. Other institutions also extended their professional support; in particular The Georgia Institute of Technology, The University of Texas at Austin and The University of Miami provided valuable administrative assistance.

On behalf of the Officers and Fellows of the Academy of Marketing Science, I sincerely thank the above individuals and institutions for their generous support and contributions. Without their efforts and assistance, this Conference and PROCEEDINGS would not have been possible.

In preparing this publication, I have exercised a great deal of care to minimize errors and omissions. My sincerest apologies are extended to those who are affected by any mistakes which may still remain.

April 25, 1990

Ms. B. J. Dunlap, D.B.A.
Western Carolina University

PREFACE

The Academy was founded in 1971, held its first Annual Conference in 1977 (Akron, Ohio), and has grown and prospered over the years. 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 throughout 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 last year, defines 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 articles;
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; and,
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

COMPETITIVE PAPERS

SELF-IMAGE CONGRUENCE AS A MODEL OF CONSUMER ATTITUDE FORMATION AND BEHAVIOR:
A CONCEPTUAL REVIEW AND GUIDE FOR FUTURE RESEARCH

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Abstract

Over thirty consumer research studies have assessed the impact of a consumer's image of a product relative to his or her own self-image. Self-congruence models of attitude formation and subsequent behavior are still sparsely used, however. This is somewhat surprising given the prevalence of the self-concept in psychological and behavioral research.¹ This paper addresses some important conceptual issues of self-congruity research within consumer behavior and in light of the most recent empirical findings and suggests key areas of further research.

Introduction

Self-image congruence models are based on a cognitive matching between the value expressive attributes of a given product which form the product's image and a consumer's self-image relative to those attributes. The most commonly used self-image congruence models are the actual, ideal, social and ideal social self-congruity models (see Sirgy 1982 and 1985 for reviews of the literature). Significant relationships have been found between consumer's attitude/behavior and self-image congruence with all aspects of the self (e.g. actual, ideal, social and ideal social). Also the moderating effects of consumption-related variables have been examined to find ways to enhance the attitude/behavior predictiveness of self-congruity models. Examples of moderating variables include response mode, product conspicuousness, personality type, among others. Although a rudimentary theory of self-congruity has been identified and underlies much of the empirical work, several important issues still need to be addressed, issues such as the standardization of the definition of self-concept, the clarification of the relationship between product image and self-image in terms of expected effect sizes, and the relative predictiveness of self-image congruence models on consumer attitude/behavior. This paper explores the conceptual progress in consumer behavior/self-congruity research (sociologically-based studies have been excluded) and identifies areas for further study.

Definitions of Self-Concept

One of the problems in self-congruity research is the plethora of definitions of self-concept stemming from the variety of ways the self is viewed in the psychological literature. For example, James (1890) defined the self-concept as all that

¹A computerized search of the Psyc 1 data base in **Dialog** for the past 10 years yielded over 11,000 references to self-concept as a key identifier.

we call our own, and with whom or with which we share a bond of identity. Many other traditional definitions of the self-concept focus on a unitary self (Allport 1943; Cooley 1902; Mead 1934; Sullivan 1953; and Lecky 1945). However, the recent psychological literature in self-concept points to the possibility of multiple selves. That is, the self is a collection of masks each tied to a particular set of social circumstances (Markus and Nurius 1986). The self-concept is diverse and multifaceted. Each self-concept domain represents the individual's persistent hopes and fears and indicates what can be realized in certain situations.

Consumer researchers have traditionally used four aspects of self-concept in explaining and predicting attitude/behavior. These are the actual self-image, the ideal self-image, the social self-image, and the ideal social self-image (Sirgy 1982, 1985a). The actual self-image is defined as how consumers see themselves. The ideal self-image is defined as how consumers would like to see themselves. The social self-image is defined as how consumers believe they are seen. The ideal social self-image is defined as how consumers would like to be seen by others. In that vein, consumer research addresses how each of these types of self-concepts is used as a cognitive reference in evaluating product symbolic cues. Product symbolic cues refer to stereotypic images of users of a product (e.g. sexy, classy, fashionable, and young, to name a few). Consumer's attitude/behavior toward a product is thus influenced by the matching of the product image with any one or more of the self-concept types (actual, ideal, social, and ideal social self-image). This matching process is referred to as self-image congruence. Thus, there are four types of self-image congruence models: actual self-congruity, ideal self-congruity, social self-congruity, ideal social self-congruity. The actual self-congruity model describes how the match between a consumer's actual self-image and a product image influences attitudes toward the product. Similarly, ideal self-congruity, social self-congruity, and ideal social self congruity models predict consumer attitude/behavior relative to these respective forms of self-image.

Self-Congruity Theory

Self-congruity theory (Sirgy 1982, 1985a, 1985b, 1986; Sirgy and Samli 1985; Eriksen and Sirgy 1989) argues that the relationship between self-image congruence and consumer attitude/behavior can be explained in terms of self-evaluation. The consumer who is evaluating a product is not evaluating the product per se, but s/he is evaluating herself/himself using the product. That is, the consumer conjures up how s/he would "look" using the product. How s/he would look using the product is very much determined by the product's image, i.e. the stereotypical image of the

generalized product user. Hence, the traditional notion of product image as evaluated in reference to self-concept can be explained in terms of a perception of oneself through the actual (or anticipatory) use of the product. This perceived self-image, in turn, is the object of evaluation, not the product image per se. The perceived self-image is evaluated in reference to a particular self-image. For example, a consumer is in a situation to evaluate a sports car which appears in an ad. The consumer thinks, "how would I look driving a sports car like this car?" "I may look like I am, young, sexy, and attractive." This perceived self-image is postulated to be determined by the product image, i.e. the stereotypical image of the generalized product user (that is, the typical person who drives this car is "young, sexy, and attractive"). The perceived self-image is then evaluated in relation to how the consumer sees herself/himself along the image dimensions of youth, sexiness, and attractiveness. The consumer may see and like herself/himself as young, sexy, and attractive. If so, this situation is characterized as positive self-congruity (or as a high actual/ideal self-congruity situation). If s/he sees herself/himself as not young, sexy, and attractive but would like to be, the situation is characterized as positive self-incongruity (the product image is congruous with one form of the ideal but not the actual self-image; see [Table 1](#) for a complete description of all possible conditions).

Note that self-congruity theory explains the effect of self-image congruence on consumer attitude/behavior through the mediating effects of self-concept motives (self-esteem, social approval, self-consistency, and social consistency).² In the positive self-congruity condition, the consumer is expected to feel highly motivated toward the acquisition of the product, mainly due to its self-esteem (or social approval) and self-consistency (or social consistency) enhancement effects. That is, the consumer may feel that acquiring the product may increase his/her self-esteem (or social approval), as well as, satisfy the need for self-consistency (or social consistency). However the positive self-incongruity and the negative self-congruity conditions may produce a conflict between the satisfaction of self-esteem (social approval) and self-consistency (or social consistency); hence only an average (50/50) probability of purchase is predicted under these conditions. In the negative self-incongruity condition, the consumer is expected to have a negative attitude toward the product (a low probability of purchase because the product does not

serve to satisfy both self-esteem (or social approval) and self-consistency (or social consistency) needs. Hence, self-congruity theory explains the mediating states of self-image congruence and consumer attitude/behavior. It does this through the concepts of self-esteem, social approval, self-consistency, and social consistency motivation.

Self-Concept Research in Consumer Behavior

Self-concept research in consumer behavior may be viewed in terms of three groups of studies. The initial studies sought to demonstrate the existence of a relationship between a product image and some form of the self-image (Dolich 1969; Dornoff and Tatham 1972; Grubb and Hupp 1968; Grubb Stern 1971; Hughes and Guerreo 1971; Martin and Bellizzi 1982; Ross 1971). A second group of studies examined the predictiveness of product/self-image congruity on consumer behavior (Belch and Landon 1977; Bellenger et. al. 1976; Ericksen and Sirgy 1989; Landon 1974; Sirgy and Samli 1985; Sirgy and Johar 1989a). More recently studies have considered the specific type of product/self-image congruity evoked, the self-concept motives involved, and the moderating variables which affect consumer behavior (Sirgy and Johar 1985; Sirgy, Johar, and Wood 1986; Sirgy 1985; Sirgy, Samli, Bahn and Varvoglis 1985; Varvoglis and Sirgy 1984). The impact of these areas of research on the conceptual development of the field is discussed in the following sections.

Existence of the Relationship Between Product Images and Self-Images

All studies that examined product image/self-image relationship supported the existence of a relationship (see [Table 2](#)). The effect sizes, however, are inconsistent with uncorrected effect sizes (eta) as large as .91 ($F=730, df=1,160$). Part of this variation may be due to the statistical methods and reporting standards of that period. Nevertheless, it is safe to conclude that there is sufficient empirical evidence for a relationship. Furthermore, the relationship extends to different settings and products: retail stores, automobile brands, clothing, and consumer products such as cigarettes. In addition, various groups have been used as subjects suggesting that the results apply generally across people. The predominance of female students as subjects does raise some questions. In particular, because of socialization, the frame of reference may be different for some groups, such as, women and men when evaluating some products. Landon (1974) found gender differences between self-congruity and purchase intention scores for men and women. If the reference image is different for these two groups, then the perceived product image is not comparable between men and women. In other words, the stereotypic image of the generalized product user may not be the same for men and women evaluating the same product (brand). The sports car mentioned previous, for example, might be viewed by a demographically comparable group of women as childish, macho, and unattractive. This would lead to a "negative self-incongruity" (see [Table 1](#)). This question needs further investigation.

²The need for self-esteem is defined as the tendency to realize an ideal image of oneself. The need for social approval is defined as the tendency to realize an ideal image of oneself as determined by significant others. The need for self-consistency is defined as the tendency to engage in behavior that is consistent with how one sees oneself. The need for social consistency is defined as the tendency to engage in behavior that is consistent with how one believes significant others see him.

TABLE 1
SELF-CONGRUITY THEORY

Perceived Self-Image (Product Image)	Actual (or Social) Self-Image	Ideal (or Ideal Social) Self-Image	Self-Congruity Condition	Self-Esteem (or Social Approval) Motivation	Self-Consistency (or Social Consistency) Motivation	Consumer Attitude/Behavior
Young, sexy, and attractive	Young, sexy, and attractive	Young, sexy, and attractive	Positive Self-Congruity	Approach Motivation	Approach Motivation	Positive Attitude and/or High Probability Purchase
Young, sexy, and attractive	Not young, sexy, and attractive	Young, sexy, and attractive	Positive Self-Incongruity	Approach Motivation	Avoidance Motivation	Moderate Attitude and/or Average Probability Purchase
Young, spoiled and immature	Young, spoiled, and immature	Not young, not spoiled, and mature	Negative Self-Congruity	Avoidance Motivation	Approach Motivation	Moderate Attitude and/or Average Probability Purchase
Young, spoiled, and immature	Not young, not spoiled and mature	Not young, not spoiled, and mature	Negative Self-Incongruity	Avoidance Motivation	Avoidance Motivation	Negative Attitude and/or Low Probability Purchase

TABLE 2
RELATIONSHIP BETWEEN SELF-IMAGE AND PRODUCT IMAGE

RESEARCHER	YEAR	RELATIONSHIP CONFIRMED
Dolich	1969	Self-image of most (least) preferred brands
Dornoff & Tatham	1972	Self-image and best friend's image relative to preferred store
Grubb & Hupp	1968	Self-concept and stereotypical product self of competing brand
Grubb & Stern	1971	Self-concept and other's stereotypical product self of competing brand
Hughes & Guerrero	1971	Self-image and present and first choice brand images
Martin & Bellizzi	1982	Self-image and most (least) preferred brand
Ross	1971	Self-image and most (least) preferred brand

The Relative Predictiveness of Product/Self-Image Congruity Models

A second group of empirical studies examines the correlation between product/self-image congruity and consumer behaviors. The behaviors predicted are preferences and liking, purchase intention, store loyalty, and social desirability. Effect sizes for these predictions range from .21 to .39 with an average (weighted by sample size) of .29 (see Table 3). A comparison of these studies indicates that there is no difference in the findings ($t=.40$, $p=.71$). That is, the findings are homogeneous and can be considered from the same group. Research to date therefore indicates a moderate effect size of product/self-image congruity on consumption behavior. A number of questions still remain about this relationship, in particular whether the relationship is linear or non-linear, its stability over time, and its causal direction and mediating variables.

TABLE 3
PREDICTIVENESS OF PRODUCT/SELF-IMAGE CONGRUITY AND CONSUMER BEHAVIOR

RESEARCHER	YEAR	BEHAVIOR PREDICTED	EFFECT SIZE	Z
Belch and Landon	1977	social desirability	0.31	2.13
Bellenger et. al.	1976	store loyalty	0.34	3.61
Erickson and Sirgy	1980	product usage	0.29	4.35
Landon	1974	purchase intention	*0.39	7.32
Sirgy and Danes	1980	preference/intention	0.34	4.41
Sirgy and Samli	1980	store loyalty	0.22	4.24
Sirgy and Johar	1980	attitude/intention	0.21	4.08

*Kendall's Tau rather than Pearson r

With respect to the linearity, it may be hypothesized that the nature of the relationship between self-image congruence and consumer attitude/behavior is nonlinear. More specifically, one can argue that self-congruity effects may be most visible in the polar extremes. That is, consumers may evaluate a product positively if the product is clearly perceived to have an image that is congruent with one or more of the self-concept types. Conversely, a product may be negatively evaluated if the product is clearly perceived to have an image that is incongruent with a particular type of self-concept. Future research may investigate the possibility of a S-shaped relationship between self-image congruence consumer attitude/behavior.

With respect to the stability issue, future research may focus on the possibility of how self-image congruence affects consumer attitude/behavior as moderated by time. One can hypothesize that self-image congruence may play a role in the early stages of the consumer decision cycle. However, with greater familiarity and information processing (which occurs with the passage of time), the role of self-image congruence in influencing consumer attitude/behavior decreases. This may be due to the effect that consumers may process more concrete and functionally-related cues as they become more interested and familiar with the product.

The causal direction of the self-image congruence, consumer attitude/behavior relationship needs empirical investigation. We have theoretically assumed that self-image congruence may cause the formation and/or change of consumers attitude/behavior. However, the reverse cause is equally plausible. That is, subjects may make self-attributions or self-perceptions based on having preferred or acquired certain products. They could develop self-image projections to insure consistency with their behaviors. In other words, self-concept changes as a function of behavior.

Self-congruity theory suggests, with respect to mediating variables, that the cause of the dependency of consumer behaviors on product/self-image congruity is related to self-esteem (social approval) and self-consistency (social consistency) motivations. These mediating influences are the subject of the third group of studies.

The Mediating Effects of Self-Concept Motives

A third, and more current area of research looks more specifically at the motivating effects of self-esteem and self-consistency within the relationship of self-image congruence and consumer attitude/behavior (Sirgy 1985b, 1987). Sirgy (1986) suggests that the value or "meaning" of a product is not a veridical perception but an evoked self-image dimension. The comparison of self-image with the evoked product image leads to either a state of self-congruity or self-incongruity (see Table 1). Self-congruity is positive given a comparison between a positive product image perception and a positive self-image belief. Self-congruity is a negative given a comparison between a negative product image perception and a negative self-image belief. Self-incongruity is positive given a comparison between a positive product image perception and a negative self-image belief. Finally, self-incongruity is negative given a comparison between a negative product image perception and a positive self-image belief. The different product/self-image congruity states affect consumer behaviors differently. Stronger effects are predicted for positive self-congruity and negative self-incongruity. Weaker effects are predicted for negative self-congruity and positive self-incongruity. Negative self-congruity leads to a moderate attitude since a match between a negative self-image and negative product image leads to a conflict between the needs of self-esteem and self-consistency. Similarly, positive self-incongruity results in a moderate attitude due to the same conflict between the self-concept motives.

In a test of this model Sirgy (1985b) found support for the predictiveness, across products, of the positive/negative self-congruity/incongruity measures with preference ($F=11.9, \eta^2=.106$), intention ($F=10.64, \eta^2=.10$), and with the sum of preference and intention ($F=13.09, \eta^2=.11$). Further the high, moderate, and low congruity groups were found to differ significantly when averaged across products and dependent measures ($F=35.6, \eta^2=.24$). While the effect size is small, there is clearly a differential effect on behavior for different levels of self-congruity. An interesting issue for future research is the role of belief strength associated with product image and self-image in the various self-congruity conditions. Sirgy (1986) suggests that belief strength may play different roles. For example, given a strong product image and weak self-image, the mediating effect of self-esteem is postulated to have a stronger impact on attitude/behavior than the mediating effect of self-consistency. Conversely, given a weak product image and strong self-image, the mediating effect of self-consistency is surmised to have a stronger impact than self-esteem. Future research may empirically investigate the hypothesized effects of belief strength in product image and self-image constructs.

Moderators of the Self-Image Congruence/Attitude Relationship

Two kinds of moderators are of interest, moderators within and moderators between. Moderators within are moderators that serve to qualify the

differential predictiveness of the actual, ideal, social, and ideal social congruity models. Moderators between are moderators that serve to qualify the differential predictiveness of self-image congruence models in relation to functional congruence or other models of consumer behavior.

Moderators Between Self-Image Congruence and Functional Congruence Type Models. Self-image congruence models are based on a matching between the value expressive attributes of a product and consumer self-concept perceptions. Functional congruence models, on the other hand, are based on the perceived utilitarian aspects of the product in reference to some ideal aspects. Functional congruence models most often occur as multiattribute attitude models (see Wilkie and Pessemier 1973 and Lutz 1981 for comprehensive literature reviews). The research literature suggests that the predictiveness of both self-image congruence and functional congruence models may be qualified by a number of moderating variables. Fourteen different moderating variables have been considered in consumer self-concept research (see Table 4). Several of these variables are related to social visibility; social consumption, personally revealing products, and product conspicuousness. Social visibility is more likely to affect self-image congruence than functional congruence because of the strong link to the social self (Dolich 1969; Martin et al. 1982; Ross 1971; Sirgy 1980, 1985a, 1986). Preference for products high in value-expressiveness is therefore more likely to be affected by product conspicuousness.

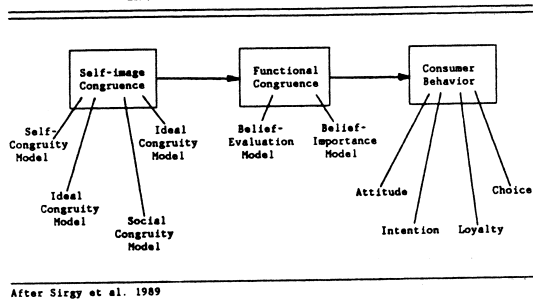
Other variables considered in relationship to self-congruity and functional congruity are product differentiation, involvement, conspicuousness, and common usage (Sirgy and Johar 1989a). Each of these moderators exerts a greater effect on either self-congruity or functional congruity and thus strengthens the predictiveness of that construct. More specifically, it was hypothesized and empirically demonstrated that self-congruity is more predictive of attitude/behavior under conditions of high (rather than low) product conspicuous, and under conditions of low (rather than high) common usage. Common usage is defined as the degree to which a product is commonly versus scarcely used by the general population. Functional congruity, as expected, was found to be more predictive of attitude/behavior under conditions of high (rather than low) product involvement and differentiation.

Although the relationship between self-image and product image has been demonstrated, the fundamental relationship is still unspecified. In particular, some proximal-distal juxtaposition may operate in consumers minds. This is suggested theoretically by the difference in importance and immediacy between the self and an external object. Recent studies have found multiattribute models more predictive of behavior for some products which were previously thought to be more value-expressive, and therefore more symbolic. Therefore the specific nature of the relationship between self-congruity models and functional congruity models has been brought into question. Sirgy et al. (1989) propose that self-congruity may operate antecedently to multiattribute processing (See Figure 1). This remains to be tested.

TABLE 4
MODERATOR VARIABLES

RESEARCHER	YEAR	CONSTRUCT (Y)	CONSTRUCT (X)	MODERATORS
Belch & Landon	1977	social desirability	self-image	ownership
Bellenger et al.	1976	store loyalty	self-image	
Dolich	1969	product preference	self-image	conspicuousness
Dornoff & Tatham	1972	product preference	self-image	
Ericksen & Sirgy	1989	self-congruity	clothing behavior	achievement motivation
Grubb & Hupp	1968	self-concept	stereotypical self	
Grubb & Stern	1971	self-concept	stereotypical self	other's self-concept
Hughes & Guerreo	1971	self/social congruity	self/social incongruity	choice of present brand
Landon	1974	purchase intention	actual/ideal self-image	gender
Martin & Belizzi	1982	preferred brand	self-congruity	social/private consumption
Ross	1971	preferred brand	self-congruity	conspicuousness
Sirgy	1980	self-congruity	ideal self-congruity	personally revealing
Samli & Sirgy	1981	interactive congruity	single congruity	congruity measure
Sirgy et al.	1985	purchase motivation	self/ideal congruity	consistency/esteem
Sirgy & Johar	1985	value expressiveness	utilitarianism	referent brand
Sirgy & Samli	1985	store/self-congruity	functional store image	socioeconomic variables & loyalty
Sirgy	1985	store patronage	social congruity	
Sirgy et al.	1986	self-congruity	value expressiveness	usage/differentiation/conspicuousness
Sirgy & Johar	1989	attitude/intention	self-congruity	
Stern et al.	1977	preferred store image		
Varvoglis et al.	1984	value expressive	utilitarianism	

FIGURE 1
THE INTERRELATIONSHIP OF SELF-CONGRUITY
AND FUNCTIONAL CONGRUITY



Moderators Within Self-Image Congruence Models.

A number of studies have examined moderators within self-image congruence models (e.g. Ross 1971; Sirgy 1987). For example, Ross (1971) hypothesized that the predictiveness of public versus private self-concept models is a function of product conspicuousness. More specifically, private self models (actual and ideal) should predict brand preferences for less conspicuous brands better than for more conspicuous brands. Conversely, public self models (social and ideal social) should predict preference for conspicuous rather than inconspicuous brands. The results have not been highly supportive of these hypotheses however.

Sirgy (1987) hypothesized that response mode moderates consistency versus esteem-type of self-image congruence models. More specifically, it was hypothesized that esteem-type models (ideal and ideal social) are more predictive of attitude than behavior; and conversely consistency-type models (actual and social) are more predictive of behavior than attitude. The results were supportive of the hypotheses.

Varvoglis (1987) examined the moderating effects of advertising versus retail setting. He hypothesized that evaluating a product through an ad may evoke ideal or ideal social congruity type of processing; whereas, a retail setting may evoke actual or social congruity processing. His results were moderately supportive of the hypothesis.

A conceptual area which has been overlooked is the reference for product image evaluations. If self-image evaluations are conceived of relative to our various selves, these internal comparisons naturally vary across individuals, but in some cases they may vary between groups, as well. Are groups of product owners likely to use different standards (actual, ideal, social, and/or ideal social) than groups which have only seen ads for the product? Are men and women likely to relate to certain products or brands differently? If so, what is the source of the reference for these group's product image evaluations.

Self-Image Congruence as Mediating Links. A group of studies (e.g. Sirgy and Samli 1989, Ericksen and Sirgy 1989) treat self-congruity as a mediating variable for relationships between individual difference variables and consumer behavior. For example, Ericksen and Sirgy (1989) hypothesized and empirically demonstrated that achievement motivation of working women and their clothing behavior at work is mediated by self-image congruence. More specifically, they show that achievement motivated women tend to experience greater self-image congruence with "professional outfits" than non-achievement motivated women.

Similarly, in a store patronage study, Sirgy and Samli (1989a), hypothesized and demonstrated that social class and patronage of "upscale and downscale stores" is mediated by self-image congruence. More specifically, high social class consumers tend to experience greater self-image congruence with upscale (rather than downscale) stores, and hence patronize more upscale than downscale stores.

Further research may concentrate on exploring the mediating effects of self-image congruence on individual difference variables such as self-monitoring, self-esteem, age, and gender to name a few.

References

Due to space limitations, references have been omitted. A complete set of references can be obtained by writing to either author at the Department of Marketing, Virginia Tech, Blacksburg, VA 24061, or call (703) 231-6949.

VALIDATION OF THE SUSCEP SCALE:
AN INDEPENDENT SECOND LOOK

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Abstract

The consumer susceptibility to interpersonal influence (SUSCEP) scale developed by Bearden, Netemeyer, and Teal (1989), has the potential of being a major individual difference measure in consumer behavior. However, to date, no replications of the reliability and validity studies have been accomplished. In the replication tradition, this study examines the factorial structure, reliability, and convergent/discriminant validity of SUSCEP. With the possible exception of one test item, support was found for SUSCEP.

Introduction

Numerous marketing researchers in the positivist/empiricist tradition (Banks 1965; Kollat, Engel, and Blackwell 1970; Robertson and Ward 1972; Heeler and Ray 1974) as well as those writing for a broader audience (Campbell and Stanley 1963; Kerlinger 1964) have long insisted that replication is required.

"In general, measures that have undergone extensive development and scrutiny are judged to be more valid than those that are proposed haphazardly" (Peter and Churchill 1986, p. 1). This statement suggests (1) a long process, (2) carefully planned studies, and (3) independent replication. The dominant measurement process paradigm (Churchill 1979) indicates numerous feedback/replication iterations may be necessary. Since construct validity varies over time and situations (Peter and Churchill 1986), the measurement validation process never ends.

In the spirit of a continual validation process, this study is designed to provide information related to the consumer susceptibility to interpersonal influence (SUSCEP) scale developed by Bearden, Netemeyer, and Teal (1989). A brief summary of their validity studies precedes the reporting of our findings.

Review of Previous SUSCEP Measurement Studies

The SUSCEP scale includes eight items to measure the normative (conformity and enhancing one's image) dimension and four items to measure the informative (utility information) dimension. SUSCEP is a self-reported measure, scored on a seven-point scale from strongly disagree to strongly agree. Bearden, Netemeyer, and Teal (BNT) (1989) provide an intentional construct definition (Bagozzi 1980) which lists a unique set of properties for each dimension.

The construct is defined as the need to identify with or enhance one's image in the opinion of 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 or seeking information from others. (Bearden, Netemeyer, and Teal 1989)

Deutsch and Gerard (1955) suggest that SUSCEP consists of normative and informational influences. BNT conceptually supported Park and Lessig's (1977) three factor proposition which separates the normative factor into value expressive and utilitarian components. However, BNT's results clearly support a two factor model over both the three factor and one factor models.

TABLE 1
SUSCEP SCALE ITEMS

Item no.	Statement
<u>Normative Items.</u>	
5	I rarely purchase the latest fashion styles until I am sure my friends will approve of them.
3	It is important that others like the products and brands I buy.
8	When buying products, I generally purchase those brands that I think others will approve of.
11	If other people can see me using a product, I often purchase the brand they expect me to buy.
9	I like to know what brands and products make good impressions on others.
12	I achieve a sense of belonging by purchasing the same products and brands that others purchase.
2	If I want to be like someone, I often try to buy the same brands that they buy.
6	I often identify with other people by purchasing the same products and brands they purchase.
<u>Informational Items.</u>	
4	To make sure I buy the right product or brand, I often observe what others are buying and using.
7	If I have little experience with a product, I often ask my friends about the product.
1	I often consult other people to help choose the best alternative available from a product class.
10	I frequently gather information from friends or family about a product before I buy.

BNT started with, "An original pool of 166 items generated from a review of prior literature." Rather than being a representative sample of the construct domain, sampling from prior literature may yield a sample of only parts of the domain. Psychometric scale development requires that the entire domain of the construct be sampled

(Nunnally 1978). Inadequate domain sampling is a primary source of measurement error (Churchill 1979). While random sampling of a construct domain is unrealistic, Angleitner and Lohr (1986) recommend structured sampling as an alternative.

Two judge panels pruned the original items to 62 by eliminating ambiguous items, duplicates, and unrepresentative items. An analysis of a sample of 220 adult consumers resulted in removing 47 additional items. The analysis of a second sample, consisting of undergraduate students, reduced the remaining 15 items to 12. The final two-dimensional scale is shown above in Table 1.

A series of validity tests were then conducted including comparison to three other scales--Eagly's (1967) self-esteem, Ajzen and Fishbein's (1980) motivation to comply, and Lennox and Wolfe's (1984) ATSCI--and an examination of correlations with behavioral indices and external judge ratings. Results of these studies supported SUSCEP's construct validity. However, more support was found for the normative dimension than for the informational dimension.

BNT did not analyze their results for differences of gender. Gender differences represent a major problem in developing individual difference scales. Kassarian (1971) suggests that all consumer personality measure development must control for gender. More specifically, an extensive literature search, by Zikmund et. al. (1984), showed that most conformity studies found females to be more yielding. Zikmund's own study found that females would conform more than males across broad product categories. Because SUSCEP is related to conformity, gender is an issue that must at some point be addressed.

In summary, Bearden, Netemeyer, and Teal (1989) have demonstrated considerable construct validity for the SUSCEP scale. However as mentioned previously, measurement validation is a long process. The scales must still be confirmed and additional construct validity studies are required to help identify what SUSCEP measures and what it does not. The next section is an account of our independent study intended to advance SUSCEP's validation process.

Replication Results

A convenience sample of 137 undergraduate marketing students was drawn from a large southwestern university. The research instrument consisted of a series of items all measured on seven-point scales and included the 12 SUSCEP items, 35 CAD items (Cohen 1967), and 18 revised self-monitoring items (Snyder and Gangestad 1986).

SUSCEP's Factorial Structure

Nested LISREL models were constructed to examine the internal structure of the SUSCEP. Table 2 lists the results of the hypothesized two factor model. The correlation between the two factors

($r = 0.44$) is identical to BNT's results.

TABLE 2
INDIVIDUAL ITEMS RESULTS FOR HYPOTHEZIZED MODEL

Item Number	Lambda Correlations		Modification** Indexes	
	/Scale	Norm	Inform	Norm Inform
5 N	.677	-	-	.1
3 N	.656	-	-	9.6
8 N	.906	-	-	.6
11 N	.822	-	-	1.7
9 N	.723	-	-	.2
12 N	.763	-	-	1.0
2 N	.564	-	-	.9
6 N	.654	-	-	5.3
4 I	-	.428	-	51.2
7 I	-	.741	-	3.1
1 I	-	.655	-	.1
10 I	-	.813	-	2.7

Item Number	LISREL T-values*		Squared Multiple Correlations (Reliabilities)
	/Scale	Norm	
5 N	8.7	-	.458
3 N	8.3	-	.430
8 N	13.4	-	.820
11 N	11.5	-	.676
9 N	9.5	-	.523
12 N	10.3	-	.583
2 N	6.9	-	.318
6 N	8.3	-	.428
4 I	-	4.7	.183
7 I	-	8.9	.549
1 I	-	7.7	.429
10 I	-	10.0	.661

* A LISREL T-value greater than 2 is considered to be significant at the 0.05 level.

** If the largest modification index is greater than 5, then, had that element been included in the model, it would have had been significantly correlated.

To test the hypothesized two factor model versus a one factor model, a difference in chi-square test was performed with the restricted model ($\phi_{12}=1.00$) (chi-square = 224, 54 df) against the unrestricted model (ϕ_{12} free) (chi-square = 180, 53 df). The difference in model chi-squares of 44 with 1 df is significant at .001, thus supporting the two factor model. The question of whether the correlation is significant was resolved with a similar test. Here the restriction of $\phi_{12} = 0.0$ yields a chi-square of 200 with 54 df. Against the unrestricted model (ϕ_{12} free), the difference in chi-squares of 20 with 1 df, is significant at the .001 level. Thus the two factors are significantly correlated.

The LISREL modification index for the correlation between item four and the normative factor was 51.3. This indicates that the goodness of fit could be substantially improved by allowing the item to correlate with both dimensions. In exploring item four's factorial allegiance, additional models were developed. When item four is allowed to correlate with the normative dimension but not with the informational dimension ($\phi_{12} = 0.38$, chi-square

= 123, 53 df), the result is a better fit for the data than the hypothesized model ($\phi_{12} = .44$, chi-square = 180, 53 df).

A model where item four is correlated with both factors is also superior to the hypothesized model ($\phi_{12} = 0.376$, chi-square = 121, 52 df). However, in this model, item four's correlation with the normative dimension is .64, while its correlation with its hypothesized dimension is 0.12. If this sample is representative of the population of interest, then item four is a measure of the normative dimension, not the informational dimension.

Reliability

SUSCEP's internal reliability was generally confirmed. Cronbach's coefficient alpha is 0.90 for the normative scale and 0.72 for the informational scale. One of the four informational items (item 4) had a pronounced negative effect on alpha. Removing the item increases the informational dimension's reliability to 0.78. Examination of the reliabilities of individual items can be made by examining the squared multiple correlations for items (see Table 2). The 0.183 reliability for item number four indicates item number four is unreliable.

Gender Results

Analysis of the data indicate females score lower (less conformist) than males on SUSCEP (See Table 3). For the normative scale, females scored 21.95 and males scored 26.82 indicating that females were less conforming to normative information than males ($t=3.09$, $p=.0025$). For the informational scale, the females (14.12) were also less susceptible to informational influence ($t=1.87$, $p=.0632$) than males (15.56). This finding is in contrast to that reported by Zikmund et. al. (1984).

TABLE 3
RANGE, MEANS, AND STANDARD DEVIATIONS

	N	Informational		
		Range	Mean	SD
BNT First Sample	220	4-28	16.70	5.59
BNT Second Sample	141	4-28	19.02	4.45
This Study Total	137	6-28	18.77	4.49
Females Only	75	8-26	18.12	4.26
Males Only	62	6-28	19.56	4.68
		Normative		
		Range	Mean	SD
BNT First Sample	220	8-56	22.04	9.79
BNT Second Sample	141	8-56	27.18	9.15
This Study Total	137	8-46	24.15	9.33
Females Only	75	8-45	21.95	8.27
Males Only	62	8-46	26.82	9.89

In summary, item four demonstrates low reliability as a measure of the informational dimension, and it loads substantively and statistically significantly on the normative dimension, with that exception, the model is a good fit for our data sample.

Convergent/Divergent Validity

To establish construct validity, the instrument must measure what it is intended to measure, and not measure unrelated constructs. In other words, it should correlate with measures of similar constructs reflecting convergent validity and not correlate too highly with measures of unrelated constructs reflecting discriminant validity (Churchill 1979). Two analyses of SUSCEP's construct validity are reported below.

SUSCEP and CAD

The CAD scale, developed by Cohen (1966, 1967), is a measure of consumer "susceptibility to interpersonal influences" (Cohen 1967 p. 273). CAD is based on the belief that individuals are members of one of three groups, each of which has a "predominant mode of response to others" (Cohen 1967, p. 270). Compliant people tend to move toward others; aggressive people move against others; and detached people move away from each other.

One difference between CAD and SUSCEP is that CAD is more global and refers to an individual's response to others while SUSCEP refers to responses to significant others. In referring to others, CAD items tend to use more general terms (e.g. people, or everybody), while SUSCEP generally uses more personal terms (e.g. friends, or friends and family).

Compliant and aggressive individuals make extensive use of both normative and informational perceptions about others but differ in their relational tendencies with others. Compliant use perceptions from others because they are more empathetic, need others, are apologetic, and want to be loved. Aggressives seek and use the same perceptions but they conform for more Machiavellian reasons such as gaining power, prestige, and admiration (Cohen 1967). Thus any results found for aggressive should be similar to those found for complaint. In summary, compliant and aggressives both use normative and informational cues but differ in their emotional motives. Compliant want to be liked in a submissive manner and aggressives want to be liked in a admiring manner.

SUSCEP normative and CAD compliance were intended to measure, at least in part, conformity (Cohen and Golden 1972, BNT 1989). The link between SUSCEP informational and the CAD constructs is also hypothesized to be positive. One who is susceptible to consumer interpersonal information learns by observing others and seeks information from others (BNT 1989). Similarly, Cohen's compliant person accepts that others are a solution to problems and the compliant person wants to be helped and guided (Cohen 1967). Both SUSCEP normative and informational are expected to be positively correlated to both CAD compliant and aggressive.

In contrast to the above posited positive correlations, CAD detached should be negatively correlated with the two SUSCEP dimensions.

Individuals scoring high in either of the SUSCEP dimensions pay attention to others to enhance their image, conform, and gather information (BNT 1989). In contrast, the CAD detached person seeks independence, emotional distance, and is repelled by conformity (Cohen 1967).

One disadvantage of using CAD is that its own validity remains controversial. Some researchers (e.g. Noerager 1979) found little support for CAD's factor structure while others (e.g. Williams, Parent, and Mager 1986) disagree. However, the CAD scale was specifically developed for use in consumer behavior and is well known and currently used by marketers (e.g. Slama, Williams, and Tashchian 1987, Poetzner and Pandit 1987). Thus it is informative to compare SUSCEP with CAD, not only to investigate SUSCEP's construct validity, but also to see if SUSCEP is an acceptable substitute for the still troubled CAD scale.

SUSCEP and Self-Monitoring

The self-monitoring scale is posited to correlate positively with both SUSCEP dimensions. SUSCEP is concerned with identifying or enhancing one's image or self-concept by using information from or conforming to observations of others. SM is "self-observation and self-control guided by situational cues to social appropriateness," (Snyder 1974, p. 526). Thus it seems likely that those scoring high in self-monitoring will also score high in both the informational and normative dimensions of SUSCEP.

For purposes of construct validity, self-monitoring (SM) (Snyder and Gangestad 1986) offers disadvantages and advantages similar to CAD. Like CAD, SM's factor structure remains controversial (e.g. Briggs and Cheek 1988) but it is still of active interest to marketers (e.g. Bearden, Shuptrine, Teel (1989).

Results

Results of the analyses of LISREL models comparing SUSCEP to SM and CAD is shown in Table 4. All the correlational tests are a comparison of a two factor correlated model (ϕ_{12} free) versus a one factor, restricted model ($\phi_{12}=0.0$).

TABLE 4
CORRELATIONS BETWEEN SUSCEP,
CAD & SELF-MONITORING

	SUSCEP Normative ($\alpha=.90$)	SUSCEP Informational ($\alpha=.72$)
CAD Compliant ($\alpha=.60$)	.29 ($p=.009$)	.33 ($p=.003$)
CAD Aggressive ($\alpha=.75$)	.37 ($p<.001$)	.19 ($p=.092$)
CAD Detached ($\alpha=.66$)	-.05 ($p=.671$)	-.22 ($p=.064$)
Self-Monitoring ($\alpha=.80$)	.13 ($p=.167$)	.02 ($p=.841$)

All eight of the correlations between factors are in the posited direction, however only three are significant at a 0.05 alpha level and an additional two at a 0.10 alpha level. Peter and Churchill (1986, p. 3) suggest that the size of the correlation isn't critical and that a correlation of 0.20 "should not be viewed as inadequate solely because it is not large." It is possible that part of the reason for the weaker than expected correlations with the three CAD orientations is CAD's low alpha reliabilities (See Table 4).

The low correlation of CAD Detached to SUSCEP Normative is quite surprising. While it is possible that this finding is due to Type II error, detached individuals may find it easier to move away from informational cues than from normative cues.

After taking into consideration that the two comparative scales have questionable internal structure, we find support for SUSCEP's construct validity. However, results are not strong enough to suggest that SUSCEP can be used as a surrogate for any of the comparison measures.

Conclusions

This study found strong support for the SUSCEP's validity. Internal reliability and factor structure were satisfactory except for item number four. All the construct validity correlations were in the posited direction and many were significant.

More research is needed to continue the validation process. In addition to the required replications to generalize across samples, several specific steps should be undertaken. First, as previously suggested, if item four must be removed from the informational scale, that scale will be reduced to three items. A new sample of informational items may have to be developed and processed. Second, the gender issue must be addressed with replication (possibly using BNT's original data). Third, the potential confound of social desirability should be investigated (Kerlinger 1986) by including a measure of social desirability in the next test administration. The potential of SUSCEP can only be realized if the validation process is continued aggressively.

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AN EXAMINATION OF CREDIT USAGE BY
COMPULSIVE PURCHASERS

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Abstract

The purpose of this research was to compare the credit usage patterns of compulsive and noncompulsive purchasers. Specifically, comparisons were made of the number of credit cards possessed and the usage rate of those credit cards. The results indicate that there is no significant difference in the numbers of credit cards, but there are differences in usage rates for bank and department store credit cards.

Introduction

Compulsive purchasing is increasingly becoming a concern not only for consumers who have the problem, but also for credit-granting institutions and marketing organizations that are socially conscientious. Examination of case studies of compulsive purchasers has led to the general assumption that most people who compulsively purchase use (or abuse) credit to help support their excessive spending. Therefore, the cycle of compulsive purchasing can be financially devastating to households in which a person with this problem is present. The purpose of this research is to examine the nature of credit usage by compulsive purchasers.

The Nature of Compulsive Purchasing

Compulsive purchasing has been theorized as an addiction in which the individual responds to a negative emotion, such as depression or anxiety, by purchasing (Briney and Reed 1988). The act of purchasing itself serves to relieve the negative emotion. Compulsive purchasing is a behavioral addiction, unlike drug or alcohol addiction which are physical addictions. It is similar to other behavioral addictions, such as overeating, in that an individual must learn to control the behavior rather than eliminate it entirely.

The problem of compulsive purchasing has received much attention recently in popular publications, but has had limited empirical examination by scholars in the marketing and psychology disciplines. Winestine (1985) examined compulsive shopping from a psycho-analytic perspective presented in the form of a case study. He concluded that this compulsive behavior was a manifestation of feelings of humiliation and worthlessness stemming from episodes of seduction and sexual molestation during childhood. King (1981) discussed the problem of addictive consumption from a theoretical perspective and concluded that the phenomenon was a result of the pressure exerted on consumers by the advertisements in a materialistic culture. Faber, O'Guinn, and Krych

(1986) and O'Guinn and Faber (1989) found several factors related to compulsive purchasing. Among these were the obsessive-compulsive personality syndrome, low self-esteem, high fantasy-imagination level, high degree of envy and non-generosity, more bank credit cards, and more consumer debt. A similar study (Faber and O'Guinn 1988) concluded that some people with credit problems had buying behaviors resembling those of compulsive purchasers. Briney (1989) theorized compulsive purchasing as an addiction, a learned behavioral response to negative emotions, and a personality disorder. The conclusion of this empirical research was that compulsive purchasing most closely resembles a behavioral addiction, such as overeating.

Many descriptive articles of compulsive buying appear in popular magazines, usually those whose audience demographics reflect primarily women readers. Brandt (1987) examined the problem of "shopaholics" with particular emphasis on the debt problems which arise from this behavior. She reports that psychiatrists compare compulsive shoppers to other kinds of addicts and claim that shopaholics have poor impulse control and use their addiction to shopping to cover up feelings of inadequacy. She also reports that compulsive shoppers tend to spend money whenever something goes wrong.

Tkac (1987) reports the opinion of psychologists who believe that compulsive spending is an addiction, just like gambling, alcoholism, and drugs. They also believe that a compulsive spending problem exists if shopping "becomes an entrenched way to handle your feelings and it results in guilt and anxiety" (p. 63). Jacoby (1986) discusses the results of a survey dealing with compulsive buying behavior to which 1,600 individuals responded. In addition to completing the survey, many respondents returned long, detailed letters describing compulsive buying as a nightmare which has led to bankruptcy, liens on their homes, and attempts to steal money from friends, relatives, and employers. The survey reinforced the premise that the compulsive purchasing cycle is related to anxiety, guilt, and depression.

A case study reported by Bernikow (1985) describes an actress who purchased 50 sweaters on one shopping spree to overcome feelings of powerlessness being experienced as a result of her career. Bernikow makes the point that compulsive spenders never need what they buy, they need to buy. Numerous case studies reported in other articles (Fortino 1982; Seligmann, Greenberg, Bailey, and Burgower 1985; Viorst 1986; Williams 1986) reflect similar experiences described by compulsive spenders. Seligmann, et.al (1985) report the opinions of Dr. William Rader, a psychiatrist, who believes that spending is a secret compulsion of which most Americans

aren't aware. The overwhelming response he received after a discussion of this problem on a Los Angeles talk show convinced Rader that the problem is widespread.

An understanding of compulsive purchasing has application for consumers, credit-granting institutions, and marketing organizations concerned with fostering social responsibility. Consumers engaging in compulsive purchasing behavior frequently encounter financial difficulties. These difficulties arise from the use of credit to extend purchasing power. Credit problems can lead to bankruptcy and the stealing of money from friends, relatives, and employers (Brandt 1987; Jacoby 1986). Many compulsive shoppers have credit card debts which approach 50 percent of their income (Brandt 1987; Jacoby 1986). This unmanageable debt is a symptom of the compulsive purchasing cycle.

One compulsive purchaser who finally had to seek counseling to overcome her debt problems reported that she was bombarded by applications for credit cards and loans when she started her first job. She attributed the easy availability of credit as a driving force urging her to buy in excess (Brandt 1987). The practice of soliciting credit through the mail by credit-granting institutions brings the question of social responsibility into the issue of compulsive purchasing behavior.

As a result of the credit problems associated with compulsive purchasing behavior, several self-help support groups have been formed. Among them are Spender Menders based in San Francisco (Brandt 1987) and Debtor's Anonymous based in New York City (Tkac 1987). Other organizations modeled after these programs have been started in the Dallas-Fort Worth area and in Dayton, Ohio. These programs use behavior modification to attempt to break the compulsive purchasing cycle (Brandt 1987). The relationship between credit usage and compulsive purchasing seems evident. However, the nature of this usage has yet to be examined in detail. Specifically, this study compares the credit usage patterns of individuals with the compulsive purchasing problem with individuals who do not have this problem.

Research Methodology

The instrument used to collect the information was a self-report questionnaire composed of several distinct sections. Of importance to this research was a section containing a screening scale used to identify compulsive purchasers and a section pertaining to credit usage. As discussed by Faber and O'Guinn (1988) and O'Guinn and Faber (1989), a diagnostic test is needed to identify compulsive purchasers from other consumers. The only way to currently identify compulsive purchasers is to reach those enrolled in self-help groups which are few in number. The scale used to identify respondents as compulsive purchasers was one developed by Richard H. Landess (Tkac 1987). According to Landess, the individual scores one for each positive response to the statements on the scale. Therefore, a range of scores from 0 to 15 is possible, with individual scores of less than 5 signifying that

compulsive purchasing is not a significant problem for the individual. The Landess scale is reproduced in Table 1. In a previous study, the Landess scale correctly discriminated compulsive purchasers from alcoholics and overeaters (Briney 1989). However, there are currently no norms for this scale. The KR-20 reliability coefficient for the Landess scale in the current study was .6938.

Table 1

Landess's Scale of Compulsive Purchasing

- 1) Is shopping your major form of activity?
- 2) Do you buy new clothes that sit in the closet for weeks or even months before you wear them?
- 3) Do you spend more than 20 percent of your take-home pay to cover your loans and credit cards?
- 4) Do you ever pay one line of credit with another?
- 5) Do you pay only the minimum balance on your charge accounts each month?
- 6) Do you ever hide your purchases in the car or lie about them so your spouse doesn't know you were shopping?
- 7) Do you ever lie about how much something costs so your spouse or friends think you were just after a great bargain?
- 8) Do you buy something just because it's on sale even though you have no use for it?
- 9) When out with friends for dinner, do you offer to put the check on your credit card so you can collect the cash?
- 10) Do you feel nervous and guilty after a shopping spree?
- 11) Is your paycheck often gone on Tuesday when the next payday isn't until Friday?
- 12) Do you borrow money from friends, even though you know you'll have a hard time paying it back?
- 13) Do you frequently have to charge small purchases, such as toiletry items and groceries, because you don't have enough cash in your pocket?
- 14) Do you think others would be horrified if they knew how much money you spend?
- 15) Do you often feel hopeless and depressed after spending money?

The questionnaire was administered to 557 individuals, 360 females and 197 males. Of the 557 responding to the questionnaire, 283 were undergraduate students enrolled in three medium-sized universities in the Southwest. In addition to completing the survey, the students were asked to address an envelope to one of their parents. A similar questionnaire and a business reply envelope were then mailed to the parent. Only five parents did not return the questionnaire, resulting in 278 usable responses from this group. A total of 561 questionnaires were completed, with 557 being usable for the current study.

The research was designed to accomplish two objectives. The first objective was to examine the differences between the number of credit cards possessed by compulsive and noncompulsive purchasers. The second was to examine the relationship between usage rates of several types of credit cards and the presence of the compulsive purchasing problem.

Findings

The first objective of the research, to examine the differences between the number of credit cards possessed by compulsive and noncompulsive purchasers, was accomplished through a multivariate analysis of variance (MANOVA). The respondents were asked to report the number of each type of credit card they have. The Landess scale scores were divided into two groups--compulsive purchasers (those with scores of 5 or greater) and noncompulsive purchasers (those with scores of less than 5). The number of each of the types of credit cards served as the five dependent variables, while the presence or absence of the compulsive purchasing problem served as the independent variable. The group means for the five dependent variables are shown in Table 2. MANOVA was used in the analysis rather than separate ANOVAs so that differences between the two groups could be evaluated across all five types of credit cards while preserving the alpha level of .05 (Hair, Anderson and Tatham 1987).

The homogeneity of variance assumption was upheld in this analysis. The Box's M value was 37.94 which shows equality of variance in the two groups at the .001 level of significance. Therefore, no adjustments were needed in the MANOVA.

The MANOVA resulted in an F value of 1.689 and a p value of .135 (d.f.=5). Therefore, no significant difference was shown in the number of credit cards possessed by compulsive and noncompulsive purchasers.

Table 2

Group Means for the Dependent Variables

Type of Credit Card	Compulsive Purchaser (n=144)	Noncompulsive Purchaser (n=417)
Gas	1.931	1.966
Bank	2.125	1.866
Department Store	3.528	3.727
Travel/Entertainment	3.319	2.456
Other	5.562	4.369

In order to accomplish the second objective of the research, individuals responding to the questionnaire were asked to report their usage rate based on the five categories given. The categories offered as choices were daily, weekly, twice per month, monthly, and less than once per month. The choices were scaled so that "1" represented "daily" and "5" represented less than once per month. The respondents were asked to report this usage information for five categories of credit cards: gas, bank, department store, travel/entertainment, and other. The reported frequency of use was an average across all cards possessed in each of the five categories. The frequency distributions of the responses are depicted in Table 3.

Table 3

Frequency Distribution of Credit Card Usage Rates

Type of Credit Card	Daily	Weekly	Usage Rate Twice per Month	Monthly	Less than Once Per Month
Gas	8 2.0%	192 48.7%	77 19.6%	28 7.1%	89 22.6%
Bank	6 1.5%	108 26.9%	72 17.9%	65 16.2%	151 37.5%
Dept. Store	0 0.0%	17 3.9%	78 17.8%	97 22.1%	246 56.2%
T/E	3 1.4%	22 10.1%	30 13.7%	32 14.7%	131 60.1%
Other	2 1.4%	15 10.3%	9 6.2%	19 13.1%	100 69.0%

To assess the relationship between credit card usage rate and the presence of compulsive purchasing behavior, a Chi-Square test was conducted for each of the types of credit cards. Since the number of responses were so few in the "daily" category, this category was combined with the "weekly" category for the analysis. The Chi-Square analyses resulted in two significant relationships at the .10 level. The crosstabulations and results of the Chi-Square analyses for bank card and department store usage rates are shown in Tables 4 and 5. The percentages shown in the tables represent column percentages.

Table 4
The Usage Rate of Bank Cards for Compulsive
and Noncompulsive Shoppers
(n=402)

	Compulsive Purchasers	Noncompulsive Purchasers
Daily/Weekly	43 44.8	71 23.2
Twice Per Month	15 15.6	57 18.6
Monthly	11 11.5	54 17.6
Less Than Once Per Month	27 28.1	124 40.5
Chi-Square = 17.1 d.f. = 3 p value = .0007		

Table 5
The Usage Rate of Department Store Cards for
Compulsive and Noncompulsive Shoppers
(n=438)

	Compulsive Purchasers	Noncompulsive Purchasers
Daily/Weekly	5 4.2	12 3.8
Twice Per Month	24 20.2	54 16.9
Monthly	35 29.4	62 19.4
Less Than Once Per Month	55 46.2	191 59.9
Chi-Square = 7.33 d.f. = 3 p value = .0622		

As can be seen in the tables, higher percentages of compulsive purchasers use bank and department store cards more frequently than do noncompulsive purchasers. This is consistent with the literature concerning compulsive purchasing since the types of products that can be purchased with these types of cards are the ones commonly involved in compulsive purchasing. Examples are clothing and hobby-related items. Some travel/entertainment cards, such as American Express, have credit terms which require payment in full each month. Therefore, an individual wishing to extend purchasing power would not be able to do so with this type of credit card. These cards are used primarily for convenience. Obviously, gas credit cards would not be a target for abuse by the compulsive purchaser, since gas

is used in a limited amount on a need basis. Finally, usage of other types of cards was not related to the presence of the compulsive purchasing problem. The respondents were not asked to specify what their "other" type of credit card was.

A further examination of the usage rates for bank and department store credit cards yields further information. For bank credit cards, the highest percentage of compulsive purchasers report using the cards daily or weekly (44.8 percent) while the highest percentage of noncompulsive purchasers use this type of card less than once per month (40.5 percent). The percentages of compulsive purchasers using department store cards daily/weekly, twice per month, and monthly were all higher than the percentages for noncompulsive purchasers. Conversely, the percentage reporting a usage rate of less than once a month for department store cards was higher for noncompulsive purchasers (59.9 percent) than for compulsive purchasers (46.2 percent). Since department store cards are restricted to a single retail establishment, it is a logical conclusion that, overall, shoppers would use these cards less frequently.

The findings of this study suggest that, although compulsive purchasers have the same number of credit cards as those without the problem, the degree of the problem present in an individual is related to the usage rate of bank cards and department store credit cards. These findings have many implications for marketers who are involved with these types of credit cards.

Implications for Marketing Organizations

Several scholars have raised the issue of the social responsibility of business organizations to consumers. Among these scholars is Lazer (1969) who anticipated problems occurring in a growth-oriented and consumption-oriented society. He predicted that "consumers will find that their financial capabilities for acquiring new products are outstripping their natural inclinations to do so" (p. 7). As a result, he asserted that marketing must be viewed as a force that both expands and stabilizes consumption. Wallack (1984) proposed a model for the integration of marketing principles into the prevention of societal problems, such as alcoholism, cigarette use, diet, and exercise. This approach would seem to work well in the context of compulsive purchasing behavior. The institutions granting credit are susceptible to the same standards of social responsibility as are those institutions who facilitate the exchange of products that possibly have harmful effects on consumers.

Therefore, an understanding of the relationship of credit and compulsive purchasing behavior could aid companies in developing marketing programs exhibiting social responsibility. Companies in various industries have initiated "demarketing" or socially responsible education programs when the products produced by the companies have shown potential danger to society.

A recent example of this type of program is the "Know When to Say When" advertising campaign by a major beer producer. If institutions were to recognize the harmful effects of current credit-granting practices to certain groups of consumers, it is possible that they could also conduct their own form of "Know When to Say When" campaigns. This type of campaign could be essentially an education program designed to stress self-reinforcement for not spending, keeping a budget, and avoiding the carrying of checkbooks or credit cards. This type of program has resulted in a 55 percent decrease in spending by individuals experiencing problems in impulsive overspending of money (Paulsen, Rimm, Woodburn, and Rimm 1977). The responsibility of marketers to compulsive purchasers begins with an understanding of the problem. The results of this study suggest that department stores offering credit cards and marketers of bank credit cards have a special responsibility in helping to prevent and correct the problem of compulsive purchasing.

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CONSUMER LOGISTICS: AN EMPIRICAL INVESTIGATION

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Abstract

This paper reports the findings from an empirical investigation of consumer logistics. Cluster analysis grouped individuals according to their participation in consumer logistics activities and resulted in a four-group solution. Multiple discriminant analysis was then used to determine the relationship between the four group criterion variable and five sets of predictor variables. All analyses had at least one significant function at the .05 level of significance.

Introduction

Previous conceptual work has portrayed consumer logistics as a promising field of investigation for consumer researchers (Granzin and Bahn 1989). Briefly stated, consumer logistics (hereafter, CL) considers the part played by consumers in the movement and handling of goods from the point of their acquisition to the point of consumption or final disposal; it also considers consumers' participation in logistics operations surrounding the consumption of services. The household has been argued to be the locus of performance for five consumer logistics functions: Inventory, Transportation, Location, Communication, and Handling and Storage (Granzin and Bahn 1989).

Research using the CL perspective provides a foundation for: (1) understanding an important area of human activity; (2) teaching important aspects of consumer behavior and marketing; (3) conducting empirical consumer research and forming subsequent reconceptualizations based on the empirical findings; and (4) improving the effectiveness and efficiency of household performance relative to the distribution of products and services. This foundation will benefit from research that investigates the nature of the relationship between CL participation and other, established characteristics of consumers. The purpose of this study is to empirically investigate and portray the relationship between CL participation and consumers' AIO's, personal values, required benefits, shopping patterns, and demographics. The portrayal will enlarge our understanding of who performs which CL tasks, and will indicate the relative usefulness of several consumer behavior variables for such portrayal.

Variables Used in This Study

CL Activities

The contribution to distribution from the CL system complements the contribution from the industrial system; thus, the five basic functions performed by these two segments are basically the same. However, the performance of CL activities is centered in and around the household, which is the central organization for performing consumption activities in human societies. First, in

performing the Location function a household must select its place of permanent residence. From this basis, it must then select places for purchase (e.g., a shopping center) and consumption (e.g., a restaurant). Second, in the Transportation function the household selects a means of transportation, how and where it is used, the timing of its use, and myriad other details attendant to providing large-scale movement of products and consumers. Third, Handling and Storage involves small-scale movement of products; for example, movement within the store or the dwelling. In addition, the function entails management of storage spaces. It also provides disposal of the residue of consumption. Fourth, Inventory deals with the timing of acquisition and disposal, including decisions on substituting for items that are unavailable. Fifth, Communication pertains to decision making and processing of information, primarily requests (i.e., requirements of the household). It also involves status briefings and quality-control exchanges for household members. Empirical research into CL behavior can thus usefully measure participation in terms of the constituent activities of these five functions.

Explanatory Variables

The five classes of explanatory variables used in this study have all been successfully applied in previous research. First, AIO's have been used to provide a broad, rich portrayal of various groupings of consumers. They have been used to explain logistics-related behavior, but not in the present framework. For example, AIO's have been found useful for describing shoppers in terms of in-home purchasing (Cox and Rich 1964; Gillett 1970; Reynolds 1974), store choice (Keng and Ehrenberg 1984), and aspects of food shopping behavior (Cobb and Hoyer 1986; Roberts and Wortzel 1979). Second, personal values have been used to characterize vehicle ownership (Henry 1976; Vinson, Scott and Lamont 1977), and food usage habits (Steelman 1976; Granzin and Bahn 1982). Third, consumers have also been characterized in terms of the benefits they require in generic food purchases (Bahn and Gandhi 1987), in restaurant patronage (Bahn and Granzin 1985), and in the banking industry (Sawyer and Arbeit 1973).

Fourth, shopping patterns are the usual behavioral emphases, in terms of habitual behavior, of the consumer during preparation for, conduct during, and recovery from a shopping trip. Shopping patterns characterize the broader context for consumers' participation in the distribution of products and services (e.g., Block, Sherrell and Ridgway 1986). For example, time is a limited resource for shoppers (Anderson 1971); thus, they may form their shopping habits to save time. For example, convenience store patronage has been linked to the need to conserve time (Berry 1979).

Fifth, demographics have long helped researchers to explain consumer behavior, often by focusing on logistical topics such as dining out (Jackson,

McDaniels and Rao 1985) and selection of quickly prepared meals (Goebel and Hennon 1983). Outside the field of consumer research, use of demographics has explained aspects of logistical behavior by linking workplace and residence to shopping pursuits (Damm 1982); income, household size, occupation, and education to demand for housing attributes (Awan, Odling-Smee and Whitehead 1982); and various measures to transportation choice (Murtaugh 1980; Kitamura 1981). Inside consumer research, income, education, SES, and mobility have been associated with in-home purchase behavior (Berkowitz, Walton and Walker 1979; Peters and Ford 1972).

On this basis, the conceptualization shows that participation in a variety of CL activities that reflect the Location, Transportation, Handling and Storage, Inventory and Communication functions as criterion variables should be related to AIO's, personal values, required benefits, shopping patterns, and demographics as predictor variables. This relationship is hypothesized to exist at the multivariate and univariate level of analysis.

Method

Data Collection

Data were collected via a random sample of dwellings in a medium-sized eastern city. Self-completion questionnaires were completed by 415 adults in the presence of interviewers, who served to motivate cooperation and monitor compliance with instructions.

Respondents reported their CL participation (32 measures) in terms of the percentage of shopping trips the respondent takes, the percentage of time someone in the household performs a CL task, or the percentage of time a CL situation arises for the household. Twenty-one AIO's were measured using 6-point scales anchored by Strongly disagree and Strongly agree. Fourteen Values and 20 Benefits were operationalized using 6-point scales anchored by Not at all important and Extremely important. Respondents supplied information on 17 Shopping Patterns and 24 Demographics using standard measures as shown in [Tables 5](#) and [6](#) respectively.

Data Analysis

Relatively homogeneous groupings of the respondents in terms of their CL participation were formed using hierarchical cluster analysis based on the Ward criterion. The 32 participation measures were first standardized for input into the SPSSX clustering routine. Based on the value of the Ward criterion, their substantive content, and resulting group sizes, a 4-group solution was selected for subsequent analyses. Membership in these four groups was then used as the categorical criterion variable for five separate multiple discriminant analyses. Univariate ANOVA's were also used to test whether the four groups differed with respect to the individual variables in these five sets taken singly. The multivariate and univariate analyses thus formed complementary portrayals of the nature of the

four CL participation groups.

Results

Because of space limitations, [Tables 1](#) through [6](#) provide the results in abbreviated form. The tables present only those variables whose univariate F-values reached significance at $p .05$ and/or whose canonical correlation reached importance through an absolute value of .30 or greater. For clarity, only important loadings are reported in the tables.

CL Activity Participation

[Table 1](#) presents the results of the discriminant analysis based on CL participation; all three roots are interpretable. The results show Root I clearly describes a "headquarters" function centered on household inventory and storage actions and decisions performed in the kitchen. The groups most involved in this inventory/storage function are C and A. Group D is uninvolved, and Group B definitely avoids it. Root II portrays one's degree of dependence on others for transportation. Groups C, A, and B are independent in their performance of the transportation function (in that decreasing order), while Group D is extremely dependent on others for transportation. Root III represents a support function; the function includes handling of goods, decisions on location, and transportation vehicle maintenance.

The one-way ANOVA's indicate the groups were formed on the basis of contributions from all 32 CL participation measures. Of course, the F-values and loadings can only be used to describe the groups; no statistical inferences are possible because the variables for which these statistics are reported formed the basis for clustering. Based on the univariate results, Group A reports relatively restricted participation in many of the activities involved with a trip to the store. The trips this group makes seem rather limited in scope, as though group members consciously seek to economize their shopping effort. The group shows moderate participation in all other non-trip-related activities and is high in checking storage to determine needs. Group B reports lowest participation in most of the activities, and differs from Group A by apparently being uninvolved in shopping where possible. In particular, this group has low involvement in kitchen activities. Group C is the most involved in the full range of CL activities, except for those that suggest low involvement in a given task (e.g., riding with someone else). Group D seems somewhat dependent on other persons, particularly for transportation.

AIO's

[Table 2](#) gives similar data for the AIO's. Two of the three roots were significant; the four groups differed with respect to nine variables taken singly. Root I provides a continuum of major responsibility for preparation of meals and in-home monitoring of food stocks. Groups bear this responsibility in decreasing order of C, A, D, and B. At one pole, Root II portrays an internal,

personal orientation toward collecting information, one centered on household members and reduced search in the environment (i.e., featuring store loyalty). At the other pole, this root portrays an external, impersonal orientation toward collecting information relevant to shopping decisions. From highest to lowest internal orientation, the groups fall in this order: B, A, C, D.

The univariate results indicate Group A is high in its within-household orientation (particularly kitchen activities) and perceives the greatest responsibility for shopping tasks. Group B accepts lesser responsibility for shopping chores and kitchen work when possible, perhaps to escape (or to justify) its relatively cramped storage areas. Group C not only leads in accepting responsibility for food preparation tasks, but operates relatively independently of other household members (if any) and works in the most spacious storage environment. Group D avoids kitchen and shopping responsibility; it is not store loyal when shopping.

Values

Table 3 gives the findings for personal values. The discriminant analysis had one significant root; four univariate ANOVA's were significant. The discriminant root portrays emphasis on a deliberate, more leisurely approach to doing things the best way -- a way that involves elements of fine dining where food consumption is involved. The univariate results indicate Group A most strongly emphasizes spending much time on household tasks and having leisurely meals, and strongly emphasizes the best way of performing tasks. Group B stands low or lowest in all aspects of this general value orientation. Group C most strongly emphasizes doing things the best way and eating high-quality meals. Group D shows relatively low concern with this value orientation, especially meal quality and performing tasks correctly.

Benefits

Table 4 shows the discriminant analysis of required benefits produced two significant roots; 12 benefits were significant in univariate analysis. Root I reflects the requirement for a variety of 11 attributes obtainable from a modern, well-managed American supermarket and from meals prepared from the food it sells. The benefits contributing most to discrimination are the product variety, cleanliness, convenient layout, and high-quality food (including produce) of the store; as well as nourishing and attractive meals. The decreasing order of groups on this function is: C, A, D, B. Root II contrasts an interest in pleasant conversation when eating against dessert at dinner and short checkout lines. Group A, C, and D almost equally seek pleasant eating, while Group B is associated with dessert and speed of shopping.

The univariate results for Group A portray interest in a pleasant, orderly dinnertime experience. Group B can be seen as least interested in 7 of the 12 significant benefits, and disproportionately disinterested with those involving meals.

Group C is most interested in two-thirds of these benefits, especially those dealing with store benefits; it is relatively disinterested in pleasant conversation at meals. Group D is most interested in dessert at dinner, highly interested in helpful store personnel, but least interested in the finer aspects of food distribution and food consumption; in general, its requirements are minimal.

Shopping Patterns

Table 5 presents the findings for two significant discriminant roots and six variables significant by ANOVA. Root I contrasts an emphasis on driving oneself to the store and deemphasis on a fixed day for shopping against an emphasis on riding with someone else when shopping Monday through Thursday. In decreasing order of such independence, the groups are: B, C, A, and D. Root II contrasts a relatively high volume shopper who drives him/herself to the store against a relatively low volume shopper who rides with someone else. In decreasing order of volume-independence, the groups are: C, A, B, D.

The ANOVA's Group A members emphasize driving themselves to the store rather than riding with others, and to be relatively prone to shop on Monday through Thursday. They are relatively high in following an irregular time pattern for shopping. Group B members are least likely to follow a regular day or time schedule; they are also self-transported. They spend the least money and are least likely to shop on Monday through Thursday. Group C members spend the most money; they are also self-transported. They are relatively prone to irregular choices of shopping day, but most likely to shop on weekends. Group D members are most likely to ride with someone else, and most likely to have a favorite shopping day and time for shopping. Their shopping day is more likely to be Monday through Thursday than it is for other groups.

Demographics

Table 6 gives the results for demographics, whose analyses produced two significant discriminant functions and ten variables significant in univariate analysis. Root I simply portrays gender of the shopper. The descending order of male composition of the groups is B, D, C, A. Root II contrasts households composed of nuclear families against single-person households and/or those without spouses. The descending order of traditional household composition is B, A, D, C.

The univariate results portray Group A as the extreme group for nine of the ten significant measures. Group members are most likely to be female, married, living with only a spouse or with a spouse and children rather than living alone, and having a large household. These shoppers are most likely to own their house rather than rent an apartment, and are lowest in newspaper readership. Group B members are most likely to be male and least likely to live only with children. They are also high in household size, not living alone, living with a spouse, and house ownership. Group C members are most likely single, living alone, living without a spouse or without

TABLE 1
Means, F-ratios, and Canonical Loadings for Consumer Logistics Activities

	Group Means					p*	Rotated Loadings		
	A(n=175)	B(n=121)	C(n=78)	D(n=41)	F		I	II	III
Asking Someone Outside for a Ride	2.05	4.13	5.38	59.02	164.50	.000		.84	
Choosing Roads to Travel on Trip	64.69	63.47	86.41	39.51	13.37	.000			
Deciding Means of Transport	82.97	75.87	92.31	60.00	9.71				
Driving Myself to the Store	84.23	83.64	95.64	38.54	39.31			-.41	
Asking Store Personnel for Help	29.49	24.13	36.67	46.34	6.40				
Choosing Time of Day/Week for Trip	79.89	63.64	85.13	52.68	15.87				
Shopping at Convenience Stores	21.14	26.12	18.21	30.24	3.33				
Postponing the Trip If No Transportation	38.74	36.86	58.72	48.78	6.24				
Visiting Stores Other than Grocery	35.54	33.39	49.74	41.95	6.25				
Walking to the Store	4.57	8.76	14.36	28.29	18.21				
Looking in Storage to Learn Needs	56.46	30.58	56.92	46.83	17.08				
Visiting Another Store after Stockout	34.06	30.27	49.23	48.78	10.03				
Choosing Best Store to Meet Needs	77.71	60.33	83.33	69.76	13.29				
Riding With Someone Else to Store	16.69	18.18	12.82	59.02	29.83			.37	
Deciding How to Use Various Spaces	79.31	29.59	93.85	58.05	127.70		.56		
Carrying Purchases From the Car	62.74	57.52	92.31	62.93	27.16				.35
Deciding Who is Responsible for Transport.	68.69	39.34	92.82	65.85	43.70		.31		
Disposing of Garbage and Other Trash	47.77	59.34	90.51	60.98	35.07				.48
Taking Care of Vehicle Maintenance	24.34	67.60	81.03	33.17	67.09				.57
Deciding Where to Store Items	82.74	39.34	95.13	63.41	114.70		.53		
Deciding to Discard Partly Used Items	79.77	40.50	94.36	59.51	91.77		.46		
Finding Out What Household Members Want	77.37	43.80	81.79	49.76	47.26		.32		
Preparing Meals for the Household	88.00	33.72	95.13	64.88	179.10		.68		
Putting Away Purchased Items	82.86	43.31	95.64	68.29	108.00		.52		
Clearing Unneeded Items From Household	85.37	30.74	95.38	62.93	182.40		.69		
Purchasing a Substitute for Stockout	70.74	49.75	81.03	52.20	22.74				
Going Out to Eat at a Restaurant	57.71	54.38	77.17	43.41	14.90				
Making Return Trip to the Store	45.26	42.98	63.33	45.85	7.14				
Assigning Chores to Household Members	48.57	31.07	54.36	40.49	8.03				
Visiting Different Stores to Learn	29.71	26.12	60.26	43.41	21.85				.33
Scheduling Special Trip to Fill In	54.40	43.14	75.13	48.29	16.92				
Relative Influence on Where to Live	58.17	61.82	88.21	62.93	25.62				.39

*All variables differ at p=.000 in 1-way ANOVA. All functions significant at p=.000. Group centroids for first function are: A, 1.21; B, -2.46; C, 1.47; D, -.70. Centroids for second function are: A, -.52; B, -.03; C, -.82; D, 3.88. Centroids for third function are: A, -.97; B, -.01; C, 1.87; D, .61.

TABLE 2
Means, F-ratios, and Canonical Loadings for AIO's

	Group Means					p*	Rotated Loadings	
	A(n=175)	B(n=121)	C(n=78)	D(n=41)	F		I	II
I enjoy preparing food.	4.76	4.14	4.54	4.02	5.64	.001		-.31
When shopping, I feel rushed.								
Planning in advance saves time.								
Other members strong influence on store.	3.86	3.98	3.15	3.78	3.22	.023		
When rushed, I visit usual store.								
I always go to the same store.	4.89	4.52	4.46	4.27	3.27	.021		-.39
Ads are a strong influence on items.	3.14	3.01	3.37	3.73	2.34	.075		.30
I purchase in large quantities.								
Members should express food opinions.	5.01	4.91	4.74	4.54	1.77	.153		-.32
I buy because the mood strikes me.								
I have responsibility for food preparation.	5.18	3.26	5.37	4.27	43.88	.000	.80	
Shopping is pleasure.								
I stay out of the kitchen.	1.87	3.27	2.22	2.29	17.02	.000	-.48	
I shop as little as I can.	2.02	3.06	2.35	2.88	9.23	.000	-.38	
I use a food budget.								
Good for members to talk about household.								
I usually try something new.								
I buy the same brand time after time.								
I clean the kitchen after meals.	4.87	3.28	5.37	4.44	37.87	.000	.69	
I check for enough food to meet needs.	5.13	3.58	5.55	4.41	42.48	.000	.77	
My home has more storage space	3.60	3.36	4.12	3.83	4.08	.007		.33

First function significant at p=.000. Group centroids for first function are: A, .45; B, -1.02; C, .72; D, -.30. Second function significant at p=.003. Centroids for second function are: A, -.23; B, -.24; C, .54; D, .65.

TABLE 3
Means, F-ratios, and Canonical Loadings for Values

	Group Means					p*	Loadings
	A(n=175)	B(n=121)	C(n=78)	D(n=41)	F		
Eating Only the Best-Quality Meals	4.75	4.48	5.08	4.44	4.82	.003	.45
Being Able to Relax a Few Hours Every Day							
Not Being Different or Standing Out							
Doing Things My Own Way							
Doing Things the Best, If Longer, Way	5.02	4.68	5.18	4.66	4.68	.003	.54
Trying New Things Just for Experience							
Spending a Lot of Time On Household Tasks	4.39	3.97	4.04	4.15	2.63	.050	.38
Having a Familiar Routine for Tasks							
Spending a Lot of Time With Friends							
Doing Things Slowly and Deliberately							
Having Leisurely, Relaxed Meals	4.67	4.29	4.41	4.37	2.67	.047	.42
Having a Lot of Leisure Time to Myself							
Staying Home Rather than Going Out							
Trying to Change Things I Don't Like							

First function significant at p=.005. Group centroids are: A, .28; B, -.41; C, .14; D, -.26.

	A(n=178)	Group Means			F	p*	Rotated Loadings	
		B(n=121)	C(n=78)	D(n=41)			I	II
A Grocery Store That is Clean	5.51	5.25	5.59	5.24	3.58	.014	.40	
A Store With a Convenient Location	5.22	5.00	5.35	5.24	2.30	.077	.32	
A Store With Convenient Hours								
A Store With Helpful/Courteous Personnel	5.17	4.88	5.28	5.20	3.18	.024	.35	
A Store With Produce of Good Quality	5.52	5.28	5.63	5.15	4.88	.002	.46	
A Store That Emphasizes Low Prices								
A Store With a Convenient Layout	4.74	4.66	5.23	4.66	4.55	.004	.48	
A Store With Specialty Sections	4.37	4.21	4.74	4.12	2.93	.033	.40	
A Store With Short Wait at Checkout	5.03	5.22	5.27	5.12	1.60	.188		-.34
A Store With Well-Stocked Shelves								
A Store With a Wide Range of Products	5.23	4.98	5.45	5.05	5.18	.002	.54	
Plenty of Food at Mealtime								
Food That is High in Quality	5.18	4.93	5.38	4.88	4.54	.004	.49	
Well-balanced, Nourishing Meals	5.27	4.91	5.40	5.20	5.47	.001	.49	
Wide Variety in the Types of Food I Eat								
Meals That are Served On Time								
Meals That Have a Nice Appearance	4.63	4.24	4.77	4.51	3.86	.010	.42	
Meals With All Dishes Ready at Same Time	4.83	4.26	4.72	4.46	5.15	.002	.37	
Pleasant Conversation at the Table	5.04	4.70	4.64	4.59	3.28	.021		.37
Dessert With Evening Meals	3.18	2.89	3.06	3.76	2.96	.032		-.32

First function significant at p=.000. Group centroids are: A, .09; B, -.44; C, 1.59; D, -.22. Second function significant at p=.006. Centroids are: A, .30; B, -.34; C, .30; D, .27.

	A(n=175)	Group Means			F	p*	Rotated Loadings	
		B(n=121)	C(n=78)	D(n=41)			I	II
Proportion Personally Spent on Groceries	70.19	50.25	88.69	60.51	23.94	.000		.80
Shops for Groceries on Monday-Thursday	.32	.17	.17	.37	5.14	.002	-.32	
Shops for Groceries on Saturday								
Shops for Groceries on Sunday								
Shops for Groceries No Day Regular Pattern	.34	.50	.46	.29	3.89	.009	.30	
Shops for Groceries in Afternoon								
Shops for Groceries in Evening								
Shops for Groceries at Night								
Shops for Groceries No Regular Time Pattern	.12	.26	.18	.12	3.82	.010		
Home is the Origin of Shopping Trip								
Other Than Home or Work Origin of Trip								
Drives Car to Grocery Store	.90	.95	.91	.56	17.50	.000	.64	.31
Rides in Someone Else's Car to Store	.09	.02	.05	.41	21.67	.000	-.72	-.36
Takes a Bus to Grocery Store								
Takes a Taxi to Grocery Store								
Walks to Grocery Store								
Distance From Home to Favorite Store								

First function significant at p=.000. Group centroids are: A, -.16; B, .60; C, -.01; D, -1.07. Second function significant at p=.000. Centroids are: A, .12; B, -.41; C, .77; D, -.76.

	A(n=175)	Group Means			F	p*	Rotated Loadings	
		B(n=121)	C(n=78)	D(n=41)			I	II
Sex of Respondents (0=Female; 1=Male)	.14	.67	.31	.31	36.99	.000	.85	
Age of Respondent								
Age of Main Working Member of Household								
Marital Status (0=Single; 1=Married)	.82	.72	.40	.51	19.34	.000		.60
Number of Children Newborn thru Age 5								
Number of Children Aged 6 thru 17								
Number of Children Aged 18 and Older								
Household Size	3.09	2.94	2.21	2.76	9.37	.000		.44
Lives Alone (0=No; 1=Yes)	.04	.06	.38	.20	26.06	.000		-.76
Lives With Another, Unrelated Adult								
Lives With a Spouse	.37	.35	.19	.22	3.49	.016		
Lives With a Spouse and Children	.48	.37	.18	.27	8.05	.000		.36
Lives with Children and Without Spouse	.07	.04	.17	.12	3.75	.011		-.30
Lives With Parents								
Rents Apartment/Condo/Townhouse	.11	.17	.17	.34	4.64	.003		
Rents a House								
Owns a Condominium/Townhouse								
Owns a House	.75	.71	.71	.44	5.25	.002		
Years at Present Residence								
Prefers Talk Radio								
Hours/Week Listens to Radio								
Hours/Week Watches TV								
Hours/Week Reading Newspapers	4.07	4.33	5.74	4.10	2.99	.031		
Hours/Week Reading Magazines								

First function significant at p=.000. Group centroids are: A, -.64; B, .76; C, .17; D, .18. Second function significant at p=.000. Centroids are: A, .26; B, .43; C, -1.06; D, -.36.

a spouse and children, and having a small household. They are highest in newspaper readership and high in house ownership. Group D members are distinguished as highest in apartment rental and lowest in house ownership; they are also low in being married, in living with a spouse, and in newspaper readership.

Discussion

All of the hypothesized relationships were significant at the multivariate and univariate level of analysis. Five independent predictor sets of variables used in other consumer behavior frameworks have also proved to be successful in furthering our understanding of consumer logistics. The analysis characterizes consumers in situation specific logistic activities. Further, this study has not only looked at consumer logistics in general, but has also attempted to characterize consumers according to broad-based segmentation variables. These characterizations, which follow, may be useful to marketing managers in their attempt to target markets for products that facilitate the CL functions.

(1) Group A - Consists mostly of females from the modal, traditional, two-parent household who are habit-oriented shoppers, concerned with food consumption benefits, concerned with deliberateness, leisure, correctness, responsible for kitchen and shopping duties and assume an internal orientation regarding consumer logistics decision information. Additionally, people in this group are reliant on their own transportation for shopping trips.

(2) Group B - Consists mainly of males from the traditional family; are relatively low-volume, transport-independent, irregular weekend shoppers, unconcerned with store or consumption benefits, although specifically concerned with dessert and quick shopping; have a low concern for leisure, correctness and deliberateness, lean towards other persons for direction when shopping, perhaps filling the role of "go-fer," and relatively uninvolved in consumer logistics activities.

(3) Group C - Consists mostly of single persons of both genders who live alone in non-traditional households, are relatively high-volume, independent, weekend shoppers who are unlikely to have a favorite day to shop, are highly concerned with store benefits, care about meal-time production-related benefits, but not the social aspects, emphasize doing things the best way and eating high quality meals, take the most responsibility for kitchen and shopping chores, yet assume an external orientation regarding decision information, and are broad-based consumer logisticians, taking part in activities in all areas of consumer logistics.

(4) Group D - Comprises a composite group of persons who live in less established traditions, are transport dependent, relatively low-volume shoppers who are more likely to shop early in the week, require relatively little from the food distribution system and the food that they consume, low concern with a value orientation especially meal quality and performing tasks

correctly, accept little responsibility for kitchen and shopping chores and assume an external orientation when collecting decision information. This group provides a moderate emphasis on the various consumer logistic activities, except a great deal of importance is placed on providing its own transportation.

These four segments have been described according to their participation in consumer logistic activities as analyzed with AIO's, values, benefits, shopping patterns, and demographics. This study has attempted to make an initial effort at understanding more about CL by investigating some hypothesized relationships between CL activities and consumer characteristics. This study has provided us with information regarding the research question "who does what" in a CL framework. Future research should look at the causal relationship between various constructs as offered in the conceptualization of consumer logistics. Further research could focus on one specific set of predictor variables and employ a field-oriented methodology appropriate to in-depth investigation of the consumer logistics function.

References

Due to space constraints, references will be furnished upon request.

ADOLESCENTS' POWER AND PERCEIVED INFLUENCE
IN FAMILY PURCHASE DECISIONS

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Abstract

This study examines adolescent perceptions of power in five dimensions contained in the French-Raven typology and investigates their relationships with adolescents' perceived influence in family purchase decisions. The results show that adolescents' perceptions of legitimate power were significantly related to their perceived influence in family purchase decisions involving minor and major products for their own use and adolescents' perceptions of expert power were significantly related to their perceived influence in those decisions involving minor and major products for their own use as well as major products for the family use.

Introduction

The role of children as significant influencers of family purchase decisions has emerged as an important topic of marketing research for its strategic implications on promotion as well as on public policy decisions relating to advertising aimed at children. Evidence of children's influence in a number of family buying decisions has been well documented in the studies of children's socialization (Moschis 1987; Moschis and Mitchell 1986; Ward and Wackman 1972) and of family decision making (Foxman, Tansuhaj, Ekstrom 1989; Belch, Belch, and Ceresino 1985; Jenkins 1979).

Researchers using the socialization theoretical perspective have proposed the concept of second-order consequences of socialization in explaining the children's influence, which refers to the changes in parental consumer behavior brought about by the child's influence attempts (Moschis 1987). Their studies have focused on parental yielding (or denial) to a child's requests for products or services, and its correlates. Findings in this area can be summarized as that parental yielding to a child's request varies greatly by product class, and that yielding is likely affected by such factors as child's social class, age, and child-centeredness of the mother (Atkin 1978; Ward and Wackman 1972; Berey and Pollay 1968; Mehotra and Torger 1977).

Some researchers have assessed children's influence in buying situations within the context of family role structure. Past studies in this line of research indicate that children do influence a wide variety of family purchase decisions ranging from cereal to automobile and their influence varies by age of the child, parental type, product, user, throughout different stages of decision making

(Foxman and Tansuhaj 1988; Darley and Lim 1986; Jenkins 1979; Szybillo and Sosanie 1977; Perreault and Russ 1971; Belch, Belch, and Ceresino 1985; Foxman, Tansuhaj, and Ekstrom 1989). Several of these studies also show varying degrees of perceptual discrepancies in the assessment of family members' influence in various purchase situations and in different stages of decision making. A frequent finding has been that children tend to perceive higher levels of influence than do mothers or fathers.

Overall, the existing empirical evidence more than adequately attests to the conventional wisdom that the children's role in family purchase decisions is not to be neglected. A further task of research interest should be then to develop a better understanding of the factors underlying the varying degrees of children's influence in family decision making. The factors examined in the past research have been largely limited to the demographic type, and social or psychological constructs that have a strong conceptual linkage have rarely been examined; among the exceptions are parents' locus of control examined in Darley and Lim (1986) and mother's child-centeredness examined in Berey and Pollay (1968). On this belief, this exploratory study proposes and tests a sociological construct, adolescent power, as an explanatory variable for the varying degrees of children's influence in various family purchase decision situations.

The concept of power has been particularly important for researchers across many disciplines in explaining decision outcomes in various social settings, of which family decision making situations are no exception. However, past applications of the power concept in family research have been largely limited to its use for explaining the family member role structure which excluded children from consideration. An application of the power concept in explaining children's influence in family decision making appears to be conceptually sound and represents a logical extension of past research efforts.

Power

The fundamental assumption in studying power in group decision making contexts is that the causes of group choices can ultimately be reduced to what the powerful member wants or to some action of the powerful person that decisively affects the group choice (Turk 1975). Power is commonly defined as the potential ability to influence the behavior of another in the relationship (Rogers 1974; Emerson 1962; Cromwell and Olson 1975; Wrong 1979). It is viewed as a relational concept

involving the ability to influence the direction or outcome of a joint course of action (Cartwright 1959; Sprey 1975). Sources of this potential ability or power bases may include economic components (Blood and Wolfe 1960) as well as normative (i.e., culturally defined authority) and noneconomic components (e.g., affective and personal resources) (McDonald 1980).

Aside from these, power is commonly recognized as a multidimensional concept (Cromwell and Olson 1975; McDonald 1980). The French-Raven typology of power forms reflects this. Included in it are: (1) coercive power - the potential ability to administer punishment for failure to conform to an influence attempt, (2) reward power - the potential ability to supply gratification for compliance to an influence attempt, (3) expert power - the extent of knowledge possessed by an individual, (4) legitimate power - the right to influence derived from social or cultural norms, and (5) referent power - the potential to function as an identification object (French and Raven 1959; Warren 1968).

Existing family power research concentrates mainly on the power perceptions of the spouses, but those of adolescents in the parent-child relationship have been rarely investigated. The few studies examining adolescent power (Peterson 1986; Smith 1983) do provide evidence that parent-adolescent influence is a two-way process. In particular, the study by Peterson (1986) on the sample containing adolescents (mean age = 16.4 years) and their parents, showed that mothers and fathers perceived their teenage children to have "power" or the potential ability to influence within the parent-child relationship. Specifically, parents in the study perceived their children as having the potential to punish and reward them as well as having useful expertise, right to exercise influence, and function as significant others.

The research reported in this study examines adolescent perceptions of power in five dimensions contained in the French-Raven typology using an existing measure (Peterson 1986; Openshaw, Thomas, and Rollins 1983), and investigates their relationships with adolescents' perceived influence in various family purchase decisions.

Methodology

Sample

The sample used in this study is of the convenience type, and consists of 113 grade eight students (mean age = 14.3 years) from a high school in the West Island region of the Greater Montreal area where there is a large concentration of English-speaking population. The high school offered programs in both English and in French. All of the students contacted came from those enrolled in the English program. A teacher handed out and collected self-administered questionnaires (in English) in the beginning of four classes that

he taught. The respondents were assured of anonymity and confidentiality of their responses. The questionnaire had been pretested on eight students in grade eight prior to this time, and no problem was found in their understanding of the instructions and the questions. Students took on average ten minutes to complete the questionnaire.

Measures

Included in the beginning of the questionnaire was a list of 18 products used by the children themselves and by their family for which the children were asked to indicate how seriously their parents would consider their opinion if their family were to buy these products. These items were designed to measure the teenagers' perception of their influence in various family buying situations. The five-point scale used for these items ranged from "Not seriously at all" (1) to "Very seriously" (5).

Twenty one measurement items for the teenagers' perceptions of their coercive, reward, expertise, legitimate, and referent power in parent-adolescent relationship were contained in the subsequent section. All of the items used a five-point Likert scale. These items come from the Peterson's study (1986) of parental perceptions of adolescent power. They were slightly modified for the purpose of this study which investigates teenagers' own perceptions of power. The 21 measurement items assesses adolescent power in such content areas as occupational goals, educational plans, choice of friends, and relations with the opposite sex. Content validity and dimensionality of the five sets of items were previously checked by a panel of social scientists and factor analysis respectively by Peterson. The Cronbach's alphas for mothers' and fathers' responses on the five sets of items, as reported in his study, ranged from .77 to .92.

Analysis and Results

Adolescent Perception of Influence

The first step in the analysis concerned delineating dimensions underlying the 18 decision influence items. Principal component analysis with the varimax rotation initially produced 5 factors with eigenvalue greater than one, which accounted for 60.8 percent of the total variance. Each item was then examined in terms of the size of factor loading and the content consistency with the rest of the items loading highly on the same factor. Three items with ambiguous loading values and/or inconsistent contents were deleted, and the same factor analysis procedure was performed on the remaining 15 items. The factor solution this time provided 4 factors with eigenvalue greater than 1.0, which could be clearly interpreted as: "minor purchase items for family" (MINORF), "major purchase items for family" (MAJORF), "major purchase items for child" (MAJORC), and "minor purchase items for child" (MINORC) (see [Table](#)

1). The four factors accounted for 61 percent of the total variance in the original 15 variables. MINORF was represented by purchase decisions involving juice, shampoo, toothpaste, ketchup, and breakfast cereal for the family; MAJORF by purchase decisions involving a car, house, stereo system and a computer for the family; MAJORC by purchase decisions involving a calculator, cycle, and a Walkman for the child; and MINORC by purchase decisions involving clothes and shoes for the child, and what movie should the child go to.

Also presented in Table 1 are Cronbach's alphas computed for each of the four factors (which ranged between .69 and .76) and the mean and standard deviation of each factor (the average response on the variables measuring the factor) as well as each variable. On average, the teenagers' perceived influence is highest in purchase decision situations involving minor items for themselves (mean of MINORC=4.14), followed by those involving major items for themselves (mean of MAJORC=3.50), minor items for the family (mean of MINORF=2.99), and major items for the family (mean of MAJORF=2.94). Thus, a higher level purchase influence was perceived by the teenagers for those products for their own use. Whether the purchase situation involves a minor or major item appears to be a less important factor.

Adolescent Perception of Power

The five forms of power hypothesized and previously confirmed in the study by Peterson (1986) were examined with the five-factor solution produced for the 21 adolescent power variables. Nineteen of the 21 items conformed to the initial expectation by showing loading values greater than .5 on the hypothesized factors. A summary of the five factor solution obtained after deleting the two variables (one designed for coercive and the other for expert power measurement) is presented in Table 2. The five factors explained 61.1 percent of the total variance in the 19 original variables.

Also contained in Table 2 are Cronbach's alphas for the five factors (which varied from .64 to .85) and the mean and standard deviation for each factor (the average of the items measuring each power dimension) and each variable. The mean values for the five power dimensions ranged between 3.30 and 3.95. The Z statistics computed for the five factors showed that in all five cases the mean values were significantly greater than 3.0, the neutral point of the Likert scale used (all $p < .001$). Thus, the teenagers apparently perceived themselves as having power in multiple facets in relationship with their parents. Among the five, the teenagers in this study perceived their legitimate power to be the strongest, followed by referent, reward, expert, and coercive power.

TABLE 1

RESULTS OF FACTOR ANALYSIS ON THE SELECTED PRODUCT PURCHASE DECISIONS USING TEENAGERS' PERCEIVED INFLUENCE MEASURES

Purchase Decisions Involving:	Factor Loading	Mean	Standard Deviation	Cronbach's Alpha
Factor 1: Minor Purchase Items for Family (MINORF)		2.99	.98	.76
Juice for the family	.79	3.38	1.29	
Shampoo for the house	.75	2.81	1.52	
Toothpaste for the family	.72	3.15	1.41	
Ketchup for the house	.71	2.52	1.55	
Breakfast cereal for the family	.55	3.34	1.45	
Factor 2: Major Purchase Items for Family (MAJORF)		2.94	1.12	.76
A car for the family	.83	2.74	1.48	
A house	.83	2.72	1.63	
A stereo system for the house	.68	3.18	1.33	
A computer for the family use	.57	3.18	1.50	
Factor 3: Major Purchase Items for Child (MAJORC)		3.50	1.12	.69
A calculator for you	.77	3.45	1.29	
A Walkman for you	.72	3.46	1.44	
A cycle for you	.64	3.75	1.66	
Factor 4: Minor Purchase Items for Child (MINORC)		4.14	.88	.69
Clothes for you	.88	4.36	1.08	
Shoes for you	.82	4.24	1.04	
What movie should you go to	.50	3.86	1.26	

TABLE 2
RESULTS OF FACTOR ANALYSIS ON THE ADOLESCENT POWER VARIABLES

Item	Factor Loading	Mean	Standard Deviation	Cronbach's Alpha
Factor 1: Reference Power		3.81	1.08	.83
My opinions should be given a great deal of importance when it comes to making a decision about my education.	.84	3.77	1.21	
My opinions should be given a great deal of importance when it comes to making decisions about my relationship with members of the opposite sex.	.77	3.78	1.21	
My opinions should be given a great deal of importance when it comes to choosing my occupational goals.	.77	3.87	1.27	
Factor 2: Reward Power		3.77	.85	.68
I could make my parents feel very good by choosing the right kind of friends.	.74	3.38	1.36	
I could make my parents feel very good by choosing the right kind of educational goals.	.74	3.91	1.12	
I could make my parents feel very good by choosing the right kind of occupational goals.	.64	3.94	1.05	
I could make my parents feel very good by choosing the right kind of dating partner.	.62	3.89	1.21	
Factor 3: Legitimate Power		3.95	1.04	.85
I have the right to choose my own occupational goals.	.77	4.14	1.05	
I have the right to choose my own dating partner.	.76	3.97	1.32	
I have the right to choose my own educational goals.	.74	3.79	1.20	
I have the right to choose my own friends.	.71	3.91	1.39	
Factor 4: Coercive Power		3.30	.87	.64
I could make my parents worry by choosing the wrong kind of friends.	.69	3.45	1.43	
I could make my parents feel bad when we have a hard time talking about important family matters.	.66	3.19	1.35	
I could make my parents very concerned by choosing the wrong kind of occupational goals.	.60	3.23	1.32	
I could make my parents feel very bad by not doing what they tell me to do.	.59	3.44	1.37	
I could make my parents worry by choosing the wrong kind of dating partner.	.50	3.38	1.50	
Factor 5: Expert Power		3.36	.88	.64
I know a great deal about future career opportunities.	.75	3.19	1.22	
I know a great deal about how to get a good education.	.70	3.42	1.56	
I know a great deal about how to choose the right kind of dating partner.	.65	3.48	1.08	

Adolescent Power and Perceived Purchase Influence

The relationships between the five adolescent power dimensions and the perceived influence in the four factor analyzed decision areas are examined with bivariate correlation coefficients. As shown in Table 3, among the 20 bivariate correlation coefficients, a significant relationship was shown by five. These results can be summarized as: 1. The teenagers' perceived influence in purchase decisions involving major items for the family is positively related to their perceived expert power ($r=.27$, $p<.05$); 2. The teenagers perceived influence in purchase decision involving minor items for themselves is positively related to their perceived legitimate power ($r=.19$, $p<.05$) and expert power ($r=.13$, $p<.10$); and 3. The teenagers' perceived influence in purchase decisions involving major items for themselves is positively related to their perceived legitimate power ($r=.20$, $p<.05$) and expert power ($r=.13$, $p<.10$).

Thus, among the five power dimensions, only the adolescents' perceptions of expert power and legitimate power significantly related to the teenagers' perceived decision influence. Teenagers who attributed more legitimate power to themselves also tended to claim more influence in purchase decisions involving products for their own use regardless of whether they are of minor or major expenditures. The results also show that a general perception of having more knowledge and expertise is linked to a stronger perception by the teenagers that their decision inputs are respected by their parents in purchase situations involving products for their own

use as well as major expenditure items for the family.

Discussion and Conclusion

The results of this study, although tentative due to the exploratory nature, produce several findings worth noting. First of all, the teenagers sampled in this study perceived their influence in a wide variety of family purchase situations involving major and minor items for themselves as well as for their family. An observation on the data showed that their perceived influence, however, decreases from the purchase decisions involving items for their own use to those involving items for their family use and also from purchase decisions involving minor items to those involving major items. In any case, the level of influence they believed to exert in family decision making appears to be substantial and warrants marketers' attention for its promotional implications.

This study also showed that teenagers apparently perceive themselves as having coercive, referent, reward, expert, and legitimate power in relationship with their parents. Most strongly, they believed that they had a "right" to make major decisions affecting their personal lives in the present and in the future (legitimate power) and that their opinions should be respected by their parents when it comes to making these decisions (referent power). It is interesting to note that, on the other hand, they believed to a lesser extent that they possessed expertise to make these decisions or ability to react to their parents in a coercive manner. It

TABLE 3

A SUMMARY OF BIVARIATE CORRELATIONS BETWEEN
ADOLESCENT POWER AND PERCEIVED DECISION INFLUENCE FACTORS

	Minor Purchase Items for Family	Major Purchase Items for Family	Minor Purchase Items for Child	Major Purchase Items for Child
Referent Power	.11 (108)	.06 (110)	.10 (110)	.00 (108)
Reward Power	.09 (107)	.06 (109)	-.03 (109)	-.02 (107)
Legitimate Power	.08 (108)	.02 (110)	.19 ^a (110)	.20 ^a (108)
Coercive Power	.04 (106)	.03 (107)	.02 (107)	.08 (106)
Expert Power	.01 (108)	.27 ^a (110)	.13 ^b (110)	.13 ^b (108)

^a $p<.05$, ^b $p<.10$

Note: In the parentheses are the sample sizes after pairwise deletion.

appears that for the teenagers in this study, their claims to various rights and respect may not be fully founded on expertise or the ability to forcefully claim them from their parents.

Among the five specific dimensions of adolescent power, legitimate and expert power emerged as significant correlates of teenagers' perceived influence in family purchase decisions. Teenagers' legitimate power was significantly related to their perceived influence in purchase decisions involving products both major and minor for their own use. It is conceivable that teenagers who believe more strongly in their "right" to make decisions and govern themselves may also believe similarly with regards to the purchase situations involving products for their own use. The perception of expert power by teenagers was related to their perceived influence not only in purchase decision situations where they are the principle users but also in those involving major purchase items for the family. This suggests that teenagers, as they acquire more knowledge and expertise through their educational and other types of experiences, may contribute to the emergence of a more egalitarian parent-child role structure in decision making processes outcomes of which may affect the whole family.

In closing, some limitations of this study need to be pointed out. The relationship between adolescent power perception and decision influence was investigated with the use of teenagers' perceptions only. Past research have shown evidence that children tend to overestimate their decision influence. It may also be the case for the teenagers in this study. However, if their perceptions of power are similarly overestimated, the relationships found in this study between power perception and perceived decision influence may be sound. Future studies should additionally include parental perceptions and investigate not only the existence of perceptual disagreement but the relationship between parental perceptions of adolescent power and adolescents' decision influence assessed by children as well as parents. Another limitation comes from the sample employed in this study. The type and size of the sample impose a limitation in generalizing the findings.

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CONCEPTUAL AND METHODOLOGICAL ISSUES IN CONTEMPORARY VALUES
RESEARCH IN CONSUMER BEHAVIOR: A CRITICAL ANALYSIS

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Abstract

Marketing research concerning the relationship of consumer values to their marketing related behaviors has found a resurgence in the past decade. This paper identifies some problematic issues concerning this area of research and addresses gaps in both conceptual and methodological conceptions of values oriented studies. Areas of concern include definitional confusion, choice of instruments, cross cultural studies, value prioritization and conflict resolution. Some suggestions and implications for future research are discussed.

Introduction

In the fields of psychology, sociology and organizational behavior, it is widely accepted that values play an important role in human behavior. Psychological research, for example, has focused upon the relationships existing between values and psychological constructs such as ethnocentrism and dogmatism (Allport and Vernon 1931; Troidahl and Powell 1965; Rim 1970). In the field of sociology, values have been viewed as a prime determinant of social conduct and exchange (Blau 1964); collective consciousness (Durkheim 1960); and the distinction between "Gemeinschaft" and "Gesellschaft" (Tonnies 1957). The significance of the role of sociologists in the study of values is highlighted by the work of Rokeach (1968) who investigated the relationship between values and various aspects of social behavior. Evidence of the importance of this contribution is the popularity of the Rokeach Value Survey as a value-measurement instrument. Finally, in the research of organizational behavior, values have been found to be related to corporate strategy decision-making (Guth and Tagiuri 1965); differences of managers among organizations (Clare and Standford 1979); manager - non-manager differences (Munson and Posner 1980), and satisfaction with a group (Drake 1973).

Despite this great interest in the values construct exhibited by researchers in these fields, marketers and consumer behavior researchers have been comparatively slow in adopting the construct. Until the 1970s, consumer behavior values research had been only parsimoniously documented (with a few exceptions: see Rosenberg 1956; Yankelovich 1964; Kassarian and Kassarian 1966). Despite the naive embracement of the values construct and of the instrument, the consumer's personal value system has been accepted by consumer behavior researchers as a basic psychological

construct with the potential for influencing a wide range of consumption-related behavior.

According to one writer, the sparkling of interest in value studies may be termed a "values renaissance" (Munson 1984). However, optimism concerning the increase in investigation of the values construct should be tempered with caution. A critical evaluation of recent values studies reveals certain empirical and theoretical weaknesses. The appropriateness of the measurement tools used in values studies may be called into question. Also, many important topics in values research (e.g., emic versus etic values, deprivation theory, prioritization of values, resolution of value conflicts) must be studied in much greater depth than has been the case. This paper attempts to evaluate current value research in consumer behavior; to elaborate on the values construct and the frequently-used measurement instruments; and to make recommendations for proposed future directions of research.

A Values Studies and Conceptual Issues

Concept and Definition

Despite the difficulty encountered in attempting to define values, the understanding of the concept seems to be quite consistent in the literature. Rokeach (1973) defines values as, "An enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence." (p. 5). Rokeach distinguishes between two kinds of values: terminal and instrumental. The former refers to desirable end-states of existence, and the latter to modes of behavior. Rokeach's definition has been widely accepted for the operationalization of values in most consumer behavior-related studies (Bennett and Stuart 1989; Munson 1984; Munson and McQuarrie 1988; Pitts and Woodside 1984; Tse, Wong, and Tan 1988). Kluckhohn's (1951) conceptualization of values as "conception of the desirable means and ends" shares a striking similarity with Rokeach's distinction between terminal and instrumental values.

In addition to distinguishing between kinds of values, Rokeach (1973) also clearly distinguishes values from attitudes, which he defines as an "organization of several beliefs around a specific object or situation" (p. 18). Many other writers have supported the notion that attitudes are beliefs which are more specific in scope than values (Theodorson and

Theodorson 1969); or, similarly, that values are antecedents or determinants of attitudes (Katz and Stotland 1959; Allport 1961; Watson 1966; Woodruff 1942). The need to distinguish values from attitudes and life style arises as some studies confuse attitudes and lifestyle with values (Horn and Wells 1984). Table 1 shows how Rokeach (1973) distinguishes values from attitudes in five important aspects.

TABLE 1
DISTINCTION BETWEEN THE CONSTRUCTS OF VALUE
AND ATTITUDE

Values	Attitudes
1. a single belief....	an organization of beliefs
2. transcending objects	focusing on specific situation or object
3. a standard.....	point of view (non-standard)
4. small numbers..... (dozens)	large numbers (thousands)
5. centrally-held.....	less centrality

Source: Rokeach (1973), p. 18.

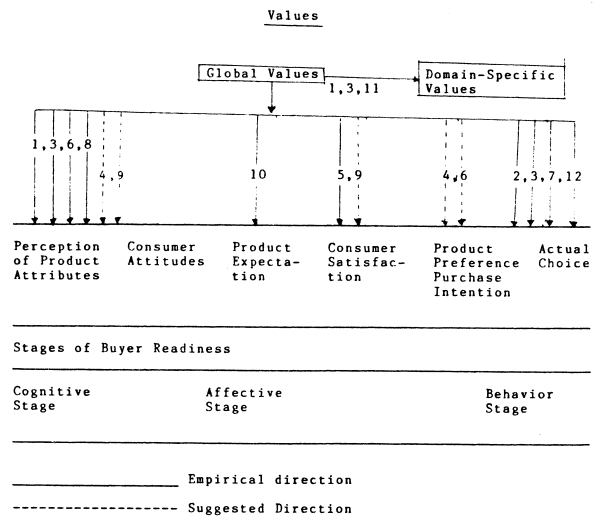
Distinction Between the Constructs of Value and Attitude

Vinson and Munson (1976) have suggested that values be used as an alternative market segmentation basis, while other researchers have empirically related values to differing perceptions of product attribute importance (Scott and Lamont 1973; Carman 1978; Becker and Connor 1982).

Alternatively, values have been related to levels of consumer discontent (Vinson and Gutman 1978), shopping orientation (Howell 1979), product expectations (Prakash 1984), and the use of mass media (Becker and Connor 1981). Figure 1 depicts major linkages investigated by value researchers since the early 1970s when the interest in values was rekindled in the consumer behavior area. Except in connection with consumer attitudes, the relationship between the value construct and other major components of consumer behavior has been well documented in the literature.

The relative neglect of the value-attitude linkage in the consumer behavior literature appears to be at odds with the existing belief that values may play an important role in the forming of attitudes. Rokeach (1973) contends that values are standards guiding and determining action and attitudes toward objects and situations and various researchers have demonstrated a theoretical relationship between values and attitude outside the consumer behavior area by way of Rokeach's Value Survey (Grube et al. 1977; Horman and Rokeach 1970; Rokeach 1971, 1973; Shotland and Berger 1970). Munson (1984) also posits that attitudes and behaviors based on more centralized, salient

FIGURE 1
Linkages of Values and Marketing Constructs in the Literature



References:

1. Scott and Lamont (1973)
2. Henry (1976)
3. Vinson, Scott, and Lamont (1977)
4. Carman (1978)
5. Vinson and Gutman (1978)
6. Howell (1979)
7. Becker and Connor (1981)
8. Becker and Connor (1981)
9. Prakash (1983)
10. Prakash (1984)
11. Sherrell et al. (1984)
12. Bennet and Stuart (1989)

values will be more resistant to change due to the psychological consistency of a hierarchical values -- attitudes -- behavior network. It is not clear whether Howard's (1977) position that values have only an indirect effect on attitudes and intentions may have led researchers to divert their attention from the value- attitude linkage. However, the gap between the very abstract value construct and the object-specific attitude construct seems to be a demotivating factor in the attempt on the part of consumer behavior researchers to link values and attitudes.

Under these circumstances, domain-specific values have been suggested as the intermediate value construct bridging the gap between global values and specific attitudes (Vinson, Scott and Lamont 1977). Despite the proposed utility of domain-specific values, they have not been rapidly adopted in consumer behavior research. The reasons for slow adoption may not be the lack of perceived importance but, rather, the difficult task of generating items and validating the abstract scales needed for measurement.

Methodological Issues

Ranking and Rating

The widespread use of the Rokeach Value Survey of terminal and instrumental values has not been critically questioned with regard to its

psychometric properties and techniques. At the most, investigation of the suitability of Rokeach Survey as a measurement instrument has centered around the relative effectiveness of the Likert-type rating approach adopted by Munson and McIntyre (1979) and the ranking method originated by Rokeach himself. Although ranking method was recommended by Rokeach (1973), the violation of independence among values, inapplicability of parametric statistics and measurement inflexibility have been pointed out as major limitations (Munson and McIntyre 1979; Lee 1983). Consequently, the use of Likert scales were used by several researchers to measure the importance of values (Howell 1979; Powell and Valencia 1984). Bennett and Stuart (1989), on the other hand, adopted both rating and ranking approaches in measuring the association between personal values and household decision processes. The measurement issue has indeed never been resolved, since a definitive statement cannot yet be made as to the most appropriate data collection method.

Interpretation of Values Relatedness

The skepticism toward the theoretical and practical utility of values in consumer behavior has originated perhaps not from the value construct itself but from the way researchers have pursued values research. The dominant trend appears to be that researchers start with a popular value scale (e.g., Rokeach's) and explore the value linkage to whatever marketing constructs appear to be related. When some items or factors are found to be correlated, the researchers conclude that a relationship exists without offering explanations of how they are specifically related. For example, Pitts and Woodside (1983) found that the importance placed on the value "a world at peace" is related to the importance of "price" as significant choice attribute. "Happiness" has also been related to "Luxury" as a corresponding choice attribute. An important step in establishing the face validity and the generalizability of such relationships would be an explanation of how these relationships come about.

Put in another way, two respondents may place extreme importance on the value of "comfortable life," yet interpret the value differently. This problem becomes even more grave if respondents are extremely different ethnically or culturally: the meaning of "comfortable life" may be quite different to a middle class American as compared to a poor indigent person. Due to different orientations toward the same value, any attempt to relate the value to any specific attitude or behavior may result in distorted or meaningless linkages.

Multi-dimensionality of Values

Another related issue concerns whether a value should be measured in terms of its importance to the individual, or in terms of the extent to which it is practiced by the individual. Virtually no consumer behavior research studies have raised the issue. Most existing value studies in consumer behavior have adopted

methodological approaches measuring only importance without taking into account whether the value is actually being practiced or implemented. Use of a strictly importance-based approach cannot identify and likely discrepancies between how an individual rates a value in terms of importance, and the individual's actual behavior regarding the value. For example, someone may rate the value of "true friendship" as very important because of his deprivation of close friends, whereas others may view this value as important because they do not wish to lose close friends they already have.

Deprivation/satisfaction theory may be used to justify the possible existence of this discrepancy between "desired" (high importance) values and "reality." A deprivation theory of values formation assumes that needs not satisfied during socialization come to be important values later in life (e.g., middle-class blacks accentuate middle-class values to compensate for any prejudices that may exist among their white peers) (Crosby, Gill and Lee 1984; Powell and Valencia 1984; Darden 1977). In the sense that it only explicitly measures importance, the Rokeach scale is far from complete. The Morris Ways to Live scale, in contrast, is designed to measure differences between "what is desired" and "what is accepted" (Robinson and Shaver 1973). However, this instrument has been criticized for the complexity and abstract quality of each paragraph and its tendency to force the respondent to give only simple responses to very rich stimuli. Creating improved instruments designed to embrace these distinctions may present a formidable challenge, if not impossible.

Cross-Cultural Studies

Value studies investigating the differences among subcultures and across cultures appear to be a promising direction for values research, for the very reason that culture is a value-based construct, and, in some cases, the constructs of value and culture are used interchangeably. Only a few studies have investigated sub- and cross-cultural differences or value differences among American ethnic groups (Munson and McIntyre 1978; Powell and Valencia 1984; Ness and Stith 1984; Valencia 1989). With the increasing importance of foreign consumers as possible target markets, the need for cross-cultural value studies is becoming even more pronounced.

Most value studies in sub-culture setting employ the Rokeach scale with little modification of scale items, despite the strong need for emic-etic distinction (Lee 1978). A study investigating the cultural aspect of values should emphasize locality (emic) as well as universality (etic) to grasp the true nature of the value system among different cultural groups. The Rokeach instrument is not designed to embrace the emic side of the value system. For example, "sharing" and "face saving" are dominant values among Asian ethnic groups which

exhibit strong family influence. No single item of the Rokeach instrument captures these dimensions. The Rokeach scale, therefore, appears to be more accurate for conducting cross-cultural research which focuses on shared values (of the American culture, e.g.) rather than on cross-cultural differences.

Another difficult in cross-cultural research is the need to control likely confounding variables (Powell and Valencia 1984; Ness and Stith 1984). Rokeach (1973) himself argues that sex, age, income and education are related to different value structures. Therefore, any subcultural or cross-cultural research with inadequate control over these confounding variables must face criticism over the true source of the observed effects. The usefulness of previous cross-cultural findings, for example, that there exist cross-cultural differences in personal value structures is limited due to the failure to control for such key variables as social status and sex. This logic implies that the choice of unrepresentative convenience samples for value studies can be a serious stumbling block to the advancement of value research, especially in the cross-cultural area.

Hypotheses Testing and Cut-off Point

Most value studies have succeeded in rejecting the hypothesis of "no difference" among groups or "no relationships" among constructs. Such studies suffer from two major difficulties which may seriously inhibit their contribution to the formation of a theory of value. First, no cut off point is specified which determines whether differences in value orientations exist. This problem occurs most frequently in sub- or cross-cultural studies: Ness and Stith (1984), for example, found that middle-class blacks and whites differed on eight of 36 value items. It is not clear that eight significant differences out of 36 sufficiently support their conclusion that values of these two groups are different.

Conclusions and Future Research

The time is now to assess the direction that values research has taken during the "values renaissance," and to evaluate critically the likelihood of practical application of this research. The critical discussion on conceptual and methodological issues regarding values research is previously provided. The main points discussed previously call into question the usefulness of values research from both managerial and academic perspective.

These questions concerning the value of values research by no means indicate that previous efforts have been unfruitful. On the contrary, they represent an important list of research opportunity in the values research area. Future research can benefit from systematically considering the limitations of past efforts while attempting to discover useful relationships among various value constructs and marketing decision variables. Future research can also assess the dynamic nature of values.

For example, some indications exist that consumers may prioritize their values in order to satisfy conflict over several competing values (Katz and Beech 1980). Value prioritization and value conflict resolution and their impacts on consumer decision making may be of significant interest to marketers because the consumer decision process involves closing a gap or satisfying a saliently felt need.

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CONSUMER CULTURE IN DEVELOPING ECONOMIES:
IS IT REALLY SO DIFFERENT?

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ABSTRACT

Scientific research requires consistency in methods of gathering data as well as labeling phenomenon and interpreting results. In cross-cultural studies of consumer behavior, however, consistency in labeling similar behavioral phenomenon encountered in different cultures seems not to have been practiced. Aspects of consumption behavior that have been identified as manifestations of the consumer culture in developed countries have not been so classified when encountered in the cultures of the developing countries. This paper suggests, using a variety of key consumer behavior concepts, that consumer proclivities and predilections in both categories of consumers may be more similar than hitherto imagined. To accomplish this, the paper reviews consumer culture in developing economies and attempts to compare aspects of consumption behavior identified with analogous factors identified in the developed world. Implications for research are also presented.

INTRODUCTION

Many definitions have been given to the 'consumer culture' in the industrialized world, however, most of them imply that the consumer culture in these countries is hedonistic and wasteful (e.g., Schudson 1984, Rassuli and Hollander 1986, Belk 1989). Rassuli and Hollander (1986, p. 5) specify the following criteria one of which must be present, for a consumer culture to exist:

1. A substantial segment of the population consumes at a level substantially above that of crude, survival-level subsistence;
2. Goods and services for consumption are acquired through exchange rather than self-production;
3. Consumption is an end in itself, rather than a means to an end, and it is acceptable in the community; and/or
4. People judge each other in terms of their consuming lifestyles.

This definition agrees with that offered by Belk (1989, p. 5) which states that "a consumer culture is a culture in which the majority of consumers avidly

desire (and noticeable portion pursue, acquire, and display) goods and services that are valued for non-utilitarian reasons such as status-seeking, envy-provocation, and novelty-seeking."

Consumers in most segments of the developed world are purported to practice the behavior described above (e.g., Campbell 1987). However, the practice of indiscriminate consumption has not been associated with consumers in the developing economies in the same manner as it has been linked with consumers in the developed world. Three potential explanations suggest themselves for this prevalent perception:

1. The consumption behavior of consumers in the developing world has not been studied in as much depth as that of their counterparts in the developed world;
2. Studies have been done in the developing world, and the consumption behavior was found to be utilitarian in nature; and/or
3. Studies have been done in the developing world, but the results have not been compared to results obtained in studies done in the developed world for similarities and differences.

As a perspective which may allow for a reconciliation of these rival hypotheses, the issue of whether consumer culture is a phenomenon precipitated by economic development and wealth, or merely an expression of some innate aspects of human behavior will be examined. Specifically, literature insights will be utilized to assess if an internal desire on the part of people to consume goods and services that are available in the society is a stable human preoccupation cross-culturally.

A review of the relevant literature reveals that though some consumer studies have been conducted about the consumption cultures of the developing world (e.g., Arnould and Wilk 1984; Belk 1989), their results have not been compared with those obtained in the developed countries. A possible reason for this may be the preoccupation of marketing and consumer behavior researchers with consumption behaviors of the developed world. It would appear that archaeologists and anthropologists have contributed the most to the documentation of consumption

patterns in developing societies (e.g., Kamp 1987; Kramer 1979), and the extent of corroboration between these disciplines and the discipline of consumer behavior is still limited. Consequently, this paper seeks to compare the findings about expressions of the consumption behavior of the developing countries with the purported manifestations of the consumption culture of the developed world. Arguments will be offered to refute the premise that a consumer culture is merely a consequence of economic development and wealth (Davis 1985). In effect, we argue that the perception of difference may largely emanate from a questionable conceptualization of what drives the phenomenon we term consumer culture. More formally, we will attempt to defend two premises:

1. A consumer culture is a manifestation of one of the multi-dimensional aspects of human behavior, namely that of a demand for worldly possessions; and
2. Consumers in the different societies and cultures in the world consume goods and services for the same two reasons identified in consumer behavior, i.e., for utilitarian reasons or the consumption necessary for survival (cf. Rassuli and Hollander 1986), and for non-utilitarian reasons or consumption for status-seeking, envy-provocation, and novelty-seeking (cf. Belk 1989).

The key rationale of these theses is that consumers in the developing economies have always consumed goods and services for utilitarian and non-utilitarian purposes. And the type of goods and services consumed for non-utilitarian purposes have traditionally included both indigenous and foreign products. These theses will be extended to demonstrate that to some degree, the desire to communicate the symbolic meanings derived from consumption is also present in the different cultures of the world. Further, within cultural constraints, the patterns of consumption (e.g., using goods in the groups of complements) are also similar across the different cultures.

DEFINITION OF CONSUMER BEHAVIOR

Many theories have been offered to explain consumer behavior (e.g., Osgood, Suci, & Tannenbaum, 1957; Levy 1959; Halbert 1964; Tucker 1967; Fishbein & Ajzen 1975; and Howard 1989). The economic models (Levy 1959; Halbert 1967; Tucker 1967) depict consumers as rational decision makers whose motives for buying are basically economic in nature. On the

other hand, the psychological models (Fishbein & Ajzen 1975; Halbert 1964; Tucker 1967) emphasize the dynamic motivational and attitudinal antecedents of consumption, and stress the seemingly non-rational aspects of decision making process (e.g., impulse buying; Tucker 1967). The socio-anthropological models attempt to explain consumer behavior in terms of social location; the key assumption being that social location (i.e., social and economic class) largely accounts for behavioral variations (Tucker 1967).

These models suggest that while no single theory could individually explain all consumer behavior, they all recognize that (a) consumers are driven by certain needs/motives, (b) process information (rationally, irrationally, or stochastically) regarding available goods, and (c) attempt to achieve a desired state following consumption. As Tucker (1967, p. 1) has noted, "consumer behavior is like human behavior, subject to a host of influences that can be classified as social, psychological, environmental, physiological, economic, and the like." If we classify the existing theories of consumer behavior based on the three dimensions of drive, information processing, and desired end-state, the following framework (Figure 1) of consumer behavior emerges.

FIGURE 1
A FRAMEWORK FOR CONSUMER BEHAVIOR^a

	DRIVE/ MOTIVATION	INFORMATION PROCESSING	DESIRED END-STATE
ECONOMIC MODELS	Basic Needs: Food, Shelter & Clothing	Rational Decision Making	Physiological Contentment
PSYCHO- LOGICAL MODELS	Psycho- Physiological Needs: Food, Self Esteem, etc.	Rational/ Irrational Decision Making	Psycho- Physiological Contentment
SOCIO- ANTHRO- POLOGI- CAL MODELS	Socio- Psychological & Physiologi- cal Needs: Food, Shelter Clothing, Self Esteem, Status, etc.	Rational Decision Making	Socio- Psychological and Physiological Contentment

^a Adapted from W. T. Tucker (1967)

As we compare the dimension of drive/motivation across theories, we find the motive for consumption moving from the satisfaction of basic needs (i.e., hunger, shelter, clothing, etc. in economic models) to the satisfaction of superfluous needs (i.e., status in socio-anthropological models), and consumer behavior takes on a hedonistic character. Applying Belk's (1989) and Rassuli and Hollander's (1986) definitions of consumer culture, the theories of

consumer behavior of present interest then, are the socio-anthropological models that stress the hedonistic aspects of consumer behavior.

CONSUMER CULTURE IN DEVELOPING ECONOMIES

Type of Goods Dimension

Several investigations of the consumer culture in the developing economies can be found in the literature (e.g., Belk 1988b & 1989; Belk & Zhou 1986; Blair 1965; Freedman 1975 & 1976; Worsley 1968; Cochrane 1970; Wilk 1986; Yellen 1985; Sethi 1979; and Aryee 1984). However, most of them define the consumption culture in terms of the types of goods being consumed. In countries where the availability of western goods is relative rare and their consumption is practiced by a minority of the population, the studies so far have failed to identify any significant consumer culture (e.g., Blair 1965). On the other hand, where western goods (e.g., cars, radios, TVs, shoes, and ready-made clothes) are abundantly available and consumed on a large scale, the studies have identified (in some cases) the emergence of a consumer culture (e.g., Blair 1965), and in other cases, the presence of a consumer culture and the practice of hedonistic consumption (Freedman 1975; 1976a; 1976b).

A major problem with these studies is that they equate the presence of a consumer culture with the presence of western goods. If a developing country (either by design or accident) does not consume large quantities of western goods, then no inferences are typically made about "evidence" of a consumer culture. Only when western goods are consumed on a fairly large scale that the studies have tried to identify the presence of a consumer culture.

However, in terms of the definitions of consumer culture (Belk 1989; Rassuli and Hollander 1986), the type of goods consumed is not an essential part of the criteria for determining the presence of a consumer culture. Rather, the purpose of consumption seems to be the only appropriate criteria. For example, in some north African countries (e.g., Egypt, Morocco, and Sudan) some individuals own many camels as a means of expressing their wealth and status in their communities; and this behavior qualifies as hedonistic consumption as much as the multi-car ownership behavior in the developed economies.

Consumption as Symbols

Another important characteristic of a consumer culture is purported to be a

propensity for non-utilitarian consumption. Hence people in such cultures are said to consume for status and novelty reasons (Belk 1989). Again, consuming for symbolic meaning is neither limited to consumers in the developed countries nor to western goods and services.

For instance in many developed countries, individuals use their house sizes as an expression of wealth. In the United States, in states like Texas, Oklahoma, Arizona, and California, (where land is relative cheap), ranches and huge estates are common; whereas in states like New York, Massachusetts, Connecticut, New Jersey, and Pennsylvania, (where land is relatively expensive), the size of houses of the wealthy are comparatively modest in size. In the latter case, the wealthy express their wealth in household artifacts, such as paintings, antique furnitures, expensive china, and jewelry. In both regions, the houses of the wealthy are better built and they are fairly recognizable. And in a status conscious society such as the United States, people are quite knowledgeable about the wealth of their neighbors.

However, not surprisingly, Kamp (1987) discovered the same phenomenon to be operative in a Syrian village. Kamp studied the village of Darnaj, located in northeast Syria along the Euphrates river (population 1500 inhabitants, comprising of Muslim Arabs of the Bu Hasan tribe). Kamp (1987) found the households of the wealthy to occupy more land than the houses of the less affluent. Moreover, the villagers appeared to be very status conscious, and people were quite knowledgeable about the economic status of their neighbors. Hence, if hedonistic consumption (as opposed to utilitarian consumption) is taken to be a hallmark of the existence of a consumer culture, then one could unequivocally conclude that a consumer culture is present in the village of Darnaj. Further, the underlying psychological dimension driving such consumption were also the same. Other studies that have revealed similar results include a study of a Kurdish village in Iran (Kramer 1979; 1982), where landowners' properties were discovered to occupy larger compounds than the landless and there was a large correlation between household wealth and compound size.

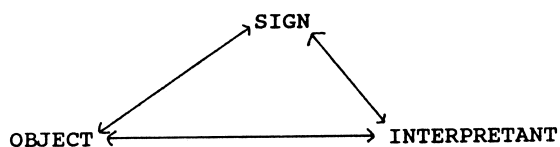
According to Kamp (1987), the hypothesis that household size is affected by economic constraints and opportunities is a cross-culturally valid generalization. However, the relationship between house size and wealth is not always positive, because in some cases less affluent

segments of society may maintain large household for economic advantages (e.g., closely related conjugal family units may co-reside in a large household). Still, in the above studies, house sizes were positively related to wealth.

The Question of Cultural Meaning

While it would seem reasonable to suggest that the meanings derived from the ownership of large households in the compared societies were about the same, it is important to note that the meanings derived from the consumption of specific goods are not necessarily the same cross-culturally, nor are similar goods used to express the same sentiments across cultures (Sahlins 1976; Douglas & Isherwood 1987). However, cross-cultural comparisons of the symbolism of goods can still be accomplished through the examination of the motives of the consumption activity. We use the semiotic framework (Peirce 1931-58; [Figure 2](#)) to elaborate on the relationship between motivation and symbolic meanings.

FIGURE 2
PEIRCE'S MODEL OF SEMIOSIS

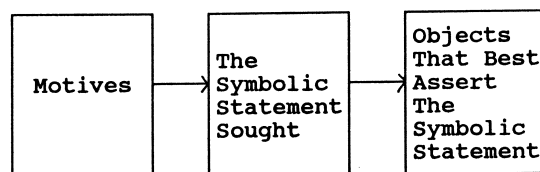


A description of the process of semiosis is that it is the communication of the sign (symbol) of an object to a person (or context). The model ([Figure 2](#)) describes semiosis as the process by which the sign (symbol) of an object is communicated to an interpretant. However, the interpretant can be transformed into creating another sign that refers to the same object. Thus, depending on the mode of the interpretant, an object can imply different signs. While the objects and the signs individuals infer from them are usually culture-specific, the motives for using objects for their symbolic value may not be culture-specific. Thus, while the symbol derived from a sable fur coat in the western culture may be different from that derived from an "akwete" attire in the culture of the Ibo tribe of Nigeria, it would not be unreasonable to suggest that the motives behind the use of these products in their respective cultures may be similar (i.e. to communicate the status of the user).

It has been argued that motives influence the nature of pre-purchase information-processing, and in turn affects the choice of brand purchased (Howard 1989). If this argument holds,

then motives can be expected to influence the symbolic statements that consumers make with the consumption of certain products ([Figure 3](#)).

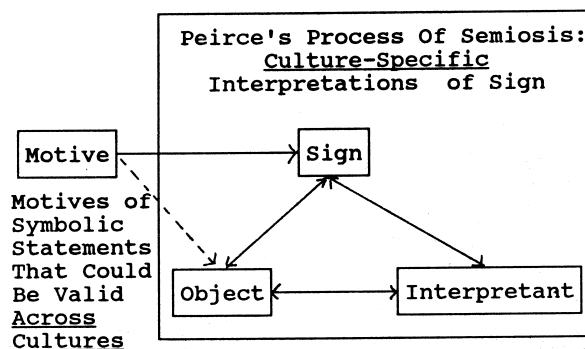
FIGURE 3
ROLE OF MOTIVE ON SYMBOLIC PRODUCT CHOICE



As shown, the link between motives and product choice is mediated by the symbolic statements intended: motives influence the type of symbolic statements that consumers intend to make; and the symbolic statements in turn influence the choice of product(s) that consumers use to express them.

If we incorporate these theoretical linkages into Peirce's model ([Figure 2](#)) of the process of semiosis, the resulting model would be as follows ([Figure 4](#)):

FIGURE 4
INTRODUCING MOTIVE INTO PEIRCE'S MODEL



The implication of [Figure 4](#) is that while it may be impossible to compare how different objects are used for their symbolic values in the various cultures of the world, it may not be so difficult to compare the motives behind the use of goods for their symbolic value. If such comparisons are made, it is the position of this paper that similarities in the motives behind the use of goods for their symbolic value would be found between the cultures of the developed and the developing economies.

Diderot Unities/Effects

Another key characteristic of consumption behavior is purported to be a tendency to consume goods and services in groups of complements, i.e., it has been suggested that goods that are complements are usually used together. McCracken (1988)

uses the term "Diderot Unities" to describe a highly consistent complements of goods, and defines "Diderot Effect" as "a force that encourages the individual to maintain a cultural consistency in his/her complement of consumer goods (p. 123)." According to McCracken (1988), Diderot Effect operates in three ways:

1. It works to prevent an object (e.g., a new product) from entering an existing stock of consumer's goods that carries cultural significance;
2. It forces the creation of an entirely new set of consumer goods; and
3. It is the means by which individuals manipulate their stock of existing consumer goods in order to make new meaning (cultural significance) out of them (pp. 123-124).

In the developed world, consumers create a new set of complements of goods by adding a newly acquired good to classifications seen in the existing stock of goods. However, since both the newly acquired goods and the existing stock of goods are usually western products, there seems to be "harmony" among the goods comprising the new set of complements. For example, a newly acquired tuxedo might match an old bow tie. However, in the developing economies, consumers create a new set of complements of goods (with cultural significance) in one of three ways:

1. By adding a newly acquired indigenous good to an existing stock of indigenous goods (e.g., adding new clothes to create a complete indigenous attire); or
2. By adding a newly acquired western good to an existing stock of indigenous goods (e.g., Wallendorf and Arnould (1988) found quartz watches being worn together with indigenous ceremonial dress at Hausa wedding in Niger); or
3. By adding a newly acquired western good to an existing stock of western goods (e.g., adding new western clothes to create a complete attire).

As in the case with consumers in the developed world, when the newly acquired good is of the same type (e.g., indigenous for indigenous, or western for western) as the existing stock of goods, harmony among the new set of complements is readily achieved. However, when consumers in the developing economies add a newly acquired western good to an existing stock of indigenous goods (to create a new complement of goods with cultural

significance), the transformation is noticeable - something does not appear to be right. There seems to be no "harmony" in the new set of complements of goods. However, such an inference is an outside judgment and does not necessarily reflect how such complements of goods may be perceived by the consumers themselves.

Aryee (1984) has observed that in Ghana low income consumers are more likely to wear high status prestige footwear for social and ceremonial wear. However, a closer scrutiny could have revealed that the "high status footwear" (a western product) is part of a complete attire that includes indigenous dress and/or hats (all of which are complements, and are worn together for social and ceremonial occasions). Thus, what looks like an indiscriminate consumption practice on the surface to an outsider, is actually a calculated effort to create a set of complements of goods with cultural significance.

Other examples include Peruvian Indians carrying rocks painted to look like transistor radios (Arnould and Wilk 1984), and quartz watches being worn together with ceremonial dress at Hausa wedding in Niger (Wallendorf and Arnould, 1988). While Belk (1989) refers to this phenomenon as evidence of the lure of western goods, the process of creating "diderot unities" (goods that complements) is entirely indigenous (without external intervention). If the Hausas in Niger do not believe that quartz watches complement indigenous dresses that they wear for wedding ceremonies, they would not include them.

Often an additional inference is also made that consumers in the developing economies were attracted by the lure of hedonistic consumption (Belk 1989); or else, they would not have purchased a product that is totally out of "sync" with the stock of goods they already owned. Such a judgment further implies the equating of western good with hedonistic consumption in developing economies. As argued earlier, the type of good (i.e. western or indigenous) has no bearing on whether consumption is hedonistic or not. Also, evidence would suggest that hedonistic consumption has always been present in developing economies but expressed mainly with indigenous goods and services (Kamp 1987; Kramer 1979; 1982; Castro, Hakasson, and Brokensha 1981). The following illustrations support the misperception implicit in the above judgments.

Quality as a Stable Dimension

An interesting observation from the works reviewed is that many scholars seem to

confuse between consumers in the developing economies who are familiar with popular brands of western products, and those who consume hedonistically (western brand or not). If an individual owns a watch, it does not make it hedonistic if the brand is well-known, or non-hedonistic if it is a lesser known brand. Instead, the stable sentiment may be quality consciousness. It is well-known everywhere except in societies entirely uninitiated to the functioning of markets, that brands differ in quality, and in many cases, the only way to ensure quality is to buy a well-known brand.

The Diffusion Process

The diffusion process plays an important role in the developing economies in that consumers will often selectively choose western goods to serve as complements on the basis of the extent of diffusion. Rogers (1983) defines diffusion as "the process by which an innovation is communicated through certain channels, over time, among members of a social system (p. 5)." The nature of the information-exchange relationship between pairs of individuals determines the conditions of the transfer. The principle of human communication implies that the transfer of ideas occur most frequently between two individuals who are alike, similar, or homophilous ("homophily" refers to the degree to which pairs of individuals who interact are similar in certain attributes, such as beliefs, education, social status; Rogers 1983).

The process of diffusion that communicates western innovations to consumers in the developing world also operates on the dimension of likeness. Consumers in the developing economies "see" a lot of similarities between themselves and their counterparts in the developed world (e.g., professionals in the less developed countries of the world feel a sort of kinship with similar professionals in the developed world, who they may see as role models). Consequently, they modify their behavior (including consumption behavior) to conform to that of their "peers" in the developed world. For example, young MBAs in Africa, Central and South America, and Asia may develop a preference for BMW cars, because BMWs are perceived as the "right cars" for MBAs in north America. In some cases, wealthy individuals in the developing world, who until now expressed their wealth through the consumption of indigenous goods, are replacing them with western goods. For instance, Castro, Hakasson, and Brokensha (1981), found that in communities in India and Africa, western goods (e.g., luxury cars) are replacing large holdings of livestock, as indicators of wealth and status.

Priorities and Resource Allocation

A problem that many scholars find with the increasing consumption of western products in the developing world concerns changing consumption priorities and resource allocations. Chapman (1986) and Wells (1977) found that increased consumption of western goods by the consumers of developing economies lessens their purchasing ability for food and other necessities. Freedman (1975; 1976a; 1976b) asserts that there is a common tendency in developing countries to forgo having children in order to afford more consumer goods. And Belk (1989) states that the demand for western goods is likely to outstrip means of purchase. However, consumers in the developed world are also experiencing this same phenomenon (e.g., with the introduction of credit cards in the early 1970's, demand for durable goods has outstripped the means of purchase and consumer debt in the U.S. has increased steadily; U.S. Bureau of the Census 1989). However, such trends may not necessarily be a consequence of the types of goods being purchased; rather it may be a result of the consumption behavior in a consumer culture - the search for pleasure and variety through consumption (Campbell 1987).

IMPLICATIONS AND CONCLUSIONS

Mason (1981) has perceptively noted that high level consumer cultures have existed in isolated pockets since ancient times. As such, our paper provides updated support for Mason's assertion. Moreover, we extend his ideas in (1) presenting evidence that the contemporary consumer cultures around the world may be more similar than hitherto imagined, and (2) we substantiate this on the basis of specific consumption characteristics that are held to be the key descriptors of consumer behavior.

In conclusion, evidence suggests that consumers in the many different societies and cultures in the world are similar in more ways than we presently suspect. And if this assertion is correct, a key implication may be that whenever a new market is emerging (such as China today), marketing and consumer behavior experts may not always have to study the entire market from ground zero, because such efforts may merely lead to mass duplications of the results already obtained in studies of western markets and consumers. Instead, marketing and consumer behavior experts should concentrate their studies on the differences between the new markets and the markets in the west that have already been studied.

REFERENCES AVAILABLE FROM AUTHORS

ABSTRACT

This exploratory study investigates the relationships of product familiarity and involvement with message recall and evaluation in an ad pretesting situation. Subjects' familiarity and involvement with the product category under study were measured, followed by forced exposure to a print ad of the product and elicitation of message recall and evaluation. The results suggest that familiarity is a better explainer of message recall, while involvement is a better explainer of message evaluation. Implications for advertising strategy and testing are discussed.

INTRODUCTION

Cognitive psychologists have proposed two basic routes to the attitude change process: central and peripheral (Petty and Cacioppo 1979; Chaiken 1980). However, the evidence in consumer research in support of the two-route-to-persuasion theory is mixed. Rothschild and Houston (1977) found that highly involved consumers used more attributes to evaluate brands than less involved consumers. Hoyer (1984) found that consumers made quick and effortless decisions when the purchase is unimportant. Lutz et al. (1983) call into question the central vs. peripheral distinction in an advertising context.

A factor that has not received much attention in consumer use of central vs. peripheral processing is product category familiarity. Although Lutz et al. hypothesized that the use of central processing would vary directly with subjects' prior knowledge of the product category, they used a single-item scale (not very/very knowledgeable) to measure prior knowledge. The effects of prior knowledge, or familiarity, on information processing are well-documented in the literature (Park and Lessig 1981; Johnson and Russo 1984; Bettman and Park 1980; Punj and Staelin 1983). Prior knowledge is an important explanatory variable to the extent that it differentiates subjects' ability to process new information.

The purpose of this study is to explore the extent to which message recall and evaluation, in an advertising pretesting context, are related to product category familiarity and involvement.

A COGNITIVE STRUCTURE VIEW OF FAMILIARITY AND INVOLVEMENT

Familiarity and involvement are both constructs that are beset by conceptual and measurement problems. Familiarity has variously been defined as prior knowledge (Lastovicka 1979), frequency of use (Raju and Reilly 1979), a component of involvement (Lastovicka and Gardner 1979), or as previous experience (Russo and Johnson 1980). Park and Lessig (1981) define

familiarity as a combination of what a consumer thinks he or she knows about the product (subjective knowledge) and what the consumer actually knows about the product (objective knowledge). Rao and Monroe (1988) also operationalized prior knowledge as a combination of subjective and objective knowledge. Marks and Olson (1981) see familiarity as the cognitive representations of previous product experiences. These representations are encoded and organized in memory as product-related cognitive structure or schema. The cognitive structure comprises of elements of objective and subjective knowledge as acquired through formal or informal learning, product experience, word of mouth, and mass media. Repeated exposure and encoding of product information leads to a more refined and reliable cognitive structure. It is the degree of development of the cognitive structure that determines an individual's familiarity with a product. The more highly developed the cognitive structure, the more familiar the individual is with the product (Zinkhan and Muderrisoglu 1985). If an individual has a well-developed cognitive structure, he or she is better able to activate more elements from memory to use in interpreting information about the stimulus. If the individual is exposed to advertising message, he or she is better able to make associations between the attributes of the product and cues already existing in memory. This leads to memory rehearsal and, subsequently, better recall of message arguments. On the other hand, an individual who is less familiar with the product will have less-developed memory structures. There are few existing cues in memory with which to associate product attributes, resulting in little memory rehearsal and poorer recall of message arguments.

Like familiarity, there is no single, widely accepted definition of involvement. Some researchers define involvement as a cognitive state while others emphasize the behavioural aspects. With respect to the cognitive processing and evaluation of persuasive message, we adopt the view of involvement as a psychological or internal state of commitment that is activated by a stimulus in a given situation (Mitchell 1979, 1981; Cohen 1983). When an individual is exposed to advertising message, he or she may process the message superficially, without expending cognitive effort. This results in a low commitment to the stimulus object in the cognitive domain. On the other hand, a highly committed or involved individual will expend a high degree of cognitive effort in message comprehension, elaboration and evaluation (Greenwald and Leavitt 1984; Zinkhan and Muderrisoglu 1985). Thus, from the point of view of the individual's psychological or internal state, it is the level of activation of an individual's cognitive state by a stimulus that determines the individual's involvement with the stimulus object.

While it is true that, in some situations, individuals that are highly involved with a product tend to be more familiar with it, this is not always the case. An individual may be highly familiar with a product or brand but expend little cognitive effort in matters relating to it, such as toothpaste. Similarly, an individual who is unfamiliar with a product may expend great cognitive effort in decisions relating to it, such as first-time purchase of a camcorder. Thus, an individual may be highly familiar but uninvolved with a product, or highly unfamiliar but highly involved with it. Familiarity is a latent state representing the extent to which the cognitive structure with respect to a product is developed, while involvement represents the degree of activation of the cognitive structure, which may or may not be highly developed.

The greater the number of associations that can be made, or the better developed the cognitive structure, the better the recall. Therefore, highly familiar subjects will recall more message features in total than less familiar subjects. Research suggests that greater familiarity leads to greater emphasis on brand facts or objective attributes (Park and Lessig 1981; Alba and Hutchinson 1987). Therefore, highly familiar subjects would be expected to process and recall proportionately more information regarding the merits of the brand advertised than the physical and executional features of the ad itself. That is, highly familiar subjects will engage in relatively more central processing (brand cognitions) than peripheral processing (ad cognitions). The opposite is expected for less familiar subjects. The above analyses are summarized in the following propositions:

- P1: Recall of message features is related more to product category familiarity than to product category involvement. Highly familiar subjects will recall more message features in total than less familiar subjects.
- P2: Highly familiar subjects will recall more brand-related features and more ad-related features than less familiar subjects.
- P3: Highly familiar subjects will engage in more brand cognitions than ad cognitions. Less familiar subjects will engage in more ad cognitions than brand cognitions.

The primary dependent measure in the above propositions is recall. Recall remains the most widely used measure of advertising effectiveness (Hornik 1989; Batra and Ray 1986), although its indiscriminate use has recently come under criticism (Gibson 1983). Recall measures may tend to understate ad effectiveness in situations of low involvement (Krugman 1986) or peripheral processing (Petty, Cacioppo and Schumann 1983). In such situations other measures, such as recognition, behavioural intention or actual purchase, may be better measures of ad effectiveness.

While the recall of message features is hypothesized to be more related to the level of

familiarity, the evaluation of the message will be more related to the level of involvement. Various cognitive thoughts that consumers use to elaborate on persuasive messages have been studied. These include counterarguing, support arguing and source derogation (Wright 1973, 1980); neutral, irrelevant thoughts (Cacioppo and Petty 1979); and source bolstering and repetition-related evaluations (Belch and Lutz 1982). The evidence suggests that it is these subject-generated thoughts that mediate the attitudinal acceptance of the incoming message, rather than the cues contained in the message. The more involved the subject is with the issue or product the more likely it is that these cognitive thoughts will be activated. Petty and Cacioppo (1979) and Chaiken (1980) show that less involved subjects engage in less elaboration of message arguments (peripheral or heuristic processing) than more involved subjects who engage in central or systematic processing.

In studying the effect of involvement on message evaluation, it is important to differentiate between cognitive, affective and conative responses because each response may be premised on quite different considerations. For example, cognitive responses result from evaluating message arguments. The evaluation process involves counterarguments and source derogation when the new information is discrepant from information stored in memory, or support arguments and source bolstering when the information is congruent with information stored in memory. Previous studies have shown that support arguments tend to lead to positive cognitive and conative evaluations while counterarguments tend to have the opposite effects (Belch 1981; Edell and Staelin 1983; Olson, Toy and Dover 1978). Affective responses, on the other hand, do not necessarily require that new information be compared with prior beliefs. Affective response, or attitude toward the ad, reflects primarily a subject's liking/disliking of the way in which the ad was made. That is, it is concerned primarily with the visual aspects and execution style of the ad itself. Such response may be influenced by the subject's mood, feelings and other emotions at the time of exposure (Lutz 1985). Affective response, therefore, should be independent of subject level of product involvement since it is dominated by affective, rather than cognitive, considerations (Batra and Ray 1986). Conative responses, measured as behavioural intentions, will be dependent on the level of subject involvement. Highly involved subjects are persuaded through careful weighing of message arguments and the merits of the product advertised, while less involved subjects are persuaded through executional cues, source likability, and other communicator-oriented cues. In an ad pretesting situation, or laboratory environment, behavioural intentions are hypothesized to vary depending on whether they predominantly result from brand cognitions or from ad cognitions. Lutz et al. (1983) found, for example, that the relationship between brand cognitions and purchase intentions

was stronger for their high knowledge/high importance subsample than for the low knowledge/low importance subsample. This suggests that subjects' stated behavioural intentions depend on the level of involvement. The above analyses are summarized in the following propositions:

- P4: Message evaluation is related more to the level of involvement than to the level of familiarity with the product category.
- P5: Cognitive evaluations will vary with the level of product category involvement.
- P6: Affective evaluations will be independent of the level of product category involvement.
- P7: Conative evaluations will vary with the level of product category involvement.

METHOD

Stimulus and Subjects

The stimulus was a full-page colour print ad for a compact disc (CD) player obtained from a stereo magazine. The CD player product category was chosen because it is a relatively complex product and one that would encompass a wide range of consumer familiarity and involvement. The visual or pictorial portion of the ad comprised seventy percent of the nonblank portion of the ad and showed a male and female in attention-grabbing nineteenth century outfits, with a picture of the CD player in the foreground. The verbal portion, comprising descriptions of seven attributes, made up the remainder of the page. The ad was evaluated by a sample of students at a medium-sized university in Southwestern Ontario. A total of 139 students participated in the study.

Procedure and Measures

Upon agreeing to participate in the study, the subject was given a questionnaire designed to measure his or her familiarity and involvement with the CD player product category. Following the completion of this questionnaire, the subject was given the CD player ad to read. After the subject handed back the ad, s/he was given another questionnaire designed to measure message recall and evaluation. The recall and evaluation measures comprised the dependent variables while the familiarity and involvement measures comprised the independent variables.

Familiarity measure. The questionnaire designed to measure a subject's familiarity with the CD player product category followed the approach used by Rao and Monroe (1988). It contained both objective and subjective knowledge items. The seven objective knowledge items measured subject's (a) knowledge of local stores that carry CD players (1 point awarded for each correct response up to 4 points), (b) purchase experience in the product category (2 points for Yes, 0 for No), (c) ownership of a CD player (2 points for Yes, 0 for No), (d) knowledge of brand names (1 point per correct response up to 4 points), (e) knowledge of evaluative

attributes in the product category (1 point per attribute up to 4 points), (f) belief about price/quality relationships in the product category (2 points if subject said higher-priced CD players were better than lower-priced ones; 1 point if subject said No/Not necessarily; 0 if Don't know), (g) knowledge of user-maintenance procedures (2 points for any correct response). The subjective knowledge item asked the subject to indicate how familiar s/he was with CD players, on a five-point scale (extremely unfamiliar to extremely familiar). At one end of the scale no point was awarded if the respondent was extremely unfamiliar with the product category while at the other end 4 points were awarded if the respondent was extremely familiar. A subject's product category familiarity score was then obtained by summing his or her scores on the individual items. The theoretical minimum and maximum familiarity scores were 0 and 24. Actual scores ranged from 0 to 20, with a mean of 8.8 and a standard deviation of 5.1. Cronbach's alpha for the familiarity scale was 0.86.

Involvement measure. The involvement scale was administered after the familiarity scale.

In this study, subject involvement with the CD player product category was measured using the Personal Involvement Inventory (PII) developed by Zaichkowsky (1985). The PII is a twenty-item scale requiring the subject to indicate his or her feelings with regard to the importance, desirability, relevance, etc., of the product to him or her, with each item being measured on a seven-point semantic differential scale. A subject's involvement with the CD player product category was then obtained by summing his or her scores on individual items. This scale appears to tap the subject's involvement with the product itself rather than his or her involvement with the experimental situation.

The theoretical minimum and maximum scores on the PII scale are 20 and 140. Actual sample scores in this study for the CD player product category ranged from 20 to 140, with a mean of 86.7 and a standard deviation of 25.5. Cronbach's alpha for the PII scale was 0.96.

Ad recall. Following the completion of the familiarity and involvement questionnaire the respondent was given the CD player ad. Upon handing the ad back, the respondent was given a questionnaire designed to measure message recall and evaluation. The message recall section asked the respondent to list everything s/he remembered about the ad s/he just read, no matter how trivial.

Ad evaluation. The items used to evaluate the ad were selected so as to tap the cognitive, affective, and conative components of attitude (Baker and Churchill 1977). The cognitive component was measured by the extent to which the subject felt the ad s/he just read was believable, informative, and clear. The affective component was measured by the extent to which the subject felt the ad was interesting, appealing, impressive, attractive,

and eye-catching. Finally, the conative component was measured by the extent to which the respondent would try, seek out, or buy the product advertised. Each item was measured on a seven-point semantic differential scale. For example, "Did you find the ad "Attractive.....Unattractive?"

Following data collection, the number of message features recalled were counted and coded independently by three judges according to whether they were directed toward the brand advertised (brand cognitions) or toward the physical quality or execution style of the ad itself (ad cognitions). Inter-judge agreement was quite high at 98 percent. The items used to evaluate the ad were subjected to principal-components analysis. The varimax-rotated components matrix of Table 1 shows that each item had the highest loading on the component which it was assumed to be measuring. Cronbach's alpha was 0.74 for the cognitive items (believable, informative, and clear), 0.91 for the affective items (interesting, appealing, impressive, attractive, and eye-catching), 0.76 for the conative items (try, buy, and seek out), and 0.87 for all eleven items together. Consequently, the cognitive evaluation of the ad was calculated as the average of the cognitive items, the affective evaluation was the average of the affective items, and the conative evaluation was the average of the conative items.

Table 1
Varimax-Rotated Component Loadings

Item	Component		
	Cognitive	Affective	Conative
Believable	.83	.20	-.04
Informative	.73	.26	.17
Clear	.71	.24	.17
Interesting	.30	.81	.21
Appealing	.35	.79	.10
Impressive	.38	.76	.10
Attractive	.20	.83	.05
Eye-catching	.05	.83	.18
Try	.19	.28	.66
Buy	.13	-.02	.85
Seek out	-.03	.16	.88
% Variance	15.4	45.0	10.2

The correlation between the familiarity and involvement scores for the CD player product category was quite high at $r=0.51$.

RESULTS

To examine the effects of familiarity and involvement on ad recall and ad evaluation, the sample was divided into four mutually exclusive groups according to whether the subject was below or above the median on familiarity and involvement scores (Lutz, MacKenzie, and Belch

1983). The four groups thus derived are the Low Familiarity/Low Involvement (LF/LI), Low Familiarity/High Involvement (LF/HI), High Familiarity/Low Involvement (HF/LI), and High Familiarity/High Involvement (HF/HI) groups. Table 2 shows the sample size, mean number of message features recalled in total, mean number of brand-related features recalled, mean number of ad-related features recalled, proportion of ad-related to total recall, mean cognitive evaluation of the ad, mean affective evaluation of the ad, the mean conative evaluation of the ad, mean familiarity score, and mean involvement score for each group.

Table 2
Group Means For Dependent And Independent Variables

	LI		HI	
	(n=47)		(n=22)	
LF	Total recall	= 4.23	Total recall	= 5.41
	Brand-related recall	= 2.34	Brand-related recall	= 3.23
	Ad-related recall	= 1.89	Ad-related recall	= 2.18
	Ad/Total recall (%)	= 45.40	Ad/Total recall (%)	= 39.50
	Cognitive evaluation	= 4.33	Cognitive evaluation	= 4.97
	Affective evaluation	= 3.99	Affective evaluation	= 4.58
	Conative evaluation	= 3.00	Conative evaluation	= 3.92
	Familiarity score	= 4.36	Familiarity score	= 5.18
	Involvement score	= 63.75	Involvement score	= 102.96
HF	(n=22)		(n=48)	
	Total recall	= 6.23	Total recall	= 6.58
	Brand-related recall	= 3.14	Brand-related recall	= 3.19
	Ad-related recall	= 3.09	Ad-related recall	= 3.39
	Ad/Total recall (%)	= 51.70	Ad/Total recall (%)	= 53.50
	Cognitive evaluation	= 4.80	Cognitive evaluation	= 5.17
	Affective evaluation	= 4.52	Affective evaluation	= 4.86
	Conative evaluation	= 3.55	Conative evaluation	= 4.15
	Familiarity score	= 10.59	Familiarity score	= 13.96
	Involvement score	= 71.77	Involvement score	= 108.48

Legend:

LF = Low Familiarity; HF = High Familiarity; LI = Low Involvement;
HI = High Involvement

Effects of Familiarity and Involvement on Recall

Using the numbers of brand-related and ad-related features recalled as criterion variables, MANOVA shows that the effect of familiarity on overall recall is significant at $p=.001$, while the effect of involvement is not (see Table 3a). The mean number of message features recalled by highly familiar (HF) subjects was 6.5, compared to a mean of 4.6 by low familiar (LF) subjects, regardless of the level of involvement. In accordance with P1, message recall appears to be better explained by the level of product category familiarity than by the level of product category involvement, with HF subjects recalling significantly more message features than LF subjects. Thus this result supports the proposition that memory performance increases with increasing product familiarity.

Table 3a
Manova Using Brand and Ad-Related Recalls As Criteria

Source of variation	Wilks' Lambda	Degrees of freedom	F-ratio	Significance of F
Familiarity	.90	2,134	7.29	.001
Involvement	.98	2,134	1.27	.286
Familiarity X Involvement	.99	2,134	0.51	.602

Univariate ANOVA results show that while the effect of familiarity on the recall of brand-

related message features is not significant ($p=0.375$, Table 3b), it is quite significant on the recall of ad-related message features ($p=0.001$, Table 3c). The level of involvement was not a significant factor in either the recall of ad-related features or in the recall of brand-related features. HF subjects recalled significantly more ad-related features than LF subjects (3.3 vs. 2.0), but there was no significant difference between them in the recall of brand-related features (3.2 vs. 2.6). It appears, therefore, that the difference between HF and LF subjects in overall recall is due to greater recall of ad-related features by HF subjects. These results partially support P2. P3 states that HF subjects will engage predominantly in central processing while LF subjects will engage predominantly in peripheral processing. The results show that there was no significant difference in the number of brand-related and ad-related recalls (3.2 vs. 3.3, $t=0.29$, $p=0.771$) by HF subjects, nor was there a significant difference in the corresponding numbers (2.6 vs. 2.0, $t=1.72$, $p=0.089$) for LF subjects. Thus, contrary to P3, HF subjects did not appear to engage in more central than peripheral processing, nor did LF subjects engage in more peripheral than central processing.

Table 3b
Anova Using Brand-Related Recall As Criterion

Source of variation	Sum of Squares	Degrees of freedom	Mean Square	F-ratio	Significance of F
Familiarity	4.30	1	4.30	0.79	.375
Involvement	6.61	1	6.61	1.22	.271
Familiarity X Involvement	5.25	1	5.25	0.97	.327
Error	732.32	135			
Total	788.48	138			

It is interesting to note, however, that the proportion of the total recall that was ad-related was higher for HF than for LF subjects (52.9 vs. 43.6 percent). While this difference is not significant ($t=1.70$, $p=0.091$), it suggests a tendency for HF subjects to devote proportionately more effort to the visual than the verbal aspects of the ad while LF subjects showed the opposite tendency. There are a number of possible explanations for this unexpected result. First, it may be that HF subjects processed the visual information as verbal or brand-relevant information (Edell and Staelin 1983). They may pick up cues in the pictorial or visual information that they consider central to the merits of the product. Petty, Cacioppo, and Schumann (1983) caution that the verbal/visual dichotomy is not synonymous with their central/peripheral hypothesis. They emphasize that 'central' cues may be presented visually and 'peripheral' cues may be presented verbally. For example, the picture of the CD player in the ad may communicate its size, the number and placement of control buttons, etc., all of which are brand facts. Such situations confound the coding of recall into the brand-related versus ad-related dichotomy.

A second possible explanation is that subjects that are highly familiar with the advertised product feel that they already know the

attributes of the product and need not devote as much effort to processing verbal information. On the other hand, less familiar subjects may feel a greater need to 'learn' about the product and, consequently, devote relatively greater effort to processing verbal information. If this is the case the implication is that marketers should emphasize verbal information earlier on in the product life cycle when product familiarity is likely to be low, and visual information later on in the cycle when familiarity is likely to be high.

Table 3c
Anova Using Ad-Related Recall As Criterion

Source of variation	Sum of Squares	Degrees of freedom	Mean Square	F-ratio	Significance of F
Familiarity	43.71	1	43.71	11.37	.001
Involvement	2.64	1	2.64	0.69	.408
Familiarity X Involvement	0.00	1	0.00	0.00	.981
Error	519.04	135			
Total	565.39	138			

Effects of Familiarity and Involvement on Message Evaluation

Using the cognitive, affective, and conative evaluations as criteria, MANOVA result shows the main effect of involvement on message evaluation to be significant ($p=0.007$) while the main effect of familiarity is not (see Table 4a). Thus, in accordance with P4, overall message evaluation appears to be better explained by the level of involvement than by the level of familiarity with the product category.

Table 4a
Manova Using Cognitive, Affective, and Conative Evaluations As Criteria

Source of variation	Wilks' Lambda	Degrees of freedom	F-ratio	Significance of F
Familiarity	.97	3,133	1.47	.226
Involvement	.91	3,133	4.25	.007
Familiarity X Involvement	.99	3,133	0.22	.883

The univariate ANOVA results of Tables 4b and 4d show that the effect of involvement on cognitive and conative evaluations is significant ($p<0.028$). The effect of involvement on the affective evaluation is not significant ($p=0.069$), as shown in Table 4c. Highly involved subjects gave a more positive cognitive evaluation of the ad than low involved subjects (5.1 vs. 4.5), more positive though not significantly different affective evaluation (4.8 vs. 4.2), and a more positive conative evaluation (4.1 vs. 3.2). The results of Tables 4a to 4d support P4, P5, P6 and P7. Tables 4b to 4d show that the level of involvement explains the most variance in conative evaluations, followed by cognitive evaluations and, lastly, affective evaluations.

Table 4b
Anova Using Cognitive Evaluation As Criterion

Source of variation	Sum of Squares	Degrees of freedom	Mean Square	F-ratio	Significance of F
Familiarity	3.41	1	3.41	2.20	.141
Involvement	7.62	1	7.62	4.91	.028
Familiarity X Involvement	0.53	1	0.53	0.34	.560
Error	209.68	135			
Total	221.24	138			

Table 4c
Anova Using Affective Evaluation As Criterion

Source of variation	Sum of Squares	Degrees of freedom	Mean Square	F-ratio	Significance of F
Familiarity	4.85	1	4.85	2.50	.116
Involvement	6.51	1	6.51	3.36	.069
Familiarity X Involvement	0.47	1	0.47	0.24	.623
Error	261.48	135	1.94		
Total	273.31	138			

Table 4d
Anova Using Conative Evaluation As Criterion

Source of variation	Sum of Squares	Degrees of freedom	Mean Square	F-ratio	Significance of F
Familiarity	4.51	1	4.51	2.76	.099
Involvement	17.30	1	17.30	10.58	.001
Familiarity X Involvement	0.75	1	0.75	0.46	.499
Error	220.75	135	1.64		
Total	243.31	138			

CONCLUSIONS AND DISCUSSION

This study has investigated the relationships of familiarity and involvement with message recall and evaluation in a pretesting situation. With regard to message recall, it was found that: (a) message recall is better explained by subjects' familiarity with the product category than by their level of involvement with it, with overall message recall increasing as the level of familiarity increases, (b) recall of brand-related message features does not appear to increase as familiarity increases, while recall of ad-related features appears to, and (c) central processing does not appear to predominate at higher levels of familiarity, nor does peripheral processing appear to predominate at lower levels, as hypothesized. Indeed there was a slight tendency toward increased use of peripheral processing at higher levels of familiarity.

With regard to message evaluation, it was found that: (a) message evaluation appears to be better explained by subjects' involvement with the product category than by their familiarity with it, (b) cognitive evaluation appears to become more favourable as the level of involvement increases, (c) affective evaluation appears to be independent of the level of involvement, and (d) conative evaluation appears to become more favourable as the level of involvement increases.

The results suggest that involvement affects message recall indirectly through familiarity, that is, the causal ordering appears to be: involvement — familiarity — recall. This is supported by regression analyses. When total recall was regressed on familiarity alone, the explained variance ($r^2=0.151$) did not change significantly as compared to when it was regressed on both familiarity and involvement ($r^2=0.147$). On the other hand, familiarity appears to affect message evaluation through involvement: familiarity — involvement — evaluation.

Zinkhan and Muderrisoglu (1985) found that both familiarity and involvement had direct effects on recall, although the effect of familiarity was stronger. However, in their study the correlation between familiarity and involvement

was only 0.25. The correlation between familiarity and involvement was quite high for the CD player product category in this study ($r=0.51$). Allowing for differences in the stimuli and measurement methodologies used, their result and the present results suggest that when familiarity and involvement are uncorrelated, or not highly correlated, they tend to have direct effects on message recall; when they are highly correlated, familiarity plays a mediating role.

As noted earlier, a practical implication of the finding regarding the relationship between familiarity and message recall relates to the advertising strategy for achieving and reinforcing recall through the product life cycle. During introductory periods when product familiarity is likely low, the strategy for achieving advertising recall should emphasize factual information in order to promote learning. Later on when familiarity is high, recall can be reinforced through emphasizing the visual components.

This study suggests that the level of involvement best explains the differences in conative responses, followed by differences in cognitive responses, and least explains the differences in affective responses. Although the amounts of explained variance are generally low, they are quite typical of values obtained when analyzing individual differences in consumer behaviour research. An implication of these findings for the marketer is that, in an ad pretesting situation, the pretest sample should comprise of subjects with a representative spectrum of product category involvement if the objective of the ad being pretested is to enhance cognitive or conative responses. In this way the cognitive and conative evaluations obtained in pretest will be more generalizable. If the objective of the ad is to measure affect toward the ad itself, then it is not as essential for the pretest sample to be representative of levels of product category involvement. Other factors, such as subjects' moods, feelings, and affective states may become more important (Batra and Ray 1986; Holbrook and Batra 1987).

The generalizability of the present results is limited by a number of considerations including the testing of only a single ad in a single product category, forced rather than natural exposure, the use of only one medium (print), and the use of single rather than repeated exposures. The results reported in this exploratory study are necessarily tentative. In addition to the aforementioned limitations, future research could investigate the effects on message recall and evaluation of varying the mixture of central versus peripheral cues and argument strength (Petty and Cacioppo 1979). Finally, recognition rather than recall could be used as the dependent measure. Although some of this work is currently underway, these preliminary findings seem sufficiently interesting.

(References available from author upon request.)

NEW DIRECTIONS FOR CONSUMER BEHAVIOR:
ADDING SERVICES FUEL TO THE FIRE

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Abstract

While the debate concerning the domain of consumer research currently focuses on its degree of independence from management application, other relevant issues also appear to have a potentially substantial impact. In particular, the consideration of services as having theoretically unique effects on consumer behavior raises new possibilities for consumer research. Expansion of the domain, into the consideration of service consumers as producers, and service producers as consumers, is discussed.

Recent discussions in the Journal of Consumer Research (JCR) reflect the concern within the field of consumer research regarding the definition of its domain. The principal issues in this debate may be summed by the consideration of Holbrook (1987), who contends that the domain is a science devoted to the study of consumption, with no necessity of managerial relevancy. The other perspective is typified by Kernan (1987), who contends that the domain should be flexible, rather than be bound to any particular fixed definition. That is, consumer behavior is what consumer researchers choose to study.

The purpose of this paper is not to attempt to resolve these differences, but to "add fuel to the fire" by posing additional factors which have not yet been considered in these discussions. It is contended here that services, due to their unique characteristics, are opening new directions for consumer research within the existing boundaries of the field. Further, these same characteristics offer the potential for an expansion of the boundaries of the consumer research domain, which adds to the importance and complexity of the current debate. The intention here is not to perform an exhaustive literature review of these additional factors, but to support their existence and importance for consideration by the field.

The Debate on the Domain of Consumer Behavior

The current debate on the domain of the field may be summarized by considering the following four questions:

1. Is consumer research responsive only to managerial needs?
2. Is consumer research tied to the exchange process?
3. How is "consumer" defined?
4. What activities of consumers are appropriate to research?

The first question of debate centers on how tightly consumer research is bound to managerial application. The current editor of JCR, upon his appointment, made his position clear (Lutz 1986):

JCR is a scholarly journal, not a managerial journal. Therefore, papers need not necessarily incorporate managerial impli-

necessarily incorporate managerial implications of the findings. (p. i)

It appears, then, that the leading journal of the consumer behavior field, in accord with the admonition of Holbrook (1987), adopted the concept of consumer behavior as a field of social science, not an application of research for management decisions.

Other questions pertaining to the domain of the field remain unresolved, however. A perplexing issue in the domain discussion is the lack of consideration of the second question: the study of consumer behavior in the context of the exchange process. Since the consumer behavior field is concerned with the recipient (the consumer) of the exchange process, discussing domain issues without reference to exchange has *prima facie* shortcomings: without exchange there is no consumption. The exchange, it should be noted, is not necessarily a monetary one; bartering would be considered economic but not monetary, and voting behavior may involve non-economic considerations.

The lack of exchange discussion may be a reaction of the consumer behavior discipline in attempting to distinguish itself from the marketing discipline. As Sheth (1985) points out, marketing has had, and still maintains, a strong consumer behavior interest. He explains that the marketing interest in consumer behavior has historically had four different bases of concern: economics, from the turn of the century to the 1950s; the social sciences, into the late 1960s; the behavioral sciences (primarily psychology), into the late 1970s; and strategy/environment areas currently.

The third question involves the definition of consumer, which seems to be a neglected issue in the recent debate. A decade ago, however, the first JCR editor (Frank 1974) and other well established consumer researchers (Sternthal and Zaltman 1976) were quite clear in their definitions: consumers included not only individuals and households, but other groups and organizations as well. Insofar as the domain of consumer research will be effected by the definition of consumer, this issue does not appear to have had the depth of consideration it deserves.

The last question pertains to the unresolved concern with the scope of activities of consumers (however defined) which are within the purview of the field. That is, should consumer research be directed at a variety of activities of consumers (e.g., Frank 1974), or only their activities as consumers. There appear to be substantial unresolved differences of opinion in these areas.

Holbrook (1987) defines consumer research as the study of consumption: ". . . the acquisition, usage, and disposition of products . . ." (p. 128). Implied in this definition is the exclusion of the study of consumers unless they are in the act of consumption. This is somewhat contrary to

the original JCR editor (Frank, 1974), who included "... family planning behavior, occupational choice, mobility, determinants of fertility rates, ..." (p. iv) as being within the appropriate research domain.

The emergence of the Association for Consumer Research (ACR) as an organization, currently consisting of largely a marketing-based membership, coincided with the behavioral sciences era of marketing interest. As Sheth (1985) notes, consumer behavior is currently on the "horns of a dilemma" (p. 7) in deciding whether to maintain its independent behavioral science basis, or have its research follow the marketing discipline's needs. He suggests a forthcoming split in the consumer behavior discipline in this regard.

In summary, debate on the appropriate domain for consumer behavior is one with several manifested dimensions. The underlying issue appears to be whether to maintain its established behavior-oriented tradition, or continue its research emphasis in support of evolving marketing interests.

Services and Consumer Behavior

As troubling as some of the unresolved concerns are, when considered in the context of services they pose several additional substantial issues. The effect of services on the field of consumer research can best be understood in the context of the conceptual distinctiveness of services from goods.

The fundamental premise of services theory, in both the production and marketing literatures, is that there exist a number of characteristics of services, such as intangibility, which differentiates the consumer purchase behavior of goods from the consumer purchase behavior of services (e.g., Buffa 1980, Zeithaml 1981). To the vast majority of contemporary services authors, these differences are worthy of the attention of the general management, marketing, production/operations, and consumer behavior fields.

The services literature has seen an explosive growth over the past two decades. Fisk and Tansuhaj (1985), list almost 2,000 articles over that period, with 60 percent of them published in the 1980s. This is reflective of the national economy, where two-thirds of current employment, and 90 percent of the newly created jobs, are in services (Heskett 1986).

A brief review of the mainstream ACR literature reveals no such parallel interest, despite the theoretical consumer behavior basis for the marketing distinction of services from goods. That is, if services were simply intangible goods, then despite their economic importance little unique theory would be applicable. The reason for the recent voluminous services marketing literature is the contention that their unique characteristics cause differences in consumer behavior (e.g., Zeithaml 1981), which ought to be understood and managed in our highly competitive economy.

Considering the years 1983 through 1988, the Journal of Consumer Research carried no articles pertaining specifically to services, while the Proceedings of the ACR Conference fared only slightly better. An ACR Conference Proceedings typically contained, over that period, one paper addressing the distinctiveness of services, two or three papers related to specific service industries, and an occasional paper using a service context in the test of a behavioral hypothesis (e.g., consumer processing of information by scripts).

In summary, the consumer behavior discipline seems to have basically ignored examining any behavior of consumers in the service purchase process which may be distinctly different than the purchase process for goods. It would appear that a substantial theoretical shortcoming exists: if in the service purchase/consumption process consumers do not behave differently than consumers in the goods purchase/consumption process, then much of the basis for the services marketing literature is unfounded; if they do behave differently, then the consumer behavior discipline has been remiss in largely ignoring those differences.

New Roles for the "Consumer"

Unique services characteristics, particularly intangibility and the typical participation by the consumer in the service delivery, lead to two new areas for potential consumer research: the role of the service consumer as producer, and the role of the service producer as consumer.

Consumer as Producer

While not all services have a substantial portion of their offering produced by the consumer, there are many services which do. Such diverse services as the fitness club and educational industries, for example, are built on the foundation of consumer participation in the service production. While some goods may entail consumer effort, and those efforts must be considered in the design of the product, they are typically not part of the exchange process. Assembling a child's toy, for example, may be a necessary part of the consumption process, but the exchange between retailer and purchaser is for the toy in a disassembled state. The subsequent assembly is not a direct part of the exchange; presumably the purchaser was willing to pay a lower price for the toy in exchange for performing delivery (from the store to home) and assembly as necessary antecedents of consumption.

Participation by the consumer in the production of the service puts the customer in the role of a producer in the actual exchange process, in addition to continuing the traditional role of consumer/purchaser. While this new role of consumers has seen little research in the consumer behavior field, it appears clear that it is an area within the "acquisition, usage and disposition" criteria (Holbrook 1987) for current consideration by the field.

This participation role poses the issue of understanding how the consumer behaves as the service co-producer, and how this participation require-

ment may effect service purchase behavior. Several questions pertinent to this issue arise. Are existing theories of consumer purchase behavior sufficient to explain their behavior as co-producers of the service offering? Would worker motivation theories, such as equity theory and intrinsic motivation theory (e.g., Muchinsky 1983), improve the understanding of the behavior of consumers in their co-producer role? Is some melding of theories better able to explain this behavior than those of either discipline alone? True to its interdisciplinary philosophy, the consumer behavior field may be interested in the initial exploration in this area evidenced by the human resource discipline (e.g., Bowen 1986).

This consumer-as-producer aspect of services as yet has seen minimal empirical consideration even in the services literature. Those studies which have considered this consumer role have examined it with the primary purpose of seeking productivity increases, e.g., Lovelock and Young (1979), Chase (1978). That is, the employee effort involved in service production may be reduced by increasing the efforts of the consumer, presumably resulting in lower prices.

An example of the consumer theory contribution to service productivity is provided by Goodwin (1987). She poses the use of social influence theory as a framework for management to design the service system, generating several propositions in that regard. Thus the nature of the service, the desires of management, and the characteristics of the consumer, would interact to determine whether a compliancy, identification, or internalization approach would be most effective.

Further potential for consumer behavior investigation in this area can be illustrated by two empirical studies. Fitzsimmons (1985), in attempting to use operations management methods to increase the efficiency of drive-thru banking, concluded that changes in customer behavior, through consumer education, offered the most potential for improvement. In a more attitudinally-oriented study, Langeard, et al. (1981) found that some customers prefer to serve themselves even if there is no appreciable cost savings. No theoretical basis for this latter finding was offered, indicating the need for consumer behavior research.

In summary the role of the consumer as co-producer of the service offering does appear to be worthy of the consideration of the consumer behavior discipline. The discipline's historical and stated desire to focus on the consumer, and its traditional interdisciplinary orientation, both support the appropriateness of consumer behavior research in this regard.

Producer as Consumer

Several aspects of the debate on the consumer behavior domain, discussed above, combine to raise the issue of the field of consumer research engaging in the study of producers. While the support for the expansion of the consumer behavior discipline into this area is not as compelling as that for studying the consumer as producer, the considerations appear sufficient for its appropriate discussion in this paper. If the consumer

behavior discipline is going to substantially broaden its area of concern (e.g., Belk 1987), then we should not overlook this concept without due consideration.

The generic concept of marketing (Kotler 1972) has established nonmonetary exchanges as being within the realm of the marketing discipline; the consumer research field appears to have had no problem adopting a similar perspective. For example, Sternthal and Zaltman (1973) note the inclusion of selection of a psychiatric therapist, independent of economic considerations, as being within the domain of consumer research.

Given the acceptance of the generic concept, with its associated nonmonetary exchange, it frequently becomes unclear which entity in the exchange process is the producer, and which is the consumer. This is exacerbated in situations of generalized or complex exchange (Bagozzi 1975). Insofar as groups or organizations may be considered consumers (e.g., Frank 1974), the foundation for the entrance of consumer research into some very nontraditional areas appears to be conceptually established.

The target of marketing efforts to encourage the exchange process has largely been the ultimate customer. However, there is a growing concern, in both the marketing and quality disciplines, with influencing the individual production worker (e.g., Juran 1988, Lovelock 1984). Ford Motor Company's "quality is job 1" promotional effort is aimed not just at the would-be automobile consumer, but also at the auto worker. In this latter context, the exchange process consists of the business organization promoting pride of workmanship to the factory worker (consumer), in exchange for greater care of the worker in his/her production efforts.

Product quality is currently being defined in terms of customer satisfaction by the quality control discipline (e.g., Chandler 1989, Stempel and Elfin 1989), making product quality of potential interest to the consumer behavior discipline. Further, quality is held to be more sensitive to worker care for services than for goods (e.g., Gronroos 1983), thus adding impetus to concern for theory development in this area.

Both the marketing and the consumer behavior fields have, understandably, not traditionally been involved in work force research. Even the services literature has only recently been considering this aspect of service concerns. However, the behavior of the worker as a consumer in the industrial exchange process, as discussed above, supports investigation in this direction. Further, if consumer research can investigate the activities of consumers in their family planning behavior, as suggested by Frank (1974), or aggregate behavior issues, as suggested by Firat (1985), the activities of consumers in their production role would provide additional impetus for this pursuit.

An indication of the acceptance of the consumer behavior discipline for this direction, as well as the potential for important contributions, is a recent consideration by Roberts, Scammon, and

Schouten (1988). In their examination of skilled worker motivation, they found several aspects of the production process worthy of study by consumer researchers: consumption of inputs (e.g., materials, ideas); consumption of outputs; personal fulfillment from the production process; and lifestyle factors.

In summary, it appears to be generally acceptable that the definition of product includes goods, services, and ideas (e.g., Holbrook 1987). This definition, in conjunction with the inclusion of the generic concept of consumer behavior, would make consumption processes, albeit by an individual in his/her role as producer, appropriately within the consumer behavior domain.

Conclusions

Many expanded aspects of consumer research, particularly in the services area, appear to be warranting investigation, some of which have been discussed above. The marketing discipline has acknowledged that there are differences in the application of its principles between goods and services, and has begun to research and conceptualize these differences. However, the field of consumer research seems to have not yet considered the magnitude of the impact that services considerations may have on consumer behavior.

Topics for future research appear numerous. One approach may be a general review of consumer behavior theories, speculating how the many "unique" characteristics of services may influence established findings which were based on goods research. Zeithaml (1981) has taken initial step in this direction, but substantially more remains to be done, particularly with the need for empirical verification of the voluminous speculation which composes most of the services literature.

A similar overview of consumer behavior theories applicable to the participation of the consumer in the production process would also be worthwhile, with subsequent review and comparison with human resource management theories. The imaginative researcher should have little difficulty in deriving a substantial number of hypotheses for further empirical testing.

Following the admonition of Kernan (1987), to maintain flexible boundaries of the consumer research domain, this article has attempted to bring attention to this issue by pointing out new potential areas for consumer research: the consumer as a service co-producer, and the service producer as a consumer. It will be hopefully serve as an impetus for further discussion of the subject.

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Abstract

The Elaboration Likelihood Model of persuasion and the dual-process theory of attention are contrasted. Although these two approaches to the mechanism of information processing are not the same, this paper proposes that these two theories are conceptually consistent and that the concurrent use of both approaches may provide better insights into factors involved in the processing of marketing communications than the use of either approach alone.

Introduction

Although the Elaboration Likelihood Model (ELM) of persuasion (Petty and Cacioppo 1981) and the dual-process theory of attention (Schneider and Shiffrin 1977; Shiffrin and Schneider 1977) are different approaches to the mechanism of information processing, the conceptual frameworks upon which these two theories are based bear a remarkable similarity. These are very similar from the standpoint that both view the mechanism of information processing as lying on a continuum, anchored at one extreme by relatively "mindless" processing and at the other by relatively "thoughtful" processing. (Please note at this point that this is a very simplistic view of these theories.) These theories can, however, provide different response predictions to the same set of stimuli, depending on the situation.

The value of using these two approaches concurrently is that they each provide views of slightly different dimensions of information processing. The objective of this paper is to propose that this difference may enable us to more clearly understand how factors such as effort may be involved in the processing of information. The Elaboration Likelihood Model of persuasion and the dual process theory of attention will each be briefly reviewed. The conceptual similarity and the concurrent use of these two approaches will then be discussed. This paper concludes with an appeal for further research regarding the concurrent use of measures based on these two approaches.

The Elaboration Likelihood Model of Persuasion

The ELM has been proposed as a framework for understanding how various factors affect a person's attitude change (Petty and Cacioppo 1981. For brief reviews, see Cacioppo and Petty 1984; Petty and Cacioppo 1984. For more exhaustive reviews, see Petty and Cacioppo 1986a; 1986b.). The ELM proposes a continuum of message elaboration anchored at one end by a central route to persuasion and at the other by a peripheral route. This model assumes that people are neither universally "thoughtful" in evaluating a persuasive message nor universally "mindless".

Central Route ← "thoughtful" → "mindless" → Peripheral Route

According to this model, when conditions are such that a person has the motivation and the ability to engage in issue-relevant thinking, the

elaboration likelihood is said to be high. The person is likely to scrutinize and elaborate upon the message and to draw inferences about the merits of arguments presented in the message based upon his/her analysis of information derived from the message and from his/her own memory. When the elaboration likelihood is high, people will tend to engage in effortful thinking about the issue, which is expected to result in an attitude change that is more enduring, more temporally stable, and more accessible in memory.

As various factors in the situation reduce a person's motivation or ability to think about an issue, the elaboration likelihood is said by this model to be low. A person will tend to avoid effortful thinking, and will conserve his/her cognitive resources or expend them on some other irrelevant task. When the elaboration likelihood is low, people will tend to engage in a superficial analysis of the issue, drawing a "reasonable" attitude based on non-issue-relevant cues, such as the attractiveness or the apparent expertise of the source. This is expected to result in an attitude change that is less enduring, less temporally stable, and less accessible in memory. The ELM suggests that when the elaboration likelihood is low, people will tend to process information along the "peripheral route" to persuasion, and when the elaboration likelihood is high, people will tend to process information along the "central route" to persuasion.

The Dual-Process Theory of Attention

The dual-process theory of attention has been proposed as a framework for understanding how the processing of various stimuli may or may not result in learning or skill acquisition and how information is processed under the influence of previous learning and skill acquisition (Schneider and Shiffrin 1977; Shiffrin and Schneider 1977. For more brief reviews, see Schneider 1985; Schneider, Dumais, and Shiffrin 1984; Schneider and Fisk 1983.). The dual-process theory postulates a continuum of information processing, anchored at one end by controlled processing and at the other by automatic processing. Like the ELM, this model assumes that people are neither universally "thoughtful" in the processing of information nor universally "mindless."

Controlled ← "thoughtful" → "mindless" → Automatic

According to this model, controlled processing is a mode used to deal with novel or inconsistent information. It is a sequence of processes activated through the attention of and under the control of the person. Controlled processing is characterized as slow, effortful, and limited by the capacity of working memory. The performance of tasks which involve such effortful processing are expected to result in learning and skill acquisition.

Automatic processing is the activation of a learned sequence of elements in long-term memory. When an appropriate stimulus activates a learned

sequence, processing proceeds automatically, characterized as a fast and relatively effortless process which is not limited by the capacity of working memory and is not under the direct control of the person. The performance of tasks which involve such effortless processing are expected to be the result of previous learning and previously developed skill behavior, and are expected to result in little new learning and skill acquisition.

Measurement of Attention

Methods used to investigate information processing using the controlled-automatic approach are not so well developed in the investigation of marketing phenomena. (For a review of investigations of attention in the marketing context, see Lynch and Srull 1982. Also see Bettman 1979; Shiffrin 1988.) Although various methods have been employed in the measure of attention, a method which is often necessary in the detection and measure of attention in the context of the controlled-automatic paradigm is what has been referred to as the "RT probe secondary task technique." It is briefly introduced here because so few studies using the RT probe secondary task technique in a marketing context have been published (e.g., Lord and Burnkrant 1988; Lord, Burnkrant, and Owen 1989; Moore, Hausknecht, and Thamodaran 1986; Thorson, Reeves, and Schleuder 1985. Thorson et al. also report of other unpublished work.).

In using a secondary task technique, subjects are asked to perform a simple "secondary task" concurrent with the performance of the "primary task" under investigation. Degradation in the performance of the concurrent secondary task is taken as a measure of an increase in the utilization or consumption of working memory by the performance of the primary task. This working memory capacity usage operationalization has been used in the detection of "attention", "effort", "elaboration", and various other related constructs of interest in the investigation of behavioral phenomena.

A frequently used secondary task is the "RT probe", in which subjects must press a switch button in response to an occasional flash of light or an audible beep. A degradation (increase) in response time (RT) to the secondary task stimuli during, say, the reading of a message or the viewing of a television commercial (the primary task) is taken as a measure of an increase in attention or effort devoted to the processing of the primary task.

Integrating Attentional and Attitudinal Measures

In an apparent effort to downplay similarities between the two theories, Petty and Cacioppo do briefly address certain concepts relating their theory of attitude with attention theory (1986b, p. 11-14). One objective in their discussion is to emphasize that their notion of central-peripheral processing and the notion of controlled-automatic processing are not the same. The present paper proposes, however, that the differences between these two approaches to the mechanism of information processing might be used to advantage. The two theories are similar in that each is conceptualized along a continuum, ranging (in a very basic, simplistic sense) from rather "mindless" processing to rather

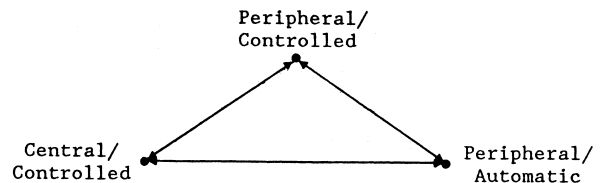
"thoughtful" processing. They differ in how various stimuli will trigger or engage a "mindless" or "thoughtful" mode of processing and in the outcome of such processing.

Controlled processing and central processing might both be described as somewhat "thoughtful" in the sense that both involve effortful, deliberate control of message processing by the subject and both result in enduring changes in memory or attitude. Both require the synthesis of a unique response based on stimulus information and on information engaged from long-term memory.

Automatic processing might be described as somewhat "mindless" in the sense that it does not involve effortful, thoughtful, deliberate control by the subject and does not result in changes in long-term memory. Peripheral processing might be described as somewhat "mindless" in the sense that it does not involve effortful, thoughtful, deliberate processing of issues relevant to the issue of the message and does not result in enduring, stable changes in attitude toward those issues. Peripheral processing, however, may be effortful in the attentional sense in that non-issue-relevant information may cue or activate processing sequences which consume greater reserves of capacity-limited working memory.

As Petty and Cacioppo note, peripheral processing can engage effortful thinking. Although the message content is not being elaborated, the strategy involved in arriving at a conclusion may involve effort in attempting to synthesize internal information with irrelevant external information. In this situation, attitude theory would predict that the attitude adopted from such superficial processing would not be so enduring or stable, but attention theory would predict that some skill would be acquired or that learning (in the sense of a change in long-term memory) would take place if effort was expended. In this sense, perhaps this peripheral/controlled processing mode results in a skill acquisition which results in future peripheral/automatic processing in similar situations. It is quite possible that something can be learned albeit not relevant to the intended message.

It appears, then, that the simultaneous application of the unidimensional continua of both theories would result in a continuum space bounded by three dimensions, these being anchored by central/controlled processing, peripheral/automatic processing, and peripheral/controlled processing. Central/controlled processing would be expected to result in an enduring attitude change and in memory of issues associated with the communication. Peripheral/automatic processing would be expected to result in a less stable attitude change and in less memory for any issues associated with the communication. Peripheral/controlled processing might be expected to result in a less stable attitude change but to result in greater memory for issues irrelevant to or possibly unintended by the communication.



An Example

Borrowing on the example of Petty and Cacioppo (1986b, p. 13-14), consider the scenario of a student who is taking an exam. The student may be very familiar with most of the material over which s/he is being tested. After carefully reading each question and set of answers, s/he thoughtfully relates this information with what s/he remembers about the material, attempts to integrate all new and recalled information in synthesizing an answer, and chooses an option which most closely matches this synthesis. As Petty and Cacioppo note, the student's responses from such "thoughtful" processing are likely to be more stable and enduring than if the answers were based on a more "peripheral" analysis of the question.

Now consider that the student encounters a question regarding material over which s/he is very unfamiliar. The student may read the question and set of answers but make a minimal attempt to relate this information with what s/he remembers about the material and make only a minimal attempt to synthesize an answer. The response given by the student in this situation is likely to be based on information not relevant to the issue of the question. The student may, for instance, choose the answer "d" because "d" was less frequently marked than other options on previous questions. The response to this question by the student is not necessarily irrational or "effortless", but rather is based on a decision rule which is irrelevant or peripheral to the primary issue of the question. The student was likely using some form of "effortful" processing by relating information about the exam with what s/he remembers about test-taking in general.

In eliciting a response to this latter question, information was processed in both a "peripheral" and "controlled" manner. The response with regard to issues relevant to the question is likely not to be stable and enduring. The student is likely to be unable to recall what answer was given after completing the exam because relevant information was not synthesized to form the basis of an attitude change. The student may very well, however, be able to recall which letter option ("d") was chosen in hallway discussions with fellow students after the exam because effort was expended in synthesizing a decision rule to choose one of the given options. Something is remembered and clearly recalled, but it is not what was intended by the instructor who prepared the exam.

Marketing Implications

This situation is generalizable to the processing of communications in marketing situations. Consider the scenario in which a television viewer may find a commercial especially interesting, but s/he believes that s/he has no use for the product being advertised. For instance, a viewer who drinks only cola-flavored soda may find the recent popular "natural-artificial" commercials of a non-cola soda distributor to be very interesting and enjoyable to watch, but may remain unpersuaded by the message. From the perspective of attitude theory, this might be expected to be a situation in which this viewer has no motivation to engage effort in issue-relevant thinking, and attitude theory would predict that

any persuasion which might result from viewing this ad would not be especially stable or enduring.

On the other hand, such an interesting commercial might result in high viewer "involvement" from an attentional perspective. If an RT probe secondary task measure indicates a relatively high amount of viewer effort expended while viewing this commercial, then attention theory would predict that something would be learned which would remain relatively stable and enduring. In this scenario, the viewer may not be persuaded to try this new product and may be unable to recall the brand name or even the product class, but may have very good recall of the commercial itself.

An advertiser is usually interested in both persuasion and the retention of information communicated in the advertisement. One practical implication of integrating attitude and attention theories, then, is that information can be processed in a way that results in high recall but low persuasion: probably not what the advertiser intended.

Concluding Remarks

The results of a marketing communication, then, are dependent on an information processing mechanism which can be measured along a central-peripheral dimension and along a controlled-automatic dimension. This paper has proposed that measurement along only one of these dimensions, however, may not provide a complete or entirely correct explanation of how a marketing communication is processed and may not provide a correct prediction of the results of the processing. Integrating the two approaches may provide better insights into factors involved in the processing of marketing communications than the use of either approach alone.

The advantage in concurrently using different approaches in the investigation of a phenomenon is that this assists in providing for evidence of discriminant and convergent validity of constructs a measure is presumed to detect. Unfortunately, there is no firm agreement on the theoretical or operational definitions of various constructs which have been investigated using these approaches, including elaboration, involvement, effort, processing capacity, processing intensity, and such. These terms are often used interchangeably, but just as often are used to distinguish between different processes. Although the present paper has proposed that these two theories are conceptually consistent, allowing them to be integrated in application, further conceptualization and empirical research is needed to investigate the dimensions measured by the concurrent use of these approaches.

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THE ART OF TIME

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Abstract

This paper argues that verbal descriptions of time limit our ability to measure and understand individuals' perceptions of it. Using ideas from the emerging area of semiotics, an alternative methodology is proposed operationalizing the time construct through a non-linguistic method: drawings of time. This approach was tested using student samples at two universities. The results indicate preliminary support for this method, and are used to develop implications for managerial strategy and for further research.

Introduction

Time is a phenomenon in life that everyone experiences, but few can define. As products of our culture, we can consider different elements of that culture, such as perceptions of time, to be transmitted not only in the written word but also through the use of non-linguistic codes.

Since language tends to reflect cultural constructs, like time, it is difficult to identify individual perceptions of time using written or spoken responses. The problem is compounded by individuals tending to standardize their responses to the time system in their subculture and culture (Flaherty 1987; Lane and Kaufman 1990). That is, by responding in the established time descriptors of the researcher, other types of less "standard" time perceptions may be inadvertently obscured. This study attempts to pierce the veil of standardization by asking respondents to communicate their ideas about time using symbols or drawings. The drawings appear to show some different conceptualizations of time, in contrast to the predominant culture's linear separable time.

This paper proposes that an alternative methodology, based on respondents' subjective drawings of time, is useful in examining individuals' perceptions of time. Specifically, the study is concerned with the distinctions among procedural, cyclical, and linear separable time (Hall 1959), discussed in the next section. This is followed by a brief overview of the standardization issue, leading to an examination of symbolic meanings of time in the literatures of semiotics, sociology, and psychology. These findings are used to develop the time-drawing approach. The results of an exploratory study are considered and used to develop managerial and research implications.

Definitions of Time Processing

There are three basic methods of time processing that have been discussed in the literature. Edward Hall (1959, 1983) suggests three different methods by which people process time: 1) procedural time, 2) cyclical time, and 3) linear time. Additionally, Hayden (1987) discussed pendulum time, which is believed to be a modification of

procedural time, and Gronmo (1989) addressed these concepts as mechanical, social and natural time. Graham (1981) brought time processing into marketing through relating it to the consumer decision process. All three of these processing methods appear to be present in the U.S. today (Lane and Lindquist 1989).

Procedural Time processing is used by those who act when all preparations are complete. Things are processed by what needs to be done and not by clock time. The focus is on the project, and the clock time to complete the project is ignored because the start or finish of an activity is not tied to a specified clock time. Procedural time processing in the Western world is probably more commonly used than originally supposed. It is evident in numerous activities such as a ceremony that begins when all have arrived, or departure for a trip after all have assembled. Additional examples can be found in a number of high involvement activities such as marathon bargaining sessions, planning sessions, brainstorming, doctoral dissertation work and shopping for high involvement products (car, home, fashionable clothing and accessories).

Cyclical Time processing is tied to some rhythmic pattern that typically repeats in a sequence without an overall start or finish. This repetitive cycle can consist of a daily, weekly or longer cycle. Seasons, sunrise/sunset, lunar cycles, pay cycles, biological cycles or weekly work/free time periods are examples of cyclical time processing. It is the most common explanation of time among human societies (Hayden 1987). Here, time is viewed in terms of a repetitive cycle, focusing on the present cycle where neither the future nor the historical past are significant.

Linear Time is prevalent in most of the Christian Western societies. It may be thought of as Christian time (Hayden 1987; Russell 1981) although today it is found among practitioners of all faiths. The death of Christ did not fit into cyclical or procedural time concepts. As a result, Christianity required a time processing that could be divided into discrete units with a clearly defined past, present and future. Here time is viewed as distinct segments in a constant flowing stream as in "time marching on."

People on linear time look forward, and are concerned about such things as the time-value of money. It is this type of time processing that managers in the U.S. appear to use most often. Further, the tripartite division of the English language, namely, past, present and future, contributes to individuals processing time in a linear fashion.

Time Standardization

Procedural time may have been overlooked as it is often not very visible to those on the other kinds

of time. People on procedural time have learned to standardize to the society around them. They do this by creating procedural opportunities such as working late at night while still making clock time appointments in other situations.

Procedural time has not surfaced in most empirical investigations. The idea of standardization suggests that when people are asked questions about their time use they will attempt to answer in the society's standardized time format. Thus, in the U.S. the researcher on linear separable time will probably get linear separable answers and not procedural or cyclical.

The realization, by researchers and managers alike, that we are trapped in a language and business culture that emphasize some kind of time orientation, linear time, is crucial to a better understanding of time processing. Breaking free of the cultural constraints of the written and spoken language and exploring another medium, such as drawings, not only provides the latitude for respondents to express meanings of time that might otherwise be hidden, but also gives researchers insights into people's perception of time.

Symbolism

Alternative types of research may be useful in uncovering phenomena which have been difficult to study and understand in the past. Holbrook and Hirschman (1982) challenge that existing research methods do not include fantasies, emotions, and subjective responses. They suggest that more investigation of experiential aspects of consumer behavior are necessary. One aspect concerns non-verbal cues in stimuli through the use of symbolic meanings. They go on to say: "The investigation of subjective time resources may help to unravel the mysteries of the psychotemporal expenditures involved in experiential consumption (p.135)."

Marketers have felt that consumers may depend on the symbolic features that many products possess more than on the functional utility of that product (Levy 1959, 1964). This relationship between material cues and social behavior is known as symbolic interactionism (Solomon 1983). The process by which individuals understand their world is the focus of symbolic interactionism. Solomon (1983) defines a symbol as a stimulus with a learned meaning and value. Often these symbols become so interwoven in a culture that it is difficult to recognize their significance in shaping an individual's behavior.

Zerubavel (1987) points out that culture is a communication system made up of messages conveyed by and to its members through the use of certain codes. These codes can be non-linguistic such as gestures (Hall 1960), clothing (Holman 1980), or space, such as the distance we stand from another person when communicating (Fast 1970). One could argue also that art could be such a code. These codes can convey social messages such as importance, priority or power (Das 1988).

Semiotics

How then, do we investigate subjective time through symbolic meanings? One approach turns to

the emerging literature on semiotics, the philosophical theory of signs and symbols, for insight. Mick (1986) suggests that aspects of semiotics ask how our reality, such as words, gestures and myths, acquire meaning. This approach investigates signs or symbolic codes which we use to communicate, which seems to be similar to the projective techniques of pictorial interpretations through storytelling. Mick cites Turner (1967) as proposing several varied research methods, one of which concerns identifying "operational meaning represented by actual symbol usage observed by the researcher (p. 207)."

Zerubavel (1987) extended semiotic methods to the study of temporality. He argues that time is composed of many semiotic codes of meaning such as duration, speed, frequency and timing, which enable us to communicate without having to articulate their meanings verbally. The authors suggest extending this approach to time as expressed through art or drawings. We propose that artistic symbols or drawings enable us to communicate subjectively without the standardized constraints of traditional verbally-based research methods.

Subjective time is often expressed in myth and art, which enables the experimenter to "identify the properties of the inner clock and to trace the parallelism between private and public timekeeping (Cohen 1981 p. 275)." This suggests that the use of other communication media such as art may provide the researcher information beyond the standardized time.

Symbols of time recur in the literature. Until the Middle Ages winged figures, such as the Greek figure of Opportunity, the Iranian image of Aion, or the Orphic god Phanes, were evident. The hourglass, the scythe or sickle, or crutches came much later when there was confusion between the Greek Chronos with Kronos. The sickle of Kronos came to be seen in the fourth and fifth centuries as "Time consuming all things (Cohen 1981)." Meerloo (1981) reviews numerous symbols, ranging from time is money through time is boredom. Particularly relevant here are three which seem to relate to the goal of this research: 1) time as creation, related to the act of being productive as defined by activities (procedural), 2) time as a dragon swallowing its tail through themes of rejuvenation symbolizing both death and eternity, which evolved into the wheel of time (cyclical), and 3) time as an arrow, found in the imagery of Western progress and growth, extending time forward in a straight line from the infinite past to the unknown future (linear).

Rappaport et al (1985) argue that "ideally, a temporal measure should impose relatively few contextual cues and should permit the contextual meaning to be largely provided by the subject rather than by the researcher (p. 1610)." It would seem then that standard ways of measuring time, grounded in the assumption of linearity, are problematical in that the context is highly specified. We feel that art instead, allows the respondent to subjectively define the context.

Interestingly, Rappaport et al (1985) develops the measurement of temporal perspective using the Rappaport Time Line, which appears to assume

linearity. Subjects are each given a strip of paper, which they are told represents their entire life. The subjects are asked to place significant experiences on the line. This method may have the unintended effect of forcing subjects who process time procedurally or cyclically to depict meaningful events or repetitive cycles in a linear fashion.

These differences between subjective and objective measures are an important consideration if we are to better understand an individual's temporal perception. In a recent study, Mayo et al (1988) examined the relationship between perceived (subjective) distance and geographic (objective) distance. When asked to plot locations on a map, subjects tended to perceive destinations to be closer than they actually are.

Methodology

The Subjects

Exploratory studies were conducted in two different parts of the country to investigate the usefulness of the time-drawing approach; convenience samples of student respondents were used. The first project was carried out in a Midwestern university in Spring 1989, the second project being conducted in an Eastern university during Summer 1989. Participants in the Midwestern study were 37 junior and senior students enrolled in an undergraduate marketing research course. Of these 37 students, 17 were males and 20 were females. The Eastern study consisted of junior and senior students enrolled in an undergraduate consumer behavior class. Thirty-two students participated, 16 males and 16 females. While all subjects were students enrolled in business courses, they were not all business majors. Additionally, some of the respondents were married while others were unmarried. A total sample of 69 respondents was surveyed.

The Time-Drawing Procedure

The students were given an overview on the subject of time. This discussion included time orientations, time processing, monochronic and polychronic time, and time commitment and use. The subjects were given a large sheet (11.5" x 15") of blank white paper and instructed to do three things. These three things were: 1) write a definition of time, 2) draw a picture of time, and 3) construct a time diary format that could be used in the study of time. There was no time limit imposed however the majority were finished within 15 minutes and no one took longer than 20 minutes to complete the experiment.

Evaluative Criteria

A set of objective criteria was developed from common readings about time processing (Hall 1959; Lane and Lindquist 1989). It was felt that these criteria should clearly reflect the characteristics which distinguish among the three types of time processing as reviewed above. Moreover, the criteria had to be consistent with the existing tradition of temporal symbology already present in the literatures of sociology and psychology. As a result, the time drawings would be classified according to the following decision rules:

1. A drawing is classified as procedural if it indicates: a.) evidence of completion, b.) lack of traditional left-to-right direction, c.) a self-contained unit, d.) no repetition, and/or e.) avoidance of past/present/future.

2. A drawing is classified as cyclical if it indicates: a.) a rhythmic nature, b.) circularity, c.) repetition as evidenced in nature, sun/moon, young/old, seasons, and/or d.) lack of an overall start or finish, while each cycle may have a well-defined beginning (birth) or end (death).

3. A drawing is classified as linear if it indicates: a.) straight line moving in a left-to-right forward direction, b.) segments, c.) past/present/future, d.) clocks, and/or e.) time/value.

Analysis of Time Drawings

Each drawing was reviewed in a content analysis (Spiggle 1986) by three independent judges, using the suggested evaluative criteria. Each judge divided the drawings into categories of procedural, cyclical, or linear. In addition, all three judges established an "undecided" category, which contained some drawings having aspects of all three types of processing, while others were oriented toward different aspects of time, such as measurement. The three sets were then compared for consensus. Out of the large consensus sets for procedural, cyclical, and linear time, examples were chosen for analysis which appear to most clearly indicate perceptions of each type of time processing. These are presented in Exhibits 1 through 6, and are discussed next.

Drawings Indicating Procedural Time

Two drawings which were classified as representing procedural time are illustrated in Exhibits 1 and 2. Both appear to consider the passage of time in terms of the completion or accomplishment of events.

For instance, Exhibit 1, depicts a "maze-like" drawing, with a clear beginning and ending point, to indicate completion. However, many sub-events (locations A through J) are able to be encountered through the choice of the individual. Some are necessary to pass through (complete) before proceeding toward the exit point. The events are not structured in a linear, left-to-right sense, in that a unique prescribed order is not required to be followed, but is established through trial and-error. In addition, cyclical repetition is not likely to occur, since the potential paths differ in direction, duration, and progress toward the exit. The path from start to exit suggests a forward movement, while the varying lengths and detours between the points could indicate completion of activities before moving on to the next and/or choices about the direction followed. There also does not appear to be any reference to natural time markers.

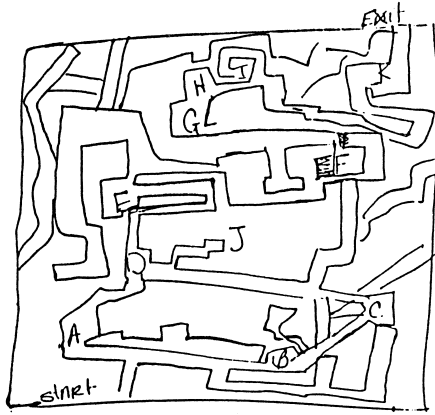


Exhibit 1

In Exhibit 2, time is viewed as a container. It appears as if time is event-oriented. The varying shades of intensity in this example suggest that different activities can impact the individual differently. It is interesting to note also that there is no reference to past, present or future or cycles, nor is repetition present. Thus, the time which is used in an event is defined by that event. Moreover, the time required of various events may range from "distinct," through "grey areas," to "vague" amounts, depending on how well-defined the event actually is.

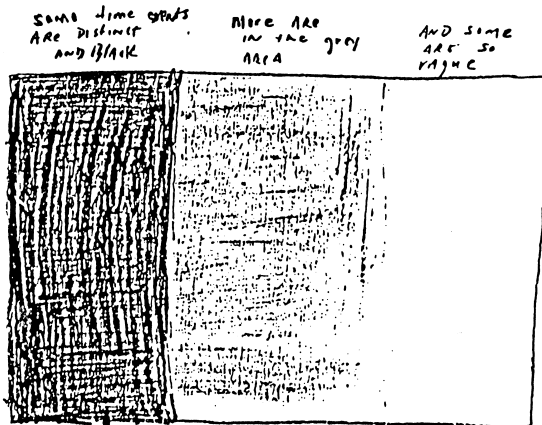


Exhibit 2

Drawings Indicating Cyclical Time

Exhibits 3 and 4 were chosen as illustrative of cyclical time. That is, the overall process of time has no well-defined beginning or ending, but continues to exist. The cycles which are repeated, however, can be identified by markers which indicate progression through the cycle.

The repetitive nature of planetary motion is indicated in Exhibit 3, as time passes through an "endless" progression of sun and moon around the earth. Clearly, no notion of past/present/future is evident here, just a continuously-existing pattern of circularity.

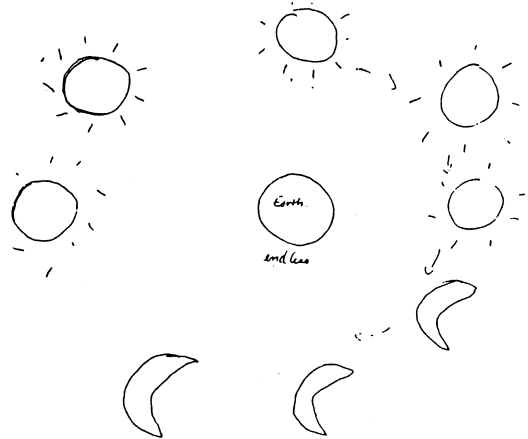


Exhibit 3

The juxtaposition of natural and human cycles is found in Exhibit 4, which depicts birth, growth, maturation, death, and rebirth in a seemingly-unending chain. Time progresses through the continuity of repetitive cycles, which are characterized by the life events of individual people and individual trees. In this case, the concept of repetition is central, as time is defined through the recurrence of established patterns, rather than through the completion of events or their linear sequence.

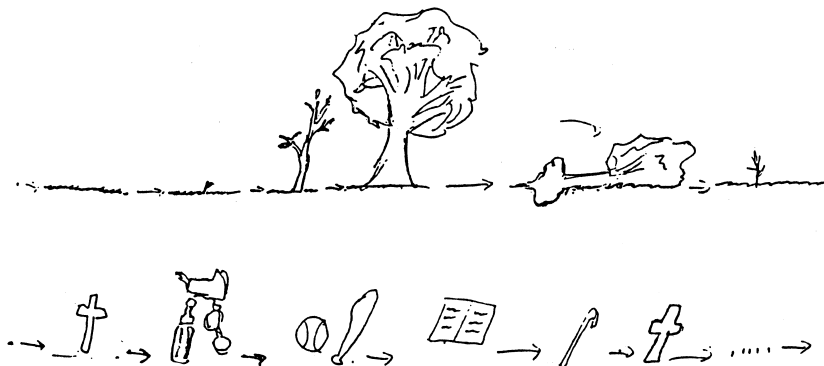


Exhibit 4

Drawings Indicating Linear Time

Finally, Exhibits 5 and 6 are offered as examples of the traditional linear separable perspective.

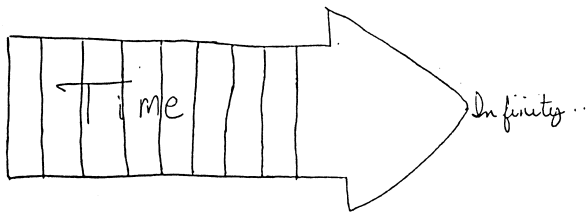


Exhibit 5

In Exhibit 5, a segmented time line, moves from left to right, pointing towards infinity. This respondent appears to see time as moving in a well-defined sequence of events.

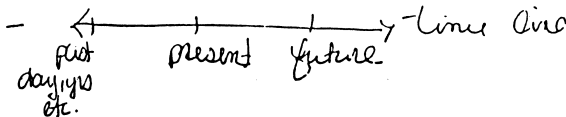


Exhibit 6

The notions of past, present, and future become evident in Exhibit 6. The arrows go in both directions, suggesting a historical aspect to this individual's perceptions. It appears that the respondent does not view time as uni-directional, moving only into the future, but instead is also influenced by events in the past.

Implications

It is argued that preliminary support for an alternative, non-linguistic time methodology is found in the analysis of the time drawings presented here. Respondents are clearly able to be differentiated in terms of their perceptions of time processing. The ability to distinguish among procedural, cyclical, and linear time processing suggests several implications for management and research, which are presented next.

Managerial Implications

The findings of this study offer support for the notion that individuals process time differently. This is relevant to both consumer promotional strategy and product development, and is also useful in structuring personal selling presentations and business negotiations.

First, promotional messages are often developed around the linear theme of "before and after" effects of the advertised product or service. For instance, the cleansing abilities of detergents and the toning benefits of exercise programs are often presented in this way. While these themes are likely to appeal to consumers who process time in a linear fashion, the cyclical and the procedurally-oriented consumer may find them uninformative regarding the actual time-related benefits being conveyed. Instead, the benefits of a regular, repetitive exercise regime may instead appeal to the cyclical individual, while the procedural individual may want to know how long it will take to achieve certain results. It is

important to more fully develop the ways in which the time-related aspects of products and services are actually described as benefits.

Product development, as well, is affected by these different types of time processing. Clothing for many consumers is tied to a changing yet stable fashion cycle. For others, however, products may have a "timelessness," such as clothing associated with careers in the medical profession, in which the clothing attributes are tied to efficient performance of the procedures, such as velcro ties, which maximize time efficiency.

In addition, typical sales presentations and business meetings proceed through a well-structured, linear agenda, which often does not recognize the need to allocate procedural time to discussions and issues which cannot be defined in hours and minutes, but instead end when a resolution or understanding is reached. In contrast, other types of sales work centers on the itinerant processes such as order-taking, which instead should emphasize follow-up, repetitive needs, and the identification of deviations from the established routine selling patterns. Comparably, agreements may need to be re-negotiated over time, ranging from aspects of inventory control through garments for the current fashion cycle.

Research Implications

Since this study is exploratory research, it is hard to draw conclusions. There are a number of directions that surfaced however, which point to future research paths and applications. First, only time processing was explored. In the literature at least three different approaches to the study of time are apparent. In addition to time processing, they are time orientation of individuals (Settle 1980; Lane and Lindquist 1989), and levels of time commitment and use (Lane and Lindquist 1988). The issue of monochronic and polychronic time use has also been proposed as a useful tool in the understanding of time (Hall 1983; Lane, Kaufman and Lindquist 1989). Looking at these additional views of time in this manner merits further consideration.

Second, other non-linguistic mediums, such as other art forms or music, could broaden our awareness of an individual's perception of time.

Third, a global marketing use of this approach may find a local time. Because of the tendency to standardize time, it is possible that the actual time perception is being obscured either by the respondent's and/or researcher's standardization or self-reference criteria. The use of a non-linguistic medium could clarify the perceived time. A cross-cultural study using this method merits consideration.

The issue of cross-cultural perspectives should also focus not only on an individual's time but also on time as a national resource (Manz, Rezsohazy and Staikov in Szali 1972). All nations can benefit from looking at whether time is being harnessed for economic well being or improvement of quality of life or whether it is being squandered and allowed to drift away.

Non-linguistic methods will help penetrate the barrier that is so often evident when we try to communicate across cultures with the written or spoken word. Art and music have often been used to stimulate interaction and understanding across cultures. It seems plausible then, that this could be extended to enhance marketing in the ever increasing global marketplace.

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A THEORETICAL MODEL FOR UNDERSTANDING SATISFACTION/DISSATISFACTION OUTCOMES OF COMPLAINT RESPONSES

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Abstract

Studies exploring satisfaction/dissatisfaction as outcomes of complaint responses have been generally scant in the literature. However, TARP research (1985; 1979) suggests that an investigation into the conditions under which complaints can be converted into satisfaction appears critical for marketing effectiveness. To help guide such an investigation, this paper proposes a theoretical model of processes that underlie the complaint response ---> satisfaction/dissatisfaction link.

Introduction

Much of the consumer behavior/marketing literature has tended to focus on satisfaction/dissatisfaction (S/D) as outcomes of consumption experiences (Oliver 1980; Bearden and Teel 1983). That is, most researchers attempt to explain if a consumer is likely to be satisfied (or dissatisfied) after he/she purchases and consumes the product/service. More significantly, the dissatisfaction outcome is generally viewed as an unfortunate but, in the short run, an uncontrollable incident. That is, it is often held that dissatisfaction is something which retailers and manufacturers can address only in future consumption experiences. Yet there is a small but growing body of literature which suggest otherwise. Specifically, retailers and manufacturers can proactively manage consumer dissatisfaction and in the process achieve long term gains.

TARP (1986; 1979) studies provide compelling empirical evidence in support of the preceding argument. For instance, 54.3% of the dissatisfied consumers surveyed stated they would repurchase when their complaints were resolved satisfactorily (TARP 1986). In contrast, less than 20% had intentions of repurchase when the dissatisfaction was either to communicated to the seller or the complaint was not resolved satisfactorily. Such findings lead Etzel and Silverman (1981) to posit that proactively managing dissatisfactions "not only prevents the loss of business but actually builds loyalty among customers" (p. 130). Thus it appears critically important that marketers institute programs that convert consumer dissatisfactions into satisfaction, and perhaps, loyalty.

Despite its importance, research into issues about of, what complaint resolution mechanisms under which conditions are successful, and why, has remained largely unexplored. This is possibly due to a lack of a theoretical model that explains satisfaction/dissatisfaction (S/D) as outcomes of complaint responses. In order to address this issue, this paper reviews previous studies in order to offer suggestions in developing a model to study the focal phenomenon.

What Occurs Once Consumers Complain?: A Review

Several recent studies have attempted to review the literature centered around questions along the lines of, "how do consumers attain a state of satisfaction or dissatisfaction following a consumption experience?" (Oliver 1980; Oliver 1981), and "why do consumers complain (or not) the way they do?" (Singh and Howell 1985; Robinson 1979). In contrast, reviews of "what occurs once consumers complain?" are conspicuous by their absence. This absence is perhaps symptomatic of the lack of research into this important phenomenon. Spurred by TARP (1979) studies, several recent searches are attempting to fill this gap (e.g., Gilly 1987; Gilly 1979; Gilly and Gelb 1982; Resnik and Harmon 1983). A review of these studies is appropriate here.

Many of the earlier studies were based on the notion that satisfaction/dissatisfaction (S/D) feelings directly affect complaining responses and future attitudes (Oliver 1980; Bearden and Teel 1983). Such a conceptualization is sometimes likened to a direct-effects model (Singh and Howell 1985). Further, this model posits that dissatisfaction (satisfaction) affects future attitudes and intentions negatively (positively).

Andreasan (1977), however, felt that while the effects of satisfaction may be direct, the outcomes of dissatisfaction are not as easily understood. Specifically, he distinguished between initial S/D feeling and final S/D. Initial feelings result when consumers evaluate the product/service performance in light of their expectations. The disconfirmation of expectations paradigm affords a theoretical framework to understand the preceding evaluation (Oliver 1980;

Latour and Peat 1979). In contrast, final S/D feelings are proposed to result from possible complaint responses, and the way such complaints are resolved. Andreassen (1977) observes that the initial S/D as a measure of overall satisfaction/dissatisfaction "clearly ignores sellers' complaint handling mechanisms. Thus, in some contexts what we shall term as final satisfaction may be the preferred measure since it adjusts initial dissatisfaction by subsequent satisfactions." (p. 13).

Although the complaint behavior process (i.e., dissatisfaction --> complaint response relationship) is beginning to receive research attention (Day 1984; Richins 1983; Singh and Howell 1985), the understanding of complaint response --> final satisfaction/dissatisfaction link is a relatively neglected area. Studies by Gilly (1979), Gilly and Gelb (1982) and Resnik and Harmon (1983) have attempted to understand consumers' expectations of sellers' responses once they have registered a complaint. If expectations are confirmed, satisfaction is hypothesized to follow.

Studies conducted by TARP (1979; 1986) appear to provide evidence in support of complaint response final S/D future attitude links. TARP reports that about 54.3% of the customers surveyed remained loyal (i.e., had positive attitudes) when their complaints were resolved. In contrast, over 80% of dissatisfied buyers did not repurchase when either they chose to complain or their complaints were not handled satisfactorily. Although these results underscore the importance of the preceding links, one is less clear about what complaint resolution mechanisms in which conditions are successful, and why. This is possibly due to a lack of a theoretical framework that models these links. A brief discussion of the suggestions for a theoretical framework follows.

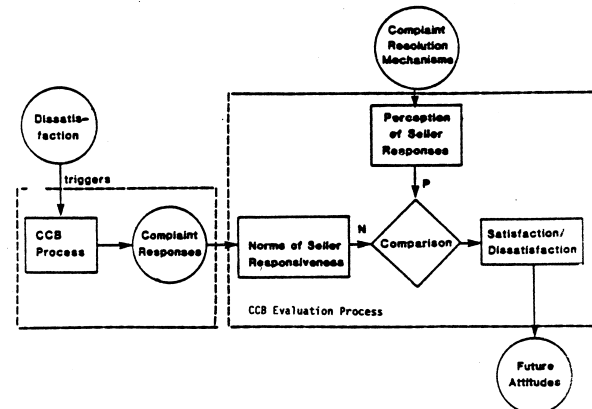
Some Suggestions for The Proposed Framework

Figure 1 depicts an overview of the evaluation process that is hypothesized to follow consumer complaint responses (CCB). These responses on the part of the consumer trigger the whole process. If an individual does not engage in one or more complaint responses, subsequent elements do not come into play. Why dissatisfied consumers engage in specific complaint responses is probably based on a complex decision-making process, which includes expectancy of outcomes, costs and benefits involved, attributions of blame, and attitude toward the act of complaining (see Robinson 1979; and Singh and Howell 1985 for

reviews). Several researchers have attempted to model the preceding process (Day 1984; Richins 1979; Folkes 1984). Based on these studies, the proposed framework accepts that different individuals may engage in different and multiple complaint responses (CCB) in very similar situations. Further, the specific complaint response selected is hypothesized to directly affect the CCB evaluation process.

Figure 1

An Overview of the CCB Evaluation Process and Its Outcomes



Several researchers observe that consumers most likely engage in multiple complaint responses; ranging from exit to legal action (Day et al. 1981; Day 1984; Richins 1983). Because of this multiplicity, the issue of the dimensionality and conceptualization of the CCB construct is critical from the perspective of models that are triggered by CCB responses¹. In other words, the motivating effects of CCB dimensions on the evaluation process would have to be specified.

Recent research, (Singh 1988) shows that CCB can be categorized into three distinct dimensions: (a) voice responses, that is, actions directed toward the seller, (b) private responses, involving exit and informal word-of-mouth communication with friends and relatives, and (c) third party responses, which include formal complaint actions to parties other than the seller, such as Better Business Bureau and legal redress (see Singh 1988 for a formalization of CCB taxonomy).

It is apparent that private CCB responses would most likely not involve an evaluation process. Such responses are characterized by an absence of seller's responses, thus a comparison cannot occur (Figure 1). In contrast, voice responses provide a direct opportunity to a retailer/manufacturer to respond to an individual's specific complaint. In

this situation, the evaluation process of **Figure 1** is evoked. In regard to the third party responses, it is hypothesized that the proposed evaluation process is operative, but this process is moderated by third party agencies. This occurs because when consumers take their complaints to third party agencies, such agencies act as channels through which sellers respond to consumer complaints. Thus voice and third party responses trigger the evaluation process, whereas private CCB does not. Because previous research has not treated CCB as a multi-dimensional construct, the suggested role of CCB dimensions in triggering the evaluation process should be treated as a testable hypothesis.

In addition, **Figure 1** presents a comparison process that is modeled after the confirmation/disconfirmation of expectations paradigm (Oliver 1980; Oliver 1981; Oliver and Bearden 1985). This paradigm represents a systematic integration of comparison level theory (Thibaut and Kelly 1959), adaptation level theory (Helson 1959) and the assimilation contrast theory (Sherif and Hovland 1961). Before a dissatisfied consumer engages in one or more complaint responses, he/she has some cognitions about how the seller should respond to his/her complaint actions. This normative level of sellers' responsiveness is rooted in the comparison level theory (Thibaut and Kelly 1959; Latour and Peat 1979). The normative level is conceptualized as an individual consumer's cognitions about how a retailer or manufacturer should respond to specific complaint responses. As suggested by the comparison level theory, the normative level is not necessarily a function of specific complaint episode. In fact, the normative level is hypothesized to represent an individual's perception of a "desired" or "deserved" level of seller's response despite the earlier dissatisfaction (which led to complaint responses) in regard to the same seller (Oliver 1981).

In notational form, the CCB comparison process can be expressed as:

$$D_{ij} = [P_{ij} - N_{ij}]$$

where:

D_{ij} = Discrepancy or the degree of confirmation or disconfirmation of seller i 's perceived response to complaint action j compared with the normative response value.

P_{ij} = perceived response of seller i to complaint action j .

N_{ij} = normative level for response for seller i to complaint action j .

Three possible states for D_{ij} are proposed. When the two levels (N and P) are equal, the normative response is said to be confirmed. Further, a distinction should also be made between positive and negative disconfirmation if the perceived response is higher than or lower than normative level respectively.

Emotional feelings of satisfaction/dis-satisfaction are hypothesized to be the outcomes of the CCB evaluation process. Specifically, when the normative response is confirmed (i.e., $P = N$), this will result in satisfaction and reinforcement of the normative level, expectancy level and the attitudes construct.

Unusually good or bad perceived levels would have a greater likelihood of resulting in strong emotional feelings. Positive disconfirmation ($P > N$) would yield a strong satisfaction feeling, whereas negative disconfirmation (i.e., $P < N$) would result in a strong dissatisfaction state. Oliver (1981) refers to such feelings as elements of "surprise". Typically, S/D feelings are not global but specific to a context (e.g., seller, situation).

Indeed, these "surprise" feelings of S/D are hypothesized to be assimilated into an individual's attitudes, resulting in either reinforcement of previously held beliefs or an attitude change (Oliver and Bearden 1985; LaBarbera and Mazursky 1983). Disconfirmation is expected to be associated with attitude change, and in the direction of surprise. Thus negative (positive) disconfirmation is proposed to influence a negative (positive) attitude change toward the focal product/seller.

Conclusion

The synergistic effect in treating complaint responses and the consequences of such responses in a well specified model is likely to provide rich ground for research. However, further investigation would be most rewarding if it follows a well defined program of research. Specifically, we recommend that the theoretical model should be more fully developed based on the suggestions provided here. This model should be able to explain previous research, be based on sound theoretical principles, and should offer compelling insights for new directions of research. We urge future researchers to address this gap.

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MULTIPLE RESPONDENT AND MEASUREMENT RELATIONSHIP APPROACH TO MEASURING INDUSTRIAL SALESPERSON PERFORMANCE

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Abstract

This paper presents a brief review of the literature on salesperson assessment. It proposes a model for measurement that uses multiple groups of respondents as sources of measures of a set of input variables.

Introduction

Understanding the determinants of salesperson performance has been a topic of continuing interest to marketing researchers and managers. One reason for this interest is the financial investment in the selling process. For instance, American firms spend an estimated \$10 billion annually on sales training (Salerno 1985). The average cost of training an industrial products salesperson exceeds \$25,000 (Sales and Marketing Management 1987). The investment in industrial personal selling is obviously high with the average cost per industrial sales call expected to nudge \$240 shortly (Taylor 1986).

Given the expense involved, improving performance and the performance measurement process should be a very high priority for sales executives and managers (Muczyk and Gable 1987). Additionally, the evaluation and control of the selling function is essential in order to ensure that the performance of salespeople contributes to overall corporate efficiency and profitability. There are also advantages for the salesperson, as accurate performance appraisal provides the necessary feedback to help him/her adjust to management expectations (Jackson, et al 1983).

The purpose of this paper is to review the literature on assessing and predicting salesforce performance. The issues in the literature seem to center around: first, accurately measuring performance, which is an evaluation question and second, predicting and improving performance, which are selection and training and sales management issues. After a review of some of the literature, a model, centered on the relationships among sources of measures will be developed.

The Measurement of Sales Performance

The most appropriate way to measure salesforce performance is a dispute that continues on in the literature. One of the earlier techniques suggested for improving sales performance measurement was the use of standardized sales data measures using Z scores (Cothams and Cravens 1969). Cothams and Cravens suggest that actual performance data for assessments can be misleading and should only be used for individuals selling under approximately similar circumstances and when a single performance measure is used. The Z score is calculated as

the raw performance measure minus the mean performance measure divided by the standard deviation of the raw performance measure for the sales group. The Z scores obtained from different measures can be added together to form a composite score. The standardized scores facilitated comparisons between individual salespersons selling under different circumstances.

The utilization of territory benchmarks was another technique developed to mitigate the differences between uncontrollable variables in performance (Cravens and Woodruff 1973). A model explaining territory performance variation caused by factors out of the control of the salesperson was developed. From this model benchmarks were established for sales territories, and then actual sales were compared against these benchmarks.

The research cited above is typical of the earlier work in salesforce performance measurement in that the performance measures used were outcome-based measures. Anderson and Oliver (1987) categorize salesforce control systems as either outcome-based systems using objective measures of results or behavior-based systems using subjective methods based on what the salesperson brings to the selling task, their activities, and their sales strategies. Anderson and Oliver found that an outcome-based measure, dollar sales, was the single most widely used criterion in published research reports.

The Behaviorally Anchored Rating Scale (BARS) advocated by Cocanougher and Ivancevich (1978) is designed to concentrate more on behavior and performance criteria that are controllable by the individual. The critical incidents and performance dimensions developed using a BARS tend to be job-specific. Muczyk and Gable (1987) suggest combining a BARS type scale, a Behavioral Observation Scale with a Management by Objectives Scale (MBO) and a Forced Choice Performance Appraisal. The MBO scale evaluates the individual on the basis of how well they attained specific goals that they set with their sales managers at some earlier date. This component of the measure is therefore outcome-based. The Behavioral Observation Scale is based on critical incidents which are significant job related behaviors that either enhance or detract from performance. This scale is obviously a behaviorally-based scale. With the Forced Choice Performance Appraisal scale, sales managers are asked to choose one of several statements as being most descriptive of the salesperson and one as being least descriptive of the salesperson. This is a highly subjective scale based on the sales manager's view of the salesperson. Muczyk and Gable state that all three scales may not always be applicable depending on the particular job being evaluated.

Lamont and Lundstrom (1977) point out that performance can be measured in a variety of perspectives. They used three means of assessing performance; managerial ratings of such items as technical competence, salesmanship skills and so forth, sales activity measures such as new business conversions and call frequency, and sales compensation as indicated by commission and incentive earnings. The managerial ratings appear to be a behaviorally based measure while the other two measures are more outcome based measures.

Jackson et al (1982) found the most frequently cited performance criterion was sales volume. Jackson and Schlacter (1980) in a survey of manufacturing, wholesaling, retailing and service organizations found the most frequently used criteria to be sales volume and qualitative factors like attitude, product knowledge and selling skills. Jackson et al (1983) categorize performance measures as output factors such as sales volume and number of accounts, input factors such as sales calls and selling expenses, and qualitative factors such as attitude, product knowledge and appearance. They feel that both output and input factors should be used for performance evaluations. In a survey of actual practices Jackson et al (1983) found that more effort was placed on output factors than input factors with sales volume being the most popular output measure, and calls per period the most popular input factor. From this survey they concluded that greater emphasis was placed on qualitative rather than quantitative factors of evaluation. Only a narrow set of quantitative, sales-related factors were used.

The distinction between controllable and uncontrollable elements of salesperson assessment is also a component of the difference between salesperson performance and effectiveness pointed out by Walker et al (1979). The crucial distinction between performance and effectiveness is that the latter does not refer to behavior directly, but rather it is a function of additional factors not under the individual salesperson's control. Therefore, outcome measures can incorporate uncontrollable factors into the effectiveness measure while behavior-based measures are driven more closely by activities under the control of the salesperson.

Churchill et al (1985) categorized dependent performance measures in their meta-analysis as self-reports on performance, manager and peer ratings, and objective company data. Their distinction between two types of objective data is consistent with the distinction between performance and effectiveness pointed out earlier by Walker et al (1979). Objective company data that does not control for externalities (effectiveness) are represented by such measures as sales volume and number of sales calls, while objective data that does correct for externalities (performance) are represented by such factors as percentage of market quota and sales corrected for economic conditions. Churchill et al (1985) found that both input and output measures were used for

all four types of dependent performance measures. Another important finding of this meta-analysis was that higher correlations between performance and predictors of that performance were not found for particular types of performance measures. Most of the performance measures used in previous studies have emphasized outcomes rather than more controllable salesperson behaviors.

Behrman and Perreault (1982) used very thorough measurement development procedures to determine what they believe to be the five components of their multidimensional view of industrial salesperson performance. The five categories of items retained in their scale were: (1) achieving quantity and quality sales objectives, (2) developing and using technical knowledge, (3) providing information to the company and following company policy (4) controlling unnecessary company expenses, (5) giving high-quality sales presentations and working well with customers. These items were measured using salesperson self evaluations. The self report measure correlated significantly with manager's evaluations, profitability data, internal company ratings, and a need for achievement measure.

Using the Churchill et al (1985) model as a base, Avila et al (1988) developed and tested a causal model where the sales manager's overall performance assessment was determined by the sales behaviors of the salesperson and goal achievement. The sales behaviors concept was a qualitative measure defined by specific job skills and attributes. The goal achievement concept was defined by the degree to which actual performance exceeded previously determined benchmarks. This was an outcome measure. The sales manager's overall performance assessment was based on the sales manager's perceptions of the quality and quantity of the salespersons contribution to corporate welfare. The authors concluded that future research should use multiple measures of sales behaviors and use salesperson self ratings, customer ratings, and independent observer ratings as well as sales manager ratings.

As the above review indicates, there is no agreement as to the best performance measurement scale. The indication from the review is that multiple measures of salesforce performance should be used incorporating both output and more subjective, qualitative input factors. The output measures should include evaluation of both controllable and noncontrollable elements as pointed up by the performance and effectiveness distinction. The best combination of these factors to include in a measurement instrument is job specific. The literature review also indicates that the evaluation should be generated from a variety of sources, including but not necessarily limited to self ratings, managers, customers and peers.

Determinants of Salesperson Success

What determines success and how to identify successful salespeople is a perennial and

difficult problem. The determinants of success and accurately identifying successful salespeople have important implications for salesperson selection and ongoing evaluation. As noted above, success can be evaluated in a variety of ways. A multitude of variables have been examined over the years to assess their impact on salesperson success.

Personal characteristics and personality traits have been examined as determinants of salesperson success (e.g., Cothams 1969; Dunnette and Kirchner 1960; Miner 1962). Lamont and Lundstrom (1977) provided a tentative profile of the successful salesperson based on their study of personal characteristics and personality traits.

In a meta-analysis of the literature on measuring sales performance, the average correlation between any one predictor and performance was found to be .188, or less than four percent explained variance (Churchill et al 1985). The authors of this study felt that these generally low correlations supported the notion that models of the determinants of salesperson performance must incorporate multiple causes for performance. The ranking of predictive factors from their analyses according to real variation was as follows: (1) personal factors, (2) skill, (3) role variables, (4) aptitude, (5) motivation, and (6) organization/environmental factors. Some of the more important conclusions from this meta-analysis were that multiple determinant sales performance models are preferred, self-report measures of performance do not create an upward bias, and the determinants of sales performance are job specific. The correlations were moderated by customer type and type of product, indicating that the best predictors to use will vary by customer and product. The performance measure used seemed to have little effect on the correlations.

A recent emphasis in research and theory on determinants of salesperson effectiveness has been on the knowledge structures of effective salespeople (e.g., Leigh and McGraw 1989; Szymanski 1988). Two types of knowledge structures have been examined in these studies. One type of knowledge, declarative knowledge, deals with sets of facts used to describe and classify categories of items. This type of knowledge is believed to be organized in hierarchical schemas.

The other type of knowledge, procedural knowledge, deals with heuristics to guide behavior through a sequence of events and actions. This type of knowledge is believed to be organized in time ordered scripts.

The above review indicates that many factors have been evaluated to determine salesperson success. The only agreement seems to be that a variety of determinants should be used and the most predictive factors are job specific.

Improving Performance

Organizations must create two strong con-

nections in order to have motivated employees, (1) a connection between effort and performance and (2) a direct relationship between performance and rewards salespeople value (Ford et al 1985). A high level of effort should directly influence performance. If the salesperson perceives that high performance will lead to a valued outcome, and perceives that increased effort will lead to higher performance, then motivation to work will also likely increase. Although several authors agree that the above connection is theoretically true, in an empirical test Futrell et al (1983) found a low correlation between effort and performance of .135. They speculate this is due to the poor performance measure used in the study.

Behrman and Perreault (1982) note in their article on performance measure development that differences of opinion between managers and salespeople could be discussed and resolved and used as a tool for guiding performance. An important aspect of determining success of a salesperson and/or identifying successful salespeople is the source of the evaluation. Although salesperson self assessments have been found not to display an upward bias (Churchill et al 1985), a sales managers view of performance or effectiveness is probably the most important from a practical point of view. Salary increases, promotions and so forth would accrue to the salesperson that is evaluated highly by their sales manager. Because of the importance of these decisions and the emphasis on sales management found in many studies, sales managers have been the dominant source of sales performance evaluation. It should be noted however that the marketing manager, the sales manager, the salesperson and the customer can all have different views of effectiveness. This can have a dysfunctional impact on the salesperson.

Few studies have examined the evaluation of salespeople from the perspective of important groups such as customers, internal support staff and other salespeople. Fewer studies still have compared the evaluations of relevant groups with one another.

An early study pointed up the importance of a salesperson meeting buyers' behavioral expectations with met expectations having a positive influence on the length of the relationship between the buyer and the seller (Tosi 1966). Taylor (1986) reported findings that asked various groups of respondents to pick which attribute was most important to success from a list of attributes. Salespeople, by far, singled out "professionalism", however, both customers and internal support staff placed "knowledgeable" at the head of the list. All three groups generally rated such items as "aggressive" and "verbal" as low in importance. When purchasing agents were asked which attributes they valued most in a salesperson the items at the top of the list were; reliability, integrity, product knowledge, innovativeness in problem solving and presentation preparation (Sales and Marketing Management 1985).

As the above literature indicates an important

concern when evaluating and predicting salesperson performance is the source of the evaluation. The indication is that multiple sources of salesperson assessments should be used. How the various sources of evaluations relate to one another and how each of these might relate to objective measures of performance and effectiveness would be important to assess.

Discussion and Implications

A review of the literature on assessing, predicting and improving salesforce performance has lead to several different conclusions. First, multiple performance appraisal measures and multiple determinants of that performance should be included in any performance evaluation model. Performance measures should include both objective output measures of performance and effectiveness. Prior research has used and suggested the use of different types of data as indicators of performance and effectiveness. It is important to use multiple types of data to obtain a clear view of the multidimensional concept of salesperson performance.

Secondly, multiple sources of these evaluations should be obtained. In other words, the same evaluations should be obtained from different sources in order to get a more complete view of performance. We propose that self-report, manager, peer, and customer evaluations of performance all should be measured to obtain this clear view. These measures should each be correlated with objective measures of effectiveness obtained from company data and then with objective company data with control for externalities as measures of performance. Congruence between measures obtained from the different sources should also be assessed.

Obviously when constructing a measurement instrument that can be used on different groups of respondents, more general types of items would have to be used than if a single specific group were used as respondents. Some com-

promises will have to be made in this regard. As an initial proposal, five categories of performance appraisal variables are suggested. These categories were determined by reviewing the literature, interviews with sales managers and buyers, and through factor analyzing items used in evaluation of salespeople generated by sales managers and buyers. The five categories of items are; communication skills, interpersonal relations, product knowledge, problem solving skills and self and territory management. Each of these five concepts are evaluated with 10 separate questions. As the Figure indicates, these evaluations are obtained from four different sources for each salesperson. Mean scores will be computed for each of the five variables.

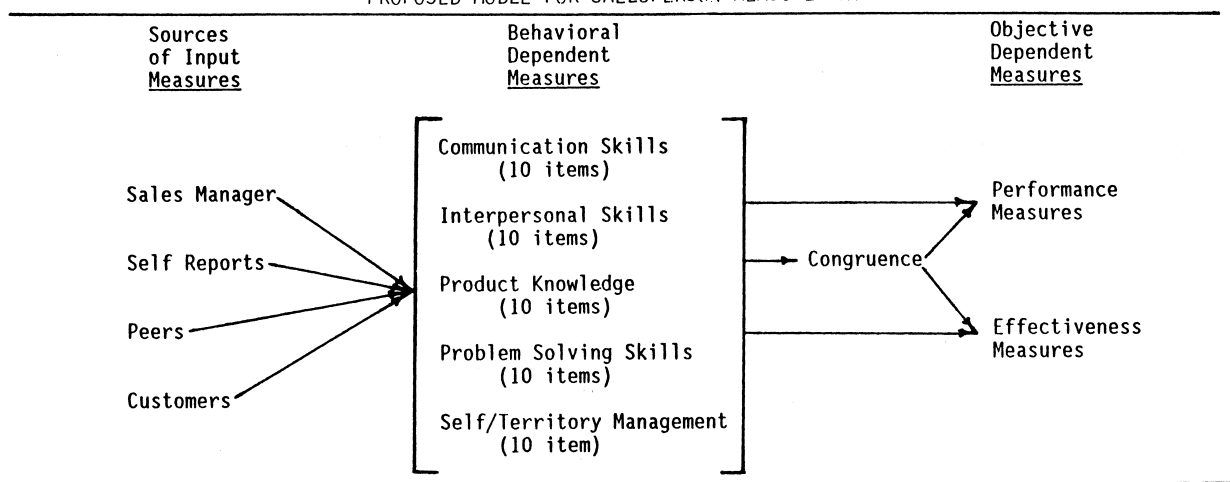
The relationships assessed in the proposed measurement approach will consist of several items. First the measures from the various sources can be correlated with objective performance and effectiveness measures. This will provide an interesting way of comparing and validating the sources of measures used. This comparison can be used to determine not only what types of behaviors are associated with higher objective measures, but also as a means of self improvement for the salesperson.

Another important relationship evaluation from this process will be congruence measures. A congruence measure is the degree of agreement in the behavioral measures obtained from the various respondent groups. These congruency measures will consist of calculating ratios, based on the mean scores on the five variables, between the various groups. For instance a salespersons self evaluation could be compared to the evaluations given by the other respondent groups individually or combined as a group.

There are drawbacks to using just one source for an evaluation; therefore, using multiple sources can compensate for these shortcomings (Schuler 1987). Different sources of appraisal are not mutually exclusive and using them to-

FIGURE

PROPOSED MODEL FOR SALESPERSON MEASUREMENT



gether minimizes subjectivity. Superiors and self evaluations have been most often used, but more emphasis is now being placed on peers and customers as sources of evaluations.

The congruence measure in this model can be correlated with the objective dependent measures. It is proposed that higher congruence will lead to higher correlation with the objective performance measures. Congruence can also be used as a feedback tool to help improve performance. The Figure summarizes the discussion above and the proposed relationships among the various measures.

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THE RELATIONSHIP BETWEEN COMMUNICATION STYLE AND SALES PERFORMANCE

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Abstract

This paper reviews the current literature concerning determinants of sales performance. The focus of the review is upon communication factors which impact selling performance. In particular, literature dealing with communication style is reviewed and implications are drawn relative to its impact upon sales performance. Questions are posed for future research efforts.

Introduction

Understanding the determinants of good sales performance is important for sales managers. Historically, much research in personal selling has focused on uncovering explanatory variables related to salesperson performance. Many studies have addressed this issue, yet much is still to be learned about what influences selling effectiveness. A meta-analysis was conducted (Churchill, Ford, Hartley and Walker 1985) to analyze the evidence in the literature about factors that affect salesperson performance. This study found that the determinants of a salesperson's performance, ranked by relative importance, were: (1) personal factors, (2) skill, (3) role determinants, (4) aptitude, (5) motivation, and (6) organizational/environmental factors. They also found that no single determinant accounted for more than 10% of variation in sales performance and that the relationship between performance and these determinants was influenced by type of product.

Adaptive Selling

Additional research investigated the ability of a salesperson to adapt to differing situations as a determinant of sales performance (Weitz 1981; Friedman and Churchill 1987; Szymanski 1988; Weitz, Suja and Suja 1986; Weitz and Wright 1978). These studies focused upon a salesperson's ability to categorize subjects accurately during different stages of the sales process. The degree of adaptiveness of a salesperson was seen as relating to the ability of the salesperson to categorize subjects accurately during each stage of the selling process. Adaptiveness allows a salesperson to adjust his/her behavior during customer interaction based upon perceived information about the nature of the sales situation in order to maximize the probability of a sale. This research suggests that salespeople consider each sales situation individually and adapt themselves so as to be maximally effective. In some situations salespeople might find it more advantageous to present themselves as similar to their customers, while in other situations

salespeople might find it advantageous to be perceived differently, perhaps as an expert.

Although the framework of adaptive selling research focuses upon the adaptation of communication content based upon a salesperson's ability to assess a sales situation, a broader view would include adaption of the presentation to all aspects of the sales situation including content, personality, and style.

Merrill and Reid (1981) investigated patterns of behavior used by people during social interactions. Based on this research, they identified two dimensions which characterized distinctive social styles people use during interaction. They labeled these dimensions assertiveness and responsiveness. A third dimension, versatility, related to a person's ability to adjust or adapt his/her style to different situations.

Communication Style

In the selling process, exchange is typically initiated, maintained and terminated on a person-to-person basis. The salesperson's most basic activity during this exchange is communication. In the competitive marketplace, effective communication is of paramount importance. The salesperson is the organization's direct link to its external environments. If the organization's salespeople are unable to communicate effectively, the success of organizational strategies may well be impaired. For the firm to achieve full promotional impact in the marketplace, its salespeople must be effective communicators. Knowledge of the communication process is, therefore, of vital importance. In spite of this, communication has received little attention in person selling research. Although many studies have examined the determinants of sales effectiveness, few have examined the communication process and still fewer have looked at communication style. Most of the early empirical work related to personal selling examined the personal characteristics of the salesperson. Several later studies have examined communication content followed by communication code, rules, and to a much lesser extent, style. In marketing, most studies that have considered communication style have done so indirectly.

Communication style is defined as the way in which a person verbally and para-verbally interacts to signal how literal meaning should be taken, filtered or understood (Norton, 1978). Communication content focuses upon what is said while communication style focuses upon how it is said.

Pace (1962) examined the relationship between oral communication and sales effectiveness. He attempted to identify attributes of oral communication which distinguish between the selling behavior of "better" and "poorer" salespeople. The findings of this study imply that salespeople who are less effective in basic oral communication skill will also be less effective in utilizing more specialized aspects of persuasive communication. His findings also suggest that oral communication skill is likely to be a reliable criterion for differentiating superior from inferior salespeople. Sheth (1976), conceptualizing upon a framework suggested by Bass (1967), suggested a paradigm where customers and salespeople can be characterized according to their communication styles which he identified as task-oriented, interaction-oriented or self-oriented.

Drawing upon Sheth's model (1976), Williams and Spiro (1985) conducted an exploratory study to test whether communication style affected sales outcome. As part of this study, they developed scales to measure communication style. They found that communication styles, measured as task, self and interaction oriented were significant in explaining sales variance. This finding supports the notion that communication style can be considered as one of the dimensions affecting sales outcome. Furthermore, since communicator style is something that is assumed to be deliberately manipulated by the communicator; it seems that, in a sales situation, a salesperson can manipulate his/her style to provide for maximum sales effectiveness.

Norton (1978) proposed a construct of communicator style. He defined a communicator style construct in terms of ten sub-constructs: (1) impression-leaving, (2) contentious, (3) open, (4) dramatic, (5) dominant, (6) precise, (7) relaxed, (8) friendly, (9) attentive, and (10) animated. Communicator style is assumed to be different from personality in that it can be deliberately manipulated by the communicator.

Research has focused upon establishing the validity and reliability of the composite style construct (Bednar 1982), sub-constructs (Norton, Sypher, Clarke and Brady 1977; Norton and Montgomery 1979; Emery, Norton and Plain 1980; Norton and Pettegrew 1977), and investigating relationships between the style construct, perceptual processes and interpersonal consequences (Norton 1977; Norton and Nussbaum 1980; Norton and Miller 1975; Norton and Robinson 1980; Norton and Pettegrew 1977; Staley and Cohen 1988; Bednar 1982).

Application of Norton's communicator style construct to personal selling has been the focus of a limited number of recent research efforts. Notarantonio and Cohen (1988) tested whether different communication styles affect perceptions of sales effectiveness using two sub-constructs of Norton's composite communicator style construct. They found that by "blending" various combinations of the Open

and Dominant sub-constructs, a communicator was perceived by objective observers in a way that was quite different from how that communicator was perceived based on either dimension separately. They postulated that in manipulating his/her style, the communicator, rather than to turn one dimension "off" while turning the other "on," tends to use different combinations of the sub-constructs.

A field study of 74 real estate agents who were categorized according to their sales performance showed that those who were high performers tended to be more precise in their communication style (Notarantonio 1989). In addition, those who were precise also tended to emphasize attentive, open and relaxed communication sub-constructs. These three sub-constructs have also been found to be strong predictors of attraction in research on social magnetism (Norton and Pettegrew 1977)

The authors of this social magnetism work caution, however, that the influence of attentive, open and relaxed sub-constructs on attraction may be mediated by context, situation and time. Thus a salesperson who possesses only those styles that have been identified as predictors of attraction, (i.e. attentive, open and relaxed), might not be perceived as very businesslike. However, when preciseness is "blended" with these variables, a communicator who is better suited to a business situation may be perceived. The precise communicator is one who provides detail and accurate information when communicating - attributes which seem to be more characteristic of business communication situations than of non-business communication situations.

The study of real estate salespeople suggested that the ten communicator style sub-constructs can be separated into two categories: (1) strong sub-constructs and (2) casual sub-constructs. Strong sub-constructs were interpreted as those which describe a communicator who is outgoing and forceful, whereas casual sub-constructs were interpreted as those which describe a communicator who is passive. Strong sub-constructs are animated, dramatic, dominant, contentious, and precise and casual sub-constructs are friendly, attentive, open, and relaxed. Impression-leaving was interpreted as neutral since it could conceivably describe either type of communicator. Combinations of these sub-constructs distinguished top performing salespeople from those who are less successful. The author found that when different combinations of the sub-constructs were "blended" together, a different type of communicator was perceived. More specifically, it was found that when a "strong" sub-construct was "blended" with various "casual" sub-constructs, the resulting combination took on new meaning.

Research into the relationship between communicator style and sales performance has demonstrated that differences in style sub-constructs account for variation in sales performance in particular selling situations.

Also noted is that combinations of sub-constructs influence the amount of explained sales variation. The "blending" of sub-constructs has wide implications for future research.

Future Research

Despite the contributions this line of research has made, efforts to further examine the nature of communication style and its' relationship to personal selling have been minimal. Many unanswered questions remain.

1. Is there a universal blend of sub-constructs which is best for all selling situations?
2. Does the type of selling activity (stage in the sales process) influence the relationship between communication style and sales performance?
3. Does the type of product/service influence the relationship between communication style and sales performance?
4. What is the influence of the buyer upon the appropriate communication style.
5. What other situational factors influence the relationship between communication style and sales performance?
6. What is the relationship between other characteristics of sales people and their communication styles?
7. Can sales people effectively adjust or adapt their communication style to different situation?

Answers to these questions can provide sales management with insight into how to select, train, allocate and more effectively manage their salesforce.

In summary, research which uses communication style as a way of understanding sales effectiveness is scant. However, it appears to be an approach which provides new and useful insights. The research which has been done has focused upon identifying constructs and dimensions upon which communicator style can be defined and relating these dimensions, individually and in combinations, to behavior. The results provide new and useful insights for researchers, sales managers and salespeople.

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WHOLESALE: MARKETING'S FORGOTTEN FRONTIER

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Abstract

This paper explores the relative position of the American wholesaler in the economy. This is achieved by comparing the wholesaling and retailing sectors. Then an analysis is presented as to some of the future functions of the wholesaler. An examination of the performance of wholesalers in the American marketing scene indicates that the wholesaler is alive and making good progress. The resilience that is shown by the wholesaling sector can teach numerous lessons to other areas of American marketing.

Introduction

If one explores marketing literature of the past thirty years which has been quite prolific and creative, perhaps among others, one can see that one area of marketing is woefully neglected. That area is wholesaling. This particular marketing practitioner according to all the predictions, for the past forty years or so, should have been extinct (Karas, 1958). Perhaps those who wanted to have their predictions to come true have ignored wholesaling as an area of study to such an extent that one can hardly find any written articles, research studies, dissertations or books on wholesaling since about 1967 for a period of over two decades. However, not having been studied in academic circles does not necessarily imply wholesaling in American marketing is dead and buried. In this article three key issues are explored. First, what is the relative role of wholesaling and has it been changing substantially? Second, what is the contribution of wholesaling in the American economy? And third, what are the factors underlying the current status of American wholesaling?

How Extinct is American Wholesaling?

In addition to the lacking articles, studies, books and other credible academic literature a quick study of the basic marketing textbooks would indicate that wholesaling in a twenty year period has gone down from one full chapter to about three or four pages (Park and Zaltman, 1987). During that time channels, consumer behavior and international marketing chapters emerged. The retailing chapter maintained its status even though its contents have changed noticeably.

If we ignore the written or unwritten literature and look at the existing facts it becomes quite obvious that American wholesaling is very much alive and holding its own. Karas (1958) had pointed out that the relative share of wholesaling in the economy had not deviated noticeably between 1929 and 1954. In order to support his statement he presented a ratio of wholesale volume to retail volume. In a twenty-five year period (from 1929 to 1954) wholesaling volume as

a percent of retailing volume in current dollars varied from a low of 140 percent in 1939 to a high of 147 percent in 1948. It is obvious that in that era of economic instability, wholesaling presented a substantial degree of stability by maintaining its relative share in the economy.

Analyzing the period from 1958 to 1987 would yield the same types of observations. Indeed, wholesaling in American business may even be gaining some ground if it is compared to total retailing activity in this country. Table 1 presents an extension of Karas' table which was published in 1958.

TABLE 1
WHOLESALE AND RETAIL
TOTAL VOLUME IN CURRENT DOLLARS
FOR CENSUS YEARS

Year	Wholesale Volume	Retail Volume	Wholesale Volume as a percent of of Retail Volume
1958	285.7	200.4	143%
1963	358.4	244.2	147%
1967	459.5	310.2	148%
1972	695.2	459.4	152%
1977	1,258.4	723.1	174%
1982	1,998.0	1,065.9	187%
1987	2,500.0	1,403.0	178%

Source: Census of Retailing and Census of Wholesaling for respective years.

Note: 1987 figures are preliminary. They have been obtained through direct contacts to census of retailing and census of wholesaling offices.

As seen in Table 1 relative share of wholesaling in the economy as measured as a percent of retailing has gone from a low of 143 percent in 1958 to a high of 198 percent in 1982. Thus it may be easily stated that the near extinction status of American wholesaling as reflected in the literature is not confirmed by its performance in practice. Indeed, wholesaling has gained substantial ground during that period.

What is the Contribution to the Economy?

There are numerous ways of assessing the role and the contribution wholesaling makes in the economy. Three such criteria are used in this article. First, wholesale volume in terms of constant dollars which would indicate if wholesaling contributes to the economy in real value. It is particularly important to know if this real value is greater or smaller than retailing. Second, total wholesale employment, if, in terms of employment, wholesaling sector provides employment and therefore income to a number of people and if that number is growing. Finally, if the output per employee in the sector is increasing noticeably and if that

compares to retailing favorably. Retailing in this study is used as a measurement criterion to evaluate wholesaling performance. It is equally possible to use another sector or the total economy for the same purpose.

Wholesaling's contribution in constant dollars: [Table 2](#) illustrates the wholesale volume expressed in terms of 1967 dollars. As seen in the table the wholesaling sector is not only growing in relative terms but it is also growing in absolute terms and again faster than the retail sector. In 1987 the U.S. wholesale volume was 157.2 percent of that of 1967 volume in constant dollars whereas during the same period the retail sector grew only 130.7 percent ([Table 2](#)).

TABLE 2
COMPARISON OF VALUE OF GOODS SOLD
IN THE WHOLESALE AND RETAIL SECTORS
OF AMERICAN ECONOMY IN CONSTANT PRICES*
(1967=100)
(%)

Year	Sector	
	Wholesale	Retail
1958	71.2	74.0
1963	85.2	85.9
1967	100.0	100.0
1972	121.0	118.0
1977	151.3	128.8
1982	150.4	118.9
1987	157.2	130.7

Source: Census of Retailing and Census of Wholesaling.

*Numbers were calculated by the following Laspeyres formula:

$$I = \frac{P_i Q_d}{P_i Q_d} \times 100$$

Where

Pi = price in the current period
Po = price in the base period
Qi = quantity weight in the base period
Qd = quantity weight in the current period

Wholesale employment: [Table 3](#) illustrates wholesale employment for each of the census years since 1958.

TABLE 3
WHOLESALE AND RETAIL EMPLOYMENTS SINCE 1958 (000)

	Wholesale	Retail
1958	2.808	7.942
1963	3.089	8.410
1967	3.519	9.381
1972	4.026	11.211
1977	4.397	13.040
1982	4.985	14.468
1987	4.500	18.812

Source: Census of Retailing and Census of Wholesaling.

1987 figures are preliminary estimates.

If employment figures are examined it becomes rather obvious why wholesaling has not been very popular among academicians. Although it is almost doubled, wholesaling employment is less than one fourth of the total retailing employment. Thus, demand for students by the wholesaling sector is not that large. Hence, the sector has been de-emphasized by the academe. However, a healthy four to five million people are employed by the sector which cannot be ignored. Perhaps one of the questions is the background and qualifications of the wholesale employees. It is quite likely that the more college educated they are the more emphasis will be placed on wholesaling education by academicians.

It is difficult to determine the overall impact on total economic base, however, wholesale employment figures over the thirty year period have shown a healthy growth trend. The only decline is seen in 1987 figures. However, these are preliminary and may not reflect the real picture.

The output of the wholesaling sector: What wholesaling may not be contributing in the employment area is more than offset by its spectacular productivity increase. [Table 4](#) illustrates a very high level productivity increase illustrated by total sales per employee. Between 1958 and 1987 that productivity increases fivefold whereas retailing productivity did not exceed threefold.

TABLE 4
WHOLESALE AND RETAIL PRODUCTIVITY
COMPARISONS (000)

Year	Wholesale Output per Employee	Retail Output per Employee	Ratio of Wholesale to Retail
1958	101.74	25.23	4.03
1963	116.02	29.04	4.00
1967	130.58	33.07	3.94
1972	172.68	40.98	4.21
1977	286.20	55.45	5.15
1982	400.80	73.67	5.43
1987*	555.55	74.58	7.44

Source: Computed from the data presented in different years of Census of Retailing and Census of Wholesaling.

*1987 figures are preliminary estimates.

For a sector which has been expected to be extinct and indeed has been treated as such, American wholesaling has shown a high degree of resilience. It is not clear if the pressure by manufactures has been forcing wholesalers to become more efficient or because wholesaling is so efficient that manufacturers and retailers are not able to get rid of them.

Some three decades ago Herman C. Nolen (1958, p. 409) had the following to say about the American wholesaler:

Do not underestimate the ability, the influence and the power of today's wholesaler. He may not have surrounded himself with a battery of publicity agents who are singing his praises to the multitude, but he is silently, steadily, and effectively doing the part to enable our economy to grow and bring prosperity and higher living standards to our people.

The Reasons for Survival and Future Functions

Just how do wholesalers manage to not only maintain their relative share in the economy but literally grow? There are at least twelve wholesale functions which are generally accepted to be standard and quite important (Rosenbloom, 1987). Table 5 illustrates these twelve functions.

TABLE 5
RELATIVE IMPORTANCE OF WHOLESALE FUNCTIONS

Wholesale Functions	Currently Perceived Significance*	Future Services
Market Coverage	+	
Sales contact		
Inventory holding		
Order processing	+	
Market information		+
Customer support		
Product availability	+	
Assortment convenience	+	
Bulk-breaking	+	
Credit and finance	+	
Customer service		+
Advice and technical support		+

Source: Adapted and developed from Bert Rosenbloom, Marketing Functions and the Wholesaler-Distributor, Washington, D.C.: Distribution Research and Education Foundation, 1987.

*This table depicts the summary of the findings whereby more than 40 percent of the responding manufacturers considered the function very important. Future services category is based on manufacturers' law ratings as well as the changes in the U.S. retailing.

Rosenbloom (1987) has found out that of these twelve functions, six are considered very important by manufacturers who responded to a very detailed and comprehensive questionnaire. As seen in the table, more than forty percent of the responding manufacturers considered these functions very important. Curiously enough some of the most standard functions of the wholesaler were not considered as important as those identified with a (+) sign in the table. Among these are sales contract function whereby the wholesaler may help both the manufacturer as well as the retailer to sell their products in addition to strictly taking over the sales function of some of the manufacturers.

Another standard function which one would expect to be valued highly by manufacturers is inventory holding. Relatively fewer manufacturers considered this to be very important. Finally customer support rendered to the retailer on behalf of the manufacturer was not rated very highly.

However, a quick look at the (+) signed functions would indicate that performing certain marketing functions effectively such as market coverage, order processing, making products available, breaking the bulk and providing assortment convenience are certainly the functions that have particularly paid off for the American wholesaler. It is quite obvious that in order to perform these functions effectively, the wholesaler has learned to assess market conditions, to transfer information quickly to facilitate prompt action, and to utilize modern computers and automation to increase efficiency in product handling. Will these functions be sufficient for the wholesaler to continue this performance and maintain the position they have held in the economy?

Current Trends in the Economy

Naisbitt in his *Megatrends* (1982) maintained that there are more small businesses emerging faster today in the marketplace than ever before. It is quite likely that this trend will continue for a period of time yet to come. The question, then, is "what would be the wholesalers' function in this situation?"

It is obvious that the wholesaler facilitates the part of the marketing functions of small manufacturers as well as small retailers. Thus, the emergence of many small businesses almost by definition would indicate an increasing need for the wholesaler. From that perspective the future for this sector in the economy appears to be very bright. However, in order to satisfy the needs of the future small retailers and small manufacturers, the American wholesaler will have to put special emphasis on the three functions which are shown in Table 5 as future services. These are: (1) market information; (2) customer service; and (3) advice and technical support.

(1) Market information: The modern wholesaler dealing with small manufacturers and retailers, will have to be providing information about the market. This information is essential in the survival and growth of small businesses. Their survival and their competitive edge essentially depend on their knowledge of the corner of their specific market. The modern wholesaler will have to be closer to information sources, information processing and information dissemination if it wants to maintain the level of success it has achieved in the past.

(2) Customer services: Today more than ever before in our economy there is a movement towards better services. Popular books (Peters, 1987) as well as scholarly publications (Buzzell, 1987) have emphasized the importance of quality and service components. During the forthcoming decade the U.S. businesses will be

involved in more service related activity to match and perhaps excel what Japanese and other international competitors have already accomplished. Thus, the wholesaler will have to provide customer services to its clients who in turn will make these services available to their customers.

(3) Advice and technical support: Finally, since the wellbeing of their customers are basically the key to success for the modern wholesaler it is essential that the customers will receive advice and technical support. This particular function is likely to involve all of the managerial and decision functions of small businesses. Of all the future activities for the modern wholesaler, perhaps this is the most important function for the wellbeing of the customers and therefore of their own.

Conclusion

It is obvious that American wholesaling is an unrecognized hero of American marketing. The wholesaler has performed efficiently and maintained an important position in the national economy. This positive performance is primarily due to the services the wholesaler provides for its customers. The wholesalers' ability to provide these services indicates that they have been abreast with time saving and efficiency generating, computer and automation technology.

However, it is also clear that for the wholesaler to maintain its present position, it will have to emphasize not only the conventional services but some of the more forward-looking services as well. Among these are market information, customer services and technical support advice. The modern wholesaler not only must be very up-to-date in these areas but must also sell its customers that these services are essential for their survival. After all the survival of the customer is the survival of the wholesaler.

The resilience that has been displayed by American wholesaling needs to be studied further so that numerous new lessons can be learned. These new lessons must be passed on to other areas of marketing in order for them to improve their own resilience.

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THE SELLING CYCLE: A UNIFYING GUIDE FOR SALES MANAGEMENT DECISIONS

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Abstract

The selling cycle is a concept rarely discussed in sales management literature except those articles and books targeted to practitioners. This paper proposes that the selling cycle should be considered as a major dimension of sales jobs which can help in devising taxonomies and analyzing performance, and in particular as a key unifying factor guiding sales management policies regarding hiring, training, compensation, and other major decisions affecting the sales force.

Introduction

The selling cycle is the time span from the initiation to completion of a sale. It is rarely discussed in college textbooks or academic journals, suggesting a relative lack of concern for this terminology and perhaps for the measure it represents. It is popular with sales management practitioners, however, and the term "selling" (or "sales") cycle is frequently found in articles and books intended for that audience. More attention to selling cycles by academics can provide an opportunity for new analytical insights, resulting in greater interest and improved communications on both sides of the academic-practitioner interface.

Sales jobs are becoming very diverse in terms of selling cycles. In some selling positions the time span to complete a sale is still very short, as illustrated by the job of a variety store sales clerk and the popcorn vendor in the stands at a baseball stadium. But a lengthening of the selling cycle is occurring in many situations where the buying process is becoming more protracted because of increased purchase complexity and expanded involvement of more buying influences in the customer organization. In the Traffic Control Materials Division of 3M, for example, the cycle is eighteen months (Everett 1989). Paralleling this wide span of differences in selling cycles is a wide span of variations in the activities and policies used to manage these salespeople, exemplified by differences in hiring, training, compensation, and motivation programs. No attempt has been made to investigate relationships between the selling cycle length and the effectiveness or even use of various elements in the sales manager's arsenal of controllable variables. The purpose of this paper is to propose that such relationships exist, and to speculate on what they might be. If variations in effective sales management practices can be tied to variations in the selling cycle, it is possible that the selling cycle offers a prominent and unifying guide to help sales managers improve sales force performance.

Background on Selling Cycles

The concept most closely related to the selling cycle which has received academic attention in the past is the "response curve," with emphasis on the optimum call frequency and call duration (Brown, Hulswit, and Kettelle 1956; Waid, Clark, and Ackoff 1956; Lambert and Kniffen 1970; Ryans and Weinberg 1987). These studies did not involve the selling cycle specifically, however, because they did not incorporate calendar time. Likewise, a study by McGraw-Hill Research (1984) found that the number of calls needed to close a sale ranged from 1 to more than 11, with 4.3 as the average. This study also did not include calendar time, nor did it relate differences in call frequencies to any differences in selling or sales management practices.

Given that sales jobs vary substantially in time span and number of calls needed to complete a sale, it is surprising that the development of sales job taxonomies as well as comparisons among sales jobs on performance issues have not considered the selling cycle as a differentiating characteristic among sales jobs. For instance, Moncrief (1986) devised a

taxonomy of six sales job categories, based on an analysis of 121 sales activities, but nowhere in his research was the selling cycle reflected. Taking a different approach, Moore, Eckrich, and Carlson (1986) compared three different industrial selling jobs on 82 specific competencies considered necessary for success, but neither the jobs nor the tested competencies reflected different selling cycle spans. In a study comparing tenure determinants among different types of sales forces, four sales force types were distinguished by type of customer (in-home consumers, resellers, organizational end-users, and manufacturers), but no attempt was made to relate any of the variance in tenure to variance in selling cycle (Jolson, Dubinsky, and Anderson 1987).

These studies are but a few examples of the many research efforts over the past few years which have not considered the selling cycle as a potential correlate. It is the contention of this paper that the use of the selling cycle can help sales managers do a better job in establishing coordinated policies for hiring, training, compensation, and other areas affecting sales force performance. It is even possible that the inclusion of the selling cycle as an explanatory variable might improve our understanding of the determinants of sales force performance, which is still modest at best (Churchill et al. 1985).

Relationships of the Selling Cycle to Sales Management Variables

A sales job characterized by a long selling cycle differs substantially from one with a short selling cycle. The long-cycle job requires continuity of a relationship with numerous stages and interim objectives to be achieved prior to closing the sale. The long selling cycle reflects a lengthy buying process, often including multiple decision makers who negotiate with the seller as well as with each other in their own organization. The products or services involved are often more complex in long-cycle selling and typically require a large monetary outlay by the buying organization. Thus, major differences should occur in managing long-cycle versus short-cycle salespeople.

Four different sales management policy areas are discussed in the following sections as they relate to the length of the selling cycle. These include recruiting and selection, training, compensation, and quotas and performance evaluation. These four areas are chosen as examples only, rather than as an exhaustive list of all policy areas related to the selling cycle.

Recruiting and Selection

Short-cycle salespeople are expected to close sales as soon as possible. Personality and background characteristics of people who fit this job environment might include a strong ego drive, need for achievement, domination, initiative, and a history of success in short-term tasks carried out independently and systematically. Long-cycle selling would be frustrating to these salespeople, since long-cycle sales require patience, relationship-building (need for affiliation), cooperation both with buyers and with others in the seller's firm, and flexibility to variations among selling situations and changes within a given selling situation as it evolves.

Since long-cycle selling usually involves more costly and complex products, it is likely to require a more analytical approach to selling strategy. Further, long-cycle sales usually involve multiple buying influences, requiring a salesperson with a great deal of adaptability, breadth of knowledge, and a wide span of empathy in order to understand the various perspectives of buying center members. A history of success in lengthy projects and team situations is more fitting to

someone entering a long-cycle sales job. Firms using long-cycle selling, especially when the salesperson works with a selling team, tend to recruit from within to get applicants already familiar with their organization.

In many cases, long-cycle selling means that the role of personal selling in the firm's marketing mix is of great importance. Conversely, its role in short-cycle selling may be less important since those firms might rely more on pricing or other types of promotion for demand generation and competitive success. Thus, sales managers with long-cycle positions will seek more educated, skilled, experienced, and thus more expensive talent as noted below in the comments on compensation.

From the above discussion, a supposition is that different background and personality traits are more effective for different selling jobs distinguished by length of selling cycle. This idea was supported in a study comparing two sets of salespeople -- one selling large computer systems requiring a long selling cycle and the other selling small computer systems in a much shorter selling cycle (Avila and Fern 1986). In their search to discover traits which correlate with success, sales managers might be more effective if they perform separate analyses and set different qualifications for long-cycle and short-cycle sales positions (Lockeman and Hallaq 1982).

Training

Many sales training programs seem keyed to short or medium cycle selling jobs (e.g., Dubinsky and Staples 1981-82; Kerr and Burzynski 1988). Likewise, many new training techniques such as scripts and expert systems are geared to learning steps in the traditional selling process, such as the "approach" or "closing" (e.g., Leigh 1987; Steinberg and Plank 1987). Yet some of the training needs of long-cycle selling are quite different from those for short-cycle selling. For instance, one of the objectives in repeated calling on a prospect is to build a relationship through social and structural bonds (Turnbull and Wilson 1989). Social bonds involve friendship while structural bonds occur when it becomes difficult for the buyer to end the relationship due to the complexity and cost of changing sources. Another long-cycle need is to identify key buying influences who will ultimately determine supplier choice (Mattson 1988).

In addition to differences in training topics, a different focus must occur in the training of long-cycle salespeople. While most traditional sales training has concentrated on the development of individual skills and initiative, long-cycle selling requires teamwork, coordination, and cooperation. An example involves the topic of delegating work to others. To the short-cycle salesperson, delegating is a weakness because it means giving up control, while in long-cycle selling delegating is often crucial in order to tap those company personnel and resources required to meet a customer's needs.

The budgeting for training can also differ. In short-cycle selling, the training budget is often derived as a percent of sales. But in long-cycle selling, where some sales results may not occur within the budget year, training must be viewed more as an investment. Further, long-cycle selling may involve the participation of company personnel in other departments and divisions, and the cost of training these persons must somehow be apportioned across organizational units. It is also possible that long-cycle selling requires more training per year than does short-cycle selling. As relationships evolve with major prospects, their buying processes are constantly changing and training is one way to meet those changes in a coordinated manner within the firm. Because the long-cycle selling process is less structured and more flexible, opportunities occur more frequently to share experiences among salespeople in the same organization. Such opportunities have substantial cost implications, however.

Compensation

Salespeople are paid by salary plus commission in more than two-thirds of all sales organizations (McAdams 1987). The typical salary/commission split for sales forces in general is 80/20 or 70/30, with fewer at 60/40 (Dartnell 1984). But in long-cycle selling, it is typical for a salesperson to be guaranteed 85% of total pay in salary, with the additional 15% provided when quota is reached and bonuses granted for exceeding quota (Everett 1989). Commissions are more effective in short-cycle selling in which sales occur more frequently, and commissions provide a steadier stream of income and a more immediate reinforcement of success than they would in long-cycle selling. Furthermore, short-cycle sales are nearly always the result of one individual's efforts, while long-cycle selling often involves the efforts of many persons working as a team. Rewarding members of selling teams is more difficult because the selling process is never the same from one customer to the next. Flexibility means complexity, involving such elements as bonus pools based on account sales volume and split among team members according to some predetermined formula (Cespedes, Doyle, and Freedman 1989). Other possibilities include bonuses based on long-term performance (using one or more year's sales as a base) or bonuses tied to separate customer accounts rather than to sales volume in total.

Besides differences in types of compensation, the overall level of pay will vary in relation to the caliber of salespeople involved and their role in overall marketing strategy. In general, long-cycle salespeople earn substantially more than their counterparts in jobs with shorter selling cycles (Tubridy 1986). Other types of incentives, including sales contests and non-cash awards, are likely to be more common with short-cycle sellers since such incentives are usually aimed at achieving shorter-term sales objectives.

Quotas and Performance Evaluation

Control of the selling process through quotas and performance evaluation differs markedly for long-cycle versus short-cycle selling. Long-cycle customer relationships consist of stages which parallel the organization's buying process. For instance, an early stage in the buying process is establishing product specifications, and an objective for the salesperson is to get his or her firm's product written into the buyer's specs. In short-cycle selling, the primary focus is on the sale itself rather than the steps leading up to it. Thus, control systems for short-cycle selling will focus on outcomes. While outcomes are also important for long-cycle, substantial emphasis will also be directed toward behaviors which eventually lead to the desired outcome (Anderson and Oliver 1987). The short-cycle salesperson will get quotas for sales volume and be evaluated accordingly. The long-cycle salesperson may also get quotas for behaviors or activities such as getting his or her company's name in the customer's approved supplier list, and be evaluated to some extent in terms of achieving those activities.

Other differences also occur. Since long-cycle salespeople spend so much time with each prospect, the number of accounts assigned to them is small. As a result, quotas and performance evaluations are likely to relate individually to each account. Short-cycle salespeople are likely to be evaluated according to their results in total, or perhaps by groups of products or customer types, but not by individual account. Further, since much long-cycle selling involves collaboration with other members of a selling team, evaluation will be focused to some extent on the relationships with these other company personnel, using such criteria as cooperation and communication clarity. As already noted, long-cycle salespeople might be assessed on their team effectiveness whereas short-cycle sellers would be judged based on their ability to perform alone.

Conclusions and Implications

Based on the above discussion, the following generalizations are proposed: The longer the selling cycle:

- the more likely salesperson performance success will be associated with personal characteristics of flexibility, need for achievement, a history of positive team experiences, and greater analytical capabilities.
- the greater will be the shift in training emphasis from traditional steps in the selling process to relationship building and bonding, coordination and teamwork, and sharing of experiences on these matters among salespeople in similar sales positions.
- the greater will be the compensation emphasis on salary, on individual rather than aggregate account performance, and on team accomplishment, and the lesser will be the emphasis on sales contests and other short-term incentives.
- the more likely will sales force control systems involve behaviors or activities in addition to outcomes, and will relate to individual accounts instead of aggregate results.

The above conclusions summarize some major differences in managing long-cycle versus short-cycle salespeople. There are most likely many other differences not covered, but this treatment is sufficient to underscore one important conclusion: Sales management policies which are effective for a short-cycle selling job will not be effective if a long-cycle assignment is added to the responsibilities of those same salespeople. The reverse is also true -- policies producing success in long-cycle selling will not effectively achieve a short-cycle task added to the assignment of that sales force. The personality, background, training, and motivation via the pay plan which suits one type of selling will not suit the other. For instance, salespeople in an effective short-cycle setting will have a hard time introducing new or more complex products which take more time to demonstrate, more educating and convincing of buyers, and greater deliberation by the buying organization.

Research evidence is now needed to see if the contention of this paper is true -- the selling cycle is a significant determinant of the effectiveness of sales management policies. While the selling cycle is not proposed to account for or explain all the variation in sales management policies, it can become a contributing and unifying guide to help sales managers in setting those policies.

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EUROPEAN CONTRIBUTIONS TO MARKETING

MAKING INTERNATIONAL MARKETING MANAGERS: THE IRISH EXPERIENCE

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Abstract

This paper focuses on a joint initiative developed by the Training and Employment authority in the Republic of Ireland (FAS) and the Department of Economic Development in Northern Ireland (DED). The European Export Marketing Programme, now in its fifth year of operation, aims to develop export competence among small Irish firms. In common with similar initiatives targeting the United States and Canada, it also seeks to increase the stock of exportise by developing a future generation of Irish international marketing managers.

Following an outline of the structure and salient features of the programme, discussion will centre on an evaluation of its impact on the export performance of participating firms and the benefits derived by young graduates who have been involved in previous programmes.

Introduction

While small firms make a significant contribution to the economy in terms of employment and wealth creation (Birch 1979, 1981), their field of vision is often parochial. Many have the potential to exploit export market opportunities but are not sufficiently motivated to demonstrate the level of enthusiasm and commitment required to ensure success.

Reasons for this aversion to exporting are well documented in the literature (Edmunds and Khoury, 1986; Rabino, 1980; Seely and Iglarsh, 1981). These can be summarised under two broad headings:

- Lack of knowledge, which leads to uncertainty in terms of market selection and subsequent entry strategy, resulting in an increased perception of risk.
- Lack of human and financial resources to undertake the necessary preparatory planning, attain operational competence, or indeed, implement coherent long-term strategies.

Furthermore, many export behaviour studies conclude, typically, that the assistance provided by export promotion agencies fails to address small firm's needs, thus making the transition from domestic to foreign markets even more daunting (Seringhaus 1986, 1987; Thomas and Araujo, 1985). In defence of these agencies, the provisions may not be inadequate per se, rather, problems often result from the inability of small firms to exploit services effectively.

In these circumstances, the export activity of small firms is, at best, "unplanned, reactive and opportunistic" (Bradley and Mitchell 1986), they often initiate the process as a consequence of home market saturation or merely react to unsolicited orders (Bilkey and Tesar, 1977; Bannock, 1987; Kanyak et al., 1987). Having adopted these tactics under duress, it is not surprising that ventures fail or that many firms revert to their home markets just as soon as conditions permit.

Background

The importance attached to increasing export competence among small Irish firms is reflective of prevailing economic conditions. The Irish Republic has a limited domestic market and a small-firm dominated indigenous economy. Economic growth achieved during the last decades can be attributed, in the main, to a successful attraction of mobile investment. Aggregate export performance is strong, exceeding \$15 billion or 64% of GDP in 1987 and the contribution of smaller indigenous industry is growing. However, policy-makers still express concern that multinationals and foreign owned subsidiaries account for almost 70% of total exports. A decline in the volume and scale of inward projects suggests that the contribution of small firms is likely to become increasingly important.

Northern Ireland, both fiscally and politically part of the United Kingdom, also has a small-firm base and a small local market. Traditionally dependant on the British market, its problems have been exacerbated by the decline of traditional industries such as textiles and shipbuilding, the departure of many multinationals in a period of global recession and difficulties in attracting investment due to social and political unrest. Consequently developing the indigenous base and improving the export performance of small firms is regarded as a major policy priority.

In these circumstances both governments have sought to stimulate export activity by providing support which is generally regarded as being well targeted to the needs of small firms. However, despite a pro-active approach by export promotion organizations and the availability of innovative support packages, usage rates among smaller firms continues to be a cause for concern. A prime reason for this state of affairs is a marked lack of international marketing management

skills available within the individual firm and in the business community in general. In addressing these macro and micro issues, the European programme seeks to develop export competence in small firms, assist them to exploit foreign market opportunities, and, at the same time, improve the overall stock of international management skills.

The European Export Marketing Programme

The European Export Marketing Programme, a joint initiative by FAS, the training and employment authority in the Republic of Ireland and the Northern Ireland Department of Economic Development, is designed to assist Irish companies to enter, or expand existing business, in European markets. The importance of this region, as the European Community moves towards the completion of the internal market in 1992, is evident. Harmonized standards, documentation and legal procedures will encourage greater trade between member states and present new market opportunities but are also likely to increase competition in the domestic market. Ireland, a peripheral region, may be particularly vulnerable.

In addition to FAS and the DED a number of other organizations are involved in the programme, their roles are outlined in Figure 1.

**FIGURE 1
ORGANIZATIONS INVOLVED IN THE EUROPEAN
EXPORT MARKETING PROGRAMME**

Role	Organization	
Management, Promotion, Administration and Funding	FAS	DED
Market information/support	CTT ¹	IDB ²
Programme Leader	IIEA ³	
Programme Consultant	CEGI ⁴	
Selection and Matching of Companies/Participants	FAS	University of Ulster

(1 Irish Export Board, 2 Industrial Development Board, Northern Ireland, 3 Irish Institute for European Affairs, 4 Centre D'etudes en Gestion Internationale, Universite Catholique de Louvain.)

Having identified interested companies and agreed suitable projects, potential participants, generally business or language graduates, are interviewed and "matched" with "host" firms. Great care is taken to ensure that their skills, qualifications, languages and experience meet company requirements as the firms have the final decision on selection. Once "matched", both are integrated in a training programme intended to develop export marketing skills in participants

and the competitive competence of the "host" firms (See Figure 2). A senior executive of the firm is designated to liaise with the participant, attends the company workshops and undertakes to support them throughout the programme.

**FIGURE 2
STRUCTURE OF THE EUROPEAN EXPORT
MARKETING PROGRAMME**

Week No.	Participant Programme	Company Programme
	Participant Selection	Company Selection
	Module 1	Workshop 1
1 - 4	Irish Training Programme	Workshop 2
	Module 2	
5 - 9	In-Company Training	
	Module 3	
10 - 17	Louvain Training Part I	Workshop 3
18 - 21	Louvain Training Part II	Workshop 4
22	Interim Review	
	Module 4	
23 - 29	European Fieldwork I	
30	Interim Review	Workshop 5
31 - 38	European Fieldwork II	
39 - 41	Report Finalisation and Career Planning	
	Programme Conclusion	Workshop 6

The first workshop, attended by company executives and participants, provides a framework for export development and preparing project specifications. These are reviewed, revised and developed during initial training in Ireland. This intensive four-week module prepares participants by inculcating fundamental business concepts and diagnostic skills. They are introduced to the services of the Irish Export Board (CTT) and the Industrial Development Board (IDB) and are encouraged to make extensive use of their market information and support packages. The second workshop provides guidelines on developing an export marketing strategy. It is followed by five weeks in-company training in which the project specification is refined.

The remainder of the programme is based in Europe. The third module, at the Irish Institute for European Affairs in Louvain, includes intensive training in export marketing. Inputs on research, planning and strategy, cross-cultural communications, and "doing business" in Europe are supplemented by language courses designed to meet participants' needs and competence. A pilot study in the Belgian market tests their ability to apply theory in practice, successful completion is a pre-requisite to the major project in the target market.

Two workshops take place during this module, the second in Louvain coincides with an interim review. At this stage each company finalises its project specification, reviews the participant's progress and is advised on financing export development and using government support packages.

During the final eighteen-week module, each participant conducts fieldwork in a selected target market, reporting back to the Irish Institute and host company on a weekly basis. As well as providing detailed progress reports identifying key contacts and action required, they also itemize expenditure and prepare an itinerary for the following week. Any action points are quickly followed-up by the company. An interim review and the fifth workshop in Louvain ensures that research is progressing according to plan and fine-tunes the concluding investigative phase. Having completed the fieldwork, each participant prepares a written report and verbal presentation for the final workshop.

Throughout the programme participants receive a modest training allowance and subsistence from FAS or DED. Each "host" company also contributes £3000 (\$5000) to cover the expenses incurred during field research. While FAS and DED in their capacity as training authorities expect that at least some of them will be offered permanent employment, there is no obligation on companies to offer permanent positions, or indeed, on participants to accept.

Evaluation

In an attempt to provide some tangible evidence of success, a recent study was undertaken among firms and participants involved in the first four programmes. Among the factors considered in the evaluation were the relationship of both parties on programme completion, company participation on subsequent programmes and export business obtained by the firm, or progress made towards this goal, as a result of their involvement. Qualitative factors such as improvements in export attitudes and usage of, and satisfaction with, government services were also investigated.

Perhaps the most tangible measure of success is to track the career progress of participants who have completed the programme. As can be seen from Table 3, a large number of them were subsequently employed by their "host" company in a permanent capacity. It must be assumed that participants were not hired for altruistic reasons, but rather because they had proved their worth and had a future role within the organization.

**FIGURE 3
EMPLOYMENT OF PARTICIPANTS
ON PROGRAMME COMPLETION**

Nature of Employment	1985-86 n=24 %	1986-87 n=24 %	1987-88 n=24 %	1988-89 n=27 %
Export Marketing in "host" company	8 (33)	10 (42)	16 (66)	17 (63)
Export Marketing in another Irish firm	7 (29)	6 (25)	3 (13)	4 (15)
Export Marketing in a European/US Firm	3 (13)	2 (8)	2 (8)	2 (7)
Other ¹	6 (25)	6 (25)	3 (13)	4 (15) ²

- 1 Includes participants who obtained employment in other functional areas, emigrated or are self-employed.
2 A number of companies/candidates were still negotiating contracts at time of writing.

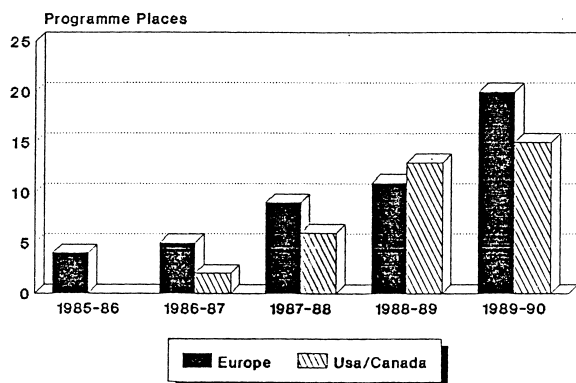
These figures do not tell the whole story. For example, in the 1987-88 programme there were nine companies from Northern Ireland. On completion, all nine participants were offered jobs, six accepted, three obtained better terms from other firms. In 1988-89, of eleven individuals from Northern Ireland, seven gained employment in "host" companies, four chose to accept other positions. Dissatisfaction with the programme and friction between firms and participants are, thankfully, relatively rare.

Also worthy of comment is that several participants from previous programmes were engaged by European or American companies, often as a result of contacts made during field research. This, while not an intended outcome, reflects their marketability. However, it is gratifying to note that the majority are retained by Irish companies and can thus continue to contribute to the national effort.

Company involvement in subsequent export programmes is also a useful measure of success, given that firms are unlikely to throw good money after bad. Since the University's initial involvement in 1986-87, offerings have been extended to include United States and Canadian initiatives and the total number of places available for Northern Ireland has risen dramatically (See Figure 4). A growing number of companies consider the programmes to be an integral part of their corporate development. Thus, for example, several firms are currently participating on the 1989-90 European programme for the second, third or even fourth time, systematically focusing on alternative markets in different years. Similarly, firms on previous European programmes are currently targeting the United States and Canada and vice versa. Indeed, of those Northern Irish firms involved in the 1989-90 programmes, sixteen have taken part in previous

years. Similar trends are evident among companies from the Republic of Ireland, although repeat involvement is lower largely as a result of competition for a limited number of places by a greater number of small firms.

FIGURE 4
PARTICIPATION ON PROGRAMMES BY COMPANIES
FROM NORTHERN IRELAND (1985-1990)



Measuring direct benefits to companies presents greater problems given the long-term nature of export development, the fact that downstream results are hard to quantify accurately and the difficulty of attributing success to one particular set of activities. With a programme currently in progress and the 1988-89 one only recently concluded, it is too early to draw firm conclusions, though all indicators are very positive. Consequently, evaluation will focus on presenting case histories of the nine companies and candidates from Northern Ireland who were involved in the 1987-88 European programme. The firms represent a typical cross-section of Northern Irish industry in terms of sector and company size (see Figure 5).

FIGURE 5
NORTHERN IRISH FIRMS ON THE 1987-88
EUROPEAN EXPORT PROGRAMME

Company	Size ¹	Sector	Target Market
A	200+	Service	Broad
B	-50	Food	West Germany
C	-50	Furniture	West Germany
D	100+	Clothing	West Germany
E	100+	Clothing	Italy
F	200+	Engineering	France
G	-50	Plastics	Holland
H	200+	Clothing	West Germany
I	-50	Plastics	Belgium/Holland/ West Germany

¹ Measured by number of employees

Case Histories

* Company A provides digital mapping and photogrammetry services to utilities and state or national governments. It has a long-established record in exports particularly to the Middle East but had little European success. During research a joint-venture partner was identified and together they have recently signed contracts worth over £3 million (\$5 mn.) The participant is now employed by the company in an export marketing capacity.

* Company B is a dairy marketing operation with export business in Saudi Arabia, the Gulf States and the Far East. Anxious to enter Europe in advance of 1992, the target market was West Germany. The firm has since launched a lactic drink in Germany market and is on target for sales of £2 million (\$3 mn.) in 1990. The participant is now general manager for West Germany.

* Company C produces furniture for disabled children used in hospitals, schools and in the home. Previous sales were restricted to the domestic market, West Germany was targeted during the programme. Research indicated that some re-design would be necessary in order to conform with German DIN standards. The firm has received type approval and a distributor identified during fieldwork has been appointed. It is yet too early to say what business will be gained, but the first year target is £250,000 (\$400,000). The participant is currently employed by the company in an export marketing capacity.

* Companies D and H both manufacture industrial clothing such as workwear and uniforms. Both focused on West Germany with disappointing results. Research indicated that the market was dominated by major European manufacturers and that they were not in a position to compete on price or service. It also highlighted the threat to their domestic sales in a post-1992 single market. Company H retained its participant and has since restructured operations substantially, it still has European ambitions. Company D retrenched in the domestic market, its participant is now international brand manager for a well known Scotch whisky.

* Company E, also in the clothing sector, design and produce high quality, exclusive ladies fashion. It focused on Italy and research identified a number of agents who wished to represent the firm. In the past year it has obtained small but significant orders for its spring and fall collections. Perhaps the most significant derived by the firm is exposure to a leading European fashion market. The participant is now an independent research consultant.

* Company F manufacture an extensive range of products for industrial and domestic applications, these include heating and ventilation systems. With only a small proportion of its business in export markets and the prospect of pan-European standards after 1992, it sought strategic alliances with similar firms in Europe. The participant is now responsible for developing the company's European strategy and is currently negotiating with a number of potential French "partners".

* Company G manufacture plastic tanks used for storing domestic and industrial heating oil and other chemicals. Given that these are relatively bulky and low value items, its objective was to seek licences for product line extension in the domestic market. Research focused on Holland, the participant, currently employed by the company, was able to identify a number of new product ideas which have since been successfully introduced in the British and Irish Markets.

* Company I produce dispense equipment for brewing and soft-drinks industries. It already had significant exports to Scandinavia and a joint-venture in the United States but wished to further expand European operations. During the programme the company obtained type approval for the West German market, a major accomplishment given the rigorous German food laws. Research in Belgium led to new product development on behalf of a major European brewery and total sales last year of over £120,000. The participant declined employment for personal reasons and is now employed by a major multinational in London. The company has just hired their participant on the 1988-89 USA/Canada programme.

These case histories demonstrate that companies can obtain significant, measurable and cost-effective benefit from the European Export Programme. It should be said that some would have developed these markets regardless, their involvement merely accelerated the process. On the other hand, others would not have attempted the exercise without the resources and support provided. Moreover, the case histories are fairly typical of outcomes for companies from the Republic of Ireland, which are not reported in this paper, and of expected results from the 1988-89 programme. Participants held the unanimous view that the experience had accelerated their career prospects, citing direct access to senior management during the programme as a major feature in their personal development.

Discussion

Many features and benefits of the European Export Marketing Programme are clearly discernible. Small firms obtain additional resources at modest cost and avail of advice given by programme consultants at each stage of the export development process. This intensive support enables them to formulate viable long-term strategies for new markets without over-extending existing resources or impeding the day-to-day activity of the company.

In the most favourable scenario, the company will develop new markets, identify (and hire) a highly-capable employee with management potential, become more aware of the central role of strategic planning and learn how to derive maximum benefit from government services to exporters. Moreover, in retaining the participant they acquire in-company foreign language expertise so essential to future export development. At worst, an unsuccessful attempt to develop new markets will force the firm to review their overall strategy and prevent them from investing substantial resources in a venture which has little or no chance of success.

From the participants perspectives, skills developed during the programme will either make them indispensable to the "host" company or highly marketable to other potential employers. The chance to get intensive and structured training in a supportive environment, be exposed to the social and business culture of new markets and apply theory in practice broadens their perspective and prepares them for international careers.

At a macro-level, the planned expansion of export management skills will, over time, lead to greater competitive competence, expand the base of active and committed exporters and provide trained and experienced practitioners to service their needs. Strong support from Export Promotion Agencies indicates that they consider the programmes to be an ideal vehicle in ensuring that companies use services more frequently and to greater effect. This is borne out by a noted improvement in attitudes towards exporting among most firms involved in the programme, by a more comprehensive use of government export services and by a higher reported level of satisfaction with provisions among companies in the study.

While discussion has focused on the European programme, it should also be noted that it has been a model for similar initiatives targeting the United States and Canada which have had the same broad objectives and outcomes. This

demonstrates the transferability of the model in terms of market focus. It also suggests that the programme could be adapted by other countries seeking to encourage greater small-firm involvement in export markets and wishing to develop the necessary managerial competence.

Conclusions

This paper has described and evaluated the European Export Marketing Programme which attempts to assist small Irish companies to develop export markets. It also seeks to improve the overall level of international marketing management competence in Ireland. It is the author's contention that the European programme and others modelled on it are achieving these objectives and that they concur admirably with Hoffman's views;

"One illusion is that you industrialize a country by building factories. You don't. You industrialize a country by building markets."

(Thorelli, 1973, p 323)

In seeking to build markets it is also important to consider the quality of the materials used.

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COMPARING TWO INVOLVEMENT SCALES :
AN APPLICATION OF STRUCTURAL AND CONFIRMATORY FACTOR ANALYSIS

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ABSTRACT

This article compares two involvement scales : the Personal Involvement Profile scale (Kapferer and Laurent) and the Derived Personal Involvement Inventory scale (Mac Quarrie and Munson). 405 people completed a questionnaire concerning their involvement with HI-FI equipment as well as their behavior towards such equipment. The results, analysed through structural and confirmatory factor analysis, show the superiority of the Kapferer-Laurent scale.

INTRODUCTION

Involvement has been a major subject of proper measurement attempts, ranging from product specific scales (Summers 1970 ; Sharpe 1971) to more global scales (Kapferer and Laurent 1985 ; Zaichkowsky 1985). This proliferation of scales renders difficult the comparison of research conclusions. It is therefore necessary to filter and attempt to unify scales measuring involvement, beyond differences in research scope or in cultural factors.

Kapferer-Laurent's (1985) and Zaichkowsky's (1985) scales have captivated the interest of the research community for two main reasons : Firstly, the complete scale-construction procedure followed by the authors (Churchill 1979) provides a credible foundation for the scales proposed. The second reason is that, being general scales, they can be adapted to most product categories.

It is however impossible to compare these scales chiefly because the IPP is a multidimensional scale whereas the PII is not. We therefore used a derived version of the PII, the DPII proposed by Mac Quarrie and Munson (1987).

BACKGROUND

The Kapferer and Laurent's scale

After a thorough literature review of past research, both in the U.S. and in France, Kapferer and Laurent conclude that involvement is a state of mind and so defies direct observation. They propose five antecedents to involvement (Laurent and Kapferer 1985, p. 43):

1. The perceived importance of the product.
2. The risk associated with a particular product purchase (two dimensions).
3. The symbolic or sign value of the product.
4. The hedonic value of the product.

In the place of one scale composed of these five dimensions, the authors created a

subscale for each dimension, thus obtaining a multiple index of involvement levels. Sample items of that scale are presented in [table 1](#).

Numerous studies have demonstrated high reliability, high predictive and content validity for this scale (Kapferer and Laurent 1984, 1985a, 1985b ; Laurent and Kapferer 1985, 1986 ; Roehrich and Valette-Florence 1986, 1987 ; Valette-Florence 1988) :

- An α coefficient beyond .80 has always been obtained for the scale and its subscales.
- The scale has shown a good predictive validity in its relationship to different criterions.
- Content validity has been asserted through factor analysis, either traditional or confirmatory. Each time, the subscales were clearly delineated, excepted in some instances, where pleasure and importance in one hand, or importance and risk in an other hand, loaded on a single factor.

Moreover, the subscale structure of the IPS makes its use highly flexible, as it enables the researcher to determine which facets are most linked with the criterion. And finally, this structure permits a product classification, as did Kapferer and Laurent (1985 a).

This scale appears to be a reference in the measurement of involvement, in the sense that it can be used as a basis for comparison with other scales.

The Mc Quarrie and Munson's scale

Recognizing the methodological quality of the work performed by Zaichkowsky, the authors wonder why she proposed such a different scale : the PII is aimed at measuring involvement *per se*, whereas the IPP measures its antecedents ; the PII is designed to be **unidimensional**, whereas the IPP is **multidimensional**. This led Mac Quarrie and Munson modified the PII in order to tap the structure of the IPP arguing that it was risky to translate items of a scale. Item sample of their scale is presented in [table 1](#). From the original twenty items of Zaichkowsky, Mac Quarrie and Munson. Finally obtained a 14 item pairs scale, which they tested against the original PII. The results appeared to satisfy Mac Quarrie and Munson : their scale showed a high overall internal consistency just did each of the sub-scales. A factor analysis showed three dimensions underlying the inner structure of the scale :

- Product importance (5 pairs of items)
- Pleasure and sign (6 pairs of items)
- Risk (3 pairs of items)

The DPII showed the same results as the PII, although the results were smoother. Finally, the predictive value was tested using *ad hoc* measures of information research process, complexity of choice process, brand commitment and differentiation between brands. The results obtained encourage further investigations on this scale.

However, although designed to measure the same concept, the DPII and the IPP show enough differences to make a comparison interesting.

THE STUDY

Translation of Mac Quarrie and Munson's scale

We took the risk of translating the DPII scale through the conventional method.

1. A first translation from American to French
2. Have the translation verified by an American
3. Have it re-translated from French into American in order to verify the consistency of the original items.

Questionnaire

The questionnaire used for this research contained three measures : the IPP, the DPII and a measure of behavior concerning HI-FI equipment and its use, i.e. : number of stereo sets owned, number of records owned, value of the main stereo set, elements of that stereo set. We must point out that this study was part of a more general research project ; there were therefore other measures in the questionnaire.

Data collection

Data were collected by students in a market research course. 437 questionnaires were collected on a convenience sample but only 405 were usable ; the 32 rejected questionnaires were discarded because of incomplete data and because of doubts on the credibility of the responses.

Statistical Analysis

The validity literature suggests that we may compare the scales on their trait validity, estimated through the following criteria.

- Reliability, i.e. «the degree to which they are free from random error» (Peter and Churchill, 1986).
- Internal structure : we must verify that these scales effectively contain the dimensions they are designed to reveal. As stated by Peter (1981) : «a factor analytic investigation of the dimensionality of a scale is another aspect of trait validity».
- Convergent validity, which pertains to the correlation between two different measures purporting to measure the same construct» (Peter and Churchill, 1986, p. 4).
- Discriminant validity, which is indicated by «predictably low correlations between

the measure of interest and other measures that are supposedly not measuring the same variable or concept» (Heeler and Ray, 1972, p. 362).

Recently, the introduction of structural equation models (Bagozzi, 1980) changed the approach of validity assessment and made it easier and more sound, as it allowed to differentiate between systematic and random error. The results presented below illustrate this new approach.

RESULTS

The IPP and DPII scales are both built to tap the multidimensionality of involvement. We therefore must ascertain first their specific structure separately. The exploration of the structure of the scales has been made through the use of Lisrel VI (Joreskog and Sörbom, 1983).

Structure of the IPP

Following Kapferer and Laurent's previous studies, we specified the model presented in [figure A](#). Goodness of fit indices show a reasonable fit to the data. However, the correlations between latent variables ([table 2](#)) b show a very high coefficient (0.85) between the importance and pleasure dimensions. This suggests that the two dimensions can be confounded into a single one. We therefore specified such a model. The difference in χ^2 ($\Delta \chi^2 = 81.67$, $df = 4$) shows that the best model is the first one where pleasure and importance items give rise to **two separate and distinct factors**.

Structure of the DPII

In respect of the results presented by Mac Quarrie and Munson, we first specified a **three** dimensions structure. The result was highly deceptive : one item of the «importance» dimension did not load on any factor ; the two «sign» items, originally related to the «sign-pleasure» factor, loaded poorly on that factor. We discarded the unsatisfactory «importance» item and specified a four dimension/thirteen items structure model (importance, pleasure, risk probability and sign). The goodness of fit indices of this last model were highly satisfactory $\chi^2 = 161.77$ with 59 d.f. ; GFI = 0.94 ; AGFI = 0.91 ; RMR = 0.052.). However, the observation of the correlations revealed that the importance and pleasure dimensions were correlated at .99 ; this suggested to test the final model presented in [figure B](#) where these highly correlated dimensions are unified. The goodness of fit indices for this model are nearly identical to those obtained for the preceding model, showing that these models are similar $\Delta \chi^2 = 3.70$; with 3 d.f.) This led us to select the three dimension model (in accordance to the parsimony principle). We finally obtained three distinct dimensions = importance/pleasure, risk and sign ([table 3](#)), which are not those originally presented by Mac Quarrie and Munson.

Reliabilities of the scales

For estimating the reliability of both scales, we calculated the coefficient of latent structure, according to the procedure proposed by Werts, Linn and Joreskog (1974). This procedure makes a more precise evaluation of random error than the traditional coefficient. Table 4 presents global as per dimension coefficients.

The results are slightly in favour of the IPP : the average internal consistency is higher than the DPII's, and its risk and sign dimensions are more reliable than those of the DPII. The only dimension on which both scales obtain equivalent results is the importance/pleasure dimension.

Convergent validity

Table 5 indicates that convergent validity per se is achieved on a global basis, since all trait-factors show high and very significant loadings in model 4. The average variance extracted in the latent constructs is around 0.5 for all dimensions, but the IPS outperforms the DPII (0.65 vs 0.55).

The DPII has been constructed to measure, in essence, the same constructs as those of the IPP. In order to test the convergence of their dimensions, we specified the model 3 depicted in Figure C. The corresponding goodness of fit statistics are very deceptive, indicating that the structure is inappropriate. The most obvious solution is to postulate the model 4 (figure D), where each facet of each scale taps distinct, although correlated, factors. The goodness of fit statistics indicate an acceptable model (GFI = 0.859 ; AGFI = 0.826 ; RMR = 0.056). As models in figure C and D are nested, one can measure the improvement obtained by moving from model 3 to model 4 ($\Delta\chi^2 = 350.93$ df = 12), showing that the scales do not converge at the global level.

At the trait level, one can test the convergent validity through a serie of sequential chi-square differences applied on model 4 (figure D). We then first specified that the «importance/pleasure» -dimension of each scale correlated to unity, and made a comparison between χ^2 's obtained for that model and for the initial model. As shown in table 6, this led to a χ^2 difference of 205.92, with 1 degree of freedom. This indicates that the initial model is better : IPP importance/pleasure facet is not equivalent to DPII importance/pleasure one. We ran a similar test for the three other facets, and found that none were identical from one scale to one another. This led us to conclude that the facets measured by these scales are not equivalent.

Discriminant validity

Discriminant validity at the trait level can be asserted by a MTMM matrix (table 8), where correlation coefficients are relative to traits themselves, not to their measures.

This table reveals discriminant validity for each of the three traits on both scales. The coefficients on the diagonal + 0.829 ; - 0.784 ; - 0.810 are superior to those of any elements of the «heterotraits-monomethod» and «heterotraits-heteromethods» triangles). Finally the mean correlation between traits (respectively 0.28 and 0.426 for the IPS and DPII). Shows that the IPS dimensions are better isolated than those of the DPII.

DISCUSSION AND CONCLUSION

The tests suggest the following comments.

- The confirmatory factor analysis and the reliability coefficients indicated that the inner structure of the DPII appears therefore to be of lesser quality than the IPS.
- Both scales have an acceptable level of convergent validity when considering the items-traits relationship. However, these indices were better for the IPP than for the DPII.
- It has been shown that, although sharing the same denomination, each trait-factor of a scale was different from the corresponding trait factor of the other one. Thus it was impossible to consider these trait-factors to be identical.
- On the other hand, discriminant validity seems acceptable for both scales. Nevertheless, we have shown that IPP traits are more precisely delineated than those of the DPII.

This french test leads to the conclusion that the IPP seems to be superior to the DPII. A U.S test is now needed.

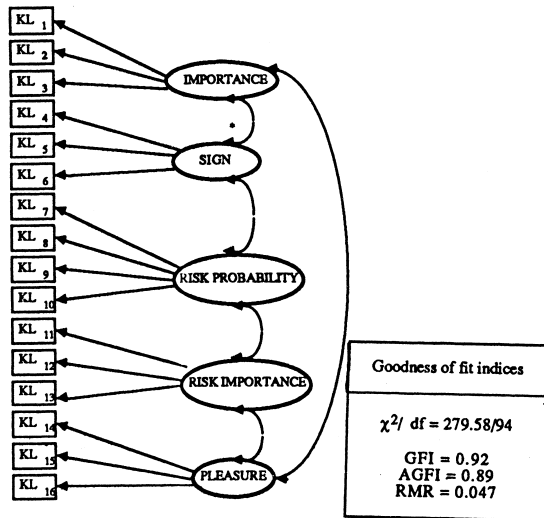
Table 1
Structure of the IPS

Facet	IPS	DPII
Importance	_____ is very important to me	important/unimportant
Risk consequences	When you get a _____, it's not a big deal if you make a mistake	
Risk probability	When you get a _____, it's hard to make a bad choice.	Not risky/risky
Pleasure	I can't say that I particularly like like _____.	Unexciting/exciting
Sign	You can really tell about a person by the _____ she picks ou	Tells me about a person shows nothing

Table 2
Correlations between latent variables for IPS' five dimension structure

	IMPORTANCE	SIGN	RISK 1	RISK 2	PLEASURE
IMPORTANCE	1.000				
SIGN	+ .314	1.000			
RISK 1	- .439	- .100	1.000		
RISK 2	- .444	- .159	+ .187	1.000	
PLEASURE	+ .849	+ .267	- .303	- .427	1.000

FIGURE A
IPS STRUCTURE : MODEL 1



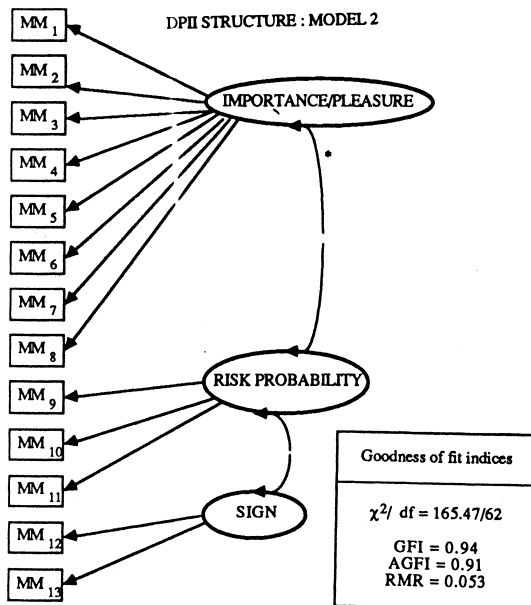
* Others ξ 's correlations are not shown for the sake of clarity.

Table 3

Correlations between latent variables for DPII three dimension structure

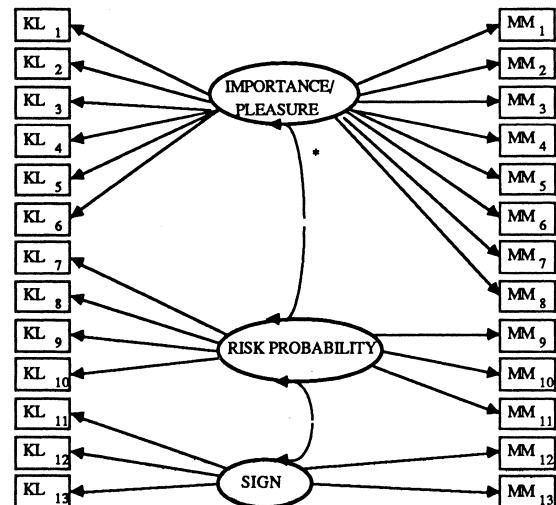
	IMPORTANCE/ PLEASURE	RISK	SIGN
IMPORTANCE/ PLEASURE	1.000		
RISK	-.399	1.000	
SIGN	-.540	-.240	1.000

FIGURE B
DPII STRUCTURE : MODEL 2



* Others ξ 's correlations are not shown for the sake of clarity.

Figure C
IPS AND DPII SCALES : IDENTICAL STRUCTURE (MODEL 3)



Goodness of fit indices

$\chi^2 = 1117.35$ (df = 296)
GFI = 0.804
AGFI = 0.767
(RMR = 0.071)

Table 4

Latent variables reliabilities

	IPS *	DPII
IMPORTANCE/PLEASURE	0.84	0.87
RISK IMPORTANCE	0.71	-
RISK PROBABILITY	0.83	0.71
SIGN	0.93	0.60
AVERAGE	0.83	0.73

Note : * : For the IPS, the coefficients for the importance and pleasure dimensions when taken separately, are respectively 0.86 and 0.82.

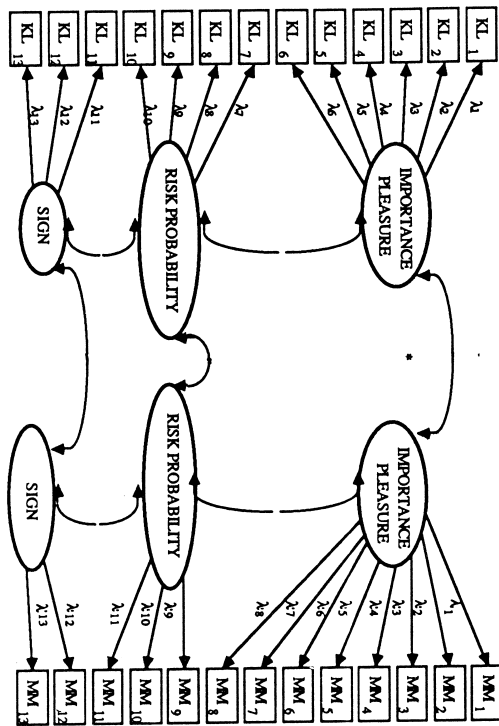
Table 5

Convergent Validity for model 4

Latent variables	Maximum Likelihood Estimates		t-values		Average variance extracted	
	IPS items (λ)	DPII items (λ)	IPS items	DPII items	IPS	DPII
IMPORTANCE/PLEASURE	0.845	0.771	20.56	17.87	0.57	0.48
	0.863	-0.550	21.26	-11.52		
	-0.676	0.617	-14.96	13.26		
	-	0.789	-	18.46		
	0.805	0.759	19.09	17.46		
RISK PROBABILITY	0.600	-0.705	12.85	-15.76	0.55	0.46
	0.719	0.720	16.25	16.20		
	-	0.597	-	13.12		
	0.694	0.645	14.92	12.85		
SIGN	0.718	0.712	15.61	14.92	0.82	0.59
	0.752	0.646	16.60	12.87		
	0.795	-	17.93	-		
Average					0.65	0.55

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FIGURE D : IPS and DPII SCALE : SEPARATE STRUCTURE (MODEL 4)



* Others ξ 's correlations are not shown for the sake of clarity.

Goodness of fit indices	
$\chi^2 = 766.42$ (df = 284)*	
GFI = 0.859	
AGFI = 0.826	
RMR = 0.056	

Table 6

Equivalence of traits as measured by both scales

SUPPOSEDLY PERFECTLY CORRELATED FACETS	$\Delta \chi^2$ (df = 1)
IMPORTANCE/PLEASURE	205.92 (p < 0.001)
RISK PROBABILITY	49.65 (p < 0.001)
SIGN	42.94 (p < 0.001)

* $\Delta \chi^2$ shows the improvement of fit between one model where the corresponding latent variables correlate to unity and another one where they can correlate freely.

Table 7

Correlations between the IPS and DPII latent variables

	IPS-IMPORTANCE- PLEASURE	IPS-RISK	IPS-SIGN	DPII-IMPORTANCE- PLEASURE	DPII-RISK	DPII-SIGN
IPS-IMPORTANCE- PLEASURE	1.000					
IPS-RISK	-0.406	1.000				
IPS-SIGN	0.309	-0.132	1.000			
DPII-IMPORTANCE- PLEASURE	-0.829	0.417	-0.383	1.000		
DPII-RISK	0.420	-0.784	0.170	-0.395	1.000	
DPII-SIGN	-0.367	0.215	0.816	0.540	-0.314	1.000

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INDUSTRIAL MARKETING

EFFECTS OF MOOD AND AROUSAL ON INDUSTRIAL BUYER EVALUATION OF
SALESPERSONS, SALES PRESENTATIONS, AND VENDORS

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Abstract

This article reports the results of an experiment which was conducted in a field setting to test the effects of mood state and arousal level on industrial buyers' evaluations of salespersons, sales presentations, and vendors. Both multivariate and univariate procedures were used to analyze data from the experiment which employed a repeated measures design and industrial buyers as subjects. Results support the conclusion that the extent to which mood influences evaluations is dependent upon arousal level. Implications of these results for practitioners and researchers are discussed.

Introduction

Recent research suggests that mood states significantly influence the processes whereby people attend to, evaluate, remember, and act upon information presented in persuasive communications. To date, however, very little research attention has been given to the effects of mood on purchase decision making in industrial settings.

This lack of research attention exists in spite of the fact that established models of industrial buyer behavior recognize the potential impacts of personal level factors on purchase decision outcomes (Webster and Wind 1972, Sheth 1973, Weitz 1979, Weitz 1981).

Given the importance of rational decision making in industrial purchase situations and the potential for personal level factors to bias decision outcomes, it is desirable that mood effects be better understood. This article reports the results of a study which investigated the effects of mood on industrial buyer responses to technical sales presentations.

Background

Recent work in cognitive psychology provides the conceptual basis for the major premises of this study; 1) that industrial buyer perceptions are biased by their mood states, and 2) that the biasing effects of mood are dependent upon the buyer's arousal level.

Mood Effects

Moods are low intensity generalized affect states that are temporary in nature and can be distinguished from other types of feeling states such as emotions which are more intense, more enduring, and often focused on a specific object (Gardner, 1985). Studies by Veitch and Griffitt (1976), Isen and Shaker

(1982), and Schwarz and Clore (1983) produced evidence confirming the widely held belief that mood biases evaluations in mood-congruent directions. In each of these studies, decision makers in good moods evaluated objects more favorably than decision makers in bad moods. Studies have also indicated that moods can influence decision outcomes even when they are so low in intensity that they escape the decision maker's notice (Clark and Isen, 1982).

Arousal Effects

While numerous studies have shown that mood influences the direction of evaluative judgments, there is also evidence that mood effects may depend upon the buyer's arousal level. Arousal is a physiological state which has been defined as "stimulation of the autonomic nervous system (ANS) and endocrine system" (Simon, 1982). While arousal may be accompanied by measurable physical effects, such as changes in pupil dilation, galvanic skin response, breathing rate, pulse, and heart rates, it also facilitates a number of mental processes of interest to marketing researchers. It is known, for example, that arousal covaries with attention, and it has been suggested that arousal can intensify cognitive elaboration of material which is attended to (Saliagas, 1984). It is also known that arousal can facilitate access to particular areas in long term memory (LTM), and it has been suggested that arousal may provide a link between feeling states, judgments, and behavior (Simon, 1982; Clark, 1982). Studies by Bartlett, Burleson, and Santrock (1982) and by Clark, Milburg, and Ross (1983) indicate that mood is more likely to bias judgments made by highly aroused evaluators than those made by evaluators experiencing little arousal. Some theorists have even suggested that there may be minimum levels of arousal below which mood has no influence on evaluative judgments and inference making (Cacioppo and Sandman, 1981).

Research Questions and Rationale

While these effects have been demonstrated in laboratory settings, many of which involved the use of student subjects and direct manipulations of mood and arousal. The issue for this study was whether similar effects could be expected, in the absence of direct mood and arousal manipulations, among adult industrial buyers in field settings. Studies on the antecedents of arousal led us to expect that they would. Berlyne (1960) was able to show that arousal is influenced by information novelty and complexity. More recently, Saliagas (1984) demonstrated that arousal varies as a function of the receiver's perception that the communicated information is personally relevant. Since industrial sales presentations are often made to groups composed of individuals representing dif-

ferent departments within the buying organization, they frequently contain information which is more relevant to some individuals than others. A message stressing technical performance information would likely be seen as more relevant to the design engineers attending the presentation, than to the finance personnel attending the same presentation. Given differences in functional training and the frequency with which buyers from different departments are exposed to arguments, it also seems reasonable that buyers from different departments would vary in their perceptions of presentations' novelty and complexity.

In summary, current literature provides a basis for the two major premises of the study. First, it suggests that industrial buyers' evaluations of sales presentations, salespersons, and vendors biased by their mood states. Secondly, it suggests that mood has a stronger influence on evaluations made by buyers whose arousal levels are high than those whose arousal levels are low.

Method

An experiment was conducted in order to empirically test these propositions. It employed a repeated measures design which treated sales presentation information content as a three-level within-subjects factor and buyer's mood and arousal levels as grouping variables. The study investigated effects of these variables on multiple dependent measures. Examination of mood and arousal effects was operationalized as a set of multivariate and univariate tests for significance of arousal group and mood group main effects and interactions. Subject groups were defined by median splits on mood and arousal scores.

Setting and Product Class

The study was conducted in a field setting. Data collection took place at facilities of fourteen manufacturing firms with 500 or more employees. The firms which participated in the study are located in the Southeastern U.S. and represent a cross-section of Standard Industrial Classification (S.I.C.) groups.

An industrial lighting system was chosen as the product for consideration in this study. Industrial lighting system purchases require decision makers to evaluate technical, financial, and vendor capability criteria, and typically involve buying task groups composed of representatives from the buying firm's engineering, finance, and purchasing functional areas.

Subjects

Operating executives in participating firms were contacted and asked to provide, as subjects, employees in their firm whom they would trust to gather information and make judgments about; 1) technical aspects of a lighting system purchase, 2) financial aspects of a lighting system purchase, and 3) selecting a lighting system

supplier. Seventy-six individuals were selected in this manner but, because of other job obligations, some were not able to attend an entire session and provide responses to all three of the presentations. These subjects were eliminated from consideration, leaving sixty-eight sets of responses which were considered to be usable.

Experimental Procedures

Experimentation sessions with the buying groups took place on site at facilities of the participating firms. Following an introduction and preliminary briefing, a measurement was made of each subject's mood using scales developed by Peterson and Sauber (1983). According to this scale, high scores indicate "good" moods and low scores indicate "bad" moods. Reliability Coefficient Alpha for mood scale items was 0.79.

Following the mood measurement, subjects listened to three different audio-taped sales presentations stressing technical, financial, or purchasing centered arguments concerning an industrial lighting system purchase. The order in which the presentations were played was randomized across the fourteen sessions.

Scripts for the taped presentations were based on information gathered in a series of interviews with engineering, finance, and purchasing personnel in representative buying firms, as well as design specialists with a national lighting equipment manufacturer, and the sales staff of a regional electrical equipment distributor.

Arguments which had been identified as being of interest to buyers with different functional responsibilities were separated into different presentations. The "Engineering" presentation consisted of arguments structured as technical descriptions of the benefits of product purchase. The "Finance" presentation contained arguments describing financial benefits to be derived from product purchase. The "Purchasing" presentation stressed the attractiveness of the hypothetical vendor with respect to important supplier attributes.

Scripts were pre-tested on site at manufacturing firms similar to those targeted for the final study, modified in accordance with pre-test subject reactions, and subsequently recorded by a professional radio announcer.

Because of the likelihood that arousal would be influenced by the information content of the sales messages, arousal was measured at the completion of each of the three presentations using the D.E.S. (Differential Emotion Scale) developed by Izard (1972). With this scale subjects reported their degree of arousal using adjectives such as "stimulated", "spirited", and "alert" across nine levels of variation ranging from "not at all" to "very much." High scores are, therefore, indicators of higher arousal levels than low scores. Reliability Coefficient Alpha was 0.91 for these ten items.

Following each presentation, buyers made evaluations of the salesperson, sales presentation, and vendor company. After indicating their responses to the last presentation, subjects completed a classification information section consisting of questions regarding their age, education level, department affiliations, years of employment, etc. They were then thanked and de-briefed.

Response Variables

Response variables of interest in the study were buyers' evaluations of: 1) the sales presentation, 2) the salesperson, and 3) the vendor. All three types of evaluations were measured using bi-polar adjective scales developed by Leigh (1981). Using these scales, subjects rated the presentation on criteria such as believability, informativeness, and persuasiveness. They rated the salesperson on criteria such as trustworthiness, dependability, and friendliness, and rated the vendor on criteria such as reputability, reliability, and service orientation. Internal consistency was high for each of the three scales. Coefficient Alphas for the sales presentation, salesperson, and vendor scales were 0.80, 0.89, and 0.89 respectively.

Results and Discussion

Multivariate analysis of variance procedures were used to test for overall impact of mood and arousal main effects and interactions on the set of dependent measures. Results indicated that the arousal main effect ($p < 0.05$ or better) and the mood by arousal interaction effect ($p < 0.05$ or better) had a significant impacts the favorability of subject evaluations in each of the three presentations. The expected mood main effect, however, was significant ($p < 0.002$) only for the purchasing presentation.

A univariate ANOVA was conducted in order to examine the magnitude of these effects more closely. This was followed by pair-wise t-tests which allowed us to examine the direction of significant differences. Comparisons were made of four groups of subjects which were classified according to median splits on the arousal and mood scores. These groups were designated HH, HL, LH, and LL with the first letter indicating arousal score group and the second letter indicating mood group. The HL group, for example, was comprised of those subjects above the median on the arousal measure and below the median on the mood measure.

Results supported the expectation that industrial buyers evaluations of salespersons are mood congruent and that the magnitude of mood effects are dependent upon arousal. Table 1 shows mean salesperson evaluation scores for the four groups.

Results of pairwise comparisons indicate that subjects in the HH group evaluated the salesperson more favorably than subjects in the HL, LH, and LL groups. Observed differences were large enough to be significant at the 0.01 level

in the engineering and purchasing presentations, and at the .05 level in the finance presentation.

TABLE 1
SALESPERSON EVALUATION
(By Arousal and Mood Group)

Arousal	Mean	Significance Levels for		
& Mood	Evaluation	Pairwise T-Tests ³		
Group ¹	Score ²	HH	HL	LH
Engineering Presentation				
HH	41.57 (1.26)	HH		
HL	36.94 (1.11)	HL	0.0076	
LH	33.27 (1.22)	LH	0.0001	0.0290
LL	36.00 (1.03)	LL	0.011	0.5346
				0.0908
Finance Presentation				
HH	39.83 (1.86)	HH		
HL	34.11 (1.48)	HL	0.0189	
LH	32.35 (1.56)	LH	0.0031	0.4186
LL	34.22 (1.52)	LL	0.028	0.9562
				0.3945
Purchasing Presentation				
HH	41.85 (1.50)	HH		
HL	35.89 (1.24)	HL	0.0002	
LH	34.60 (1.39)	LH	0.0008	0.4900
LL	32.50 (1.21)	LL	0.0001	0.0541
				0.2491

1. N=17 for each of the four groups.

2. mean standard errors are shown in parentheses.

3. for the null hypothesis of no differences between groups.

A similar pattern emerged in subject evaluations of the sales presentations. Statistical criteria, however, were not as strong as those for the salesperson evaluations. Mean scores presented in Table 2 show that for all presentations, HH subjects evaluated the presentation more favorably than HL, LH, and LL subjects. Observed differences between HH and LL evaluations were significant at the 0.001 level for all three presentations. HH and LH differences were significant at the 0.001 level for the finance presentation, and at the 0.05 level for the engineering presentation. HH and HL differences met the 0.05 significance criterion only for the finance presentation.

Results summarized in Table 3 show that the arousal by mood interaction had a similar effect on evaluations of the vendor. The HH group rated the vendor more favorably than did other groups in response to all three presentations. Differences in rating favorability between the HH group and the HL, LH, and LL groups were large enough to be significant at the 0.01 level or better for the purchasing presentation, and at the 0.05 level or better for the finance presentation. Differences between HH and the LH and LL group ratings were significant at the 0.01 level for the engineering presentation.

Conclusions and Limitation

The basic premises of the study are supported. The study offers strong empirical evidence that

TABLE 2
SALESPERSON PRESENTATION EVALUATIONS
(By Arousal and Mood Group)

Arousal & Mood Group ¹	Mean Evaluation Score ²	Significance Levels for Pairwise T-Tests ³		
		HH	HL	LH
Engineering Presentation				
HH	33.50 (1.31)			
HL	30.83 (1.15)	0.1310		
LH	29.27 (1.26)	0.0230	0.3630	
LL	28.71 (1.07)	0.0061	0.1822	0.7395
Finance Presentation				
HH	35.92 (1.55)			
HL	30.89 (1.23)	0.0135		
LH	28.59 (1.30)	0.0006	0.2017	
LL	28.61 (1.26)	0.0005	0.1995	0.9900
Purchasing Presentation				
HH	34.85 (1.49)			
HL	31.84 (1.23)	0.1259		
LH	31.46 (1.39)	0.1024	0.8406	
LL	26.15 (1.20)	0.0001	0.0016	0.0052

1. N=17 for each of the four groups.
2. mean standard errors are shown in parentheses.
3. for the null hypothesis of no differences between groups.

TABLE 3
VENDOR EVALUATION
(By Arousal and Mood Group)

Arousal & Mood Group ¹	Mean Evaluation Score ²	Significance Levels for Pairwise T-Tests ³		
		HH	HL	LH
Engineering Presentation				
HH	37.93 (1.45)			
HL	34.11 (1.28)	0.0528		
LH	30.67 (1.40)	0.0060	0.0743	
LL	32.52 (1.18)	0.0053	0.3662	0.3155
Finance Presentation				
HH	38.67 (1.67)			
HL	33.74 (1.33)	0.0241		
LH	30.65 (1.40)	0.0005	0.1144	
LL	33.22 (1.36)	0.0141	0.7875	0.1926
Purchasing Presentation				
HH	41.20 (1.52)			
HL	35.89 (1.25)	0.0037		
LH	34.65 (1.42)	0.0011	0.5170	
LL	32.50 (1.22)	0.0001	0.0566	0.2528

1. N=17 for each of the four groups.
2. mean standard errors are shown in parentheses.
3. for the null hypothesis of no differences between groups.

variations in encountered (rather than manipulated) buyers' mood and arousal states are sufficient to influence purchase related judgments. This evidence indicates that evaluations are influenced by industrial buyers' moods and that the effects of mood are dependent upon arousal. Results were consistent with the expectation that aroused buyers in positive mood states would evaluate salespeople, presen-

tations, and the vendor more favorably than buyers in less positive mood states provided that the level of arousal was high.

In spite of the clear demonstration of the effects of mood and arousal on evaluations, the study had a number of limitations which suggest that these results should be interpreted cautiously. First, the results do not provide any indicators as to the relationship between mood and arousal and their antecedents. Literature offers some support for these apparently conflicting positions. It suggests that a buyer listening to arguments tailored to his/her own functional area would experience heightened arousal because of the personal relevance of the message, but that lowered arousal because of familiarity with the topic. This issue was not addressed in the study, nor was consideration given to the question of how mood states arise. Secondly, there may have been demand and self-selection effects. Fairly sophisticated industrial employees were asked to assemble, report their mood levels, listened to recorded messages, and then asked to report their arousal levels and evaluations. Some may have developed their own ideas about the purpose of the study and responded accordingly. Finally, the study considered only one product category. To the extent that buyers' arousal levels were influenced by the novelty and technical complexity of messages about industrial lighting systems, it is possible to expect that different levels of arousal would occur with other product classes.

These findings and limitations suggest the need for further research to deepen understanding of the factors which influence mood and arousal in industrial settings and to relate these effects to variables controllable by marketers.

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PRESCRIPTIONS TO NARROW A CONSUMER/ORGANIZATIONAL BUYING
BEHAVIOR LOGICAL INCONSISTENCY

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ABSTRACT

This paper "re-visits" and extends a point made by Johnston and Bonoma (1977) that a logical inconsistency exists between behavior research. Although the organizational market is larger than the consumer market in dollar purchases, organizational buying behavior has failed to receive the degree of academic attention allocated to consumer buying behavior. Two streams of inquiry are proposed to remedy this logical inconsistency. The first stream of inquiry argues that neither viewing the unit of analysis as an individual nor viewing the unit of an analysis as the organization captures the essence of the organizational buying process. Instead, it is asserted that a more fertile ground for organizational buying theory discovery and justification may be found through use of a combinative process. Secondly, the paper advocates the importance of neglected individuals internal factors to the study of organizational buying behavior. Lastly, a normative model of organizational buying behavior is created which incorporates individual internal factors.

Introduction

The problem dealt with by this paper concerns a logical inconsistency endemic to the study of organizational buyer behavior. Johnston and Bonoma (1977) scrutinized this "industrial-consumer" logical inconsistency more than a decade ago. The authors asserted that although the organizational market represents the largest market in the United States (in terms of dollar sales), it lacks the massive academic research program of the consumer market. The authors propose that: 1) there has been an academic neglect of the area of organizational buying behavior and 2) this neglect is particularly evident when the importance of the organizational market is compared relative to the importance of the consumer market. Exemplifying the dual points, Kotler (1980) opines that "More industrial marketing goes on than consumer marketing, although many people have the opposite impression" (p. 171).

There are indications that little has changed since Johnston and Bonoma first raised the issue. A fall, 1980 *Journal of Marketing* editorial by Webster and Wind referred to industrial marketing as a "sleeping giant." Furthermore, a suggestion was entertained that many advances in organizational buying research have been developed by the private sector and that a scarcity of good academic research exists concerning organizational buying behavior. The editorial urges academicians to produce a greater amount of scholarly research concerning organizational buying behavior.

Criticism has also been leveled at the style of organizational buying research. Johnston and Spekman (1982) assert that the extant literature has contributed only marginally to our understanding of organizational buying behavior" (p. 133). The same authors argue (1986) that "both industrial marketing practitioners and academics sense an uncertainty to use the current models of organizational buying behavior for planning industrial marketing activities" (p. 461). Furthermore, Johnston and Spekman (1986) suggest that many researchers believe that our descriptive knowledge base of organizational buying behavior is strong. They further suggest that our descriptive intelligence far exceeds our knowledge of normative models and strategies. If this argument is accepted, our lack of normative intelligence proves to be a powerful indictment of previous research.

Unit of Analysis

An indication that the study of organizational buying behavior is not a well developed field of study is the fact that an argument still exists concerning the appropriate unit of analysis. The systems approach to organizational buying behavior (including Robinson, Faris and Wind's (1967) BUYGRID, The Webster and Wind (1972) Model of Organizational Buying Behavior, the Sheth (1973) Model of Industrial Buying Behavior, Structural Role Analysis (Calder 1977), the Industrial Response Model (Choffray and Lilien 1978) has concentrated on the organization as the unit of analysis in organizational buying behavior. The basic assumption of the systems models is that "the whole is greater than the sum of its parts" (Nagel 1961). Therefore, the behavior of the organization should not be considered to equal the summation of the behaviors of the individuals operating within the decision making group.

Johnston and Bonoma (1977); Bonoma and Johnston (1978); Johnston (1981), and Bonoma, Zaltman and Johnston (1978), assert the unit of analysis constitutes one reason why organizational buying behavior hasn't advanced. The authors believe that a reason for ineffectual organizational buying behavior research is due to the overuse of the "unit paradigm concept" assumption of the separation between the buyer and the seller. They propose that to further the study of organizational buying behavior a dyadic approach should be taken (i.e. the buyer and the seller should be studied interactively).

The dyadic approach is necessary for the proper study of organizational buying behavior but it

is not sufficient. The characteristics of the unit of analysis should also be studied. We need to ascertain whether or not the dyadic relationship should be studied individually, as an organization, or as a combinative process of the organization and the individual. That is, in a typical dyadic interaction between organizational buyer and seller, a number of possible dyadic interactions are possible. For example, the selling company (S(c)) interacts with the buying company (B(c)). The selling company's sales force or boundary personnel (S(bp)) interacts with the buying company's boundary personnel, the buy center (B(bp)). An individual in the selling company's sales force (S(bp1)) interacts with an individual in the buying company's buy center (B(bp1)). The selling company's boundary personnel (S(bp)) interacts with the buying company B(c). Finally, individuals interact with organizations (for example, S(bp1) interacts with B(bp) and B(c) etc.. A total of nine different possible dyadic interactions are possible (see [Table 1](#)).

TABLE 1
POSSIBLE DYADIC INTERACTIONS

1. S(c) and B(c)
2. S(c) and B(bp)
3. S(c) and B(bp1 to n)
4. S(bp) and B(c)
5. S(bp) and B(bp)
6. S(bp) and B(bp1 to n)
7. S(bp1 to n) and B(c)
8. S(bp1 to n) and B(bp)
9. S(bp1 to n) and B(bp1 to n)

Since there are nine different possible dyadic interactions between the seller and buyer, the question becomes, which dyadic interaction should be the focus of study for organizational buying behavior researchers? From the sellers perspective, the interactions deal with the different buyers levels reactions to corporate strategy (S(c)), sales team strategy (S(bp)) and individual sales personnel (S(bp1)). Each of these interactions (from the sellers perspective) has an ample body of literature. Therefore, the question becomes, which level of analysis should be the focus of investigation at the buyer level?

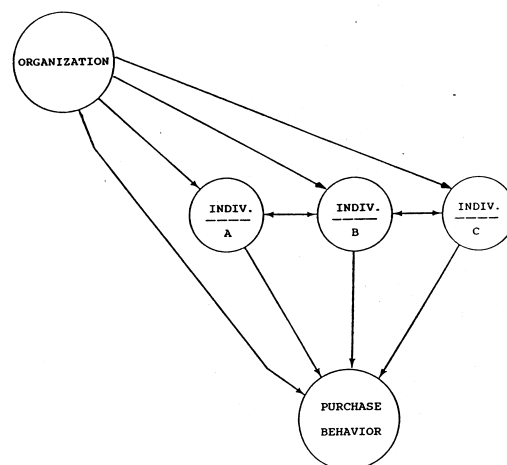
If we infer that the decision-making unit is the organization, (either B(c) or B(bp)). Organizational theory is the synergistic affect of the organization. The whole is greater than the sum of its parts. While this synergistic affect may be widely recognized, it has so far evaded the measurement efforts of organizational researchers, for one cannot administer a paper and pencil test to an organization.

On the other hand, if the unit of analysis from the buyer's perspective is the individual (B(bp1)), what are the specific characteristics that separate organizational buying behavior from consumer behavior? Fern and Brown (1984)

developed the argument of "insufficient justification" concerning the differences between consumer marketing and industrial marketing. If the individual within the buying organization is the appropriate unit of analysis (as is the case with consumer behavior), it would seem to bolster the opinion offered by Fern and Brown.

If, as purported by Johnston and Bonoma (1977), the confusion surrounding the appropriate unit of analysis is a major contributor to the retardation of academic growth in the area of industrial marketing/buying behavior, then is it incumbent upon the academic community to offer solutions to the problem. Perhaps both the organization and the individual are the appropriate unit of analysis. That is, neither can/should be looked at in isolation. [Figure 1](#) is an illustration of this relationship.

FIGURE 1
BUYING BEHAVIOR COMPONENTS



Notice that the organization, through its norms, values, or corporate climate (Martin and Hunt 1987), affect the purchase decision. The organization also affects the individuals directly via the reward structure of the company (Anderson and Chambers 1985). In addition, the interaction of the individuals within the buy center will influence one another through power, (Speakman and Stern 1979), coalitions, (Anderson and Chambers 1985), negotiation (Clopton (1984), etc. Finally, the model suggests that each member carries into the decision making process, his/her own psychological factors. These factors of the individual will also affect the purchase decision.

Individual Internal Characteristics

Organizational buying behaviorists have studied three of the four buying behavioral components illustrated in [Figure 1](#) in depth - the effects

of the organization on the purchase decision, the interaction between the individual and the organization, and the interaction between individuals within the buy center. What has been only minimally studied (Wilson 1974; Barksdale 1982; Leigh and Rethans 1984) are the within effects of internal individual characteristics such as information processing, personality, memory, and mood of the individuals in the purchase decision making process. To further organizational buying behavior research and to narrow the logical inconsistency, it is proposed that organizational buying behaviorists enlarge the scope of their study.

Historically, a reason for not pursuing the study of individual internal characteristics in organizational buying behavior is the belief that organizational buyers are completely rational - i.e. "pure economic men/women". The notion of the rational buyer was first formulated by the Greek philosopher Aristippus (circa 400 B.C.). The rational-buyer model was introduced to the marketing literature by Copeland (1924) and Converse (1924). The rational-buyer model asserts that purchasers rationally evaluate all possible alternatives. The purchaser chooses an alternative that will enable the organization to receive the largest possible pay-off. According to Astley and Van de Ven (1983), "A consistent preference ordering is assumed in which individuals or organizations have a clearly specified objective function by which they can select the best from a set of alternatives" (p. 261).

However, many studies have contradicted the rational buyer model. Shoaf (1959) and Dichter (1980) found that the organizational buyer is guided by emotional motives as opposed to rational antiseptic motives. Johnston and Bonoma (1977) assert that concepts of decision rationality and optimality have inhibited the development of organizational buying behavior. Anderson and Chambers (1985), Chambers, Anderson and Dunlap (1986) pose an economic modification to the rational-buyer model. They suggest and support empirically the idea that organizational buyers are motivated more by personal intrinsic and extrinsic rewards than congruence with organizational objectives.

The paucity of organizational study of individual internal characteristics as they affect the purchase decision is sharply contrasted to the bountiful consumer buying behavior individual internal research. Individual internal characteristics are arguable the most researched area of consumer behavior. There is, therefore, a need for intra-disciplinary cross-pollination. For example, sales situations may be demonstrative of the "primacy of affect over cognition" (Zayonc 1984). Many new "counter-cognitive" areas of purchasing behavior - mood (Gorn 1982, Allen and Madden 1985), emotional advertising (Mitchell and Olson 1981, Lutz, Mackenzie and Belch 1983, and Edell and Burke 1987), and physiological research (Russo 1978, Kroeber-Riel 1979, and Hansen and Luns-

gaard 1981) have applicability in organizational buying research.

To demonstrate the point, consider a member of the buy center assuming the role of decider. Is it logical to assume that at 7:45 A.M. on the way to work when stopping at the store to purchase a tube of toothpaste, one's purchase decision will be influenced by mood? Yet at 8:05 A.M. when attempting to decide between two apparently equal purchases options for the organization, one's mood no longer affects the individual's purchase decision?

Other areas of research which show promise for organizational buying including: memory (Keller 1987, and Wegner 1987), involvement (Krugmann 1965; Petty, Cacioppo and Shumann 1983; Zaichowsky 1985; and Gensch and Javalgi 1987) and the distraction hypothesis (Festinger and Maccoby 1964; Nelson, Duncan and Frontczak 1985). Again to illustrate the point, it is as valuable (maybe even more so) for industrial marketers to understand how distraction affects counter argumentation during communication as it is for consumer marketers. During the personnel selling process, a better understanding of distraction and counter argumentation can increase the effectiveness of the sales pitch. Yet all of the theories presented above seem to the "property" of consumer researchers.

In sum, an entire area of investigation has been ignored by industrial marketing/organizational buying behavior researchers. If researchers in this area are to heed the call of Johnston and Bonoma (1977), Webster and Wind (1980), and Kotler (1980), and lift industrial marketing/organizational buying behavior to its proper status within the discipline, it is proposed that first the importance of the variables affecting the individual within the purchasing organization be recognized. Second, we must attempt to catch up to our consumer behavior brethren by borrowing from them the applicable theoretical tools to explain purchasing behavior in the industrial marketing area. However, this "borrowing" should be short lived. Once we have "caught up", it is hoped that researchers in the most significant area of marketing surpass our consumer behavior brethren and lead the way to future knowledge.

Summary

If there is agreement that individuals (and the psychological luggage they carry into organizational purchasing decision) influence the purchase decision, a model of organizational purchase behavior may be constructed. This purchase behavior model identifies four major components of organizational buying behavior. It may be viewed as a first step towards isolating the importance of individual internal variables in the study of organizational buying behavior. A functional relationship is posited to exist between the four components. The purchase behavior model asserts that organiza-

tional purchase behavior may be explained with reference to: 1) organizational influence; 2) the interaction between the organization and individual (that is the degree to which the organization influences the individual in the buy center); 3) the interaction between members of the buy center; and 4) the individual internal (psychological) influence. The purchase behavior model, by including individual internal influence, better captures the complexity of organizational decision-making than models that fail to recognize the importance of the individual in the process.

An analysis of the purchase behavior model's four components indicates that organizational decisions (denoted by O_d) may be represented by concepts such as organizational structure and power in the organization. The interactive synergistic effect of the organization upon the individual is captured by the organization/individual component (denoted by I) may be represented by information-processing, personality, mood, and memory. Equation 1.1. specifies that purchase behavior model's functional relationship.

$$Pb = (f) Oc + OI + II + IP \quad (\text{Equation 1.1})$$

Where: Pb = Purchase Behavior

Oc = Organizational Climate

OI = Organization/Individuals in Buy Center

II = Interaction of Individuals in Buy Center

IP = Individual Psychological Factors

The purchase behavior model of organizational buying behavior 1) isolates relevant variables involved in the organizational decision making process; 2) identifies the organizational/individual interactive variable; 3) identifies as a major component of organizational buying behavior the oft-neglected individual internal variable. The use of the four variable framework provides a clearer picture of organizational buying behavior than reference to a single construct such as the buying center.

Conclusion

This paper advocates methods to better study organizational buying behavior and to mitigate the logical inconsistency that has existed between consumer and industrial purchasing behavior. Several suggestions aimed at accomplishing this purpose have been raised in the paper. Recommendations espoused present a more holistic evaluation of organizational buying behavior. Positions advocated in this paper include: 1) redefinition of the unit of analysis; 2) the importance of individual internal variables; and 3) construction of an organizational purchase behavior model.

A goal awaiting future research is the empirical testing of the purchase behavior model. Further testing of the model may be supportive of the importance of individual internal

characteristics to the ultimate purchase decision. In addition it is assumed that the four factors affecting the organizational purchase decision vary in importance given different purchase problems. It would be interesting to investigate the situations that increase the level of the personal influence, the organizational influence, etc. For instance, it could be hypothesized that organizational influences are strongest in new buy situations, and individual internal factors are stronger predictors of the purchase decision in straight rebuy situations. In sum, while this paper may serve as a vehicle to secure greater academic recognition for organizational buying behavior and lead to a new, more productive stream of research.

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Additional references available upon request.

AN EMPIRICAL INVESTIGATION OF THE DIFFUSION PROCESS FOR
PERSONAL COMPUTERS AMONG SMALL BUSINESS ENTERPRISES

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Abstract

The use of microcomputers has become very pervasive in recent years. However, in terms of their business applications most of the research is devoted to the problems of large corporations. There is very little research dealing with small business micro computer adoption and usage patterns. This paper investigated the differences in the perceptions of adopters versus non-adopters in small business sectors with regard to adoption process attributes -- relative advantage, compatibility, observability, trialability and complexity. Discriminant analysis showed that adopter of small business computers are significantly different from non-adopters in their perceptions of adoption process attributes.

Introduction

Prior to the introduction of the microcomputers, most published research on information systems related to the use of computers by large businesses (Sanders 1965). The small business enterprises did not have the money, the technical expertise, or the need to utilize the computers. The computer today is no longer a tool designed to be utilized exclusively by large companies. It has been developed and refined, and its costs have been reduced to the point where it can be of genuine value in assisting small companies (Markland 1974).

The first computer to process business data was the UNIVAC I which was acquired by General Electric in January, 1954 (Sanders 1965). Since then, rapid progress has been made in hardware and software applications. Such rapid advancements have resulted in significant changes in larger firms in the areas of personnel management, systems and procedures, and management planning and control. Unfortunately, relatively little has been written on the impact which computers have had and are having on small business enterprises. Not many years back, Welke and Konsynski (1980) summed it up when they wrote that the main focus of information systems development research is still directed at the larger, more mature organizations. Many of the existing studies on small businesses have presented rather narrow view on specific areas of computing use. These studies address on how and how not to use computers in small businesses; how to select/acquire computers; how to select vendors; how to select software; and the extent of computer usage. These studies represent the subjective observations of practitioners whose experience spans a limited number of areas. Very few systematic studies have been conducted covering a large number of firms (DeLone 1983). Hence, the major purpose of this study was to form a generalized view of what has occurred in the small business sector with regard to the

diffusion of personal computers. Identifying why an innovation is adopted and what characteristics makes it viable for adopting may provide a working description of the potential users.

Background

Not only is it cost-effective for small businesses to acquire their own computers, but most managers of small businesses are also aware of the potential of the benefits of computerization (Moore 1974). Awareness does not necessarily equate to successful use. Small businesses face many problems. They face greater financial restrictions and, hence, are considered risky enterprises (Schollhammer and Kuriloff 1979). Smaller firms have a limited asset base and their low annual operating revenues place a greater restriction on the availability of financial resources (Brighman and Smith 1967; Samuels and Smith 1968). Furthermore, they face greater manpower limitations and have a lesser degree of job specialization (Cohn and Lindberg 1972). Shortage of managerial personnel and personnel recruitment disadvantages could be the result of lower wages that small businesses traditionally pay (Bailey and Schwenk 1980). Thus, the lack of personnel with technical and specialized knowledge contributes to a higher failure rate among small businesses (Schollhammer and Kuriloff 1979; Welsh and White 1981). According to a Dun and Bradstreet survey, poor management is the cause of 93.1 percent of all business failures. Problems with receivables collection and inventory control account for 19 percent of the failures and inadequate sales contribute to about 54 percent of the failures (Dun and Bradstreet 1977). A number of authors note that small businesses have inadequate control systems and have difficulty in maintaining adequate records (Markland 1972; Schollhammer and Kuriloff 1979).

Business, large or small, runs on numbers. Each functional area has its own set of numbers which can be broken down into further subcategories. For example, within the marketing functional area, sales have vast detail and might be broken down by time period, market area, brand, package size, salesperson, and by customers etc. One can visualize that the amount of data handled by a company, even a small company, could be staggering (Little 1979). Any innovation that can successfully reduce or allow a business to manage these data would be useful and productive. Furthermore, in a small business, one individual is frequently performing a multitude of functions (Shearon, Butler and Benjamin 1980). An innovation that not only can help managers manage data but can also facilitate in the performance of these functions is the computer. Personal computers help managers manage more effectively by automating often costly, cumbersome, and error-prone manual

systems (Dologite 1981). Michels (1982) notes that the personal computer can improve productivity in three ways. First, it can do what a small business owner is doing now but faster and better. Secondly, a personal computer can extend the functions performed by the small business owner and, finally, it allows one to do more than he can do by himself. Others have noted that a personal computer provides information that could not be extracted through manual systems; enhances decision making; provides better planning and control; increases efficiency and frees time, which helps a businessman escape from getting bogged down by mundane and menial tasks (Rogers, Chadwick and Bromley 1983; Wiegner 1982). Improved planning and control systems, in addition to improved efficiency and decision making, will ultimately improve survival of the firm. Wiegner (1982) writes that the computer remains one of the last means of reducing costs and of increasing productivity, especially in the age of increasing costs for raw materials and labor. She estimates that it would cost a business \$233,000 a year to match what a \$15,000 computer can do.

Prior to the 1970s, few small businesses could afford computers and thereby participate in the cost reducing and revenue improving benefits that most large firms were realizing (Delone 1983). This picture has changed within the past few years. The reduced cost and the increased sophistication of personal computers have put the power of large computer capabilities within the reach of many businesses including small business enterprises. Markland (1974) claims that the computer is no longer a tool designed to be utilized exclusively by large companies and that it can be of genuine value in assisting small companies. Various experts in the field are predicting a vast array of applications for these personal computers (Cook and Russell 1977; Dologite 1981; Markland 1974; Shidal 1981). These application packages are so user-friendly that the user does not require any significant technical knowledge to use them (Shidal 1981). The average clerk-typist can operate these new systems only after a few hours of instruction (Dologite 1981). The personal computers' performance, price, popularity, and their potential for application have resulted in the proliferation of these small systems into even the smallest businesses (Campbell and Chermak 1984). In fact, Canning and McNurlin (1978) claim that the use of personal computers in businesses may soon reach deluge proportions. Frost and Sullivan, a New York research firm, predicts that 77 percent of the small businesses expected to be in existence in 1990 will have their own computers (Smejda 1982).

The industry is optimistic, various experts have elaborated on the vast potential and benefits of these personal computers for small businesses. Logically, then, the appropriate assumption to make would be that the adoption rate of the personal computers would be rapid in small businesses. But do facts confirm this proposition? According to one recent estimate, only 30 percent of the non-agricultural small businesses use personal computers (Spragins 1985). In

fact, Rogers (1983) pointed out that, even if an innovation has proven benefits, adoption does not necessarily have to be rapid.

Objectives and Scope of the Study

The primary objective of this study is to empirically investigate how the attributes of small business/personal computer (i.e., relative advantage, compatibility, trialability, observability and complexity) affect the adoption process by small businesses. In particular, this research attempted to identify the adoption process attributes that would be useful to categorize adopters and non-adopters of small business computer systems (SBCs). Such information would be valuable to change agents (computer marketers) seeking to predict the "adoption proneness" of their clients to this innovation.

In line with the overall objectives of the study stated above, the following formal null hypothesis constitute the scope of this research investigation:

Small business adopters of personal computers will not perceive the innovation as more advantageous, compatible, observable, trialable and, less complex than non-adopters would perceive it.

Recent advances in microelectronics and technology have resulted in computers that are not only smaller, "personal", and powerful, but also very affordable, especially by small businesses. Various proponents of SBC systems have expounded on the benefits of such systems to small businesses. But as was pointed out earlier technological innovations are not always diffused and adopted rapidly, even when the innovation has obvious and proven advantage. Furthermore, the major emphasis in diffusion research has been directed in determining the characteristics of the different adopter categories. Perhaps a more important but neglected component are the perceived attributes of an innovation and its effect on the rate of adoption. Knowledge of the role of perceived attributes of an innovation may be of value to change agents seeking not only to predict but also to understand the reactions of their clients to an innovation. This knowledge may provide additional information to the members in the channel to adapt their marketing mix to suit the needs of their potential customers.

Previous studies have typically been tailored perceptual data to specific products. Such a microview of the perceptual data has only a limited value. However, by utilizing a generalized set of perceptual variables, a macroview is obtained in this study which provides a better understanding of the role of perceived attributes in diffusion and thereby is of more value to marketing practitioners.

Research Methodology

The research reported in this paper is part of a major research project dealing with various

aspects of the diffusion process of SBCs. The population for the empirical study comprised of all small business firms in a five county area in a Mid-Western state of U.S.A. To gather the necessary data, a mail questionnaire survey was conducted with a structured questionnaire. Of the 1,972 small business companies which received the questionnaires, a total of 531 responded. Through two screening questions, 61 companies not fulfilling the definition of small businesses were eliminated. Of the 470 remaining respondents, eight firms which returned substantially incomplete questionnaires were eliminated. A total of 462 usable questionnaires resulted: 304 non-adopters and 158 adopters of personal computers. Each potential respondent was sent two questionnaires -- one for firms which are using computers and the other for firms which are not using computers. The questionnaires were color coded for easy recognition and the respondents were required to choose only one of the questionnaires depending on their status as to the adoption of computers. In one of the questions the respondents were required to express their degree of agreement on a Likert type scale (1 strongly disagree and 6 strongly agree) for sixteen statements reflecting the adoption process attributes. These sixteen statements can be found in Appendix 1. Data gathered with regard to these sixteen statements from both adopters and non-adopters formed the basis for the empirical research results reported in this paper.

Perceived Adoption Process Attribute Measures

The perceived adoption process attribute measures used in this study were validated via factor analysis techniques.

Since the objective of this study was to identify how these adoption process perceived attributes discriminate between groups of adopters and non-adopters of SBCs, factor analysis was applied to the sixteen adoption process attribute statements.

The factor analysis was accomplished via the FACTOR procedure contained in SPSSx (1983). Using the principle axis method coupled with a varimax rotation, the solution consisting of five factors was extracted. According to accepted conventions, the minimum eigenvalue criterion of one was utilized (SPSS 1975). The varimax rotation procedure was chosen because it simplifies the loading structure and makes the meaning of the factors clearer. Varimax does this by "...reorganizing the loadings on the factors so that a factor is characterized only by variables with high loadings (approaching 1.0) or low loadings (approaching -1.0)" (Frank, Kuehn, and Mussey 1962, p. 100-104).

The five factors that emerged from the factor analytic technique are summarized and presented in Table 1 along with those variables with loadings of .50 or greater. The five factors accounted for 63.6 percent of the variance.

Research Findings and Discussion

The five perceived attribute dimensions extracted and described in the previous section were tested for their potential to differentiate between adopters and non-adopters of SBCs.

A stepwise multiple discriminate model was used to test the hypothesis, where the two groups - adopters of SBCs and non-adopters of SBCs - constituted the categorical response variable.

For each respondent, summated scores for each factor were computed. A cutoff point of $\pm .50$ was established for inclusion of the variables in the factor. The five summated scores for each factor were then applied in a stepwise discriminate analysis procedure to determine which factors distinguished between adopters and non-adopters of SBCs.

Before proceeding with the discriminate analysis, 20 percent of the total sample was extracted as a "hold out" sample to test the validity of the discriminate function. This cross-validation approach was necessary to reduce the upward bias that would occur in the prediction accuracy of the discriminate function of the respondents used in deriving the function were the same as those used in applying the function.

The first attribute that entered the stepwise discriminate analysis was "compatibility", followed by "hardware complexity". The last perceived attribute with enough discriminating ability to enter the procedure was "software complexity". The magnitudes of the F-statistics determined which of the variables entered the stepwise procedure. A summary of the stepwise discriminate analysis is presented in Table 2.

The U-Statistic in column 3 of table 2 often called Wilks' Lambda, is a multivariate statistic that tests the equality of the group centroids based on the variables in the discriminate function. The approximate F-statistic in column 4 is a transformation of Wilks' Lambda that can be compared with the F distribution to determine the alpha level for the test of statistically significant differences between the group centroids. The procedure resulted in a model where alpha was under the .01 level. Therefore, Table 2 provides a basis for rejecting the null hypothesis that there are no differences in the perceived adoption process attributes between adopters and non-adopters of SBCs. The analysis supported the conclusion that adopters and non-adopters differ in their perception of compatibility, hardware complexity and software complexity attributes.

However, even though the group centroids differed significantly, this did not prove that the model was suitable. With a large sample size, even small differences between the centroids could result in statistically significant differences. Therefore, the classification accuracy and/or operational significance of the model might be poor (Green and Tull 1978). Thus, the final two classification modes which resulted

from the stepwise discriminate model were analyzed and compared to check for upward bias in classification accuracy.

Table 3 and 4 present the classification matrix for: 1) cases selected for use in the analysis, and 2) hold-out sample or cases not selected for use in the analysis.

The percent of cases correctly classified using the classification method was 83.46. In order to evaluate the predictive accuracy of the discriminate function, the percent of individuals that would be correctly classified by chance should be investigated (Hair et. al., 1979). With equal group sizes, this is a relatively simple process, and can be computed using the formula:

$$\text{Chance} = 1 / \text{number of groups}$$

In a two group function, as it was in this case, the chance probability would be .50. However, with unequal group sizes (66 percent non-adopters vs. 34 percent adopters, the computation of chance probability is more involved. The proportional chance model as suggested by Morrison (1969) was used to compute the chance probability. The formula for this model is:

$$C \text{ proportional} = \frac{2}{p} + \frac{2}{1-p}$$

Where:
p = proportion of adopters
1-p = proportion of non-adopters

Substituting the appropriate numbers in the formula, we obtain:

$$\begin{aligned} C \text{ proportional} &= (.66) + (.34) \\ &= .636 + .116 \\ &= 55.2 \text{ percent} \end{aligned}$$

Therefore, with unequal group sizes, a classification accuracy of 55 percent could have been attained by simply classifying all cases into one group or the other.

Even though the classification accuracy of 83 percent is substantially higher than the proportional chance probability of 55 percent, the possibility of upward bias should be taken into account (Frank et. al., 1964). The upward bias in classification results from classifying the same cases used in computing the discriminate function. However, the percent of cases correctly classified using the hold-out sample was 86 percent. Thus, the discriminate model was able to establish a 51 percent improvement over the chance occurrence even by using a conservative method.

Utilizing an approach used by Mosteller and Wallace (1963), the relative importance of each discriminating perceived attribute is illustrated in Table 5. Thus it appears that the order of discriminating ability among the perceived attribute dimensions is as follows:

1. The perceived compatibility attribute accounted for 81.4 percent of the total discriminating ability of all the variables entered in the model.

2. The hardware complexity dimension accounted for 17 percent of the discriminating ability of the model.
3. The perceived software complexity attribute accounted for 1.6 percent of the model's discriminating ability.

Thus, three out of the five perceived attribute dimensions entered in the stepwise discriminate analysis model were found to discriminate significantly between adopters and non-adopters of SBCs.

It appears that the perception of SBCs relative advantage attribute and trialability attribute do not differ between adopters and non-adopters of SBCs. These similarities were somewhat unexpected. A possible explanation for the similar perception of the relative advantage attribute may be that both groups are generally aware of the time-saving and money-saving advantages of computerization. Moreover, a large majority of trade and academic literature generally addresses only the relative benefits of computerization. As for the similarity of perception in the trialability attribute, an explanation may be found in the variables measuring the trialability construct (see Table 1). The original intent of the statement "Dealers generally allow potential small business users to try out a computer system before purchase," was to refer to trying out the system at the potential users' premises. It may be possible that both groups may have interpreted the 'trial' place to be the dealers' premises, which is a common business practice for most purchases. Furthermore, SBC systems are generally modular in design, thereby allowing for hardware and software upgrades. It appears that both groups of respondents are aware of this feature.

In summary, only three of the five perceived attributes were associated with the adoption of SBCs by small businesses. These were: 1) compatibility, 2) hardware complexity and 3) software complexity.

Compatibility:

This construct was positively associated with the adoption of SBCs. According to Rogers (1983), an indication of the compatibility of an innovation is the degree to which it meets a need felt by the clients. The mean values of the compatibility construct for adopters and non-adopters are presented in Table 5. An examination of the mean values reveals that adopters of SBCs perceive the innovation as being more compatible with their needs than non-adopters do. They may be of the opinion that SBC systems tend to contribute to the success and efficiency of small businesses. Small businesses are not only considered risky but they also face greater manpower limitations (Cohn and Linberg 1972). Thus the lack of personnel may contribute to a higher failure rate among small businesses (Schollhammer and Kuriloff 1979; Welsh and White 1981). Moreover, in a small business, one individual frequently performs a multitude of functions (Shearun, Butler, and Benjamin 1980). Many of these functions often involve mundane and menial tasks (Rogers, Chadwick and Bromley

1983). Automation of these tasks may not only extend the functions performed by the businessmen but also lead to the efficiency of the firm. Improved efficiency may ultimately improve the survival of the firm.

Hardware Complexity:

Adopters of SBCs tend to perceive the computer as less complex than non-adopters do. Rogers (1983) has cited studies that have identified complexity to be negatively related to the rate of adoption. The results from this research seem to concur with these studies. Non-adopters not only perceive the innovation as difficult to use but also many not have the time to learn how to use it.

Software Complexity:

Apparently, non-adopters perceive the SBCs as more 'software' complex than adopters. They tend to believe not only that it is difficult to find help with computers but also that many of their peers who may have adopted are generally dissatisfied with computers.

Conclusions

A step-wise discriminate analysis procedure was employed to generate a linear function of predictor variables. The developed model correctly classified 83.46 percent of the respondents into adopters and non-adopters at a level much beyond chance ($P .01$). Therefore, the null hypothesis of the study was rejected, and it was concluded that adopters and non-adopters differ in their perception of perceived product attribute variables. The perceived product adoption process attribute variables which discriminated most significantly between adopters and non-adopters of SBCs were: 1) compatibility, 2) hardware complexity, and 3) software complexity.

The variable which contributed greatly to the discriminating power of the model was the perceived compatibility attribute. Adopters and non-adopters exhibited large differences in their perception of this attribute with adopters perceiving SBCs to be more compatible with their needs than non-adopters. The final two perceived product attributes which contributed to the discriminating power of the model were hardware and software complexity. Adopters seemed to consider SBCs as less complex than non-adopters did. To other attributes, relative advantage and trialability, were not found to serve as discriminators.

Much has been written about the relative advantage of SBC systems over manual systems (Wiegner 1982). Moreover Roger (1983) notes that one can scarcely pick up a magazine or newspaper without some comment on the impact of SBCs. Trialability may refer to the expandability of SBCs, the capability of expanding the capacity of this product as needs arise. Therefore, it may be possible that the respondent set, both adopters and non-adopters are not only aware of the relative advantages of computerization, but also of its expandability aspect.

The research failed to identify the perceived observability attribute associated with the diffusion process. This attribute pertains to the visibility of the results of an innovation to others. The results or benefits of an SBC may not rest on the hardware component of the innovation. Small businesses having the physical unit in their environment may not achieve any benefit till they put it into use. Even then, the apparent benefits/results might not be realized immediately. Given the fact that SBCs are relatively, it may be probable that the results or benefits of SBCs are not apparent enough to be observed by others.

In summary, it may be inferred that adopters of SBCs perceive the innovation as more compatible and less complex than non-adopters do. The marketing implications of this finding may be two fold. First, change agents wanting to understand the reactions of their clients to SBCs should ensure that the innovation is compatible with the needs of the clients. Moreover, the change agents may be able to reduce the complexity of SBCs perceived by non-adopters through broadcast or other means (workshops/seminars).

(References and data tables can be obtained from the authors).

UNDERSTANDING PURCHASING BEHAVIOR IN PUBLIC SECTOR MARKETS:
A CALL FOR RESEARCH

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Abstract

Using a broad literature base and numerous case histories, the author identifies a public sector purchasing process containing four generic components universal to all government purchasing situations. A number of propositions relating to each component are made, each in need of field testing. Scholars are called to a program of research necessary to test the propositions and validate the process components.

Introduction

United States government agencies are major consumers. Estimates of total government purchases (federal, state and local) run as high as \$750 billion a year (McCarthy & Perreault 1987). And, this market is projected to grow by \$5 billion each year (Suss 1984). For some product categories, the government is the largest customer. For example, the Federal government's 1988 budget for computers, software and related services was \$17 billion, one-tenth of the entire U.S. market for this product group (Business Week 1987).

Yet, despite the size and generally open nature of public sector markets, there are surprisingly few firms interested in government marketing. Less than 2% of America's 15 million businesses derive any revenue from public sector customers (Holtz 1986).

Public sector markets are often characterized as complex, risky, and difficult for new entrants to penetrate. Suss (1984) suggests that government marketing is so fraught with risk and low profit margins that it be implemented only as an adjunct to more attractive private sector marketing. Overall, selling to government agencies is generally viewed as time consuming, hard to manage and subject to complicated procurement laws (Reeder, et. al 1987).

While textbooks dealing with industrial and organizational marketing usually give some attention to the government customer (McCarthy & Perreault 1987; Morris 1988; Pride & Ferrell 1989), very little formal research or scholarly investigation exists which focuses on marketing to public sector buyers. A few articles in scholarly journals directed at selected dimensions of public sector marketing have appeared in recent years (Goretsky 1986; Lamb 1987; Suss 1984), but most are quite general and none offer anything empirical. Trade and general circulation magazines only occasionally make worthwhile contributions to understanding the public sector market (Sales & Marketing Management 1985; Business Week 1987). Overall,

however, the research base surrounding government marketing is very small.

To date, no single source pulls together and systematically integrates the components of public sector purchasing. This paper seeks to identify reoccurring themes in the scattered and fragmented literature on public sector purchasing. Specifically, this paper has two objectives:

FIRST, to identify and isolate frequently occurring themes appearing in the literature on public sector purchasing and;

SECOND, using these frequently occurring themes as evidence, develop a series of propositions suitable for empirical testing.

Accomplishment of these objectives should help remove some of the confusion from public sector marketing in general, and in the long run, encourage more businesses to get involved. Initially, however, it is anticipated that a clear list of testable propositions taken from the literature on public sector marketing will stimulate scholars to undertake more frequent and systematic study of this vital sector of marketing.

Characteristics of Government Buyers

Review of contemporary literature reveals four frequently occurring characteristics generic to all public sector marketing.

1. Government purchasing usually begins with official 'invitations to bid.'
2. Government buyers choose vendors based upon a variety of criteria, not unlike the private sector.
3. One of three methods characterizes the actual awarding the contracts.
4. Supplier activities are vigorously monitored during the life of the contract.

Further, the four generic characteristics of public sector marketing are captured by 'time' which plays a unique role in the government buying process. Time relates to government purchasing in three ways:

- 1) **Government purchasing decisions often occur only after long term relationships have been established with potential suppliers.**

Sales representatives may need to spend long months, even years, doing pre-approach work with potential government buyers (Sales &

Marketing Management 1985). One recent study found a definite link between the number of pre-bid contacts by salespeople and successful bidding (Cohen 1983). And, when a major university recently selected an architect to design a new library, it was the result of a relationship begun 5 years earlier, a relationship fueled repetitively with sales calls and other types of follow-up activities by the hopeful architectural firm (Hinchion 1984).

2) Long leadtimes often precede the awarding of government contracts.

Government purchasing plans may be widely acknowledged, even advertised, but the actual selection of suppliers may involve a lengthy, complex and largely unpredictable process. Several tiers of government agencies, each with separate authority, may participate. Plans for road and bridge construction, for example, usually are announced a full seven years prior to the actual construction date. But such announcements are almost always subject to available funding. One agency determines the need for a new bridge and another decides on the funding. During the seven year hiatus, numerous changes and/or delays can occur. And all the while road and bridge contractors are attempting to plan and otherwise be in position to secure the contract.

3) Contracts, once awarded, tend to be for long periods of time.

Supplier organizations may be able to operate for many years as a result of securing just one government contract. It is possible that such organizations may have no other customers, public or private, for the duration of the contract. Servomation Corporation, a food service organization, entered a ten year agreement to supply food to the municipally owned Indiana Convention Center and Dome in Indianapolis, Indiana. From that agreement came five year awards by Servomation to a variety of smaller food distributors and processors. One of these smaller food processors is Indianapolis based, Best Meats Distributor, Inc., which estimated the contract to be worth \$1.5 million annually to them alone. This one transaction allowed Best Meats to acquire funding for a food processing plant, and to further award contracts to its suppliers (Indianapolis Star 1984). This chain of contracts and subcontracts, so typical of government selling, can involve large numbers of relatively small businesses, and commit the resources of those organizations for long periods of time.

Inviting Bids

Government purchasing usually begins with official invitations-to-bid. These are announcements by government agencies or buying units that qualified and interested supplier organizations may submit bids. Detailed product/service descriptions, known as specifications, are normally contained in

the announcement, as is the closing date for submitting bids. A common source of announcements is the Federal government's COMMERCE BUSINESS DAILY, which describes contracts exceeding \$10,000. Many other sources containing information on government contracts are available. A number of private publications, offered on a fee basis, send regular mailings to their subscribers that contain invitations-to-bid (Sales & Marketing Management 1985). Some government agencies even offer printed guidelines on how to respond to bid invitations. Also, specific project plans may be available from the government for a nominal cost. In general, the entire announcement process may be quite formalized (Goretsky 1986).

Formal solicitation of bids is not required in all government purchasing situations, however. Frequently there is a minimum amount below which the buying agency does not have to ask for bids. For example, some state educational units can purchase items of less than \$500 without bids. For the Veterans Administration the maximum amount before a formal bid is required is \$10,000.

Applying Selection Criteria

The second common topic found in the literature on government purchasing is the manner in which contractors are selected. Government buyers chose suppliers based on a variety of criteria, and in this regard are not unlike profit-oriented businesses operating in the private sector. Perhaps because of the frequent practice of selecting suppliers through a sealed bid procedure, government customers are often thought to place sole emphasis on price. However, this is seldom true. Like private sector buyers, governments are looking for value, and low cost may only be one consideration in their search for value. Even though government buyers are frequently mandated by legislation to accept the lowest priced supplier, such mandates always assume that all bidders are equal on other, non-price criteria.

Numerous non-price factors affect vendor choice among public sector buyers. For example, government buying agencies frequently develop their own cost estimates prior to seeking bids, and then only accept an offer that is close to that amount. If no bidder is near their own estimate, the contract may not be let to the lowest bidder after all. Further, governments are realizing that original purchase price can be but a small portion of the total cost. Some agencies speak of "life cycle maintenance provisions" and ask for bids that include estimates of necessary service costs and preventive maintenance expenses (Kotler 1980).

Government purchasing agents are also quite exacting about product and service specifications when choosing prospective vendors. Most government contracts define quite clearly what is expected in terms of product

features, service requirements and overall specifications. Suppliers are then chosen on ability to convince government buyers that required specifications can be met. Decisions are made that favor suppliers with the experience and reputation for meeting contract specifications. Experience and reputation are referred to as 'constant quality units' and the ability to supply constant quality units may take precedence over lowest price when the purchase decision is made.

In addition to meeting product specifications, government buyers also want on-time completion of contracts. Thus, a reputation for completing contracts becomes another criterion for choosing a government vendor. Completion reliability is another reason for deviating from selecting only the lowest cost bidder.

A final example of selection criteria significant to an increasing number of government buying agencies is what might be termed "partnership requirements." Partnership requirements call for government suppliers to contribute more than simply goods or services to the government buying agency. The government buyer looks at the ability of the supplier to offer such things as income generation, long-term investments, and marketing assistance; all in addition to whatever goods and services may be purchased. The potential supplier, besides quoting prices and making assurances regarding product specifications, must describe the nature of the partnership role it is willing to take on with the government agency. Examples of offers a supplier might make include: sharing gross revenues earned on government business, purchasing and/or maintaining equipment or facilities used to service the government account, advertising and other promotion of the government agency to which it will be a supplier and, paying fees or rent for space or facilities on the government's premises.

The partnership requirement usually applies to government agencies that are responsible for service businesses. Municipally-owned convention or sports facilities are an example. Consider the following list of criteria the board of managers for a municipally-owned convention center used when seeking a food and concession caterer (Wensits 1984):

1. The extent to which the caterer's activities would enhance the overall earning potential of the convention center.
2. The caterer's financial strength, managerial experience, and reputation for service.
3. Quality and portion size of food served by the caterer. (Evaluation committee members visit institutions currently served by the bidders in order to make a determination of the quality issue.)

4. The extent to which the caterer will bring business to the convention center and offer marketing assistance to the convention center.

Significant to the bidding procedure for contracts with a partnership requirement is the mix of required and optional features in the contract. In the catering contract example described above, the contract winner was required to pay a specific amount of rent during the years of the award. But such things as equipment investment and percent of revenue shared with the convention center were optional with the bidders.

Partnership requirements will continue to play a role in the awarding of government contracts. These requirements add new flexibility to the bidding procedure for both contracting agencies and supplier organizations. Government agencies can secure much greater commitment from their suppliers. They can also select vendors on a much wider range of factors, some quantitative and some qualitative.

Awarding Contracts

Contract award procedures make up the third generic component of government purchasing. Government agencies have three distinct methods of finalizing purchasing agreements with vendor organizations. The contract may be awarded:

- a) After reviewing sealed bids submitted by prospective suppliers.
- b) As a result of negotiating prices and specifications with alternative vendors.
- c) By making a unilateral choice among available vendors.

The sealed bid procedure is most common in situations where product or service specifications are reasonably straightforward, when the government buying agency knows exactly what it wants and the general price level to expect, and where a fairly large number of bidders is expected. At a pre-announced time and place, and often with competing vendor representatives present, bids are opened and contracts awarded. Awards are normally made on the basis of price, provided other selection criteria are equal among the competing bidders. Approximately 40% of all government contracts are awarded in this manner (Suss 1984).

A second award procedure, accounting for over one-half of all government contracts (Suss 1984), is to negotiate prices, specifications, completion dates, etc. This method is usually chosen when the product or service is complex or technically sophisticated, when large research and development costs are involved, and when only a handful of potential suppliers are capable of developing and

supplying the product. In these instances, neither party knows exactly what the buyer wants nor what the project may cost. The specifications and cost estimates are worked out over an extended period of time through a series of meetings that contain evolving product designs, prototypes, and cost projections. The government agency purchasing the product may conduct similar negotiations with two or three potential suppliers, possibly compensating each for their development work, before finally selecting one.

A final award strategy practiced by some government buyers is simply to go into the market when a purchasing need arises, evaluate available information on competing vendors and brand choices, and judgmentally select a supplier. In these instances, the government purchasing organization is behaving just like a private sector buyer and following a conventional buyer behavior purchasing model (Kotler 1980).

Post-Award Monitoring

A final frequently occurring characteristic of public sector purchasing is the vigorous monitoring of vendor activities during the entire life of the contract. A variety of techniques are employed by government buyers to determine if they are getting what was paid for. Examples include value analysis, on-site visits and cost-plus-award-fees.

When value analysis is used, an outside firm is employed to conduct the analysis, and a standard cost system is implemented. Invoices submitted by the supplier that exceed the standard costs are not paid until adequate justification is made. A common variant of this procedure is to require the supplier organization to submit a cost breakdown on all materials used in the project. By comparing material cost breakdowns with total bid prices the government buyer is aware of gross markups associated with the project.

Some agencies employ their own staff for conducting monitoring activities. These people, often engineers or other inspectors with specialized skills, make periodic checks on work being done or on products purchased. They act in a quality control capacity and may even physically locate in the supplier's office or job site for the duration of the project. Further, government inspectors may visit other potential suppliers (perhaps competitors of the bid-winning sales organization) to inspect their products and their work for the purpose of comparing and evaluating the efforts of the supplying organization. Finally, government buyers may send their follow-up personnel on visits to current and former customers of the supplying organization to learn what kind of work can be expected.

While most monitoring activities associated with public sector purchasing appear to be somewhat punitive in nature, the Cost-Plus-

Award-Fee Contract (CPAF) is an impressively positive monitoring device. CPAF's allow government agencies to pay bonuses during and after project completion to suppliers as incentives for performance. NASA and the Department of Defense are big users of this type of contract with the typical award fee ranging from 5-10% of the original cost. Awards are based on the subjective evaluations of government inspectors and are the result of monthly performance reviews with quarterly fee payments. CPAF's are especially prevalent in the government purchases of intangibles, things like engineering, computer and security services, as well as for the fabrication of innovative production equipment.

Supplier organizations are attracted to CPAF's because of the potential for additional profits, profits beyond the original bid agreement. The supplier already has a profit margin built into the successful bid but can earn something extra for good performance reviews. The seller still must meet the specifications of the contract, and may earn no extra fee for an adequate level of performance. Something extra must be provided to get in on the award.

Implications For Research

In addition to identifying common threads in the public sector purchasing process, the purpose of this paper is to specify a research agenda for scholars interested in developing a clearer understanding of public sector marketing. The four common characteristics of government purchasing described earlier, as well as the time frame in which they occur, need significant investigation and verification before they can be successfully applied to actual business practice. Writings reviewed in this paper suggest that the following propositions are true.

- Proposition 1:** Rules and procedures appropriate to the bid invitation process are not identical among government agencies.
- Proposition 2:** Government buyers employ a wide range of selection criteria when choosing suppliers.
- Proposition 3:** Agencies utilizing the sealed bid procedure for receiving supplier requests for contracts are not bound to select the lowest bid.
- Proposition 4:** Non-price variables are effective selling tools among firms doing business with public agencies.
- Proposition 5:** When the sealed bid procedure is utilized for awarding contracts, sellers should focus marketing efforts on

understanding competitive bid strategies.

- Proposition 6:** In situations where government buyers compensate potential suppliers for bid preparation, competing suppliers manage bid preparation activities as profit centers.
- Proposition 7:** Suppliers of government contracts utilize on-site monitoring visits by agency personnel as opportunities for goodwill building and as promotional opportunities for future work.
- Proposition 8:** Government purchasing decisions occur only after long term relationships have been established with potential suppliers.
- Proposition 9:** Long leadtimes precede the awarding of government contracts.
- Proposition 10:** Contracts, once awarded, tie the supplier to the government buyer for long periods of time.

Successful marketing to government customers is significantly enhanced if prospective suppliers understand and formulate sales strategies based upon the public sector purchasing process. The strategic goal should be to administer each step of the process in a manner favorable to the supplier organization.

This paper notes the absence of research about marketing to public sector buyers. It further describes a four component process thought to be universal to all public sector purchasing. Needed now are data-based investigations, following acceptable scientific methods, that substantiate the existence of the process and its components. Such investigations can begin with formal testing of the ten propositions offered above.

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INTERNATIONAL MARKETING

NEW PRODUCT DEVELOPMENT PROCESS AMONG MANUFACTURING
COMPANIES IN DEVELOPING COUNTRIES: A CASE STUDY

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Abstract

This paper reports the results of a study that examined the new product development process among manufacturers of industrial and consumer goods in Turkey. The study uses data collected by personal interviews of top executives of 60 industrial manufacturing companies in Turkey. Results indicate that in developing countries, new product development is generally simpler and less risky than in developed countries. Companies usually transfer technology and know-how, patents and licenses from industrial countries to fulfill existing demands which were previously served by imports; or they use product modifications to attract new users or to get more usage from current users. Also most companies place emphasis on the production process, product quality, cost and sales. Finally, the results are compared with a similar study conducted by the Turkish National Productivity Center for consumer products.

Introduction

New product development is necessary to the survival and growth of any firm in a complex and changing environment. The company must develop, test and expand distribution of more new products (Hisrich/Peters 1984). New product development is the means of achieving a successful market position in the long term. Companies which operate in developed countries feel more pressure to develop new products. They would like to emphasize finding breakthrough opportunities which will be very profitable for a long time and which will give the firm an edge over their competitors (McCarthy/Perrault 1987). The same approach may be relevant for companies which operate in developing countries. If the company wants to experience growth, expand product lines, use excess capacity, increase profitability and respond to a changing environment, it needs to develop new products or to modify existing products.

Although new product development is a very risky and costly affair in both developed and developing countries, the potential rewards from developing successful new products are very high. Presently only about 65% of all products introduced in the marketplace become successful in the U.S.A. (Rockwell/Particelli 1984). Another study found that the new-product failure rate was 40% for consumer products, 20% for industrial products and 18% for services (Kotler 1984).

For that reason it was recommended that companies must approach new product development with an effective marketing strategy which will be more likely to achieve success and minimize company risk (Urban/Hauser 1980).

The New product development process in developing countries is significantly different from the way it is undertaken in developed countries.

New product development techniques used in developing countries are the same as in the developed ones: only the application of certain stages differs. Developed countries require that the following important points be looked at closely (Crawford 1984).

1. Firms want their new product programs integrated around a comprehensive statement of company strategy.
2. Companies should have a new product development manager who has responsibility and strong leadership qualities.
3. Firms are seeking strong proactive management for the new product development task and have little patience for the new product development process (Rockwell/Particelli 1984).

Some of these points may be ignored in creating new products in developing countries. For example, in developing countries, there is no detailed strategic planning, management does not have a strong proactive style, and financial sources are not being devoted to the early steps in the new product development process. Most of the financial sources are allocated to produce good quality, defect free products which are acceptable among consumers. Less emphasis is given to the beginning and end stages of the new product development process.

In addition, manufacturing companies try to fulfill unserved markets and most of the time the companies are in a monopolistic situation. For that reason, the level of competition is very low and sometimes regulated by government. Occasionally, companies have a hard time obtaining the required technology, the necessary capital, skilled labor, and well trained managers. Economic conditions do not provide for or motivate the entrepreneurial spirit (Akcay 1978).

In developed countries, the introduction and selection of new products involves the development of unique marketing strategies. One prerequisite for the formulation of marketing strategy is the understanding of the consumers' behavior in terms of new product purchases (Black 1980). Companies try to develop new products in order to maintain their competitive situation in the market. Because the competition level is very high, they would like to maintain their market share and serve their customers' rapidly changing needs and wants (Akcay 1978). The new product development and innovation process should be managed and carried out effectively in order to be successful in the highly competitive market. Companies which are innovating new products should have a balanced new product strategy and should attempt to manage new product development systems carefully (Kamu 1980).

One of the debated areas has been global new product development. Some company managers

think that innovative global products are critical and others believe that new products for the domestic market is the only practical strategy. Most MNC's ordinarily strive for product modification in the global market place because it is risky and very complex to do global new product development (Ishikura 1985). Most MNC new product development programs are local in focus and would require major changes in strategy, organization and process to globalize. The ability to properly implement a successful program depends upon finding the right people to carry out this complex assignment and develop the right organization and structure. Research has found that most MNC's which produce food have not adopted globalization, but sixty-one percent (61%) of the non-food companies had aggressive global programs for existing products and less than one third had accepted the concept of globalized new product development (Van Nest 1985).

Purpose of Study

In this study an attempt was made to examine the new product development process among manufacturing companies in the Industrial Region of Turkey. The objective of the study was to understand the new product concept, the reason for developing new products, the cost of developing new products, the new product life cycle, the organizational structure, the test market and commercialization areas.

Methodology

To collect the data a convenience sample of sixty (60) manufacturing companies which produce industrial products (engines, engine parts, busses, cotton, nylon, polyester, other synthetic threads, and other industrial products) were surveyed by use of personal interviews among top executives.

New Product Concept

The survey indicates that (66.6%) of product development is considered new for the company, or for the customer and market. In the Turkish industrial sector, companies usually fulfill the existing demand which previously was served by imports. They transferred the technology, know-how, patents, and licenses from other industrial countries. A smaller proportion (33.4%) however used product modifications. They modified their products for attracting new users or for more usage from current users. Product modification took place to improve quality, improve features, and change styles.

Reasons For Developing New Products

The main reasons for developing new products are listed below, ranked in order of importance.

TABLE 1
REASONS FOR DEVELOPING NEW PRODUCTS

Reasons	Percents
To make profits	50%
To increase sales	17%
To increase market share	16%
To adopt new technology	15%
To serve customer better	2%
	100%

Cost of Developing New Products

All of the manufacturing companies agreed that the cost of developing a new product is very high and they would like to reduce the cost. The following benefits of reducing costs are ranked in order of importance:

TABLE 2
BENEFIT OF REDUCING COSTS

Reasons	Percents
To penetrate the market	38%
To compete	37%
To increase profits	13%
To export	12%
	100%

New Product Life Cycle

Most of the companies (66.6%) did not conduct research about the expected length of their new product life cycle since they transferred the technology, know-how, patents, and licenses from overseas. They are not expecting competition in the market in the near future. Some of the companies (33.4%) which had a modified product did research about the length of their product life cycle, using sales and cost and profit analysis since they face high competition in the market. They also want to be sure that their new product investment is profitable and gives them a quick return.

Organizational Structure

The majority (90%) of the manufacturing companies did not have a detailed organizational structure for developing new products since most of them did not create new ideas. They usually get the product idea and technology from outside the company. The new product development process is handled either by the research and development department or the planning and research department. The departments' primary duties are: 1) to set product quality standards, 2) to adopt the new product to the market, and 3) to solve the technical problems of the new product in the introduction stage. The research and development department works very closely with the production and marketing departments. Most of the companies new product managers come from the planning and research, or the search and development department. Product managers should have the following characteristics (ranked according to their importance): 1) technical knowledge in the area, 2) the courage to take risks and 3) interest in future technological development.

The majority of companies did not use PERT or CPM planning techniques since they transferred the technology and know-how from other industrial countries.

New Product Idea Sources

The main sources of new product ideas as rated by the companies are:

TABLE 3
MAIN SOURCE OF NEW PRODUCT IDEAS

Source	Rank
Customers	#1
Managers	#2
Engineers	#3
Competitors	#4
Salesmen	#5

Test Markets

Most of the companies (40) which produce industrial products used product trial tests and others (20) which produce new products used test markets in order to forecast future sales and in pretesting alternative marketing plans. All these tests were done among limited consumers. All of the companies we interviewed knew that the products had successful test market results.

Commercialization

The majority of the companies (83.4%) market their products to industrial customers. For that reason they used existing and shorter channels and cost-based pricing. In promotion, they emphasize the use of industrial magazines, newspapers, advertising and personal selling. They also give more attention to product quality in order to increase their market share. Some of the companies (16.6%) produced and sold their products through their subsidiaries which had a separate marketing organization.

Purpose of Study II

The purpose of the second study was to examine the new product development process in the consumer goods market. The study was done by the "Turkish National Productivity Center" in an attempt to understand and analyze the following areas (Baykal/Gulmez 1980).

- The source of new product ideas in the companies.
- Types of new products introduced in the market.
- The frequency of new products developed in companies.
- Marketing strategy application through the product life cycle.
- The reasons for developing a new product.
- Commercialization of the new product.
- The cause of new product failure and success rate of the new products.

Methodology

The Turkish National Productivity Center (TNPC) chose one hundred thirty (130) large consumer goods companies according to the company's production, capacity and the number of employees working in the firm. A mail survey was conducted to collect the data and only thirty eight (38) companies responded. Thirteen (13) were classified as durable goods, eleven (11) were food manufacturers, seven (7) were in textiles, six (6) were in health care products, cleaning products and paints and one was a manufacturer of glassware (Baykal/Gulmez 1980).

The results showed that new product ideas mostly come from the following sources: company managers, customers, competitors. In the durable goods area company managers have more influence on new product ideas. Among food manufacturers the key sources of new product ideas are customers, competitors, and company managers. In the textile, health care and cleaning products area the main sources of new product ideas are company managers, customers, and competitors.

Accordingly the study demonstrated that the new product types are product modification (46%) and product adaptation (34%) from other countries. Some companies were producing new products (20%) which were developed by company research and development departments. These products were not new-to-the world products. They were new for the company and new for consumers but they were not created by new technological invention.

The majority of the companies (87.5%) used different marketing strategies through the product life cycle and did research on the length of their new product life cycle. Some of the companies (12.5%) did not mention whether or not they were using different marketing strategies through the product life cycle or research about the length of their product life cycle.

Most of the respondents (84.2%) surveyed were involved in new product development. Only 15.8% did not develop new products. The main reasons not to develop new products according to their importance to the companies were as follows:

1. New product development is costly.
2. They did not see the necessity for developing new products.
3. It is hard to succeed in the market.

All thirty-two (32) companies which develop new products in the market gave the following reasons for their activities according to their importance.

1. To increase market share.
2. To increase profit.
3. To change consumer attitudes toward their product.
4. To gain competitive advantages.
5. To adopt and follow technical change in the market.

The majority of the companies emphasized the following areas of production oriented technical research which include design, production of

prototype, standardization, quality control and marketing research. Popular marketing research areas are as follows: market research, product research, price research, promotion research, and distribution research. Some of the companies, six (6) out of thirty-two (32), used PERT and CPM planning techniques.

The study's findings in the area of commercialization are as follows:

1. Most of the companies used existing distribution channels for new products.
2. Promotion plans in the health care and cleaning products area highly emphasized sales promotion and new product publicity. The study mentions that advertising and personal selling are also very important.
3. The durable goods industry highly emphasized new product publicity and personal selling. Advertising and sales promotion also play important roles.
4. In the food product area, sales promotion and personal selling are highly recommended. New product publicity and advertising should not be ignored.
5. In the textile product area, advertising and new product publicity play key roles. Personal selling and sales promotion need to support the promotion effort.

The study found that the rate of product success is very high (about 68.7%). The failure rate among industries is as follows:

- Durable goods, industry.....25.0%
- Health care, cleaning products and textiles.....16.6%
- Glassware.....33.3%

In this study the main reasons found for product failure are listed below:

1. High new product development costs.
2. Inadequate market analysis.
3. High price (skimming price) policy.
4. Product defects.
5. Poor demand.
6. Lack of key raw materials which are imported from other countries.
7. Inadequate marketing effort.

Comparison of the Two Studies

In the first study all of the companies were producers of industrial products and therefore industrial customers play a key role in new product idea creation. In the second study the main source of new product ideas was company managers. Customers and competitors also play important roles, because most of the goods produced in these companies were consumer goods. The consumer goods market is more competitive than the industrial goods market. Industrial goods production requires a higher technological level and market entry is not easy.

The second study reveals that existing product modification (46%) and product adaptation from other countries (34%) are the major types of new products. New products developed by a company's research and development department account for

20% of new products. In the first study, the majority of the new products (66.6%) are product adaptations from other countries while the existing product modifications is only 33.4%. Industrial marketers more extensively use transferred technology, know-how, patents and licenses from other industrial countries.

The studies show that companies are not utilizing PERT and CPM planning techniques. Both the industrial and consumer goods market pay attention to the length of their product life cycle and use different marketing strategies through the PLC.

The industrial goods market's primary new product development objectives are to make a profit (50%) and to enter the bigger market (33%). In the consumer goods market the reasons are slightly different. Their concerns are to increase market share, profit and to respond to a changed consumer attitude toward their product. This is because the consumer goods market is more competitive and dynamic than the industrial goods market.

In the consumer goods market, companies emphasize product, price, promotion and distribution research more than the industrial products market. In both the industrial and consumer goods markets companies gave attention to product design, standardization, quality control and marketing research. These companies are characterized as being predominantly production oriented and their main concern is an efficient production system. In the industrial products area companies used existing and shorter channel and cost based pricing. They also utilized industrial magazines, newspaper advertising and personal selling.

In the consumer goods market, companies try to get the best promotion mix suitable for the market. It is interesting to find that in this market, new product publicity is sometimes more important than advertising. This is because most of the people in the country give more credit to word of mouth than advertising and other elements of promotion. The failure rate for new consumer products is higher than industrial products.

Conclusion and Recommendations

The new product development process is very expensive in both the consumer goods and industrial goods markets. Therefore company managers should have suitable education and training in the field in order to carry out adequate marketing analysis and decision making to assure new product success. The studies reported here show that a developing country's new product development success rate is higher than in developed countries. In some ways new product development in developing countries is simpler and less risky than in developed countries. In developing countries the demand is higher than the supply and there is less competition in the market. Most of the company emphasis lies in the production and product concept stage. But it is gradually changing. Companies have a long way to go to adopt a marketing-oriented strategy in the new product development field.

Both of these studies have limitations. The sample size needs to be expanded and other developing countries need to be studied. The research methodology and data collection need to be improved and more indepth study of the new product development process in developing countries should be conducted.

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STRATEGIES FOR MARKET ENTRY INTO POWER-DOMINATED CHANNELS
IN LDC MARKETS

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Abstract

This paper examines issues affecting market entry into channels in LDCs which are dominated by local power groups who have a separate ethnic or social identity. The role of "gatekeeping" by these groups and their use of power are examined, leading to the formulation of recommendations on appropriate strategies for market entry, using both symbolic and material incentives.

Introduction

Traditionally, there has been a tendency to consider foreign market entry decisions as though they took place in a vacuum. Text authors have described the range of intermediaries operating (Cateora 1987) or have listed the range of entry options available to an exporter (Business International 1970; Root 1987), or have laid out guides on how to deal with distributors (Beeth 1973). What appears to be missing is the realization that the other party, the overseas importer, agent, wholesaler or whatever, has its own priorities to protect and may or may not be receptive and welcoming to the export company. In this case, market entry requires persuasion based on effective cross-cultural communication.

Moreover, it has long been assumed that the U.S. or Western exporter will naturally have the upper hand, because of larger company size or the desirability of the exporter's product/service. It may happen that the foreign distributor actually has the upper hand insofar as that company dominates its channel of distribution and effectively acts as a "gatekeeper" for market entry. In this instance, how will the Western export company handle market access ?

The goal of this paper is to explore issues surrounding entry into import channels in LDCs and identify some strategic options for use by U.S. export managers. The following topics will be discussed:

1. Dimensions of the "gatekeeper" problem in LDC markets
2. Profiles of gatekeepers
3. Aspects of power affecting market entry, and
4. Strategic options for negotiation.

The paper will conclude with some recommendations for action.

Specific attention is paid here to LDC markets because they present special challenges. Inconsistencies may be encountered between similar channels in the same market, or between similar channels in neighboring markets.

Moreover, LDC markets tend to exhibit unexpected characteristics which cannot be detected on the basis of secondary market research. Only actual field visits reveal the true nature of a market and its channels of distribution.

Dimensions of the Gatekeeper Problem
in LDC Markets

In 1989, Karakaya and Stahl identified nineteen different barriers to market entry and stated that part, if not all of the problem for new market entrants derives from other suppliers acting as incumbents in the target distribution channel. Here our focus is different. We are looking at the outsider (the foreign supplier) who is trying to break into a channel of distribution and needs the approval of the incumbent gatekeeper (which may be one company or a group of companies related by certain specific ties). A real-life anecdote illustrates vividly the nature of this challenge:

In 1988, a large, well-established high-tech U.S. company made an initial attempt to win an important equipment and service contract from an Arab nation. After months of negotiations, the local Ministry of Commerce recommended the company's well-designed proposal to its nation's leaders. To the American firm's surprise and chagrin, the contract was awarded to a firm in a country not known for any prowess in that industry. This winning firm did, however, understand the necessity to go beyond the normal contract channels and deal also with the country's ruling family.

This example illustrates the importance of non-business factors such as relationship-building, the need to decipher correctly environmental and cultural cues, and the need to identify accurately the locus of power. Much attention has been paid to the need for international managers to develop cross-cultural sensitivity and negotiation skills (see Harris and Moran 1987 for a full discussion). Fadiman (1989) has asked the question whether smaller firms should use Third World methods to enter Third World markets, and has shown how relationships play a key role in gaining market entry.

In order to better understand these issues, we can divide the problem into three parts: (a) time episodes, (b) encoding and decoding of cues, and (c) "power plays."

(a) Time episodes. One of the major hurdles in achieving market entry is negotiating the initial agreement. Thereafter, there is need for on-going reinforcement of contacts, monitoring of performance, and probably some modification of

early decision standards or goals. The initial agreement and the subsequent contacts constitute a learning episode which should provide insights into how to proceed with later market entries in similar markets.

(b) Encoding and decoding of cues. Communication theory provides a conceptual model of how messages are encoded and decoded by individuals and highlights the risks of error at each stage of the process. Hall (1960) drew attention to the need among international business people for interpretive knowledge and an ability to decipher the "silent language of overseas business." The classification of cultures into high or low-context (Hall 1979) provides a beginning framework for understanding how these "silent languages" may operate. However, a gap exists for most people between having a theoretical understanding of how things should be done and actually being able to steer a course through the cultural reefs of overseas negotiations. Fadiman (1989) provides detailed insights into exactly how to read the silent languages of selected Asian, African and Arab cultures and how to communicate back a message which is both appropriate and effective.

(c) "Power plays." The third element of the cross-cultural communication challenge accompanying entry into an LDC market is that of power plays. By the term "power plays", we are denoting not just the existence of power but also its use as a negotiating tool. Fisher and Ury (1981) in their practical book entitled "Getting to Yes" recognize that what may seem like dirty tricks to Western eyes are basically part of the normal set of negotiating tools in the eyes of local users. These dirty tricks may include extreme demands, phony facts, bluffing, threats and calculated delays. This theme of what is acceptable practice abroad is addressed by Adler (1986) who concludes that successful U.S. negotiators "use fewer irritators, counter-proposals, defend/attack spirals, less argument dilution, and more behavioral labels, active listening, and feeling commentaries than do less skilled negotiators" (p.188). The point of reference however still appears to be implicitly a Western perspective since irritators (such as delays and bluffs) are expressly rejected. Fadiman recognizes this paradox and concludes: "Often we react in ethnocentric terms, defining indigenous commercial tactics as devious or dishonest. One obvious alternative is to examine and make use of them." (1989 p.17) In summary, foreign market entry may be hindered by the presence of a dominant local group whose cooperation has to be won by means of effective communication, negotiation, and avoidance of conflict.

Profiles of Gatekeepers in LDC markets

In 1983, Norvell and Morey drew attention to the problem of gaining entry into LDC markets dominated by local ethnic groups. They coined the term "ethnodomination" to describe the power held by such groups over a channel of distribution. In

1988, Amine questioned whether ethnicity alone was sufficient to explain fully the nature of channel domination in LDCs. According to Amine, even Norvell and Morey went beyond their own definition by including examples of groups characterized by nationality (Lebanese) and religion (Jews), as well as ethnicity (Omani Arabs) (1988). Thus, Amine preferred to use two terms to describe the influence of these dominant groups: ethnodomination and social group power. These are defined as follows:

"...ethnodomination refers to a dominant group characterized by a separate ethnicity, culture, language, as well as family ties. These characteristics distinguish the group from the rest of the local population... Social group power includes only family ties and social rank. Thus, social group power may be enjoyed by a group which has ethnic, cultural, and linguistic characteristics similar to other local social groups, but which is distinguished by the solidarity of family membership and an elite social rank." (Amine 1988, p.137)

In their role as gatekeepers for distribution channels in their respective markets, both the ethnic groups and the social elites resemble each other insofar as they work to maintain their solidarity and exclusivity as a group. Barth (1969) in his study of ethnicity stated that the boundary defining the group is the critical factor for survival of the group, rather than "the cultural stuff it encloses," (p.15). Thus, in the context of distribution, channel power and domination may be equated by group members with boundary maintenance. Any assimilation of new members, such as a contractual arrangement with a foreign exporter, may be seen as a diminution of the group's real or perceived power. Internal conflict may arise between those group members in favor of the innovation and those who resent or reject the innovation.

From the exporter's point of view, this has several implications. First, negotiations are likely to be time-consuming. Second, there may be a real need for "multi-level selling", that is, convincing a number of group members who occupy different positions within the group. Third, not only the content but also the process and the actors involved in the negotiations will be subject to scrutiny by several sub-segments of the gatekeeper group and on several occasions. Thus, it may be difficult to identify the final decision-maker within the local "gatekeeper" group, and it may be almost impossible to gauge the progress being made, because of the various iterations within the group.

At least three scenarios can be visualized regarding the number of actors involved in this decision sequence. As Fadiman (1989) states, the U.S. export company may be represented during initial market entry by a single "point man". This may contrast starkly with the collective decision-making of the local group. Or it may be that one "big man" is encountered who reports back to the group. Alternatively, members of the lower echelons may feed information up to a remote and unknown "big man" whom the U.S. representative may never get to meet. Furthermore, the "go-it-alone" U.S. point wo/man

may in turn present a strange contrast with the teams of negotiators commonly sent out to represent Japanese, Chinese, and European companies. The fact that the local power group may be involved in negotiations with company representatives from several different cultures means that persuasion may prove more critical to successful entry than the product/service offering.

Factors Affecting Market Entry

French and Raven (1959) identified five types of power: reward, coercive, legitimate, referent, and expert power. In an international market situation where channel entry is blocked or mediated by a local gatekeeper group, we might expect to see some of the following manifestations of power on the part of the local gatekeeper and the market entrant (the exporter).

Gatekeeper Power.

1. Reward/coercive power: The gatekeeper group has the discretion to admit or exclude the petitioning exporter. Both types of power may be exerted simultaneously if the gatekeeper agrees to represent the exporter, but on a non-exclusive basis. In this case, market entry may be achieved but subsequent performance levels may be sub-optimal.

2. Expert/referent power: The gatekeeper has special knowledge of the local market, and this is recognized by the exporter who has chosen this mode of entry in order to achieve specific goals.

3. Legitimate power: As an influential power group within the local market, the gatekeeper group may feel justified in prescribing behavior/policies for the market entrant, regardless of the size of either party's company. This power source may have little to do with actual product or market knowledge, but derives directly from the gatekeeper's role in "filling a market gap." (See Amine 1988 for details on how ethnic groups in particular serve to fill a market gap.)

Market Entrant Power.

1. Reward/coercive power: Where a pull strategy can be used from outside the target market to create demand, the exporter may be able to "level the playing field" by conferring exclusive or non-exclusive rights of representation on the local gatekeeper group. In other cases, substantial incentives for the local distributor to push the product/ service may give the exporter an edge over competing foreign firms.

2. Expert power: As the manufacturer of the product or provider of the service, the exporter clearly holds much expert power which may however, be counterbalanced by the gatekeeper's market expertise.

3. Perceived legitimate power: In the case of a very large or very experienced small exporter dealing with a relatively unsophisticated power group in a developing country, the export

company's managers may assume that the local gatekeeper group will defer to their greater "knowledge of the world." However, this power perception may be illusory. Assuming that one of the gatekeeper group's priorities is to maintain its own boundaries, members of the group may be unimpressed by the market entrant's belief in its own superior power, especially if this belief is based on importance in another sphere of business that is unknown or irrelevant to the gatekeeper.

It is interesting to note that in a market where the gatekeeper group is the only means of market entry for a given product/ service, then its power is real, and not a matter of perception. This power can be counterbalanced by advantages on the side of the exporter deriving from control of the supply side.

Strategic Options for Negotiation

In their pioneering study of the effects of ethnodomination on channel entry, Norvell and Morey (1983) concluded that there are basically only two options for the exporter: co-opt or compete. This dichotomous choice is unnecessarily restrictive involving an all-or-nothing stance. Take-it-or-leave-it may be an approach that is acceptable to low-context country managers who are confident that the offer on the table is the best possible offer that each side can make. However, high-context country managers who are used to less direct, less specific and more subtle approaches might feel very uncomfortable when faced with this type of offer.

Wilemon (1972) examined power and dependency issues in channel negotiation strategies. When dependency is one-sided, as in the case of an exporter trying to enter a gatekeeper-dominated channel, Wilemon suggests that the market entrant's goals might still be achievable if it pursues an adaptation strategy, complying with the demands or policies of the gatekeeper. This would provide the possibility of getting a "foot in the door," with the opportunity to build a system of interdependence. However, Wilemon points out that where a unilateral dependency relationship exists, the weaker member needs to appraise the costs and benefits of the relationship. The dependent member's alternatives range from continuing the relationship to withdrawing from the dominance of the stronger channel member.

Gladwyn and Walter (1980) developed the theme of dependency addressed by Wilemon (1972) and formulated a contingency model to describe options for conflict resolution. Two key concerns were identified, the process and the outcome of any negotiation or conflict resolution. A grid featuring five coping modes was developed. These are avoidance, accommodation, competition, compromise, and collaboration.

This model improves upon the approaches taken by Norvell and Morey, and Wilemon, by expanding the options for dealing with conflict resolution. However, the model only serves a descriptive

purpose and cannot be used as a normative tool to indicate a best course of action. It also fails to handle mixed or ambiguous cases such as when outcome stakes are extremely high (indicating high assertiveness), but relative power is low (indicating low assertiveness) -- a scenario which might be expected in the case of entry into a gatekeeper-dominated channel.

Although the Gladwyn-Walter model does not provide complete answers to the question of which strategy of coping is most appropriate, it does suggest a range of options that may be used over time. Thus, an initial accommodation strategy may be used by the exporter, aimed at appeasing the gatekeeper. Then, when interest interdependence and relationship quality have had time to improve, a shift to collaboration might be achieved, with the object of integrating mutual interests in maintenance of market share.

Recommendations for Action:

Let us assume that the market entrant judges the accommodation strategy to be the most practical to begin with. The objective is appeasement, and the stance is unassertive and cooperative. The goal is to develop an approach which draws on all the collective wisdom about negotiation strategies and bargaining tactics. Thus, the market entrant will adopt the Fisher and Ury (1981) approach based on separating the people from the problem; focussing on interests, not positions; inventing options for mutual gain; and insisting on objective criteria. In separating the people from the problem, it becomes easier to focus attention on the persuasion aspects of market entry. Thus, influence tactics may include ingratiation and image management (see Spiro and Perreault 1976), whereby personal favors are performed to strengthen feelings of affiliation and reciprocity, and favorable impressions are created through positive word-of-mouth reports. Ingratiation may also be extended to include the fostering of support from a prestigious ally who may be influential within the gatekeeper group or exert influence from outside. It is ironic here to recognize that, in the case of LDCs, the people actually are the problem, and once the gatekeepers are won over, then the problem of drawing up a distribution contract may slipstream with relatively little effort.

With regard to the stage of inventing options for mutual gain, Fisher and Ury (1981) advocate an integrative (larger pie) approach, rather than a distributive (size of slice) approach to bargaining. (See Walton and McKenzie, 1965 for a full discussion.) In trying to invent new options it is important to remember that what motivates Western managers may not have value in the eyes of business people in LDCs. Thus, options having symbolic value may need to be combined with more material and objective incentives such as profit-sharing, commissions, fees, performance quotas and competitions. These symbolic offerings should focus on enhancement of status, image or power. These may include visits to the headquarters office in the U.S. or

facilitation of access to specially imported status goods, or the conferral of special/exclusive rights of representation.

This negotiation process may prove to be very time-consuming. Since distribution agreements are typically made to last several years, a lengthy negotiation period can be justified by keeping in mind the ultimate pay-off. Time will play a critical role in the success of market entry and subsequent results. The export company's managers must recognize the need in the future to periodically reinforce the relationship. Levitt's (1983) advocacy of relationship marketing is especially pertinent here. Low-context country managers might be tempted to assume that once the distribution agreement has been signed, that is all there is to it. Levitt argues that the relationship, in order to survive over time, needs nurturing. This is particularly the case for agreements with gatekeepers in LDC markets. Periodic signs by the exporter that the relationship is alive and well, and indeed flourishing, will contribute to improvement of relationship quality. This will then allow the exporter to move to a different type of relationship strategy, from initial appeasement through accommodation to compromise and then to collaboration.

In conclusion we emphasize the important role that is played by process elements involving communication, persuasion, and negotiation. Entry into a power-dominated LDC channel may require much more than just effective business skills. A fine cultural understanding of the intricacies of ethnic or social group dynamics may be essential for success. In many instances, the people **are** the problem, and once the support and trust of the gatekeeper group has been won, the pay-off for the exporter may be significant. The key is to read accurately and respond effectively to the cues given by each player in the specific cultural scenario.

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AN EMPIRICAL INVESTIGATION OF THE DIFFERENCES BETWEEN
INITIATING AND CONTINUING EXPORTERS

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Abstract

The purpose of this empirical research study is to examine the characteristics of small and medium-sized initiating and continuing exporting firms from Saskatchewan, Canada. As the U.S.A. is the major trading partner of Canada and most of the initial export activities of Canadian firms are destined for the U.S.A. markets, the Free Trade Agreement (FTA) between Canada and the U.S.A. has far reaching implications on the behavior and performance of small and medium sized exporters from both sides of the border.

Introduction

Exporting is of significant interest and importance to trade dependent economy and its firms. Exports enhance profitability, improve capacity utilization and reduce reliance on one market, as well as providing employment, improving trade balances and the quality of life. In order to maintain its current standards of living, advanced countries like the U.S.A. and Canada must maintain their historical rate of growth of exports. Large Canadian and U.S. businesses have acquired a tremendous amount of experience and knowledge in exporting. Unfortunately, small and medium-sized firms have lagged behind considerably and they represent a significant potential that must be tapped to achieve higher export targets. For instance, it was pointed out that in the state of Texas only less than 20 percent of all firms with a foreign potential do business abroad and the vast majority of small and medium-sized firms ignore their export potential (Raines 1987).

Canada is one of the heaviest trading nations of the world. Exports represent 30 percent of its production and total exports are 28 percent of the GDP. The U.S. is a significant export destination for Canada as 80 percent exports go south of the border. Much of Canada's exports still come from the primary sector and only about a third are provided by the manufacturing sector (Statistics Canada 1989). These figures and the proximity of the U.S. market together with the common socio-economic factors make it a natural market for Canadian firms. Therefore, the U.S. market is very important for every region of Canada in all sectors of the economy. Saskatchewan represents a very small portion of this economic picture with only four percent of the population, 1.2 percent of manufacturing employment and small contribution to exports outside the resource-based sector of the economy. If one further isolates the small and medium-sized manufacturers in Saskatchewan, the importance of this group is diminished even further in terms of its contribution to total exports. However, the prosperity of the Province of Saskatchewan hinges very much on diversifying its agriculture and resource based economy into manufacturing. While the role and the importance of attracting big business in such a strategy cannot be minimized, the existing base of small

manufacturers have a crucial role to play. As has been stated in the literature, it is a lot easier to encourage existing exporters than to create new ones. Finally, many states face similar economic diversification problems as Saskatchewan.

Background of the Study

Research efforts in the area of exporting have concentrated on two sets of factors in attempting to explain the determinants of success (Miesenbock 1988). One group which may be called the external or macro variables include the business environment of the firm and the characteristics of the economic sector that it belongs to. The other set of variables are the firm level or micro variables that are related to the size of the firm, its organization and commitment to exporting. Generally, macro level studies assesses export performance with tools such as market share, balance of trade statistics, and profit attainment of the firms. On the other hand, micro level analysis examines export structure of individual firms.

Some of the micro level factors that influence the export marketing and success of the firm have been grouped into four categories (Cavusgil and Nevin 1981) which include expectations of management regarding the impact of exports on its growth, the level of commitment, differential advantages of the firm and aspirations of the management for growth and security. There is also consensus in the literature that many firms approach involvement in export business rather cautiously and there is an underlying life cycle with critical success factors which change as a firm moves along its stages (D'Cruz and Fleck 1986). Particularly for the small and medium-sized firms exporting remains the most promising alternatives as they lack both the resources and the commitment to get involved in other forms of international business. Brasch and Lee (1978) treat the initiation of exporting as a diffusion of information process and suggest that exporting is often undertaken as an innovation rather than as a managerial response to a problem. Indeed, quite often exporting by especially the smaller firms is initiated as a response to an unsolicited overseas order and they perceive less export risk (Simpson and Kujawa 1974; Cavusgil and Naor 1987).

As a group, small and medium-sized firms are significant source of potential. Furthermore, in some regions they are the predominant source of growth and employment. Therefore, a lot of effort has been spent by researchers to understand the differences between exporters and non-exporters. For instance, Kaynak and Stevenson (1982) studied 101 exporting and 72 non-exporting Canadian firms. At a later stage, exporters and non-exporters in Canada and the U.S.A. were compared in trying to identify factors of export success (Kaynak and Kothari 1984). In an analysis of export behavior

of regional Swedish firms again certain differences entered between exporters and non-exporters (Kaynak and Ghauri 1987).

Malekzadeh and Nahavandi (1985) found that non-exporters considered tax advantages, proximity to foreign markets and third-party assistance to be more important than exporters. Non-exporters also indicated that export management was difficult and higher export prices had to be charged to make exporting profitable, whereas exporters did not agree with these statements. One of the key factors seems to be availability of information (Cappella and et al. 1981). Hardy (1986) has concluded that for small firms one of the main problems is weak marketing. Burton and Schlegelmilch (1987) profiled exporters and non-exporters and found that as export involvement increases organizational, managerial, and attitudinal improvements will occur. Their findings suggest that exporting leads to better education, higher research and development expenditures, quality control, more marketing research and perception of lower risk and cost of doing business. These conclusions are also supported by others such as Kedia and Chokar (1985), Cavusgil and Naor (1987), and Yaprak (1985). In a recent article by Culpán (1989), no substantial difference between small and medium-sized Pennsylvania exporters was detected as far as products exported, target markets served. However, the firms are differentiated in terms of export performance and their information needs.

The purpose of this article is to investigate whether there are any similarities and differences between active and reactive exporters. Furthermore, factors that facilitate export involvement and perceived impediments to export drive are explored conceptually as well empirically. As a result of the signing of the Free Trade Agreement (FTA) between the U.S.A. and Canada in January of 1989, respective governments have started paying more concerted attention to issues and policies related to the improvement of export performance of especially small and medium sized manufacturing firms. Hence, the likely implications and impact of the FTA on the workings of these firms are discussed.

Methodology

The study reported here explores the characteristics of small and medium-sized initiating and continuing exporting firms. Many of the firms in Canada have already identified and successfully exploited markets overseas, especially in the U.S., by drawing on their ability to react quickly to market opportunities, cultivating "provided" niches which were not of interest to larger firms or by relying on unique technological innovations. Insights gained from studying the non-exporting firms may also be very useful in redefining the thrust of the many agencies that aim to stimulate exports by small/medium-sized firms. As the U.S. is the most popular initial export market for an overwhelming number of companies, the impact of the Free Trade Agreement (FTA) between Canada and the U.S. will also be discussed.

The present study was conducted in one of the Prairie Region provinces of Canada. Two hundred

fifty-six firms were contacted using the Saskatchewan Manufacturers' Guide and were asked to participate in a mail survey regarding their experiences and views on exporting. Three weeks after the first mailing, a second wave of surveys was sent out resulting in a total of 178 usable surveys. Respondents were informed that they would be provided with a copy of the summary results if they returned the completed survey and the request form attached to it. Ninety-eight percent of the respondents requested to receive the composite results. The final sample included 98 exporters and 80 non-exporters.

Export Orientation of Firms

Forty-eight percent of the exporters have been exporting for less than five years, 14 percent between five to ten years, and 38 percent for more than 10 years. Only a quarter of the respondents indicated that more than 50 percent of their sales were derived from exports. Eighteen percent had 15-50 percent of their sales from exports and for 57 percent of the firms exports represented less than 15 percent of their annual gross sales which suggests that a lot of companies are trying to export but are not able to achieve much success at it. To further pursue this logic, they were asked to indicate how they rate the average annual growth rate of exports. Only eight companies out of 98 have found the rate of growth in exports better than expected and 40 percent have expressed disappointment in the growth of their exports with 52 percent stating that it has been what they had expected from the beginning. Just as important as the rate of growth is the profitability of export sales compared to domestic sales. Again, only 21 percent have found exports to be more profitable than domestic sales and these firms do not come from any specific industry. Thirty-seven percent have indicated that exports are as profitable as the domestic sales but require more work and 42 percent have indicated that it has been less profitable than domestic sales.

The major motivators of exporting were the size of the overseas market, search for stability through market diversification, profit potential, unsolicited foreign orders and physical proximity of the U.S. market. When asked to indicate what factors would be most critical in continuing to export, the top six reasons did not change that much except for the fact that once they are involved in exporting due to unsolicited orders, firms do not seem to rely on them as much to continue to export. Table 1 shows the importance of these factors in initiating versus continuing to export. Although getting an unsolicited order is very instrumental in increasing interest in exporting, once the firm is involved the same factor is no longer as critical in continuing to export. On the other hand, profit potential and offer of representation by foreign distributors remain important factors both in initiating and continuing to export.

One of the most important factors determining the level of sales as well as the willingness of the novice firm to continue to export is the level of competition in foreign markets. Thirty-six percent of the firms felt that relative to the Canadian market the level of competition they en-

counter in their principal export market is more intense. The remainder were split equally (32%) between same intensity as the domestic market and less intense competition. A factor that would influence the level of competitive activity is the newness of the product or service that is being exported. However, 75 percent indicated that the products they export are the same as their domestic products with only 7 percent indicating that it is different from their principal product line.

Perhaps not surprisingly, 82 percent stated that their principal export destination is the U.S. with 13 percent going to Europe and only 5 percent to Japan. The fact that the U.S. is a major export destination is not unique to the firms in Saskatchewan. Often small firms would obtain export experience in a nearby country and then branch out to more distant and less familiar markets. Therefore, it is likely that the respondents might express some expectation of penetrating other markets. While 61 percent said that they expect their export volume to increase, almost 90 percent of this group named U.S. as the country from which they would get additional sales. In fact, 14 percent of those companies that are currently exporting were convinced that their export sales is likely to decline appreciably and 25 percent expected sales to remain the same. This certainly does not paint an optimistic picture in terms of the future of exports in the Province nor does it suggest that getting non-exporters to consider exporting is going to be an easy task.

Impediments to Exporting

A number of factors hamper the export performance of Saskatchewan firms. Too much red tape followed by trade barriers, transportation difficulties, lack of export incentives, lack of trained personnel for export operations and coordinated export assistance were the most important problems associated with exporting (see Table 2). It is important to note that the respondents did not feel payments by importers or the economic conditions or even the competitiveness of their products to be as important as the former set of problems. The message seems quite clear that FTA between Canada and the U.S. will go a long way in terms of simplifying the red-tape. There are certainly many organizations in Canada that are trying to provide both incentives and information to potential exporters but many small businesses appear to be lost in the maze of agencies with similar or overlapping mandates. The emphasis placed on the need to train personnel must also be dealt with if attempts to rectify the other problems are to be successful in the long run. Lack of trained personnel for export operations was a more critical problem for firms with less than ten employees while it was not perceived as an impediment by those respondents that had more than 50 employees.

Non-exporters indicated lack of foreign market contracts, high initial investment, trade barriers, lack of information about exporting and lack of personnel as the most important impediments to exporting. Some have bluntly stated that they simply have not given much thought to exporting.

Overall, smaller companies see red-tape, trade barriers, lack of incentives as bigger impediments than the larger firms based on sales volume and the number of employees. Firms with less than ten employees also feel that they do not have products that are as competitive as the larger firms. Especially companies that have been exporting for a number of years are confident that their products are quite competitive and feel this is not an obstacle in penetrating other new markets beyond the U.S. if the necessary marketing know-how were available.

Prior to the FTA, one of the major obstacles to increased export involvement between the two neighboring countries was hampered by perpetual tariff and non-tariff barriers. Consequently, in the next section, the likely impact of the FTA on manufacturing exporters is examined.

Free Trade Issues

In order to present the FTA in a systematic manner it might be helpful to think of a) economic and b) emotive issues at both the macro and the micro levels. Better economic welfare, prosperity, access to a secure and large market, growth in employment and defense against other alliances such as the EC, ASEAN and CER (between Australia and New Zealand) are some of the considerations that are included under the economic issues. Incidentally, many of the concerns of a smaller nation participating in a trade agreement with a comparatively larger partner can be analyzed by looking at the Closer Economic Relations (CER) agreement between Australia and New Zealand which has been an economic success story for both parties. Emotive issues include culture, sovereignty, social programs, conservation of natural resources (beyond the economic implications), psychological problems of entering into a binding agreement with a superpower and the threat of losing national identity. These and other related macro issues are being debated by the public, businessmen, and Federal and Provincial politicians at some length. There are various studies that spell out the consequences of FTA at each one of these levels and entrepreneurs are very much influenced by these, sometimes contradictory, findings. The micro level analysis should be conducted by managers to assess the implications of FTA on their own firm with specific attention being paid to its unique set of circumstances. As an example, it is reasonable to conclude that most of the macro level findings indicate that capital intensive industries such as transportation, chemicals, and paper products are likely to benefit from free trade. British Columbia, Quebec and Ontario are likely to be the primary beneficiaries in these areas. Labor intensive sectors such as leather, furniture, small electrical appliances and farm implements are likely to experience difficulties and need to "adjust." What has happened is that as a result of this type of macro analysis, false hopes and unfounded confidence may have been fostered. Most managers indicated optimism or pessimism depending on what they have gleaned at the macro level as it applies to their industry.

In terms of economic and managerial analyses, it is crucial to realize that every company that is in a "growth" sector will not necessarily get the

same benefit nor will there be an "average benefit" that will be accrued by everyone. Free trade will make it just as easy for the best U.S. firms in those very same sectors to try and penetrate the Canadian market. Coupled with the requisite understanding that the U.S. is not a uniform market but a collection of regional markets, every firm must assess the impact of FTA on its operations by superimposing on these macro implications its own set of specific micro considerations. Some firms in a growth sector are likely to realize that due to the specific circumstances surrounding their firm they are not achieving the same advantages the industry might realize "on average." Conversely, a firm in a disadvantaged sector need not feel discouraged by the seemingly powerful position of the U.S. competition. They must appreciate that they have infiltrated the export market in spite of that competition. What is important is to identify and understand which strategies have been successful in the past and to sharpen their skills in implementing them even better. For example, the predominant strategy for entering the U.S. market has been the niche strategy by relying on non-price competition as much as possible. This and other strategies that have worked must first be identified by the small firms themselves.

Emotive considerations may be less of a concern for larger businesses as their management structure may allow less influence to be exerted on the running of the business based on the personal views of the managers. Although, it is not suggested here that personal values are never influential in business, in smaller concerns it becomes a more integral part of the decision-making process. Many respondents have indicated that they have not been able to separate how they feel about some of the emotive issues from their managerial analysis of the impact of FTA on their firms.

Even outside the manufacturing sector, there is reason to believe that with the right kind of initiatives by the Provincial government, Saskatchewan can increase the value-added component of its exports to the States and increase both its revenue and employment. One of the key factors will be provision of coordinated information followed by expert assistance. Free trade is likely to provide the opportunity to export to existing markets and expand "broader trade" by lowering not just tariffs but also relaxing the non-tariff barriers. There will undoubtedly be some restructuring of the economy and some firms will not be able to cope with the increased level of competition. However, firms that are already exporting are likely to benefit by having had the experience and having broadened the basis of their business to rely on not just the domestic market but also on exports. Again, the niche strategy coupled with non-price competition appears to be one of the best defenses used by small firms against larger competitors from the U.S.

Conclusions

Canada has to continue to export in order to maintain its current standard of living. For the small and medium-sized companies, involvement in international business starts out by exporting

and usually follows the learning curve concept. Often, the first stage of the internationalization process for small firms is to export in response to an unsolicited export order. With a vast farmland, harsh winters and dependence on the primary sector, Saskatchewan needs to diversify into other areas and must export to revitalize its economy. Its small population and industrial base make the small and medium-sized firms an important source of exporting ideas and initiatives as an alternative to attracting big business from elsewhere. Quite often the small and medium-sized businesses have accumulated a certain amount of business and financial experience as well as loyalty to the Province. The results of this study indicate that these firms are quite dependent on the large U.S. market as the most popular initial market. Within this context, the FTA and its consequences take on an important dimension not just at the macro but also at the firm level. Both in terms of penetrating the U.S. market and defending its domestic market, reduced tariffs are just as likely to attract U.S. firms into their backyard as it is to facilitate exports by Canadian firms. However, the results of this exploratory study can not be generalized to all the small and medium sized exporting firms. Nevertheless, even these exploratory findings would be indicative of some of the general trends in export performance which might stimulate further research in this field. At present, the growing number of small and medium-sized export firms appears to be seeking advice and information regarding improvement of export performance. The stream of research could easily take on additional importance in the FTA's spotlight. Further, the impact of the European Community (EC) on the FTA could easily range beyond just this particular study toward further research.

The typical exporter seems to be ready to take a certain amount of risk and is initially troubled by matters pertaining to bureaucratic export procedures. As they gather experience in exporting, the emphasis shifts to areas concerning marketing expertise. Many exporters have indicated that lack of know-how in both export procedures and marketing are important. However, they agree that it is easier to learn the procedural matters with help from various agencies but far more difficult to "pick-up" substantive marketing and managerial expertise. The latter is singled out as the critical determinant of ultimate success.

While having a comparative advantage is crucial, most respondents feel that it is only a necessary but not a sufficient condition. Many firms feel that confidence, especially when it is founded on experience, is as important as competence. Exporters indicated that having a committed champion is essential to being successful in exporting. Those who have been at least satisfied with their export initiatives have stated very strongly that without such a champion interest and enthusiasm would have dwindled quickly.

Free Trade Agreement certainly presents the experienced exporters in Saskatchewan with enhanced opportunities. It does also enable the small U.S. firms to seek out profitable niches in Saskatchewan where both the domestic and the overseas competi-

tion is likely to be less due to the small size of the market which would not make it attractive to large companies. Consequently, it is likely that small firms on either side of the border in the neighboring States/Provinces will increase their efforts to penetrate these markets.

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TABLE 1 - Importance of Factors in Initiating versus Continuing to Export

Factor Statement	Initiate	Continue	Correlation (r _s)
Large market size	59%	53%	.40
Stability through diversification	44%	36%	.46
Profit potential	39%	34%	.61
Unsolicited orders	36%	27%	No
Proximity of market	32%	34%	.46
Utilize excess capacity	27%	30%	.48
Offer by foreign distributor	25%	23%	.51
Increasing growth rate	20%	25%	.44
Smoothing out business cycles	18%	23%	No

Percentages under Initiate and Continue columns indicate the percentage of exporters that responded positively. Correlation measures the degree of association between those that responded positively to both initiate and continue exporting.

TABLE 2 - Impediments to Exporting

Statement	Mean
Too much red-tape	2.28
Trade barriers	2.46
Transportation difficulties	2.51
Lack of trained personnel	2.54
Lack of export incentives	2.55
Lack of coordinated assistance	2.56
Lack of financial assistance	2.73
Unfavorable conditions overseas	2.80
Slow payments by buyers	3.06
Lack of competitive products	3.17
Payment defaults	3.23
Language barriers	3.3

Answers are recorded on a five-point Likert scale where 1=strongly agree and 5=strongly disagree.

EXPORT TRADING COMPANIES: A PROMISE YET UNFULFILLED*

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Abstract

The performance of U.S. Trading Companies has not lived up to expectations. This article presents a survey of internationally active U.S. manufacturers, banks and export service providers regarding their evaluation of the ETC concept. A gap between the needs of firms and the export assistance services offered to companies was found. The authors conclude that banks are most able to propel the ETC concept to a successful implementation.

Introduction

In the 1980s, the world witnessed spectacular global trade imbalances. Unfortunately, to a large degree, these imbalances resulted in U.S. trade deficits. Therefore, the Federal Government sought for ways to facilitate an improvement in the export performance of U.S. firms.

Among all these efforts to promote U.S. exports, one major direction consisted in developing a new marketing structure for exporting. This structure became known as the Export Trading Company and was passed into law in October of 1982.

The Act was designed to alter the export potential of U.S. firms by providing more and better intermediation services and by promoting a channel model that was new among American intermediaries. At the heart of this model is the relationship between producer firms and their exporting intermediaries (Egan 1989). One key untested assumption in this regard was the notion that corporations would be able to adapt to patterns of cooperative behavior in the international marketplace, which would continue to be proscribed in the domestic market.

The newly to emerge export intermediaries were labeled as the one-stop export shop for small and medium-sized U.S. firms. It was expected that by emulating the successful Japanese Sogo Shosha's and other more recently formed export trading companies such as the ones developed in Brazil (da Costa Pinto 1983) U.S. firms would be encouraged to join together and as a group, now be able to afford to offer export services. Through the relaxation of antitrust provisions, the cost of developing and penetrating international markets would be shared, and therefore easier to bear for many small and medium-sized firms. As an example, in case a warehouse is needed in order to secure foreign market penetration, one firm alone does not have to bear all the costs. A consortium of firms can jointly rent a foreign warehouse (Czinkota et al. 1989). Permitting banks to participate in ETCs was intended to allow U.S. exporters better access to capital, and therefore permit more trading

transactions and easier receipt of title of goods.

Very high hopes were placed in this legislative structuring of a new market intermediary. Analysts predicted that the legislation would increase U.S. exports by 6-11 billion dollars within 5 years (Erickson 1983) and would create more than 320,000 trade related jobs by 1985 (Baldrige 1982). The legislation was expected to help small and medium-sized firms the most. The Commerce Department estimated that up to 20,000 such firms that were not currently exporting could export given the new type of intermediary (Bonker 1982).

Although the ETC mechanism seemed to offer a true innovation in the U.S. export market structure, it has not been extensively used. By 1987, only 82 ETC certificates had been issued by the U.S. Department of Commerce, covering 684 firms (Stiner 1987) whose aggregate exports were reported to be less than \$300 million (Lacy 1987). By 1989, 4360 firms were covered under ETC certificates (Muller 1989), yet this number may be misleading, since it represented only 108 individual ETCs and was mainly the result of trade associations applying for ETC certificates. The real issue is not so much the number of companies eligible to avail themselves of the antitrust protection assured by ETC certificates, but the actual extent of resulting export activity.

Firms which had formed export trading companies had deserted the concept. Large companies which had tried to achieve synergistic benefits from forming export consortia, had discontinued their efforts. For example, Sears World Trade had closed following accumulated losses of \$60 million (Countertrade 1986-87). Even though the U.S. trade deficit had experienced some reduction, very little of that was attributable to the efforts of ETCs. In addition, rather than being drawn into the international marketing field, banks continued to withdraw from exporting finance (Kolarik 1988). Even one of the key architects of the ETC Act stated "The ETC Act has the potential to mobilize the export force of small- and mid-sized American companies. It is a weapon in the nation's competitive arsenal, but one that has never really been deployed" (Bonker 1989).

Various reasons are put forth by researchers as to why the theoretically sound concept of ETCs did not work in practice. Some attribute the lack of success to insufficient information being

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passed on between trading companies and exporters (Czinkota et al. 1989). Others suggest that ETCs had failed to offer the service requirements necessary for success (Bello and Williamson 1985) or that U.S. manufacturers were not ready to turn over international marketing to the trading companies (Sarathy 1985). Others yet question whether government should create such programs at all (Howard and Maskulka 1988).

This study was conducted in order to shed more light as to where potential shortcomings may have emerged in the execution of the export trading company concept. A better understanding may perhaps breathe new life into the concept and increase U.S. exports by smaller sized firms after all.

Method of Study

This paper reports a survey which was conducted among three major actors in the U.S. export community: Export service providers (including export management companies, freight forwarders, and customs agents), manufacturing firms, and banks. In the survey, executives were asked a series of questions to determine their attitudes toward the Export Trading Company Act, the main beneficiaries of the Act, and needs for potential reform.

The survey, which had been pretested in interviews for clarity, validity, and ease of response was mailed to 579 firms. All these firms were drawn from the 1987 U.S. Department of Commerce publication Partners in Export Trade Directory. This directory lists firms which have had contact with the Department and received information about the ETC legislation.

Using a random sampling technique, every 7th export service provider was selected from the directory. A total of 207 questionnaires were mailed out to them, with 35 of them being returned for a response rate of 17%. Similarly, every 14th manufacturer/producer listed in the directory was randomly selected. 250 surveys were sent out to manufacturers, with 28 firms returning the surveys for a response rate of 11%. Each bank listed in the directory was also sent a questionnaire for a total of 122. Twenty-four banks returned a completed survey for a response rate of 19.7%.

The use of the Department of Commerce Directory may have introduced some bias into this research since inclusion in the directory required some form of contact with the U.S. Department of Commerce. This bias, however, was deemed acceptable, since it reduced the overall universe to a population which actually had expressed interest at some time in export trading company activities. The response rates were low, but tracked very closely with response rates obtained in similar research several years earlier with the same three industry sectors (Czinkota 1984).

Respondent Profiles

Approximately three quarters of the export service providers responding to the survey were corporations. Over 40% were trading companies. The firms tended to have annual sales of slightly over \$1,000,000. Most firms had less than five employees, and had been in business for over ten years.

The majority of the responding manufacturing firms served industrial customers. Annual sales volumes were slightly less than \$5,000,000. The manufacturers exported to an average of 17 countries, and tended to export 1% to 5% of their annual sales volume. Virtually all respondents had fewer than 100 employees and had been in business over 25 years.

Among the bank respondents, half were representing a bank holding company, with the other half representing a subsidiary of a bank holding company. Asset size ranged from \$1 billion to \$5 billion. All responding institutions had international divisions, and over 60% of the respondents considered their international department to be a large and integral part of the business. One quarter of the responding banks had overseas offices. International transactions generally accounted for 1% to 5% of bank revenues.

Given these profiles, it seems fair to say that the participants in the study were representative of companies with some degree of involvement in the international market, yet at a low level. In addition, most respondents can be classified as small to medium-sized.

Findings

Attitudes toward export trading companies

The survey sought to determine how respondents evaluated the impact of ETCs on U.S. export performance in general, and who in particular they thought had benefitted from them. Uniformly, respondents believed that ETCs had not made a major contribution to increased U.S. exports, even though they did agree that antitrust concerns had been addressed by the Act. A great deal of disparity emerged among participants when queried about the role of banks. Manufacturers saw the role of banks as much greater as banks did themselves. Asked about what this role should be, export service providers strongly felt that banks should only act as intermediaries, while manufacturers and banks themselves were far less certain of such a limited role. Uniformity of belief returned, however, when asked about the actual effects of the Act on their firms. Export service providers, manufacturers and banks alike, felt that the Act had neither increased their international activities, nor their profitability. Even more devastating was the finding that none of the respondents believed that their involvement in an ETC had exceeded expectations,

and only a small group (13.3% for export service providers, 4% for manufacturers) believed that their involvement had met expectations. All others believed that their involvement in an ETC had fallen short of expectations. Perhaps most insightful was the comment by an export service provider:

"You cannot legislate a salesman. They are either able to sell or not. International business is a person-to-person business."

Beneficiaries of the Act

A wide diversity of opinion existed as far as beneficiaries of the ETCs were concerned. Export service providers believed that large multinational firms were the main beneficiaries, followed closely by money center banks. One issue however, was clear in their minds: they, the export service providers clearly were not beneficiaries at all. Manufacturers in turn, saw major benefits accruing to large multinational firms and export service providers. Given the fact that most respondents to this research were small and medium sized firms, again it appears that most of them were very clear about the fact that they certainly were not any kind of beneficiary. Banks saw large multinational firms and small and medium-sized firms as major beneficiaries. Only to some degree did they believe that money center banks and regional banks had experienced some kind of benefit. They ranked themselves clearly behind the benefits thought to have accrued to export service providers.

It appears therefore, that all survey respondents believed large multinational firms to be primary beneficiaries, with some of the benefits going to some other groups, but clearly, few or none of them going to themselves.

Problems and benefits associated with ETCs

Each of the three groups was also queried as to the problems, benefits, and offerings they associated with Export Trading Companies. [Tables 1, 2, and 3](#) provide more detail.

Clearly, manufacturers experienced most difficulties in obtaining proper trade financing. Other difficulties are related to areas such as the handling of documentation, and transport rate determination. Very few difficulties were experienced with issues such as adapting the finished product, and foreign sales effort.

The latter finding may be in part due to the offerings of export service providers, since 80% of them (as shown in [Table 2](#)) offer assistance with the foreign sales effort. It appears therefore, that a match between manufacturers and export service providers exist here: export service providers offer foreign sales effort, and manufacturers state that the services offered are quite beneficial. The same applies to the issue of adopting the physical product.

However, major differences in terms of priority emerged when one looks at other issues. For example, manufacturers find the obtaining of trade finance as problematic, while only 56% of export service providers are ready to render assistance in this field. Similarly, the determination of transport rates is seen as problematic, yet only 40% of export service providers are of assistance here. Clearly, a divergence exists between the problems perceived and offerings provided. This divergence becomes even more clear, when one looks at the benefits expected by banks from an ETC shown in [Table 3](#). Banks see an expansion of services to customers as highly beneficial, as they do for the drawing in of new accounts. Providing a larger capital base, ranks substantially lower, even though the issue of trade financing ranks at the top for manufacturers.

What emerges from this perspective, is that there are substantial differences in the problems for which manufacturers expect help when they consider participating in an ETC, and the solutions offered by the other participants. This divergence occurs, since each one of the participants is less interested in making the ETC a successful venture and much more in furthering his own cause in business.

Conclusions and Implications

This research was designed to highlight issues surrounding the use of ETCs. One finding that has emerged, is that ETCs have yet to live up to expectations. Clearly, all affected parties, export service providers, manufacturers, and banks are uniformly of the belief that the formation of ETCs has not been a major use to them. While there are some suspicions in terms of who has actually benefitted, the uniformity of belief in that it has not been them, suggests, that so far Export Trading Companies have made little difference.

In exploring further as to why this new form of marketing intermediary has not been successful, it appears that the reason why is perhaps is the fact that no new intermediary has yet been formed. Rather, the legislation has given rise to temporary alliances of partners who are very much interested in their own welfare, rather than the welfare of the alliance. Given vastly divergent needs and benefit expectations, the partnership is then unlikely to perform successfully. Clearly, if the ETC is only inserted into the international trading process without adding major value, it is an unnecessary intermediary which will be circumvented and eventually disappear. Several comments from survey respondents support this line of thought. One company states that:

"ETCs usually do not know about the market niche for most of the products they represent. The interest is mostly short term for both parties. There is not enough follow up in servicing and further promotion. There are no long term activities and commitments to further the market penetration."

Another respondent is even stronger in his views. He states that:

"smaller organizations have the individual expertise and are able to be flexible and attentive to market demands. ETCs restrict the flexibility. Many lack the benefits of personal attention and expertise. When competitive manufacturers join together, too many conflicts arise that restrict success. Banks have shown that they either require restrictive profit margins or are too generalized in their approach and personnel to be successful contributing partners in an ongoing export program."

Even if these reasons are true in accounting for the lack of success of Export Trading Companies, these intermediaries ought not be permanently discounted from achieving future success. New intermediaries in the marketing channel can only be successful if they deliver the value added desirable by the system, and charge less for their services than the benefits accruing to other market participants. As one survey participant put it quite succinctly:

"ETCs will be successful if they address these three points: rapid decision making, lowering the cost of doing business, keeping rates competitive."

How can ETCs expect to go in that direction? Clearly, they must become an intermediary in their own right, where the partners expect to benefit through the ETC performance, rather than from the derivative actions in their own firm. Export trading *per se* must become the aim with the objective of delivering export services better than any other intermediary, or than an in-house export department. Such objectives, however, can only be fulfilled if true value added is provided, be it through better expertise, negotiation skills, contacts, economies of scale, or a larger capital base. Currently, apparently none of these dimensions is provided to a sufficient degree to make ETCs a success.

Where do we go from here? The possibility of collaborative activities of small to medium-sized firms clearly makes sense. Benefits from collaboration should not only be expected from strategic alliances of multinational corporations, but also from synergistic progress made by smaller sized partners. However, these benefits truly need to offer competitive advantages in order to be sufficiently worthwhile. That in turn means that ETCs need to think about ways of forging such advantages, be it through the hiring of talent, the obtaining of capital with a long term orientation, or the exploration of other areas of expertise. Given our research results, currently banks appear to be the only group able to take the lead in implementing ETC operations. They see at least some benefits accruing to themselves and have the capability of providing the necessary capital. Yet, at this time, their enthusiasm is less than overwhelming. The bottom line, therefore, remains: only if expectations, problems, and benefits overlap within an ETC group of participants will the ETC as a market mechanism emerge successful.

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TABLE 1

Problems Associated with ETC: Manufacturers

<u>Problem</u>	<u>Difficulty</u> (Means)*
Obtaining Trade Financing	3.57
Handling Documentation	3.43
Transport Rate Determination	3.43
Developing Distribution System	3.29
Providing Warehousing	3.17
Arranging Transport	3.14
Providing Technical Assistance	3.00
Information on Foreign Business Practices	3.00
Packaging	2.86
Information on Foreign Markets	2.71
Advertising Overseas	2.71
Providing Parts and Repair Service	2.43
Foreign Sales Effort	2.43
Adapting Physical Product	2.29

* Measured on a 5 point scale

- 1 = Highly beneficial
- 2 = Somewhat beneficial
- 3 = No opinion
- 4 = Somewhat problematic
- 5 = Highly problematic

TABLE 2

Offerings by Export Service Providers (ESP's)

<u>Offering</u>	<u>Offered by</u> <u>ESP's (%)</u>
Foreign Sales Effort	80.0%
Arranging Transport	70.0
Handling Documentation	63.3
Developing Distribution System	56.7
Obtaining Trade Financing	56.7
Information on Foreign Markets	56.7
Providing Technical Assistance	46.7
Information on Foreign Business Practices	43.3
Packaging	43.3
Advertising Overseas	40.0
Transport Rate Determination	40.0
Providing Warehousing	40.0
Adapting Physical Product	36.7
Providing Parts and Repair Service	33.3

TABLE 3

Benefits Expected by Banks from an ETC

<u>Benefits</u>	<u>Value*</u>
Expanding Present Services to Customers	2.08
Involving More Customers in Exporting	2.23
Drawing in New Accounts	2.54
Building Economies of Scale	2.55
Building Business with Manufacturers	2.55
Marrying Money and Expertise	2.62
Establishing Geographic Linkages	2.70
Providing Larger Capital Base	2.78

* Measured on a 5 point scale

- 1 = Highly beneficial
- 2 = Fairly beneficial
- 3 = No opinion
- 4 = Not very beneficial
- 5 = Not at all beneficial

THE ROLE OF THE JAPANESE GENERAL TRADING COMPANIES
(SOGO SHOSHA) IN GLOBALIZATION OF BUSINESS

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Abstract

The general trading companies of Japan, the sogo shosha, have greatly contributed to the globalization of business through their extensive range of international business activities. They have developed the standards, played a significant role in world trade, and led, stimulated, and set the stage for further growth of international business. The major factor underlying their success seems to be their ability to successfully modify their strategies to meet the challenges of changing conditions around the world. This paper is an examination of the changing strategies of the sogo shosha and the significant role they play in international business.

Introduction

As the 1992 internal integration of the European Community gets closer and the Eastern bloc countries rapidly take part in the free world economy, Marshall McLuhan's dream of a "global village" and one of Naisbitt's predicted megatrends (the shift from a national to a world economy) are becoming realities. Today, the impact of rapidly growing worldwide exchange of information, goods, and services on the U.S. economy, as well as on the economies of all other countries, is felt more strongly than ever before. Such considerations as market expansion, low-cost production, cost and availability of raw material and labor, assurance of resources, and incentives provided by other countries have caused many companies to go international. Globalization of business has become unavoidable as the dynamics of the world politics have drawn different ideologies, peoples, and cultures closer.

The volume of the world trade has grown from \$136 billion in 1960 to about \$2 trillion in 1983 (see Table 1). The world trade volume for 1988 was estimated to be around \$5 trillion. The stock values of world overseas direct investment at the end of 1986 was \$775.5 billion (1988 JETRO White Paper). Although about 12 percent (11.64 percent in 1983) of the world trade and 46 percent of the world direct foreign investment is accounted for by the United States and the number of U.S. subsidiaries in other countries has now increased to more than 11,000, a fivefold increase since the Second World War (Negandhi 1987), the dominant role of the United States in international business is now threatened by such countries as Japan, members of the European Community, and the newly industrializing countries of the Pacific Rim (South Korea, Hong Kong, Taiwan, and Singapore) (Table 1).

Japan has been quite successful in expanding its share of the world trade from 1.4 percent in

TABLE 1
SHARES OF THE SELECTED INDUSTRIES COUNTRIES
IN WORLD TRADE: 1983 (US \$ MILLION)

Germany, F.R.	169,436
United Kingdom	91,639
France	94,945
U.S.A.	200,535
Japan	147,000
European Community	574,496
Industrial Countries	1,139,900
Oil Exporting Countries	192,700
Non-Oil Exporting Countries	323,626
Communist Block	50,728
World Total	1,721,928

Source: Japan 1985: *An International Comparison*, 2nd ed., (1985). Tokyo: Keizai Koho Center.

1960 to 8.53 percent in 1983, and its share of foreign direct investment from \$1.5 billion in 1966 to \$12.22 billion in 1985 and to about \$22.32 billion in 1986 (1988 JETRO White Paper). Out of 912 cases of foreign investments in the U.S. in 1985, 216 were by the Japanese firms and this ranked Japan as the largest overseas direct investor in the U.S. During the same year, there were 652 cases of industrial cooperation between the U.S. and the Japanese companies (JETRO Monitor 1987). The number of the Japanese companies in the United States increased from 48 in 1976 to 203 in 1978 (Negandhi 1987) and to over 1000 in 1986 (Bowman 1986). As of April 1986, there were 545 Japanese manufacturing facilities in the U.S., employing more than 90,000 workers (JETRO Monitor 1987).

The purpose of this paper is to examine the role of the Japanese general trading companies (sogo shosha), the major means of Japan's expansion in world markets, in the globalization of business. The study focuses attention on the interrelations of the growth of the sogo shosha into international conglomerates and their ability to adjust their strategies in accordance with the changing conditions. After a brief review of the historical development and the functions of the sogo shosha, the paper examines their changing strategies followed by their growing role in international business.

Development of the Sogo Shosha

Out of more than 8,600 Japanese firms that engage in trade, the largest seventeen trading companies have come to be known as the general trading companies or the sogo shosha. The sogo shosha has usually been studied in two different categories. Most of the attention so far has been focused on the largest nine general trading companies which include C. Itoh, Kanematsu-Gosho, Marubeni, Mitsubishi, Mitsui, Nichimen, Nissho Iwai, Sumitomo, and Toyo Menka Kaisha. The second group of eight

relatively smaller general trading companies consists of Chori, Itoman, Kawasho, Kinsho-Mataichi, Nozaki, Okura, Toyoda Tsusho Kaisha, and Toshoku ("Sogo Shosha Can" 1982).

The first Japanese trading companies, namely Senshu Kaisha, Kogyo Shokai, Mitsui & Co., and Morimuragumi, were established around mid-1870s. Under the generous financial and trade policies of the Meiji governments, the Zaibatsu enterprises and their newly established trading companies prospered. In 1881, about fourteen Japanese trading companies had already opened branches in New York and in other major cities around the world. However, out of these early trading companies only Mitsui & Co. could survive the financial hardship created by the change of government's direct export subsidies policy in 1885 ("the 100 Year" 1977). Nevertheless, the number of trading companies, as well as the volume of foreign trade, continued to increase during the following years. By 1900, about 80 percent of the total imports had already been captured by the Japanese trading companies (Cho 1984).

It appears that the term "sogo shosha" was first used by Mitsubishi in 1954. To be considered a sogo shosha, a trading company needed to engage in both export and import, to handle many products, to have offices in major cities around the world, and to have considerable financial power (Kunio 1984). Today, the sogo shosha have offices in almost every country of the world and employ more than 81,000 persons worldwide. Each of the sogo shosha handles a large number of commodities, ranging from 1,000 to 20,000 items, and integrate many other business-related activities (Young 1979). Their worldwide sophisticated network of information and more than 1,100 offices in some 200 cities have enabled them to grow into powerful, large, and complex giants (Capiello 1982). Mitsui alone accounts for about 10 percent of Japan's exports and imports (Kunio 1984). In 1988, Mitsui had \$150 billion in sales, employed 12,000 persons throughout the world, and had equity investments in more than 620 companies in Japan and in 320 companies overseas (Ball & McCulloch 1990). Mitsubishi has about 140 and Marubeni 154 branches or offices in 70 and 87 countries respectively.

Structural Characteristics and Functions of the Sogo Shosha

The Sogo Shosha are highly sophisticated in terms of their organizational structures and operations. Long-term employee loyalty, paternalism, familism or groupism are the core characteristics of their organizations. Long-term planning, large volume, diversification, risk absorption, low gross profit margins, high debt to equity ratios, and close ties to industrial groups are among the typical managerial practices. They have developed worldwide office and communication networks gathering, evaluating, and transmitting information related to markets, prices, supply, and demand. Most of their activities are either directly or indirectly related to trade and

hence differ from other companies and multinationals.

The functions and operations of the sogo shosha go far beyond imports and exports. They include domestic and international trade, distribution, organizing, financing, investment, joint ventures, resource development, transportation, research, planning, marketing, information, and technology transfer. The Japanese general trading companies have increasingly become the organizers and coordinators of international projects, joint ventures, and complex industries, and are now deeply involved in high-tech, electronics, biotechnology, aerospace, and software ("The 500 Largest" 1985; Abe 1983; "The Role of Trading" 1983). They have played significant roles in developing and financing international trade, risk absorption, resource development, and offshore trade.

Recent difficulties faced and the resulting survival strategies have caused the sogo shosha to undertake such new functions as participation in high risk overseas "mega" projects as organizers, suppliers, and investors, and involvement in high-tech, distribution, and after-sales services. Among the newer functions of the sogo shosha the ones which have attracted greater attention have been growing overseas activities and direct foreign investment mostly necessitated by the rising protectionism on the part of the Western industrialized countries (Amine, Cavusgil & Weinstein 1986; Fairlamb 1986; Hirono 1983; Burton & Saelens 1983; "Japanese Multinationals" 1980).

Changing Strategies of the Sogo Shosha

Although the sogo shosha were originally established to assume the responsibility for foreign trade and reduce the control of foreign trading companies in Japan, the difficulties faced since early 1960s have forced them into new activities and ventures. The impact of such important developments as the tendency toward direct exporting by Japanese manufacturers, financing by large Japanese banks, floating exchange rates, rising protectionism, the slower growth rate of the world economy, managerial problems of ever-growing organizational networks, and increasing cost of manpower on the sogo shosha have been vital. Each of these environmental and structural challenges, however, has produced successful strategic responses (Kaikati 1983).

The early Japanese trading companies rapidly flourished as the supply, marketing, and trade arms of the Zaibatsu enterprises. After the Zaibatsu enterprises were broken up into a large number of small companies after the war, the early trading companies captured the opportunity for further expansion and diversification. The full-fledged development of the sogo shosha, however, came only after the regrouping of ex-Zaibatsu enterprises, restructuring of the Japanese industry, and the new competitive environment following the Korean War.

When the post-war Japanese economy entered a

period of rapid growth and the industrial structure shifted from textile to heavy and chemical industries, the sogo shosha introduced the technologies, imported the needed raw materials, developed export markets, and organized large joint investment and resource development ventures. This required them to expand their international networks. They also undertook the task of modernizing small processing businesses and financing such modernization. During the same period, they started to diversify and moved into real estate development, fashion industry, distribution, market consulting and engineering, agriculture, and manufacturing. The second half of the 1960s witnessed further growth and integration of the sogo shosha. They became active in resource development, and were involved in the import of iron ore, coal, nonferrous ores, uranium, timber, and agricultural and fishery projects. Their exports expanded to include machinery, steel, chemicals, and industrial goods. Enjoying the support provided by the Ministry of International Trade and Industry (MITI), they helped Japan to overcome severe trade deficits in the 1960s.

In the 1970s, the sogo shosha started their offshore trade activities. They began exporting textiles and electrical appliances from Southeast Asia to the United States and grain from the United States to the Southeast Asian countries. The oil crisis of 1973, as well as the floating exchange rates during the early years of the 1970s, and the resulting high inflation and fall in demand for textiles and lumber, however, caused the sogo shosha to consolidate and/or divest some of their unprofitable operations. The shift of the domestic demand from machinery and materials toward high technology and knowledge-intensive technology and rising protectionism against Japan's exports necessitated new adjustments in their strategies. Although they started to flourish once again after 1978 with the upturn of the economy, the appreciation of the yen put a new pressure on their exports. The 1980s have further complicated the operating environment of the sogo shosha and such factors as Japan's large balance of trade surplus, a decline in crude oil prices, and the debt problem of the developing countries have provided them with new challenges as well as opportunities.

Intense competition and the inclination on the part of some manufacturers to eliminate the intermediaries forced the sogo shosha to diversify into new high technology areas, to expand services, trade and activities, to engage in third-country trade, to keep prices and costs to a minimum, to integrate, and to consolidate. They scrutinized their operations for further efficiency, developed codes of conduct, and made new commitments to ethics and social responsibility.

The sogo shosha are now investing in foreign production facilities. They are establishing subsidiaries devoted to handling the unique needs of high technology products. They are helping Japanese and foreign firms to form joint research ventures in return for trading rights

and licenses. They are establishing their own joint ventures while at the same time helping the movement of production facilities out of Japan and/or helping Japanese firms overseas to modernize or expand. They are promoting their services trade activities in such areas as venture capital, food franchises and restaurants, leisure, health, sports, rentals, cleaning, waste management, and training in high technology fields. They are deeply committed to communications; play a major role in overseas real estate activities, research and development, commercialization of outerspace, defense and aircraft technology; and keep increasing their share in third-country trade (JEI Report 1988).

The Role of the Sogo Shosha in International Business

The available statistics and the scattered information on the share of the sogo shosha in the Japanese and world trade in the 1980s attest the vital role they play in the globalization of business. Engaging in offshore trade has been a part of their overall strategy of expanding into global enterprises. This strategy has called for promotion of joint ventures, closer relationships with foreign companies, increased overseas investment, and greater participation in the economies of other countries through their subsidiaries. Aware of the increasing need of other countries for trade and having the necessary experience and global contacts, the sogo shosha jumped into the opportunity expecting to become the world's middleman. Their extensive networks of offices, affiliates, and subsidiaries around the world have given the sogo shosha a great edge over other companies in capturing a significant portion of the third-country trade. The nine largest sogo shosha's share of offshore trade climbed from \$2.41 billion (4.8 percent of their total transactions) in 1970 to \$57.17 billion (15.3 percent) in 1983. The share of the third-country trade in the total sales of each of the largest six sogo shosha ranges from 19 to 27 percent (see Table 2). The sogo shosha are now conducting considerable trade between the socialist and developing countries, East and West, and North and South. Moreover, they have started to make every effort to increase their role in the development of the Chinese and the Soviet economies, as well as the war-torn economies of Iran and Iraq (JEI Report 1988).

TABLE 2
SALES OF THE LARGEST SIX SOGO SHOSHA (1987)
(In percent of each company's total trade)

	Domestic	Exports	Imports	Third Country
C. Itoh & Co., Ltd.	55.6	14.3	10.8	19.3
Mitsubishi Corp.	45.3	17.0	19.5	18.2
Sumitomo Corp.	50.4	21.0	18.1	10.7
Fuyo & Co., Ltd.	40.0	21.0	16.0	23.0
Marubeni Corp.	49.0	22.4	15.0	23.6
Nissho Iwai Corp.	33.0	9.2	30.3	27.5

Source: Company Annual Reports and JEI Report (1988, Sept 2).

The total annual sales of the largest nine sogo shosha is more than one third of Japan's gross national product. As can be seen in Table 3, their share in Japan's total exports in 1984 was

44.2 percent while their share of the total imports of the same year reached 68 percent. When the offshore trade (17.9 percent of the total trade) by the same group of sogo shosha and the trade share of the remaining of the eight sogo shosha are added to the above figures, it becomes obvious that the seventeen Japanese general trading companies account for more than one half of the total Japanese exports, more than three fourth of the Japanese imports, and a significant portion of the total world trade.

TABLE 3
SALES OF JAPAN'S NINE SOGO SHOSHA (FY 1984)
(Y billion)

	Total	In Japan	Exports from Japan	Imports into Japan	Offshore Trade
Mitsubishi	16,427	5,833	2,771	5,457	2,366
Mitsui	14,900	5,547	2,662	4,073	2,618
C. Itoh	14,077	6,179	2,625	2,662	2,612
Marubeni	13,564	4,561	3,541	2,873	2,589
Sumitomo	13,165	6,454	2,777	2,277	1,657
Nissho Iwai	8,552	2,843	1,391	2,423	1,896
Toyo Menka	4,503	1,637	1,074	951	841
Nichimen	3,953	1,052	873	611	1,418
Kanematsu-Gosho	3,751	1,714	490	881	666
Total (A)	92,892	35,818	18,203	22,207	16,664
Share (%)	100.0	38.6	19.6	23.9	17.9
Japan's Trade, total (B)			41,186	32,657	
Sogo Shosha's Share (A/B) (%)			44.2	68.0	

Source: Japan 1985: An International Comparison, 2nd ed. (1985). Tokyo: Keizai Koho Center

Conclusion

In brief, the sogo shosha have been the true leaders of the globalization of business. They have provided an example for many other countries; they have stimulated the world trade and international competition; and have set the stage for further globalization. The American export trading companies and the general trading companies of South Korea, Brazil, Malaysia, Turkey and many other countries have been either modeled after the sogo shosha or inspired by them. They have survived the economic difficulties, met the new challenges, and grown into international giants essentially by successfully adjusting their strategies to the changing conditions and taking advantage of the new developments in different regions of the world. The sogo shosha have been quite versatile in the past and seem to have taken the necessary measures toward maintaining their success in the future. Although the role of such managerial and organizational practices as income stability due to diversification, high efficiency, high volume, low costs, management of risk, ability to gather and apply worldwide information, unparalleled distribution capabilities, and their experienced, dedicated, and loyal manpower in assuring success has been vital, the most critical factor underlying their strengths seems to be their exceptional ability in making successful adjustments in their strategies. Their ability to overcome the rising protectionism and the new competition coming from the newly industrializing countries, however, remains to be seen.

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MEASUREMENT OF MARKETING PRODUCTIVITY IN A DEVELOPING COUNTRY

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Abstract

This study deals with marketing productivity analysis of the Spring-Cored Mattress Industry in Turkey. By means of multiple linear regression analysis exercised in this research in the SPSS routine, the levels of correlation between marketing productivity coefficient and independent variables were examined and findings indicated the reliability of the measurement relations. These issues also evidenced that marketing managers in developing countries should make a correct identification of the key variables affecting productivity so that they could set up a framework for future improvements.

Introduction

The concept of Marketing Productivity is an important issue and it is an essential element of all business enterprises. The subject gains even more importance in the case of developing countries which have limited resources. According to Thomas (1986) marketing productivity analysis is a very important element to evaluate the performance of marketing operations. Beckman and Davidson (1967) also consider the productivity measurement as one of the most significant conceptual tools in management.

From the standpoint of developing countries marketing productivity analysis is a matter of current concern. In developing countries like Turkey there are many questions. In these countries challenges such as ever - increasing costs because of high inflation and low purchasing power all make it necessary for firms to make use of different and more effective marketing strategies so that they may obtain a little bit more of the existing market. The economic situation of the country and these practices however, increase the firm's marketing expenditures.

This study is a firm level analysis and it is concerned with Marketing Productivity of the Spring-Cored Mattress Industry in Turkey. The various studies of marketing productivity have been examined and the topic is investigated by a performance criteria designed to fit the activities found in the major enterprises in the Turkish industry. The main objective of this research is to make a measurement and an evaluation of productivity in marketing to face the managerial challenges in the 1990's. The study also makes international comparisons and suggests a number of areas and hypotheses for future researches in developing countries.

Marketing Productivity Analysis

Theoretical and Conceptual Issues

Efforts aimed at marketing productivity measurement and cost analysis are being pursued and researched much more intensively nowadays. Bucklin (1975) stresses the ever-increasing dimensions of the subject. He points out that during the last ten years in the U.S. economy one

can observe a stimulative trend towards a high consumer spending which goes parallel with the increasing marketing costs. The author also notes that these issues have forced the practitioners and the scholars to be more sensitive and pre-cautious on the subject. According to Beckman (et al), in spite of the great importance of the concept of productivity, only limited application has been made of it in the field of marketing. Gold (1976) realizes the need for an effective system of productivity measurement but he argues that this measurement is confronted by problems that occur in measuring the output and input levels. The author also mentions the need of a performance criteria which must be suitable to fit the highly differentiated activities in various firms or companies. Sudit (1984) argues that efforts to develop marketing efficiency measures are at an embryonic stage due to difficulties that center around appropriate measures of output. Webster (1981) emphasizes the managerial issues and concerns regarding marketing productivity. He discusses that marketing managers tend to focus more on sales and market share than on profit contributions and return on assets. It is apparent from these issues that further research should be undertaken to explore the element of marketing productivity in developing countries to make a better use of limited resources. Unfortunately, the lack of a common standard of measurement that could shed light on such research studies prevents one from making a scientific appraisal in this context. So far several studies on the subject have been carried out at the macro level, Bucklin (1975,1978), Steiner (1978) and at the micro level Sevin (1965), Kendrick (1965), Greenberg (1973), Dhalla (1977), Thomas (1986), Hawkins, Best and Lillis (1987). So far however, it has not been possible for a single definition of marketing productivity to be made, though a definition made in 1980 (Greyser, 1980) still preserves its validity. His definition is emphasizing the need to learn more about increasing skills in order to increase the productivity of marketing decisions.

From the standpoint of production, productivity is the ratio of input to output. Briefly, productivity is a measure of the efficiency with which products are produced (OECD 1986). Therefore, productivity in marketing is desirable only to the extent that it enhances efficiency. Therefore it is defined as:

$$\frac{\text{Marketing Output}}{\text{Marketing Input}}$$

What is in question here however, is the identification of the elements of which the "marketing output" and "marketing input" consist. For example, in one study at the firm level (Sevin, 1965), the effects of inflation were not taken into consideration, while in another (Bucklin, 1978), inflation was taken into account because of its carry-over effects. Bucklin's inflation

adjusted version of Sevin's definition adjusts sales and cost elements for inflation over time and is appropriate for macro studies but not for a firm level analysis (Hawkins, et al).

While marketing output may be defined in different ways, it nevertheless consist generally of products and services, as well as their price and quality when they are offered to the market. By means of the output that it offers to the market, a firm secures benefits in terms of place, time, form and possession, but neither consumers nor the company managers are aware of this. It is almost as if the utilities created grew up spontaneously out of the relationships between the business and the market.

From a managerial perspective, marketing output consists of market share and the price. The market share and price have been taken on a relative basis for the purpose of reducing the effect of inflation over specific periods of time, thus making it possible to evaluate company sales volume in terms of quantity. Similarly relative prices are specified according to the firms existing in the market, thus creating an opportunity to make comparisons among different markets and industries. In this context the most desirable situation is that in which a firm has a big market share and a relatively high price. Marketing input on the other hand, consists of marketing expenditures, but in this case it becomes necessary to show in detail just how marketing costs are affected in situations where the prices of raw materials, particularly those of high-quality products, increase.

To describe the concepts of marketing output and input, these issues are of great importance to the scholars and practitioners. Accordingly, marketing productivity can be defined as follows:

$$\text{Marketing Productivity} = \frac{\text{Relative Market Share} \times \text{Relative Price}}{\text{Marketing Expenditures/Sales}} \quad (\text{Hawkins, et al})$$

Research Methodology

Data Source: The mathematical technique employed in this research has required a survey of certain number of firms. From this standpoint our preliminary investigation provided evidence that Spring-Cored Mattress Industry was the most suitable sector for the purpose of the study. Consequently, the research was conducted on the basis of eight of the eleven enterprises in Turkey that are engaged in business in the field of spring-cored mattresses. However, because 60 % of the production of one of the eleven firms consists of hide-a-bed spring-cored mattresses and that of two others were so small as to be negligible, these three were excluded from the study.

Multiple Linear Regression Analysis employed in this study requires that the number of firms should at least be one more than the independent variables. Because we determined seven independent variables, we had to find an industry with eight firms.

The questionnaires that were to be used in the interviews with the selected firms were drawn up

in two sections and in such a way as to reflect the different variables that had been selected in the measurement of marketing productivity. The first section intended to identify the business, included the company's name, its sales (in terms of Turkish Liras and quantitatively), and its production volume. The second section on the other hand, included questions whose answers would reflect the specified variables such as, for example, product lines, number of retailers, number of distributors, marketing expenditures and product quality.

The study was conducted by means of interviews. In order to ensure that full and correct replies would be obtained to the questions asked, meetings were held personally with top-level managers and actual figures were obtained from their accounting records. The fact that no investigation of this type had hitherto been conducted in Turkey, increased the rate of response to 100% and it was observed that the executives approached the matter with great interest and seriousness.

Selected Variables and Marketing Productivity Measurement

The selected variables and their scaling are illustrated in [Table I](#).

As is illustrated in [Table I](#), in the measurement of marketing productivity the market share and price variables were taken on a relative basis. The main reason was, to reduce the effects resulting from the current high rate of inflation, which was approximately 70%. The coefficients for other variables were obtained using the same reasoning. The formula (1) has been used for gathering the relative data.

$$(1) \text{ Coefficient of Variables} = \frac{X_i}{(\sum X_i) - X_i / (n-1)}$$

Where; $i=1,2,\dots,n$ X =raw data n =number of observation.

The selected marketing mix variables which had relevancy to marketing productivity were taken as independent variables. The relations between the marketing productivity scores and the independent variables have been tested by applying the multiple linear regression analysis technique in the SPSS routine. Besides, a correlation matrix has been developed for the purpose of indicating the relationship among the variables. At this stage the objective is to indicate not only the proportional ratios among the selected variables themselves but also the degree of their relationship with marketing productivity coefficients. The correlation matrix resulting from considering marketing productivity coefficients as dependent variables is illustrated in [Table II](#).

T A B L E 1
Selected Variables and Scaling

Variables	Source of Data	Scaling	Corresponding Indicators
1. Relative Market Share	Company records	Proportion of the firm's market share to the industry market share (less its own)	% Based on 1987
2. Relative Price	Company records	Each firm's annual sales turnover is divided by quantity sold, thus obtaining an average price. Each firm's average price is then divided by the industry average price, (less its own) thus obtaining its relative price.	
3. Sales	Responses to standardized questions	Firms' annual sales are shown in terms of Turkish Liras (TL).	TL Based on 1987
4. Marketing Expenditures	Responses to standardized questions	Firms' annual marketing expenditures are shown in terms of TL.	TL
5. Marketing Productivity (MP)			% $Y = \frac{1 \times 2}{(4/3)}$
6. Product Line (PL)	Based on the company's wholesale price list	Width of product line	X_1
7. Quality Coefficient (QC)	Responses to standardized questions	Based on overall quality; executives rate the quality of each of the 7 firms' products other than its own. Five point scale was used and coefficients identified from the firms' total score accordingly.	- Very High Quality - High Quality - Average Quality - Poor Quality - Very Poor Quality X_2
8. Custom-Manufacture (CM)	Company records	This ratio was found by dividing quantity of custom-manufactured products to the firm's total sales. Coefficients identified accordingly.	% X_3
9. Number of Retail Outlets (RO)	Company records	Based on total number of retailers selling each firm's products and coefficients identified accordingly.	X_4
10. Number of Distributors (ND)	Company records	The number of general distributors of each firm, has been taken and coefficients identified accordingly.	X_5
11. Product Modification Coefficient (PMC)	Company records	Change in design, spring steels and filling defined as product modifications. The frequency with which product modifications were made was quantified and a coefficient was found accordingly.	- Very Often - Often - Rarely - Very Rarely X_6
12. Retailers' Reordering Frequency (RRF)	Company records	Retailers were quantified on the basis of the frequency and types of their reorders and a coefficient was found accordingly.	- Every Week - Once Every Two Weeks - Once a Month - Once Every Three Months - Once Every Six Months X_7

Table II
Correlation Matrix for the Spring-Cored Mattress Industry

	Y	X1	X2	X3	X4	X5	X6	X7
Y MP	1.00000	0.79654	0.02265	0.49792	-0.10567	-0.26356	0.42185	0.44771
X1 PL	0.79654	1.00000	0.07021	-0.11113	-0.03171	-0.28234	0.15867	0.33830
X2 QC	0.02255	0.07021	1.00000	-0.05020	0.67357	0.55403	0.46260	0.75144
X3 CM	0.49792	-0.11113	-0.05020	1.00000	-0.00833	-0.13883	0.51802	0.26897
X4 RO	-0.10567	-0.03171	0.67357	-0.00833	1.00000	0.26121	0.54440	0.29273
X5 ND	-0.26356	-0.28234	0.55403	-0.13683	0.26122	1.00000	0.35960	0.14025
X6 PMC	0.42185	0.15867	0.46260	0.51802	0.54440	0.35960	1.00000	0.52891
X7 RRF	0.44771	0.33830	0.75144	0.26897	0.29273	0.14025	0.52891	1.00000

Evaluating the Data: The data obtained from the computer outputs in **Table II** show that the highest level of correlation (0.79654) is between the marketing productivity coefficient and the product line variable (X_1). This is followed in turn by custom-manufacture (X_3), retailers re-ordering frequency (X_7), and product modification coefficient (X_6), and there appears to be a significant level of correlation. Among the variables whose levels of correlation with the marketing productivity coefficient are lowest (0.02255), is the quality coefficient (X_2).

Having determined the levels of correlation between the marketing productivity coefficient and the independent variables, a regression equation was developed in order to determine the marketing productivity coefficient with the aid of these variables. An analysis of variance test was then conducted with the help of data in order to test whether or not the regression equation thus arrived at was significant. The findings are presented in **Table III**, below.

Table III									
Regression Equation for MP Scores of SOMI									
MULTIPLE R		ANALYSIS OF VARIANCE			DF	SUM OF SQUARES	MEAN SQUARE		
R SQUARE		REGRESSION			5.	17.249	3.449		
ADJUSTED R SQUARE		RESIDUAL			2.	0.048	0.024		
STANDARD ERROR		0.155							
-----VARIABLES IN THE EQUATION-----					-----VARIABLES NOT IN THE EQUATION-----				
VARIABLE	B	BETA	STD ERROR B	F	VARIABLE	BETA IN	PARTIAL TOLERANCE	F	
X1 PL	3.773	0.916	0.202	348.862	X2 QC	-0.0098	-0.0946	0.3220	0.01
X3 CM	0.706	0.650	0.067	109.768	X7 RRF	0.0025	0.0392	0.5317	0.01
X4 RO	-0.512	-0.064	0.042	1.476	DURBIN-WATSON TEST: 2.41837				
X5 ND	0.764	0.130	0.315	5.884					
X6 PM	-0.277	-0.073	0.293	0.894					
(CONST.)	-2.047								

The quality coefficient (X_2) and of the retailers re-ordering frequency (X_7) were not significant. This can easily be seen in **Table III** from the F-values found for X_2 ($F=0.009$) and X_7 ($F=0.002$). Therefore, they were eliminated from the regression equation.

The F-value ($F=142.3743$) found for the variables in the regression equation is larger than the critical value ($F_{5,2}=99.2$) at the 0.01 level of significance and at the given degree of freedom ($df=5,2$). Durbin-Watson test (dw) value was found 2.41837. Therefore, we conclude that the regression equation arrived at may be used with confidence to make predictions and it is also considered to yield the best possible predictions. In addition, this equation also provides positive results from the standpoint of R^2 : the fact that $R^2=0.99720$ is an indication that the total variation of the regression equation accounts for 99.72% of the data. In other words variations in the product line (X_1), custom-manufacture (X_3), number of retail outlets (X_4), number of distributors (X_5) and product modification (X_6) coefficients account for 99.72% of the variations in the marketing productivity coefficient.

Table IV presents the values that have been observed and the values predicted with the use of the regression equation.

Table IV
Values Observed and Predicted

SEQNUM	OBSERVED Y	PREDICTED Y	RESIDUAL	PLOT OF STANDARDIZED RESIDUAL				
				-2.0	-1.0	0.0	1.0	2.0
1	4.565660	4.443076	0.1227832					1*
2	4.538799	4.592505	-0.537659E-01					*
3	1.844899	1.908669	-0.6376788E-01					*
4	2.584700	2.502548	0.8215128E-01					1*
5	4.569500	4.676425	-0.1069259					*1
6	3.846399	3.850059	-0.3659576E-02					*
7	0.3502000	0.4017709	-0.5156957E-01					*
8	2.110660	2.035962	0.7466966E-01					*

As may be seen from the computer results presented in **Table IV**, the values observed and predicted by means of the regression equation are quite close to one another and the differences between them are quite small. These differences are generally about 2-3% of the observed values; only in the case of item number 7 the difference amounts to 14.7%. This situation also to a degree, confirms the reliability of the regression equation.

Findings, International Comparisons and Limitations

For a developing country like Turkey, the findings arrived at are quite interesting. Theoretically, quality should have a determining effect in purchasing and in determining the marketing productivity. However, on the basis of the results here, we see that in this sector quality does not have a significant determining effect. In other words, efforts made to sell a high-quality or a low-quality mattress make no difference in the calculation of a firm's marketing productivity. Normally the reason for this situation ought to stem from a failure to have a fully established relationship between price and quality due to the fact that consumers' relatively low income levels inhibiting their making a preference between high-and-low-quality mattresses. Therefore it is observed that quality does not significantly affect the productivity of marketing operations. But a comparison at an international level between the firms of developed and developing countries reveals contrasting situations. According to the results of a study made in U.S. (Hawkins, et al.) which used the PIMS data base, quality seemed to have a significant relevancy and had a direct effect.

It is also noteworthy that in the spring-cored mattress industry in Turkey it becomes necessary to address different market segments. This segmentation however, requires the need to work with a wide range of products. The high rate of correlation between custom-manufactured products and marketing productivity also reveals the importance of product diversification and functional modification. By creating a wide range of usage in different markets it becomes possible to increase the company's sales volume and thus improving the marketing productivity. It is apparent from this explanation that an increase in the numbers and types of products is a factor that improves marketing productivity in this industry.

In contrast to the research findings in Turkey, the study made on the firms in U.S. revealed different implications which showed us that

customization was insignificant with respect to the productivity of marketing operations. At the international level one should also observe some similarities between the findings of these two studies. That is, durable goods industries characterized by frequent product changes tend to have a higher level of marketing productivity than do industries with less frequent changes.

Another interesting finding is concerned with distribution channels. Increasing the number of retail outlets by means of intensive distribution does play a positive role in increasing the firm's marketing productivity. However, the correlation between the number of distributors and marketing productivity is relatively stronger in comparison with that of the number of retailers. This should be an indication that in this sector, the function of distributors in particular, is much more important from the standpoint of productivity of marketing operations. Consequently, those businesses that maintain a wide range of products and those that make an appropriate selection of their distributors will be in a better position in comparison with the others. It is most likely that this type of marketing strategy will create more effective sales opportunities and hence it will become possible for these firms to increase their marketing productivity coefficients.

The findings of our study should be interpreted in light of several limitations. First of all, the study was carried out on the basis of eight businesses and thus it may be inadvisable to derive generalized conclusions from its findings. Had the study been conducted in a sector where there were a large number of enterprises, it would have been possible not only to increase the number of variables that affect the marketing efforts, but also to derive conclusions that were more generally applicable. In addition, the study does not deal with an analysis of marketing productivity on the basis of a particular firm's individual data. Undertaking this study on the basis of a particular firm's data, it would be possible to determine the measurement of marketing productivity scores which would provide the managers with an information system to make the right decisions for a better performance of marketing operations.

Conclusion

The measurement of marketing productivity and the adoption of measures concerned with it are the issues of great importance for the economy of any country. Developing countries in particular, need to make optimum use of their limited resources to face the future challenges. They should also overcome the high operating costs resulting from very high inflation rates. It is obvious from the study that marketing productivity can be improved by means of the effectiveness of the company personnel and their accomplishments in sales. It can also be improved by an effective use of marketing tools as well as by making an adequate assessment of the existing markets. For this reason companies should be ready to make a correct identification of the key variables affecting productivity so that they could set up a framework for further improvements.

Marketing productivity is a broad and a complicated subject to deal with. From the standpoint of a developing country like Turkey, an appraisal of marketing productivity indicates that there is a high correlation between it and the marketing efforts that cannot be numerically quantified. For example, it is impossible to give concrete figures for many marketing activities related to product modifications and distribution channels in contrast to other functions such as advertising and transportation which could be represented numerically as marketing expenditures. These issues provide evidence that this study on marketing productivity will be a preliminary step to future researches in developing countries.

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MANAGING INTERNATIONAL SUBSIDIARIES:
THE CASE OF SWEDISH FIRMS

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ABSTRACT

Most of the literature on Foreign Direct Investment (FDI) deals with the structural development of MNCs, from domestic to global structure. This study deals with an evolutionary phenomenon where the foreign operations become more influential than the parent firm. The recent development of internationalization is examined using a network approach. It is assumed that a foreign subsidiary has a three dimensional relationship i.e. with the head office, local authorities and the local network. The empirical investigations from Swedish firms in South East Asia support the assumption that a new structure of MNCs is emerging where the foreign subsidiaries become more influential and independent than the parent firm. Moreover, the emergence of "center-center" relationship, where some regional subsidiaries become center for a number of subsidiaries around them, is also evident.

INTRODUCTION

The involvement of Swedish firms in international markets dates as far back as the 1870s, and by 1890s several firms such as, AGA, Alfa Laval, Nitroglycerin and Ericsson, had their manufacturing operations abroad. The decades immediately after the second World War were, however, the golden period for Swedish international business activities and by 1960s most of the bigger Swedish firms were involved in international marketing.(1)

A relatively small home market, innovation capabilities and a well established network of relationships are important factors for this success. Moreover, the Swedish firms, due to the non-alliance policies of their home government, have a comparative advantage over the firms coming from other Western countries. (2)

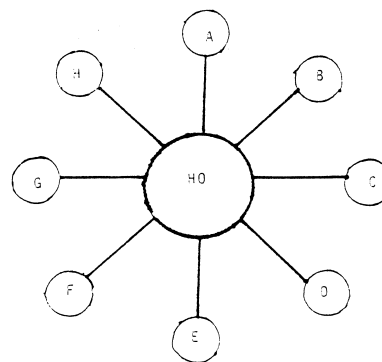
Most of the literature available on multinational firms tends to focus on traditional firms from large countries such as the United States (see e.g. Franko 1972 and Kindleberger 1979). Research on Swedish firms and on their international marketing activities is rather limited. A number of studies have been performed on the internationalization process (3) and on the export behaviour of these firms (4). Some studies have also been undertaken to study the Swedish firms and their activities in Western Europe (5). In the studies it has been mentioned that subsidiaries of major European MNEs (e.g. Siemens, Philips, Nestle', etc.) tended to overwhelm the small size of the home

country and headquarters(6). The phenomenon of subsidiaries getting more influential and independent has however, not been systematically studied.

Hedlund and Åman (1984) presented a "Swedish model of managing foreign subsidiaries". They based their study on Stopford & Wells (1972) and Franko (1976). These studies discussed the structural development of multinational companies and explained that how the structure of these firms develops from domestic to global structure.

In this paper, however, the operating characteristics and the recent evolution of Swedish MNCs are examined using a framework based on the network approach. According to this approach a firm has to develop different types of bonds and relationships to acquire raw material, components and other factors of production and also to sell and distribute its products. These bonds and relationships have to be developed with the firms situated before and after the particular firm in the production chain, i.e., sub-contractors, suppliers, distributors and wholesalers. Moreover, the firm has to develop bonds and relationships (liaison) with other actors in the same network, such as; competitors, local authorities and other third parties working in the same industry. (7)

In the existing literature it is presented that the multinationals(MNC) are working with a strong head office which controls and coordinates its subsidiaries around the globe (8). The top management in these firms is assumed to formulate an overall strategy for all the units, and implements the same. According to this view the MNCs function with a strong head office, "center", and a number of subsidiaries, "Peripheries", as illustrated by figure 1.



HO = Head office

A-H = Subsidiaries in different foreign markets

6. See for example; Doz, Bartlett & Prahalad (1981), Prahalad & Doz (1981) and Gates & Egelhoff (1986).
7. Hedlund & Åman (1984).
8. Eliasson (1984).

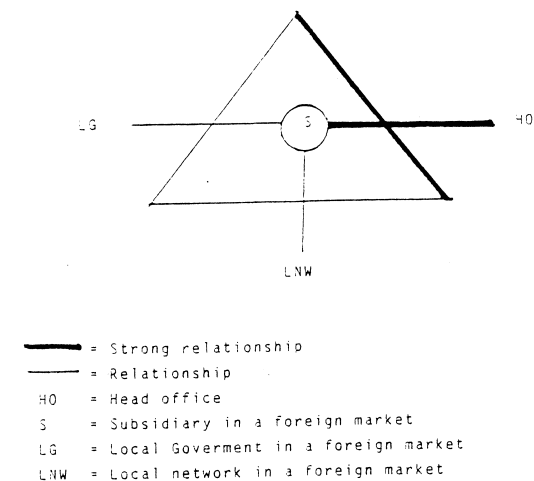
1. Horneß & Vahlne (1986).
2. Ghauri (1988).
3. Johanson & Wiedersheim-Paul (1975).
4. Kaynak & Ghauri (1987).
5. Jagren & Horwitz (1984).

It is assumed that a new stage of multinational structure is emerging after the global stage introduced by Stopford and Wells (1972). The head office/subsidiary relationship is changing. A new phenomenon is emerging which is a step further in the internationalization process of the firm. We can see the emergence of a number of centers within the same firm. Some regional subsidiaries, due to their size and importance, have started functioning as centers. This phenomenon is some what different from regional headquarters, where the head office itself delegates some of its decision making to some regional headquarters to effect better coordination (9). This is, on the other hand, a further stage in the internationalization process, which may not be initiated by or according to the policies of, headquarters.

In some cases the subsidiaries have some contacts with the head office while in other cases there is no such contact at all. As a result a "center-center" structure is emerging. Hedlund (1984) also concluded that interdependencies among head office and its subsidiaries varies with the degree and experience of internationalization. Depending upon size and importance of different markets the subsidiaries, through adaptation to local markets, acquire a prominent position in the local network.

In case of MNCs, the subsidiaries in the foreign markets are a part of the network of the parent company as well as they have their own network in the local market in which they are operating. These subsidiaries have to live and survive in the local market and have to comply with the demands of the local network even if it contradicts with the policies of the parent company. We can say that the subsidiaries have a three dimensional relationship to handle. First, there is the hierarchical relationship with the head office. Secondly, their activities are limited by the rules and regulations of the local government. And finally, they have to live and comply with the other actors of the local network. This is illustrated by figure 2.

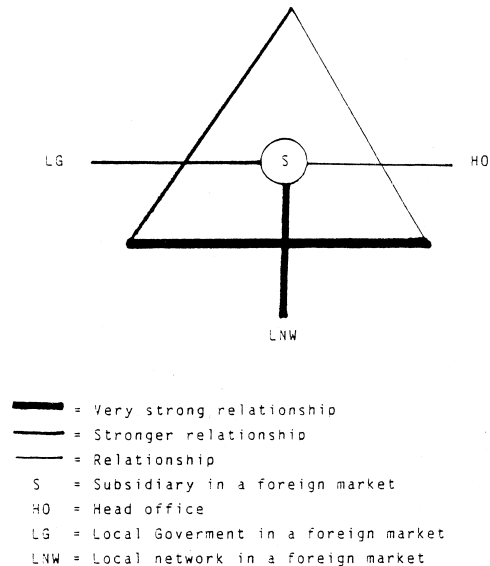
Figure 2, The Three Dimensional Relationship for a Foreign Subsidiary



9. Robock & Simmonds (1989).

Here the traditional head office/subsidiary relationship is very strong, while the subsidiary's relationship with the local government and the local network is rather weak. In the early stages of establishment of the subsidiary, the head office is directing the subsidiary in all the matters. Even how it should handle its relationship with the local government and the local network. Eventually, however, as the subsidiary gains more experience in the local market, acquires a position in the local network, and has to manage the rules and regulations of the local government on its own, its relationship priorities change as illustrated by figure 3:

Figure 3, Emerging Head Office Subsidiary Relationship



As we can see the most important for the subsidiary, at this stage, is the relationship with other actors of the local network. Secondly, it has to abide to the rules and regulations of the local government even if these contradict with the policies of the head office. The relationship with the head office thus becomes the least important at this stage.

The purpose of this study is to analyse that how the subsidiaries are dealing with this three dimensional relationship, and to find empirical support to above mentioned assumptions. The focus is however, on the head office subsidiary relationship dimension. According to the network approach, described earlier, the most important relationship for the subsidiary is the local network in which it has to live. In that case it is interesting to see that how these firms are dealing with the issues and policies of the head office which conflict with the demands of the local network. This study assumes that the subsidiary would in that case take care of its own interests i.e., the demands of the local network, and would act against the policies of the head office. This of course, depends upon several factors such as, the size of the local market and the

position of the subsidiary in the local network. The stronger the position the more inclined it is to have its own policies. As in that case it would not consider itself dependent on the head office. Similarly, the bigger the size of the market it is operating in (bigger than the parent company's home market) the more chances for a subsidiary to be independent.

This study is based on data gathered from Swedish firms having wholly or partly owned subsidiaries in Thailand, Philippines and Indonesia. The data collection is done through personal interviews with the area managers at the head office of each firm in Sweden and with the Managing Director of each subsidiary in the respective foreign country. In some cases, the marketing managers of the subsidiaries were also interviewed.

INTERNATIONAL GROWTH OF SWEDISH FIRMS

In 1965, 82 Swedish firms had 800 overseas manufacturing and sales subsidiaries with 170,000 employees. 1970s and 1980s were, however, turning point for the growth of Swedish multinationals. As the ability of Swedish firms to serve foreign markets through exports declined, they had to increasingly engage in FDI to protect markets developed with exports from Sweden. In terms of expansion there are two groups of firms, firstly, those which started with international activities a long time before the two World Wars, such as, Aga, Alfa Laval, SKF, ASEA, and Swedish Match, have operations all over the world. And secondly, those firms which started after the World War II such as, Volvo, Electrolux and Saab and are still expanding.

As indicated by the above discussion there has been a considerable growth in Swedish FDI. Not only these firms have expanded their activities abroad but they have also grown in their home market. One of the factors contributing to this domestic growth is the supply of components to their foreign subsidiaries (10). Table 1 illustrates both inward and outward Swedish foreign direct investments between 1975 and 1987.

10. Ghauri (1988).

Table 1

Swedish Foreign Direct Investment (In Billions of SEK)

<u>Year</u>	<u>Outflow</u>	<u>Inflow</u>
1975	2.0	0.53
1976	2.8	0.47
1977	3.8	0.65
1978	2.6	0.74
1979	2.0	0.70
1980	3.0	1.29
1981	5.0	1.10
1982	6.9	1.78
1983	9.2	1.48
1984	10.6	2.76
1985	14.3	5.37
1986	25.1	6.06
1987*	10.5	1.37

* Up to June

SEK: Swedish Krona

Source:

Kredit och Valutaoversikt, Central Bank of Sweden, Stockholm, Various Issues.

Importance of reinvestments: In an MIT project (1982), undertaken on behalf of STU (Styrelsen for Teknisk Utveckling), it was found that a typical newly established firm after ten years has a turnover of around SEK 20 millions, sells 80 percent of its production out of the country and has 5 percent of its employees working out of Sweden. After 14 years of its establishment it has 30 percent of its employees working out of the country and by this time it has a turnover of SEK 80 millions (11).

In recent years, however, reinvestment has become more important than new investments. Reinvestment in already existing markets and acquisition of suppliers, competitors and distributors has become quite common in recent years. For example Swedish Match both in Thailand and Philippines has acquired its suppliers as it is very important to have a secure supply of raw material. Forsgren (1989) concluded that most acquisitions by Swedish firms have taken place in the countries where these companies were already well established. A number of acquisitions by Electrolux in North America, Italy and England are also good examples.

11. Swedenborg (1982).

HEAD OFFICE SUBSIDIARY RELATIONSHIP

Importance of Regional Centers: There are several examples available where the subsidiaries have become bigger than the parent firm in terms of sales and number of employees. Considering the size of the home market, it is rather natural in the case of Swedish firms. These subsidiaries now have their own R & D and product development programs. In some cases a number of subsidiaries have been grouped together into regional networks. It has been specially popular in the case of Swedish firms in South East Asia with Singapore being the regional head quarter. These regional offices work as independent firms many times with more power than the head office.

In case of Sandvik's subsidiary in Philippines, although all the components are coming from Sweden, the Philippines subsidiary is always sending its requisitions to Singapore. All the material is thus coming through Singapore. Some of the components used are not available from Sandvik group firms and are bought from other foreign firms, even these components are bought and delivered by the regional office in Singapore. Accordingly the payments for all these components are also made to Singapore and not to the head office or the suppliers. Singapore is thus taking care of the South East Asia region i.e., Thailand, Malaysia, Singapore, Indonesia, Philippines, Hong Kong and Taiwan. Although these firms are owned by Sandvik Sweden, they report to their regional office. All the financial reports are also sent to the regional office which later on consolidates all the returns and reports to the head office. For the head office it is the result of the regional office that counts and not of the individual subsidiary.

The growth of foreign operations to become larger than the head office can be accompanied by many conflicts as illustrated by a case study of the Danish producers of farm equipment (Rorsted 1985). The company established ten sales subsidiaries in major overseas markets during the 1970s as outlets for its home production. Soon, however, these sales subsidiaries began to modify the parent company's products in order to adapt them to local demands. This eventually evolved into local production. In some cases, the production facility even led to facilities for the development and manufacturing of new products. Most of these subsidiaries also started buying parts and components from local suppliers in order to compete successfully with other international companies such as Messer Ferguson, John Deere, International Harvester and Caterpillar. One subsidiary in England was buying 65 percent of its components and parts from local suppliers which was clearly against the policy of the head office.

These developments eventually led to conflicts between the parent company and its overseas subsidiaries with regards to sourcing and the optimal product mix. The parent companies believed that the affiliates should preferably purchase from each other and that some of the product offered by competitors were

at prices and qualities which were harder to beat and, therefore, wanted to focus its resources and know-how on product lines with higher technological content. However, purchasing policies and product mix strategies of the subsidiaries were dictated by local networks.

The head office subsidiary conflict is also illustrated by the case of Electrolux subsidiary in the Philippines. In the beginning, 1979/1980, the subsidiary was importing all of its components from the parent company or from affiliated sister companies around the world. As it gained more experience and a better position in the local network, not only it started buying from local suppliers but, in fact, it helped local suppliers develop their technical competence so that they could supply to Electrolux's specification. As a result, in 1987, the local subsidiary was buying more than 85 percent of its components locally and the vacuum cleaner manufactured in Philippines was quite different from the one Electrolux was manufacturing in its subsidiaries in Europe. As an example of how the product was being adapted to the local market, the Philippines vacuum cleaner has reusable dust containers. As an example of difference in product mix, the product with the second largest sales in Philippines is water purifiers which are not even sold in the home market.

The case is not much different with Nobel Industries subsidiary in Philippines. The local firm is buying almost all of its components and raw material from the local, Japanese and American suppliers. Only a remote part of the material is bought from Sweden. In 1984 the subsidiary even started with its own Research and Development department. As far as the marketing is concerned, in 1984 when the market was decreasing in Philippines the subsidiary started exporting to nearby countries. This led to conflicts among the sister firms from the countries where this subsidiary wanted to export. Finally, the head office had to solve this conflict by establishing a common sales subsidiary which would sell to Indonesia and Thailand, the countries where there was no Nobel subsidiary.

Another example is Tetra Pak which sells machines and raw material for liquid packings. The subsidiary in Philippines imported all the machines and tools from Sweden and leased these machines to four different producers of milk and juices. Tetra Pak Philippines has a leasing contract for service and maintenance of the machines and the producers using their machines are not allowed to use any other material than supplied by Tetra Pak. The subsidiary is however, importing all the material they sell in Philippines from their regional office in Singapore where Tetra Pak has a manufacturing subsidiary. All the material is sold against a Letter of Credit which is opened by the customers in favour of Tetra Pak Singapore. In this case again we can see the emergence of a strong regional office, as Tetra Pak Singapore is supplying the material to all the subsidiaries in South East Asia.

Swedish Match, A Swedish International concern with 150 wholly or partly owned

subsidiaries in about 40 countries, has 73 percent of its total sales and 55 percent of its production outside Sweden. Swedish Match started international production with manufacturing subsidiaries in markets as far as India, Thailand and Philippine as early as 1920s and 1930s. Although these subsidiaries are fully owned by Swedish Match (except in India, due to government restrictions) they work rather autonomously. They purchase most of their material from local suppliers and even the imported material is not necessarily bought from parent or sister firms. Most of the imported material they purchase is from Germany, Japan, China and Finland. In Philippines the subsidiary had two factories in two different towns, one in Cebu and one in Manila, in 1977 it sold one of its factories and instead bought 50 percent shares of one of the suppliers for raw material. It was considered more important to have a secure local supply of raw material than to have greater market share. This was also clearly against the policy of the head office. Swedish Match's subsidiary in Thailand has also invested in its suppliers, it has leased out its machines to the supplier in order to get a guaranteed quality and quantity of the raw material.

CONCLUSIONS

As the examples mentioned above show, it can be concluded that the concept of center and periphery and the interdependence between the two is fading away in many MNCs. In many cases several centers in the same company are emerging. We have seen that in examples of Tetra Pak and Sandvik where Singapore is emerging as a center for subsidiaries in South East Asia. The "Center" or head office for these subsidiary is thus Singapore and not the parent company in Sweden.

The case of Electrolux where the subsidiary in Philippines is working independently, is very much the same. The Philippines subsidiary has excellent manufacturing facilities and is exporting to other Electrolux subsidiaries in the region e.g., Thailand and Indonesia. The parent company knowing the independent status of the Philippines subsidiary and also accepting the fact that it is one of the most successful subsidiaries for the whole concern, has chosen not to have any say in their business with other regional companies and in their purchasing policies. For Electrolux subsidiaries in that area, the Philippines subsidiary is acting as a "center". As the products manufactured in that subsidiary, being adapted to the local market, are more suitable for them than the products manufactured in Sweden or in any other European subsidiary.

We may conclude that these changes in head office subsidiary relationship are however, gradual. According to our empirical evidence this relation changes with time and depends upon the position of the subsidiary in the local network. These changes, most probably, go through three different stages.

In the first stage, at the beginning of the internationalization, the most important relationship is with the head office. Later on, in the second stage, the subsidiary most probably gives equal importance to the head office, local network and the local government. Finally, in the third stage, the subsidiary gains more experience, knowledge, and a better position in the local network and thus that relationship becomes the most important one. Moreover, as we have seen, in some cases, the subsidiary's relations with the head office are replaced by its relationship with a regional office (center).

This study has shown the emerging concept and phenomena for MNCs as regards to foreign direct investment. It has special implications for the development of foreign operations on MNCs based in small economies like Sweden. In such cases, their foreign operations are likely to become independent or regional "center" oriented as they overtake the parent firm in size and influence. The Swedish cases from South East Asia have shown to be consistent with these recent developments regarding foreign direct investment. The results of the study are, however, difficult to generalize due to the limitations of the empirical evidence. Hopefully, this study would lead to further empirical studies from relatively bigger markets such as, U.S.A., West Germany and other European markets.

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Available from authors upon request.

THE PROCESS OF TECHNOLOGY TRANSFER THROUGH JOINT VENTURES: INTERNATIONAL MARKETING IMPLICATIONS

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partners.

Abstract

This paper describes the process of technology transfer through joint ventures by the help of two case studies. A longitudinal view is applied in analyzing the cases. A discussion on the result is presented and few comparisons are made. Finally, some marketing implications are drawn from the experience of the study.

Introduction

The concept of technology transfer is nothing new and is well conceived as a convenient way to engage in production without being involved in primary research for a product which already exists in the market. Advantages are manifold in connection with the acquisition of technology, such as it saves time and other resources.

Joint ventures (JV) usually offer an environment of low cost, less risk and deep involvement in future commitments. This mode of transfer is very helpful when the continuity of the relationship is important. Joint ventures will be used with increasing frequency in the future because of changes in the skills needed to survive in accelerating pace of technological changes and the broader range of technological capabilities firms must possess (Harrigan, 1987, p. 67). In the developing countries, the JV approach is the most familiar form of transfer due to the necessity of guided support by the technology supplier. For example, only in one year (1984), China signed 741 JV agreements. Further support to the increasing application of JV for manufacturing is evident from the investigations of Christebow (1987) and Morris & Hergert (1987).

This paper attempts to discuss the transfer of technology through JV with the help of empirical studies. There are many studies available on this issue. However, the approach used here is different from these at least in a few aspects. This paper recognizes different control aspects in particular, and investigates their impact on the future relationship between the partners. Moreover, cooperation/conflict is dealt with to have conformity with the assumption in treating the process of transfer over time. Two case studies on JVs with local partners are presented between Swedish firms, Ericsson and Kanthal Höganäs, and Indian

Background

A JV involves at least two partners and the literature suggests that normally their motives differ, since they have complementary resources and needs (Simiar 1983 and Harrigan 1986). Janger (1980) identifies local government pressure, spreading risks and a desire to sell technology as major reasons to form JV. In a study of 77 JVs and 29 wholly-owned firms in the ASEAN countries, Ahn (1980) found that local partners are attracted by foreign capital, technology, training, management and marketing know-how. In selecting local partners, technology contributing firms tend to take the initiative due to their better knowledge of production. Killing (1983), who studied JV success, observed the change in the need for resources from one another due to the presence of continuous learning. Koot (1986) and Harrigan (1986) also observed the divergence of business interests among the partners over time.

Ahn (1980) discovered that indispensable technical know-how for operational tasks of the JV is provided by the foreign partner (*ibid*, p. 198). Otterbeck (1979) found that control over operations appear to lie with the party which commands the most critical resource, which is usually technology. Barkas and Gale (1981) also observed that technical expertise is a source of control for the foreign firms.

Beamish and Lane (1982) identified 58 kinds of problems associated with the management of JVs. The main problems were the partner's eventual dispensability, the partner's inability to run the venture effectively and one or both partners use of the venture as a training ground. 'Lack of goal congruence' has been mentioned by many authors as a major reason for conflict (see Reynolds 1984 and Simiar 1983).

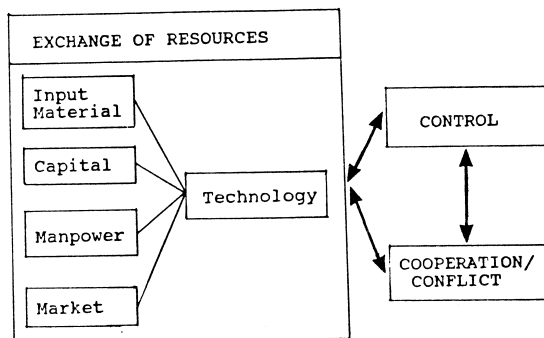
Methodology

This is a longitudinal study, so all major happenings over time are duly investigated, discussed and finally analyzed. The data is collected through face-to-face and telephone interviews, correspondence and printed materials. Face-to-face interviews, which were mainly conducted between 1982-1985 gave valuable information. A questionnaire was prepared on the basis of the initial research problem based on previous JV studies. The duration of each

interview varied from two to four hours depending on the depth and requirement of the discussions. Local partners or their representatives, foreign firms main representatives to the JVs and local chief executives were interviewed. Some complementary information was gathered in 1989 to update the data. To describe the case studies, a model is developed in this section. A comparative analysis follows the case studies. Finally, marketing implications are presented for the practitioners.

The model applied for the analysis comprised of exchange of resources, control and cooperation/conflict (Figure 1). Pfeffer (1981) identified interdependence as the first condition for the use of power, and such is created by the establishment of a JV. All cooperative strategies require firms to give up some control over strategic activities, especially where the risks and problems of acquiring resources (or of developing them in-house) leave few other feasible ways of doing a project (Harrigan, 1986, p. 41). The exchange will bring cooperation if the contributions are made as anticipated. But if a partner fails to provide an expected critical resource, conflict is more likely. On the other hand if partners are cooperative, they will try to give support with critical resources, even when it is difficult. Control in a JV usually provides a partner access to more resources. However, too much control by a partner may cause a conflict in a JV.

Figure 1 The Process of Technology Transfer



Technology itself is a resource and its transfer is closely associated with the availability of some other resources, such as input material, capital, manpower and market in a JV. Technology is usually a vital issue at the time of planning, negotiating and forming a JV, which is going to engage in manufacturing. Technical relations may be significant only at the beginning of the venture when an initial transfer of technology is to be made (Janger, 1980, p. 30). To a foreign firm, control is usually important when the technology used is comparatively new or its reputation is closely associated with the quality of the products.

Control is important because partners put in capital, administrative efforts and reputation, so they want to safeguard their interests. Control can be divided into formal and informal, depending on the pattern of application. Formal control is directly related to ownership. Informal control is wide and complicated, and access to scarce and essential resources is its power base (Hyder & Ghauri, 1989). Every decision which the partners take may have some link with, or result incooperation/conflict, but may not necessarily be visible all the time.

The Case of Ericsson India

The foreign partner Ericsson is a Swedish multinational having a leading position in the telecommunications industry of the world. Its total net sales amounted to 15.2 billion SEK (\$1 = 6.50 SEK) during the first half of 1987. Technology transfer is an essential activity of Ericsson. It has a large number of wholly-owned subsidiaries and both majority and minority owned JVs. The local partner is a well-established businessman in India and has been in the business for more than 30 years. His total investment in different businesses approaches 5M Rs (\$1 = 14 Rs). Ericsson had been working in the Indian market with a wholly-owned subsidiary for 10-15 years before the JV was formed. This subsidiary was basically a trading house and had difficulty in competing with the other foreign companies, which had local production facilities. Personal liking played a major role in Ericsson's choice of the local associate. The local partner was approached by Ericsson and accepted the offer to set up a JV in January 1971.

Exchange of Resources

During the establishment of the JV, the local partner had no technical competence in the field and was wholly dependent on Ericsson's technology. The purpose of the JV formation was to make certain specialized communication equipment, namely, portable magnetor telephone switch boards for the Ministry of Defence. During 1971-1973, Ericsson offered extensive training to the local technicians, both in the host country and in Sweden. According to the plan, technological responsibility was handed over to the local staff already at the end of 1984. The JV managed to sign other collaboration agreements with Ericsson for the production of co-axial terminal boxes and operator head sacs. The JV was also exploring the possibilities of making power equipment for telephone exchange, such as electronic and intercom equipment. In connection with the local production, the JV was in need of Ericsson's help to select new products. Whenever the JV learned of a demand for a certain related product, Ericsson was asked to supply all information regarding its manufacture so that a feasibility study could be made locally. Whenever necessary, Ericsson trained the local engineers in Sweden.

In the host country and abroad, Ericsson had the exclusive responsibility for the procurement of input material in the first two to three years. The JV gradually learned to handle this task alone while Ericsson's contribution remained important over the years to supply some useful input material. At the time of the JV formation, the initial shareholding of Ericsson was 74% while the rest was in the possession of the local partner. During the next seven years, the share capital ratio was progressively increased in favor of the local partner to comply with the government regulations. As skilled and semi-skilled people were available in India, the local partner was responsible to recruit efficient manpower from the local market. This assignment was gradually passed on to the general manager (GM), who was the chief executive of the company. There were altogether four top ranking executives including the GM and each was well qualified and not related to any of the directors. In marketing, the JV had two functions. One function was related to receiving order from the buyers and delivering the manufactured goods. The other was to act as a liaison office for Ericsson to market the latter's products in the host country through the participation in international bids. For this second function, the JV maintained both formal and informal contacts with the buyers and supplied complementary information while the local partner conferred legitimacy.

Control

Gradual change of equity structure in favor of the local partner did not conflict with the interests of the foreign partner due to previous understating on this issue. The formal control is presented in Table 1. Out of the four directors on the board, two were nominated by Ericsson and the remaining two were local shareholders. The local partner was chairman of the JV and the post of the GM was always left to a local professional executive in order to emphasize efficiency and effectiveness in the company. This attitude of the owners enabled the JV to have formal control in many important areas.

The control through resources is illustrated in Table 2. Ericsson had no intention of retaining control in the technical area because the technology used in the JV was comparatively old. As a buyer and a famous manufacturer of telecommunication equipment, Ericsson had enjoyed legitimacy for a great many years and could exercise some control through the procurement of input material. However, this control was short-lived, since the JV could meet all its requirements from both local and external sources after a certain period. The local partner worked as managing partner and had day-to-day contact with the venture. The GM often required to consult with the local partner on financial matters. With a very few exceptions, all

financial decisions were taken by the local partner during the last 15 years and his decisions were never challenged by the foreign partner.

Table 1 Formal Control

Determinants of Control	Local Partner	Ericsson	JV	Criticality
Shares				
1971-75	(a) 26%	(a) 74%	-	Not critical
1975-78	(b) 40%	(b) 60%		
1978-85	(c) 60%	(c) 40%		
Board	2	2		Not critical
Chairman	The local partner throughout	-		Critical to exercise formal control
Managing Director	-	-	A local executive	Critical for the development of the JV
Plant Manager	-	-	Local people	Critical for the development of the JV

Table 2 Control Through Resources

Resources	Local Partner	Ericsson	JV	Criticality
Technology	-	Responsible at the beginning	Operations after 1973	Critical for the JV's own control
Input material	-	Control at the beginning	Responsible after 1973	Not critical for control
Capital	Financial control	-	-	Very critical for control
Manpower	Control in major selection	-	Responsible for ordinary selection	Not critical for control
Market	Meeting with the buyers	Supply technical information to the buyers	Marketing own goods & trading activity	Main control with the JV

The local partner could exercise control through the appointment of higher officials in the JV. From the beginning the JV had complete control over the marketing of its own products. However, for the trading business, the JV had shared control with Ericsson, since it had to depend largely on Ericsson for offers, suggestions and technological information. Even the local partner enjoyed some control in marketing Ericsson's products, since he offered useful legitimacy and access to the many government buyers.

Cooperation/Conflict

In the JV the partners were very cooperative over the years. Ericsson always extended a helping hand to the local people, so the transfer of technology was possible within a very short time. Ericsson's main representative and the local partner had been personal friends since the end of 1960s and they could easily solve most of the problems.

Some implicit conflicts were, however, identified in the JV. There was basic difference in opinion between the partners as to what would be its major area of interest. Ericsson was mainly interested in the trading business of the JV. The local partner's goal was always to produce more items locally and to gain recognition as a leading manufacturer of telecommunications components in the particular market. The local partner was somewhat suspicious of Ericsson's sincerity concerning the procurement of information. The JV needed information when selecting new products because it sought the rapid expansion of business through the increase of local production. Another area of implicit conflict arose from the slow success of the JV in securing big local contracts.

The Case of Kanthal India

Kanthal Höganäs, the foreign partner, is a medium-sized company compared with other Swedish multinationals, having sales of SEK 3,378M for the year 1988. Its two major area of production are electrical resistance materials and precision castings. The local partner has been in the business for a considerably long time and directly associated with Kanthal as the latter's representative in the Indian market for more than four decades.

Kanthal Höganäs had been selling resistance materials in India since the 1920s and succeeded in capturing 50 percent of the market during the late 1950s and early 1960s. The demand of the resistance materials increased significantly, it became necessary to weigh the possibility of local production, as the requirement could no longer be met by export from Sweden. Kanthal found the local agent as a suitable candidate for local partnership. It was essential for a foreign investor to share equity with local interest to start manufacturing. After repeated negotiations, the JV was formed in 1965, having its head office in Calcutta, West Bengal. The JV has two manufacturing plants, one producing resistance wires (RW) while the other make precision castings (PCG).

Exchange of Resources

Under the agreement, Kanthal was to supply technology to the JV. The technology for the RW plant was simple and could easily be handed over to the local people. For the purpose of continuing operation, the local people were trained by the expatriates, both at Kanthal, Sweden and in the host country. As far as the PCG plant was concerned, the technology was relatively modern and there was a need to serve foreign subsidiaries in India. In this plant, the training was very extensive, so a few foreign personnel were needed to work there for a longer period. Kanthal's contribution in the technological field actually started long before the commence-

ment of production in the PCG plant. This long period was required for planning, obtaining approval of the papers, procuring machinery, building the factory, installation, and training the local people. Kanthal resumed its technical contribution to the plant after signing of a new agreement between the partners in 1983. It was realized that Kanthal would regularly need to monitor the performance of the plant so that the operation does not get interrupted for technical reasons.

Kanthal supplied 95% of the input materials to RW plant, while the remainder were bought on the local market. In the PCG plant, Kanthal's contribution was at first 100 per cent of the input materials. But due to the availability of indigenous substitutes, import was stopped already in 1974 but Kanthal still played a significant role in assessing the JV's needs and selecting the best possible alternatives from the local market. Kanthal offered a credit facility to buy resistance materials, which solved the problem of working capital in the JV. The local partner was directly involved with the major appointments in both the plants until the end of 1980. Kanthal played an important role by engaging expatriates and helping to select the right people for the PCG plant. The local partner and the JV itself carried out the selling activity of both the products.

Control

During the formation of the JV, Kanthal and the local partner had equal ownership, which changed afterward with the signing of new agreement in 1983. Due to change in the ownership, Kanthal lost 9% of its share to another local partner, and could finally retain only 40%. The formal control is shown in Table 3. There were altogether six members on the board of directors, three from each major partner. The local partner was MD until the end of 1980 and a new permanent MD came from Kanthal in 1983 as a result of the new agreement.

Table 3 Formal Control

Determinants of Control	Local Partner	Kanthal	JV	Criticality
Shares	50%	40% to Kanthal and 10% to a selected local partner	-	Critical for equal formal control
Board	3	3		Critical for the balance of power
Chairman	Alternate chairman	Alternate chairman	-	Not critical
Managing Director	-	Expatriate loyal to Kanthal	-	Very critical for Kanthal's control
Plant Manager	Managers loyal to the local partner	-	-	Critical for normal control by the local partner

Control through resources is illustrated in Table 4. In the PCG plant, Kanthal exercised technological control through expatriates until 1979. This control pertained to development, testing and quality control of the products and overall maintenance of the machinery. The JV later had full control on technology and production. Due to the new agreement, Kanthal's control increased with the adoption of relatively modern techniques and the establishment of a direct link with the JV.

Table 4 Control Through Resources

Resources	Local Partner	Kanthal	JV	Criticality
Technology	-	Development work in the PCG plant	Operating activity in both plants	Very critical for Kanthal's control
Input material	-	Supply of RW materials from Sweden	Procurement of the PCG materials	Very critical for Kanthal's control
Capital	Possession of financial resources	Credit facility	-	Critical for the local partner's control
Manpower	Executives selection until 1980	Assisting the JV management	Local administration after 1980	Control by the local partner in early days
Market	Sole selling agent	-	Significant performance	Not critical

Kanthal had continuously carried sole responsibility for the procurement of input materials for the RW plant, since the JV had neither sufficient information nor legitimacy with the suppliers. There was production of PCG materials in the country and so most of the raw materials were bought from the local market. From the beginning, the local partner had absolute financial control of the JV. The financial manager was sitting at the head office in Calcutta and dealt with most of the financial matters at both manufacturing plants. This executive was also responsible for finances at other companies of the local partner and had day-to-day contact with him. By appointing relatives and close associates to key positions, the local partner succeeded in exercising control of the JV. Marketing was always the sole responsibility of the local partner and the MD had no authority to influence this activity. However, the JV had some control over sales, since its own staff used to market a significant proportion of both products.

Cooperation/Conflict

Both the partners were very cooperative at the beginning, as they knew each other for many years. But a major conflict emerged in 1980 when Kanthal was asked by the local government to sell 9% of its share to a local interest as the JV failed to fulfil the export target. The local partner was interested to acquire those shares, which Kanthal did not accept. The local partner regarded the act by Kanthal as an

insult and consequently filed a case against the latter at the Calcutta High Court in 1980. Besides the main grievance other sources of dissatisfaction, contributed to the damage of the relationship. One such was the death of the chairman of the JV in May 1980, because he acted as a bridge between the two major partners. The relationship deteriorated when Kanthal tried to appoint a new MD in the JV by its own initiative. One dissatisfaction from Kanthal's side consisted in the appointments of the local partner's relatives to the key positions of the JV. Another conflicting issue was concerned with the sales agent for the JV products as Kanthal found him both inefficient and incapable.

The partners signed a 'memorandum of understanding' on November 27th, 1983 to conclude the unfortunate crisis in order to create a favorable atmosphere for fruitful cooperation. The partners decided to respect their long-lasting relationship and forget the bitterness which had developed during the crisis period.

Discussion

The foreign partners, in both the cases had technological knowledge which they sought to exploit by keeping and broadening their market. They needed a local identity to legitimize their activities and gain access to local support and facilities. They lacked access and legitimacy with the local buyers. For the local partners, better financial returns and access to foreign technology were the main objectives in accepting JV investment. Both the partners succeeded in drawing financial and other benefits over time. When the JVs were formed the initial expectations were high. The partners were still interested in the ventures, despite conflicts and declining profits, as they had invested large amounts of money and saw possibilities of success. It was difficult to break the relationships, since the partners developed an exchange relationship based on financial, technical and mental involvements.

Technology was the major source of control for the foreign partners in the JVs as the local partners lacked both information and legitimacy. In this resource area, control was important in two ways, i.e., control over technology and control through the supply of technological knowledge. None of the foreign partners were willing to lose their control in this area completely over the years, so they tried to keep, albeit limited, technological links with the ventures. The attitude to control created problems when both partners sought effective control in the same JV and none was prepared to compromise. However, control was not a problematic issue if the foreign partner could rely on the ability of the local partner. Manpower was a major source of conflict when the local partners appointed many of their relatives to different important positions. This was

due to cultural difference and the foreign partners involved were totally against this practice. Otherwise the partners were cooperative. The foreign partners met external requirements, which were mainly related to importing input materials and providing technology, training, etc. while the local partners extended valuable local support through local know-how, contact with the local authorities, manpower, etc.

The foreign partners continued to supply input materials when the local people had difficulty in obtaining them from other sources. All foreign partners did not have the same interest in supplying the materials. When the foreign partner was a manufacturer of the materials, it liked to continue with the supply in order to avoid losing a reliable customer. If the foreign partner had an international chain of activities, he was interested in supplying the materials in order to benefit by the coordination of the activities. The foreign partners were always responsible for selecting foreign personnel. Duration of stay by these staffs depended on the requirement of the JVs. The foreign personnel's activity was mainly related to technology, i.e., start up, training, product development, feasibility study, etc.

Marketing Implications

JV is a separate entity and is free from the financial and legal positions of its parent organization. Two firms jointly create a third firm to do business. There are several factors determining why foreign firms prefer entering into foreign markets with a JV. Unstable political conditions, economic risk related to market, exchange restrictions, staff and financial resources are only some of them. A business enterprise in a foreign market is more complex to manage because of the broader area of activities and interests involved. Risks are greater for ongoing conflicts and problems.

The selection of JV partner is the most important factor. Our cases have shown that facilities and resources, with respect to production plants, organizational resources, market position, personnel and local contacts are important factors. The foreign firms chose their partners with the above criteria. Ericsson however, chose its partner due to personal liking but it still had the above characteristics. We have also seen that the management of JV is a crucial issue, as it includes a very broad range of activities from appointment of local executive/staff to the sale of shares. We have seen that the local partners have a tendency for employing their relatives and associates in the JV to ensure control. The foreign partner should therefore be aware of them and in case they do not approve this practice they have to express that explicitly in the JV contract as to who has the authority to employ personnel at different levels.

For foreign firms information is of utmost importance. These firms should gather information on rules and regulation of the local government regarding equity share, foreign exchange, import restrictions and capabilities of the local partners. We have found that equity share rules created problems in one of the cases and the foreign partner sold some of its shares to a third party.

Foreign firms are always interested to gain control over the JV. For the local partner many times it is a question of prestige. As in the case of one Indian JV, when the local partner recommended someone for the post of MD but the Swedish partner appointed someone else. This annoyed the local partner.

It is advisable that the foreign partners are aware of these things and somehow cover their interests at the time of entering into joint venture. Contribution made by each partner must be assessed properly. Contributions by foreign partners are usually tangible compared to the local partners' contributions such as, knowledge of the local market.

Finally, JV is like a marriage. Partners have to be sincere in their cooperation and adjustment to each other, and believe that they will be able to live together throughout their lives. The partners should be prepared for re-negotiations, certain circumstances such as political change, economic restriction, etc. can force parties to adjust themselves. In the case of one Indian JV, we have seen that sale of shares by one party led the partners into litigation. Conflicts also emerge from cultural differences e.g., employing relatives and that performance standards demanded by foreign partners can not be met.

References

Authors' references available upon request.

A CROSS REGIONAL STUDY OF EXPORT PERFORMANCE:
ATLANTIC PROVINCES AND PRAIRIE REGION MANUFACTURERS CONTRASTED¹

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Abstract

This research study compares the export behavior of Prairie and Atlantic Canadian exporters in a comparative manner. The results indicate that both regions' exporters are involved in exporting in a passive way. Very few of them have reached the stage of active involvement. Company international marketing operations, in most cases, are characterized as "rare" and "sporadic" involvement.

Introduction

In the last two decades, a substantial amount of research has been carried out on the export marketing behavior of firms. Most of these studies have examined export behavior at a domestic level. As such, they are cross-sectional in nature. Cross-national and comparative studies of export behavior of companies are very rare in the current export marketing literature (Kaynak 1985; Cavusgil & Nevin 1981). Most of the export studies conducted so far represent a group of firms in the manufacturing sector, segregated by size (small, medium, and large), by geographic location (e.g., Northern England, Florida, Atlantic Canada, Ontario, the Middle East and Latin America) and export strategies utilized by firms in a number of Far Eastern countries (Chan 1984; Johansson & Nonaka 1983).

Firm Export Performance Assessment

Generally, export performance of firms is assessed at two levels. At the macro level, it is determined with tools such as market share, balance of trade statistics, sales and profit attainment of the companies (O'Rourke 1985; Cavusgil 1985). At the micro level or firm level, there have been several attempts to measure export performance. Fenwick and Amine (1979) mention the Queen's award by an industry selection committee based on the following six criteria: a) the absolute value of export sales, b) growth of export sales, c) the export ratio relative to the industry average, d) the growth of the export ratio, e) the long and short term nature of exporting, and f) a breakthrough in a particularly difficult market.

Ayal (1982), in an Israeli study, utilized a comprehensive regression analysis in an attempt to measure and predict export performance. It is stated that target market import statistics are viable guidelines for export planning but only when used to supplement relative advantage considerations. Cunningham and Spigel (1971) studied successful exports and concluded that it is difficult to assess success realistically in exporting. While assessment of success is difficult, documentation of success in exporting is widespread. Halbrooks (1979) describes the success of Rotary Corporation's export of lawn equipment. Jackson, Piercy and Thomas (1981) outlines the following six conditions that contributed to a success story of Israel exporting to Britain: a) export managers catered to the needs of the buyer, b) export managers were committed to long term relationships, c) a climate of trust, sharing of information and cooperation existed, d) open communication, e) high frequency of personal contact, f) the exporter produced reliably to standards. It is pointed out that successful marketers are market-oriented. Furthermore, Cavusgil and Kaynak (1982) in their empirical study of Nova Scotia firms determined four dimensions leading to success in export marketing: a) quality image, b) contractual linkage, c) promotion, particularly of a unique product, d) terms of sales, credit offerings and competitive prices.

Exporting is an important factor contributing to the future maintenance of economic growth, prosperity, and increases in production and employment in different provinces of Canada. Despite its vital importance for the economy as a whole, little is known about the export behavior of Canadian manufacturers or the internationalization process of Canadian firms across provinces and regions of Canada (Cooper & Kleinschmidt 1985). On the other hand, data and information at the provincial level are rather scanty. By understanding the process which firms use in reaching a decision to implement an export strategy, one can identify those factors which encourage or hinder the export activity of manufacturing firms. Such an understanding will enable more firms to consider exporting as an alternative element of their strategy to survive, grow and prosper in today's highly competitive business environment.

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Export marketing has frequently been assumed to be a viable market development strategy for most manufacturers. In recent years, the intensification of competition in domestic markets in North America and higher growth rate opportunities in foreign markets, have prompted more manufacturing firms to explore the exporting option as a market growth opportunity. As a result of this, researchers in marketing on both sides of the ocean have attempted to keep pace with the growing interest of firms in export activities (Kaynak & Kothari 1984).

Perhaps the most pertinent research in the entire topic area of exporting has been aimed at answering the question "What is the most important factor affecting the decision to export?" Another important aspect of the export process is the first step taken towards exporting and why it is taken. It is stated that outward looking executives and unsolicited orders are the two most prominent causes (Cunningham & Spigel 1971; Bilkey & Tesar 1977).

Why do more manufacturers not export? Because of a large domestic market in North America, resources can be more effectively channelled into expanding domestic business. There are also real or perceived barriers to exporting. Some took a macro view of barriers to export trade and determined such exogenous factors as inflation and technology as problems (Abdel-Malek 1974). Others have taken a more direct approach and examined barriers affecting individual firms or groups of firms (Alexandrides 1971; Robino 1980).

This research study seeks to compare the export behavior of Prairie and Atlantic Canadian exporters. A group of manufacturers with an export orientation from seven Provinces in the Prairie and Atlantic regions were surveyed by using a mail survey questionnaire.² Exploratory studies of the Canadian and American literature revealed a number of independent variables affecting export performance of manufacturing companies. It was discovered that it would be possible to study successful and unsuccessful export ventures of individual Prairie region and Atlantic Canadian manufacturing firms by measuring the degree of presence of certain performance measures (Seely & Iglarsh 1981). The questions to be answered by this research study are: a) What types of problems do Prairie region and Atlantic Canadian manufacturers face in their export marketing ventures and how are these problems solved? b) Which variables, both internal and external, affect the success and failure of products in the export market, and how are these variables related to each other? c) From the results obtained, what improvements can be recommended to managers of exporting firms of Prairie region and Atlantic Canada, national and provincial export policy makers, and export marketing researchers? d) Do regions like Prairie and Atlantic Canada whose export stock and potential is based mainly on resource based products face similar problems and challenges? Could the Prairie and Atlantic regions learn from each other's experiences?

²The author thanks Philip Rosson and S. Tamer Cavusgil for allowing to use some survey questions from their respective questionnaires.

The latest directories of manufacturers (1984-1985) of the four provinces of Atlantic Canada and the three provinces in the Prairie region were used to select the respondent companies. Some of the manufacturing companies are owned by one concern and exporting is performed centrally. In such cases, the headquarters of the firm were contacted. Some 25 percent of the total exporters of each region were contacted. A systematic sampling procedure was used whereby each fourth manufacturer was selected from the directory.

All correspondence was sent to the Owner/President of the firm as identified in the Directory of Manufacturers. The Owner/President was asked to complete the questionnaire or refer it to the person primarily responsible for export activity within the firm. Some 92 Atlantic Region and 104 Prairie Region exporter questionnaires were returned. The breakdown of total exporters contacted as well as the responses received is shown in Table 1.

Research Findings

Firm Specific Characteristics

In the two study regions, exporters' major business activity was categorized into five product/service groups. Statistically significant differences were found between exporters of Atlantic and Prairie regions. The study showed that while Prairie region exporters produced more industrial goods, Atlantic exporters sold more consumer goods. Likewise, there were statistically significant differences between the two regions' exporters in their principal export products. Prairie manufacturers placed more emphasis on advanced technology products while Atlantic exporters dealt mainly with traditionally manufactured and less sophisticated products. Major users of Atlantic products were final consumers (end users) while it was industry in the case of Prairie region (see Table 2).

The great majority of the responding exporters from the Atlantic and Prairie regions is involved in international marketing in an incremental way. That is, 89 percent of the Atlantic and 97 percent of the Prairie region exporters market their products through exporting. A substantial percentage of the exporters utilized an indirect method. Only some 9.8 percent of exporters from the Atlantic region and 3.0 percent from the Prairie region utilize other modes of foreign market entry. This passive involvement in international marketing is further substantiated by the fact that exporting accounted for less than 25 percent of the total sales of the manufacturers from both regions. Furthermore, there was a complete lack of export organization and in most cases this function is performed by domestic marketing departments of the company. On the whole, a substantial percentage of sampled firms was Canadian owned. However, there was more foreign ownership among Atlantic region exporters than Prairie region exporters (see Table 2).

Export Decision Making

The major stimulus for a firm's initial decision to export for both regions was to utilize excess capacity. The second most important stimulus for export drive was "foreign consumer(s) sought us out". The third most important factor was a means of making a high profit (Table 3). A majority of exporters of the two regions either marketed their products directly to final users or to foreign distributors. As such a majority of exporters' behavior of Atlantic and Prairie regions is characterized as "sustained" as they have ten or more years of experience in international marketing operations (Tables 4 and 5).

The study results indicated that in terms of cost comparison of domestic versus international marketing, Atlantic and Prairie region exporters perceive their own costing in a similar way. The only two exceptions are: cost of locating potential customers and negotiating sales. The cost of these two items was much more than domestic for Prairie region exporters (Table 6).

Atlantic and Prairie region exporters perceive major barriers to international/export marketing in a consistent manner. The reason for the similarity may be attributable to the fact that most of the firms in both regions are related to resource based industries. The four areas where there are significant differences are related to foreign tariffs, price, quality and finding agents. Atlantic region manufacturers perceive significantly greater threat in the first three barriers than Prairie region exporters (Table 7).

The major international marketing problem area for both regions' exporters was inability to compete because of higher production costs. Lowering labor productivity and increased prices of imported inputs are the causes of this apparent trend. In addition, unsuitable channels of distribution in foreign markets, lack of marketing information and data on foreign markets and lack of foreign marketing support services were also mentioned as problem areas (Table 8).

Export decision makers of both regions hold the firm opinions that there is a niche for their products in foreign countries; their companies want to grow and expand; international marketing (exporting) is a desirable task for their firms; their firms are planning on increasing their exports in the near future; and finally, exports could make a major contribution to their firms' growth. Lower value of the Canadian dollar makes exporting easier. On the other hand, significant differences were observed between exporters from the two regions on two items, namely market orientation of the production department and the small size of the company (Table 9).

Atlantic and Prairie region exporters experienced certain changes in company international/export marketing operations. Most areas of change was related to distributors' attitudes, technical developments, changes in production processes, tariff and non-tariff barriers and foreign market opportunities (Table 10).

Conclusions

The results indicate that both Atlantic as well as Prairie region exporters, on the whole, are involved in exporting in a passive way. Very few of them have reached the stage of active involvement. Company international marketing operations, in most cases, are characterized as "rare" and "sporadic" involvement.

A number of differences were delineated between exporters of the two regions. This kind of information offers managerial insights to exporters and provides government agencies or interested facilitators with needed information in stimulating export activity to boost economies of provinces in the respective two regions of Canada. The following conclusions were drawn from this study which may be of use for public policy making purposes.

- a) A major company business as well as export activity among Atlantic region exporters is manufacturing consumer goods whereas it is industrial goods manufacturing among Prairie region firms. The reason for this is a heavy concentration of some Canadian industries in the Prairie region. As well, the firms from this region deal with more high-technology products and patented products. There are differences in the local resources available between the two regions of Canada which account for the differences in export behavior.
- b) A substantial portion of both Atlantic and Prairie region manufacturers are involved in international marketing through exporting. The primary users of exported products are industry for Prairie region and final consumers for Atlantic region. A substantial portion of exporters from both regions generate only a small percentage of their revenues from export sales. Because of the passive involvement of firms in international marketing, only some 20 percent of the firms have a special export/international unit.
- c) The most important reason given for exporting was to utilize excess capacity and the second reason was unsolicited orders from foreign companies. This finding is in line with previous findings in other countries/states/provinces.
- d) Because most of the exporters are involved in international marketing in an ad-hoc basis and they do not have a structured export/international organization setup, they utilize direct channels to reach the foreign distributors and final users of their products.

e) There were a number of similarities between exporters of the two regions in their way of cost comparison of domestic versus international marketing. The major cost items for Prairie region exporters were: management time required to locate potential customers and to negotiate sales, shipping costs whereas for Atlantic region exporters were shipping costs, management time required to locate potential customers and to negotiate sales.

f) Firms from both regions perceived the importance of various barriers in dealing with international/export markets very highly. In order of importance they were listed as: ability to deliver on time, freight costs, price, competition of heavily subsidized firms and currency fluctuations for Atlantic region exporters and freight costs, currency fluctuations, knowledge of particular market conditions, quality and price for Prairie region exporters.

REFERENCES ARE AVAILABLE UPON REQUEST.

Table 2
A Comparison of Exporting Firms by Firm
Specific and Export Related Characteristics

Comparison Variables	Exporter of Atlantic Region (n=92)	Prairie Region (n=104)	Level of Significance
(a) Company Major Activity			.0282
Industrial goods manufacturer	25.3	45.3	
Consumer goods manufacturer	38.9	31.1	
Both industrial and consumer goods	23.2	12.3	
Services	2.1	3.8	
Others*	10.5	7.5	
*Includes suppliers; research firms; mining; storage; printing; processors.			
(b) Principal Export Product			.0036
High-technology product	15.9	18.9	
Patented product	-	14.2	
High-style product	8.0	1.9	
Low-cost product (competitively-priced)	14.8	13.2	
High quality product	25.0	22.6	
Traditional product	27.3	17.0	
Have no special competitive advantage	2.3	6.6	
Other*	6.8	5.7	
*Includes custom designed equipment; innovative design; medium technology; highly specialized product; luxury product			
(c) Product Groups Exported			.1985
Consumer product	56.8	52.8	
Component(s) used by manufacturers of consumer products	17.0	9.4	
Industrial product	9.1	19.8	
Component(s) used by manufacturers of industrial products	10.2	7.5	
Service	1.1	2.8	
Other*	5.7	7.5	
*Includes animal genetics; defence equipment; utility product			
(d) Primary Users of Exported Product			.1128
Industry	37.4	52.3	
Government	5.5	3.7	
Other institutional markets	12.1	6.5	
Final consumers	42.9	31.8	
Other*	2.2	5.6	
*Includes farmers; intermediate customers; publishers			

(e) International Involvement			.3619
Exporting	89.3	97.0	
Licensing	2.4	1.0	
Joint venture	1.2	-	
Foreign production	4.8	2.0	
Other*	2.4	-	

*Includes Canadian distributor; foreign sales office

(f) Exports/Total Sales (1984)			.1589
Up to 10%	33.7	45.0	
11 to 25%	21.7	15.0	
26 to 50%	13.3	16.0	
51 to 75%	12.0	15.0	
Over 75%	19.3	9.0	

(g) Export Organization			.1053
Special export/international unit	26.7	20.6	
Domestic marketing department	37.8	55.9	
Parent or affiliate company	8.9	6.9	
Outside agent	14.4	11.8	
Other*	12.2	4.9	

*Includes domestic salesmen assisted by corporate office; sales representative; brokerage agent

(h) company Ownership			.0696
Canadian-owned	88.2	95.2	
Foreign-owned	11.8	4.8	

(i) Primary Domestic Users of Products			.4019
Industry	47.9	54.2	
Government	5.3	8.4	
Other institutional markets	8.5	5.6	
Final consumers	36.4	26.2	
Other*	2.1	4.7	

*Includes farmers; intermediate customers

Chi-square test was utilized

Table 3
Decision to Start Exporting

Reasons for Exporting	Atlantic Region n=92	Prairie Region n=104
To utilize excess capacity	44.6	34.6
Smoothing production of a seasonal product	3.3	2.9
A means of making a high profit	13.0	17.3
Foreign consumer(s) sought us out	21.7	20.2
A means of boosting sales during a slump in the domestic economy	3.3	6.7
Government trade mission activity	1.1	2.9
Competition began exporting	1.1	-
Attended trade fair	-	1.9
Saturated domestic market demand	2.2	3.8
Intense domestic competition for our products	1.1	2.9
Others*	7.6	-

Table 4

Approach to Foreign Markets

International Market Channels Utilized	Atlantic Region n=92	Prairie Region n=104
Market directly to final users	44.1	52.8
Market directly to foreign distributors	32.3	31.1
Market directly to foreign retailer	7.5	6.6
Market directly to our own branch or subsidiary	8.6	0.9
Sell through a Canadian agent	6.5	5.7
Other*	1.1	2.8

Table 5

Company International Marketing Operations

Length of Experience	Characterized as					
	RARE		SPORADIC		SUSTAINED	
	Atlantic Region	Prairie Region	Atlantic Region	Prairie Region	Atlantic Region	Prairie Region
Less than one year	37.5	28.6	11.8	2.4	8.9	5.5
1 to 4 years	18.8	28.6	44.1	53.7	10.7	34.5
5 to 9 years	12.5	14.3	11.8	22.0	19.6	21.8
10 or more years	31.3	28.6	32.4	22.0	60.7	38.2
	n=16	n=14	n=34	n=41	n=56	n=55
	Raw chi-square value = 2.56378 with d.f. = 4 p ≤ .6333		Raw chi-square value = 4.62444 with d.f. = 3 p ≤ .2006		Raw chi-square value = 10.36804 with d.f. = 3 p ≤ .0157	

Table 6

Cost Comparison of Domestic Versus International/Export Marketing

Cost Items	Mean Scores*		t **	2-Tail Probability
	Atlantic Region	Prairie Region		
The Base Price	3.07	3.09	-.19	.84
Production Costs	3.08	3.09	-.14	.88
Selling Costs	3.48	3.60	-.85	.39
Assembly Costs	3.12	3.02	1.21	.23
Packaging and Handling Costs	3.53	3.55	-.17	.86
Shipping Costs	3.96	4.17	-1.38	.17
Insurance Costs	3.80	3.91	-.76	.45
In-Transit Damage Costs	3.54	3.40	1.03	.30
Clerical Office Work Costs	3.56	3.65	-.72	.47
Management Time Required:				
to locate potential customers	3.90	4.26	-2.65	.00***
to negotiate sales	3.90	4.18	-2.07	.04****
after-sale contacts with customers	3.63	3.83	-1.37	.17
Risk involved	3.78	3.94	-1.20	.23

**Pooled Variance estimate

***Significant at p ≤ .001

****Significant at p ≤ .05

Table 7

Perceived Major Barriers to International/Export Marketing

Major Barriers	Mean Scores*		T **	2-Tail Probability
	Atlantic Region	Prairie Region		
Foreign tariffs	2.97	2.54	2.24	.02****
Credit	3.22	3.19	.15	.87
Insurance	2.41	2.49	-.46	.64
Price	3.67	3.36	1.85	.06*****
Design	2.79	2.80	-.06	.95
Quality	3.76	3.43	1.78	.07*****
Ability to deliver on time	3.74	3.57	1.05	.29
Packaging	2.70	2.61	.46	.64
Labelling	2.63	2.48	.77	.44
Freight costs	3.65	3.52	.77	.44
Currency fluctuation	3.46	3.52	-.40	.69
Paper work	2.48	2.61	-.74	.45
High cost of raw materials	2.97	2.68	1.56	.12
High Canadian wages	2.94	3.11	-.97	.33
High overhead	2.93	2.89	.22	.82
Warehousing abroad	1.84	2.09	-1.44	.15
Finding agents	2.51	3.01	-2.44	.01***
Getting into trade shows	2.30	2.38	-.40	.69
Knowledge of particular market conditions	3.28	3.45	-.95	.34
Other ^a	3.57	2.75	.69	.50

^aIncludes competition of heavily subsidized firms; strict animal health standards; high service demand; low productivity

*Five point scale was used where: 5 = very important and 1 = not very important.

**Pooled Variance estimate

***Significant at p ≤ .01

****Significant at p ≤ .05

*****Significant at p ≤ .10

Table 8

Major International Marketing Problems Faced by Exporting Firms

Problem Areas	Mentioning Atlantic Region		Mentioning Prairie Region	
	1st	2nd	1st	2nd
Inability to compete because of high production costs	31.9	16.1	19.1	8.5
Trade barriers	12.5	17.9	13.5	8.5
Increasing nationalism abroad reflected in consumer practices	9.7	14.3	10.1	7.0
Unsuitable channels of distribution	22.2	3.6	19.1	12.7
Unfair competition from foreign government and/or foreign enterprises	8.3	8.9	9.1	14.1
Lack of marketing information and data	9.7	25.5	13.5	26.8
Lack of marketing support services	2.8	10.7	9.0	14.1
Product adaptation to local (foreign) use	1.4	1.8	5.6	5.6
Integration of international marketing into a unified world-wide corporate marketing effort	1.4	1.8	1.1	2.8
	n=72	n=56	n=89	n=71

First Important

Raw chi-square value = 7.76863 with d.f. = 8
Not significant p ≤ .4564

Second Important

Raw chi-square value = 10.68179 with d.f. = 8
Not significant p ≤ .2204

Table 9

Company Export Behavior

Export Orientation	Mean Scores*		t **	2-Tail Probability
	Atlantic Region	Prairie Region		
We should concentrate on exports when things are getting tough at home	3.02	2.90	.66	.50
Our bank is familiar with export financing	3.31	3.47	-.93	.35
We would be hard-pressed to handle large export orders	2.67	2.65	.12	.90
We know what sells in the export market	3.75	3.64	.84	.40
There is a niche for our products in other countries	4.19	4.08	1.23	.21
Our production department is in tune with what sells in other countries	3.64	3.36	2.02	.04***
When you export you tend to lose control over marketing and sales	2.45	2.68	-1.39	.15
Our company wants to grow and expand	4.28	4.26	.19	.84
If present tariffs on our products are lifted it will affect our company sales abroad	3.45	3.35	.60	.55
Our company is too small to export	2.13	1.86	1.82	.07***
The profit margin on exports is higher than on domestic sales	3.10	2.92	1.21	.22

*Five point Likert Scale was used where: 1 = Strongly disagree; 2 = Disagree; 3 = Do not agree; 4 = Agree; 5 = Strongly agree

**Pooled Variance estimate

***Significant at p ≤ .05

****Significant at p ≤ .10

**IS THE THIRD WORLD READY FOR CONSUMERISM?
THE CASE OF INDIA AND TRINIDAD & TOBAGO**

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Abstract

American consumers have benefitted from the businessess embracing the Marketing Concept and evolution of consumerism. Implementation of the Concept does not seem to have hampered growth of consumerism, which has lately broadened its scope and functions. Marketing Concept is a necessary but not a sufficient condition for the abatement of consumerism and legislative consequences. The paper traces the development of consumerism in the United States and explores the likelihood of India and Trinidad & Tobago embracing the movement. Can lessons learned in the United States be translated and utilized to accelerate the pace of consumer oriented reforms in the two countries?

Introduction

Marketers in the United States have enjoyed somewhat of an unregulated business environment in the early 1900's but as decades passed, organized consumers and government stepped in to insure against business abuses and consumer exploitation. Lately, the corporate world has learned that consumer protection/satisfaction and profitability are not mutually exclusive. Therefore, as these companies go international, they are forced to consider and compare their relationship with American consumers and with those in foreign countries. Unfortunately, in Third World countries, consumers are not yet well informed or organized to forge a similar relationship with American companies or their own. For example, the implementation of the marketing concept in the United States does not necessarily translate to some Third World countries especially the poorer ones. This puts American companies in a dilemma: Should the countries' consumers be treated as the American consumers are? Possible responses to this question raise some ethical and moral issues and they may not have clear answers.

A business does not operate in a vacuum and it needs the support of both consumers and government. The history of consumerism in United States reveals that businesses were able to forge a beneficial relationship with consumers and government only with help from the government and consumers themselves. The situation in Third World countries often

is somewhat different and neither their consumers nor government can offer the required assistance to bring about a mutually beneficial relationship among the three entities. Given this premise, it is worthwhile to look at the antecedent conditions that brought about a beneficial relationship between marketers and consumers in the United States and examine if similar conditions exist in two Third World countries that may foster similar interactions. Therefore an exploratory attempt is made to trace the growth of the consumer movement in the United States in order to understand the conditions that made it possible for American marketers to further a mutually beneficial relationship. A second objective is to explore if conditions in India and Trinidad & Tobago permit similar phases of development of the movement and if the lessons learned from the American experience can be translated to these countries.

The evolution and growth of marketing philosophies somewhat parallel the growth of consumerism, yet by no means is it suggested that one is the outcome of the other. The authors do not also purport to maintain that the marketing concept is viable in all situations or that it has been fully implemented by marketers. Rather, as a starting point we hold that the concept matured in the United States and that American marketers were among the first to implement it as a business philosophy.

Evolution of American Consumerism

Although the recent history of the movement can be traced to three distinct periods, consumer dissatisfaction and revolt have been documented for periods before Columbus ever set sail. The earliest phase was dubbed as the "period of innocence" because consumers then believed they were helpless against businesses and that the State could offer no defense or protection. The masses were suppressed both by business lords and the kings. Although, with the signing of the Magna Carta in 1215, the English barons were somewhat free from King John, yet the average person was not affected. The toil and sweat of common folks kept the officials of the kingdom happy. But as the economic situation of the masses worsened, there were sporadic outbursts of bitterness against the system and the trading barons, sometimes resulting in acts of arson.

The early American Revolution of 1775 began as a consumer protest against the prevailing tax and tariff system. Later came the Boston Tea Party, a form of product boycott and the French Revolution, which was a mass struggle for betterment of life. Adam Smith's writing in Economics and the concept of the "invisible hand" did not counter the prevailing belief that competition was a panacea to economic problems and a fair allocation of resources. Even later as individuals began enjoying freedom, they wanted to minimize dependence on any body or group including the State, for dependence was believed to restrict freedom. Hendon classified the history of American consumer movement into three distinct periods: Pre-1920, 1920-WW II, and Post-1950 (1975).

Pre-1920

The first consumer protection law was passed in 1872 as an intermediate measure and in response to the exploitation of labor and abuse of both native Indians and settlers alike by the railroad construction companies. Consumers were exploited through mail fraud and adulterated food supply by the large business houses. These and similar acts lead to deep rooted resentment amongst the people that caused them to stop and take notice of the practices and voice concerns. The growing movement led to the establishment of the first Consumer League in 1891. Soon the League began assuming a leadership role in matters of consumer abuse and exploitation. As this group was gaining recognition and momentum, Upton Sinclair's The Jungle dropped the bombshell on the working conditions in Chicago's meat packing companies. This book was instrumental in the passage of the Food and Drug Act of 1906. There were other isolated cases, all of which culminated in the passing of a powerful piece of legislation in the area, the Federal Trade Commission Act of 1914.

The marketing philosophy that paralleled this period was the product/production concept. Attempts were made to manufacture the "better mousetrap" to lure the customers to one's "doorstep." Mass production was the other key to success, but eventually economies of scale philosophy overtook the quality dimension.

1920 - WW II

The production orientation of the earlier era led to manufacturers flooding the market with products and since demand seemed to lag supply, creative and sometimes manipulative tactics were used to push products. The deceptive practices were so pervasive and it led to widespread consumer dissonance. Another famous book titled, Your Money's Worth

continued the attacks on "marketing," this time directed at deceptive advertising and hard selling tactics. Despite a setback in 1929 when the stock market crashed, many believe that the consumer movement had been strongly entrenched in the fabric of American economy by 1930. Although efforts were not always organized and concentrated because of the existence of many splinter organizations trying to represent consumers, the movement steadily grew. During this period there were other cases of fraud and misrepresentation, including the Sulfanilamide case, which only increased consumer resentment with businesses and the system. In response to growing unrest, the Food and Drug Administration tried to push for a newer yet tougher legislation aimed at correcting deficiencies in the system. But this time only the National Congress of Parents and Teachers and the American Economics Association were interested. All that changed after the publication of two more influential books, 100,000,000 Guinea Pigs and American Chamber of Horrors. These books focussed on unsafe product testing and quackery in the medical field and together they catalyzed the passage a new Food and Drug Act, this time with the help of sixteen national womens' organizations. Public outcry also lead to Congress sponsoring anti-monopoly, pro-competition acts. Competition was again seen as the solution that would weed out the unnecessary and unwanted market elements and serve for the betterment of consumers.

Oversupply due to gains in productivity and increase in the number of manufacturers along with a gradual decline in consumer demand lead to the development of the sales concept. This occurred when consumers had inadequate income and few reasons to buy goods (McKitterick 1957). The only way to survive was to push products hard on consumers with no real regard for their needs, wants and satisfaction. This helped tarnish the already sagging image of the selling profession. Words used to describe salesmen then included, "con-men," "chatterboxes," and "travel bugs."

Post-1950

After WW II, demand skyrocketed leading to scarcity and it took a while for the supply to catch up. Consumers were better educated and more affluent compared to the previous eras and therefore demanded the best from marketers. Businesses had to rethink their marketing goals and strategies. Research activities became paramount to organization and profits were regarded as a necessary but not sufficient ingredient for success. Consumerism is considered to have reached its potential during this period (Bloom and Greyser 1981) and it even became a

avored issue of government officials, movie stars, academicians, and even businessmen (Bloom 1976). Nevertheless, consumer advocates like Vance Packard charged that consumer research enabled marketers to exploit an unwilling customer. Public response to Packard's book indicated that interests in consumer problem and protection had not abated but merely taken a more sophisticated form (Engel, Blackwell, and Miniard 1986).

In the mid-50's a movement developed that lead to the rise of the modern-day consumerism. This movement started in the Denver area when a supermarket, because of competition, decided to introduce trading stamps. The researcher for a newspaper article charged that trading stamps led to higher prices triggering a wave of protests by housewives and it gained national attention. Finally the supermarket withdrew the promotion and the incident illustrated that consumers could make a difference if they mobilized. Later came the Kennedy manifesto aimed at consumer protection and his "Bill of Rights" is considered as the major force behind modern consumerism. The role of government was essentially changed from that of a mere watchdog institution to one as the ultimate protector of consumers. This stance provided impetus to consumer advocates in their assault on business and marketing practices. The trend toward non-price competition in the marketplace helped marketers think of consumer satisfaction as a means to succeed and survive in the competitive arena. Meanwhile, the shift from a sellers' to a buyers' market enhanced the collective power of consumers and finally led to the emphasis on the marketing concept. The energy crisis of the 70's and today's ecological, environmental, and societal health concerns are paving way to broadening the marketing concept to include societal welfare as an added dimension to the business equation.

Of interest to this paper is the marketer response to consumerism. Although, an earlier prediction has been that marketers were poorly equipped to deal with the "new consumer," there has been substantial and significant strides toward keeping customers satisfied (Webster 1973). A recent survey by the Forum Corporation of CEOs, COOs, and Vice Presidents of Fortune 500 companies revealed that "quality of customer service" was their top priority (Business Week 1989). Today the consumer movement is trying to tackle a wider range of issues and causes that it is used in a general fashion to include; a) consumer education; b) consumer self-protection; and 3) business realization and acceptance of responsibility. At this juncture it seems appropriate to examine some of the accomplishments of the consumer

movement so far. It would not be polemic to list the following:

1. safer products;
2. better information dissemination between consumers, business, and government;
3. greater competition;
4. more effective legislation and their enforcement;
5. increased awareness and concern for consumers; and
6. the awareness that consumerism is inevitable, enduring, beneficial, profitable, and finally pro-marketing.

Lessons Learned

A closer look at the history of the movement in the United States reveals that a revolutionary change in business philosophy was partly caused by over eighty years of concerted effort by consumers and the government. Although these two factors tended to influence each other, there have been other extraneous factors such as increased consumer affluence and education that contributed indirectly. A review reveals that the success of the consumer movement was in part due to the following (Gaedeke 1970, Hensel 1974, Hendon 1975):

1. increased use of mass communication tools and the potential for their abuse;
2. negative impact of business activities on the environment leading to the belief that businesses have a duty of care that extends beyond profit motives, green marketing for example;
3. changing attitudes of consumers and their concern and involvement in issues;
4. better educated and informed consumers with increased spending power;
5. publicity for the wrongdoing of businesses that generated greater interest in the issues; and
6. political action and enforcement providing greater impetus for lobbying efforts of consumerists, write-in campaigns both at the local and national levels.

In some cases, support for political candidates is based on their platform for consumer concerns. This is amply evident in present day politics where candidates are forced to choose, for instance, either a pro-choice or pro-life platform. It is also interesting to note that so far direct action by consumers did not seem very effective. Impact of consumer boycott or threat of boycott seems limited partly because of the difficulty in organizing the different groups and later sustaining the campaigns over any length of time and was used more as a last resort measure. That might be changing in the wake of recent successes.

For example, Rev. Donald Wildmon's organization, CLear TV (Christian Leaders for Responsible Television) was successful with a boycott threat on Pepsi products, the Polka group successfully persuaded Coors/Strohs to drop their "offensive" commercial, and a house wife from Michigan, Ms. Terry Rakolta and her organization made significant gains against some TV Network programming by targeting sponsors' products for potential boycott. Some believe that the "new puritanism" is here to stay, while others see it as the "result of better, more sophisticated public relations activities by a few, rather than a public outcry in response to slipping Network standards" (Moore 1989). Obviously the most effective direct action against advertisers would be to mute the sound or switch off the TV or refusal to buy product or cut up the credit cards as was the case in wake of the Exxon Valdez disaster in Prince William Sound, Alaska. In this case, radio disk jockeys across America were leading the cause. Of course, some had mixed results, such as the one in California against Universal Studios for their release of "The Last Temptation of Christ."

Meanwhile, there is also a backlash and sometimes a public outcry against people who seemingly try to impose their values. For instance, an organization in New York called Fundamentalists Anonymous is lashing out at Rev. Donald Wildmon and carrying out a product boycott against Pepsi for bowing to pressure from the reverend. A recent gallop poll revealed that most television viewers believe there is too much sex and violence in TV programming, but they don't notice the advertisers or hold them responsible (Advertising Age 1989).

Anyhow, rise of consumerism and attempts to adhere to the marketing concept were results of actions by businesses and consumers/governmental responses to such actions. Government willingness to enact tough consumer protection laws is seen as a means of providing consumers with some form of countervailing power in the marketplace.

Consumerism in the Third World

In most foreign countries, governments impose restrictions on business as a measure of consumer protection. Sometimes, consumer protection is nothing more than a buzzword, there have been many instances of genuine intent. Foreign governments have laws to safeguard consumers against adulterated foods, harmful effects of tobacco and alcohol and so on. For sometime, Caveat Emptor was considered sufficient while operating in the world market, but a survey reveals that as sellers grow larger and powerful

and the products get complicated, consumers feel that they have lost equality in the marketplace (Cundiff and Hilger 1988). In more countries today than before, consumers are organizing and also turning to their respective governments for help (Gaedeke and Udo Ud-Aka 1974). Organization of efforts have come in different forms such as the ombudsman in Sweden and governmental division for consumer complaints in India. The most famous incident of unethical business practice and one that was instrumental for such actions was the Nestle baby food formula case.

Although the consumer movement seems to be catching up in other countries, two observations seem to be in order: first, industrialized countries and their governments tend to take a more active role in consumer protection; and secondly, in less industrialized countries adequate legislation may exist but there is little enforcement due to lack of resources (Cundiff and Hilger 1988). The rest of the paper is devoted to reviewing the consumer movement in India and Trinidad & Tobago (T & T). Both being members of the British commonwealth, it seems fitting to look at two distinct periods in their history, the Pre-independence and Post-independence eras.

Pre-Independence Era

British colonization of India and T & T is believed to have cost the countries most of their valuable natural resources. During their rule, the British opted to export colonial raw materials to the United Kingdom for production of consumer goods to be sold back in the colonies. Accordingly, the British practiced the production concept well into the 50's (Willis 1971). Despite the reliance on the concept, they did little to develop or promote industries in the colonial states. Indigenous businesses were often small and dependent on the British for resources. These firms also practiced production oriented policy with little regard for quality and consumers bought the available.

Consumer protests against marketing practices were unheard of and there was little support from the local or regional governing bodies. For example in India, the Sale of Goods Act of 1930 was the only piece of legislation that had any direct implications for consumer protection. With little enforcement, this Act expounded the maxim of Caveat Emptor, except in cases of concealment of information or deception or when the product was not of merchantable quality (Sengupta 1979). In both the colonies, the British were more concerned with the well being of their revenue producing business enterprises than their colonial subjects.

Post-Independence Era

India gained independence in 1947 and T & T in 1962 but initially the British maintained control of the means of production and contacts to the world markets. Newer but smaller industries were established mainly through the support of the local government. Inherent limitations of cottage industries in supplying consumer necessities were quickly recognized and the governments began a massive program of "industrialization by invitation." Large scale production was seen as the means of solving scarcity problems and providing employment. At this time, the main objective of businesses was to meet local shortages and this coupled with government actions in the forms of negative lists and import restrictions, served only to strengthen the sellers' market. Besides, there were no incentives to adopt the marketing concept. There were sporadic outbursts against food adulteration and non availability of essential items. Although there were no influential spokespersons to lead the cause, massive public outcry lead to the passage of the Monopolies and Restrictive Trade Practices (MRTP) Act in 1969 in India (Sengupta 1979). The Indian situation differed somewhat from the American experience, for, there was no tragedy of national proportions like the Sulfanilamide scandal, no consumer leaders and finally, no effective mass media to provide publicity.

The MRTP Act was similar to the American FTC Act of 1949 that marked the culmination of a series of efforts to protect consumers against specific fraudulent practices. The MRTP Act also established a Commission to inquire into activities that were contrary to public interest, restricted competition, and free market operations. This Act grandfathered the entire area of consumer protection in India and provided the framework for more specific acts such as Standard of Weights and Measures Act of 1985. The sixties and the seventies saw no concerted effort to bring the consumer movement to the forefront of the national agenda since there were other pressing problems, like unemployment and health, which needed greater attention and resources. There were no national or regional leaders to carry on the burden of consumer education and this was partly due to the lack of effective national media. Thus the publicity element that was instrumental in the American experience was missing.

In 1986, the Indian government enacted, what is considered as the most comprehensive consumer protection legislation. This was in part a response not to any particular type of abuse or practice or to any large scale lobbying, but more a measure that was seen as long overdue. This act, the Consumer Protection Act of

1986, amended six earlier laws including the MRTP Act. This law provides for the creation of District Forums to redress public grievances about private and government goods and services. With the same power as a civil court, these Forums were created in all districts to hear and act on consumer complaints and harsh penalties were to follow non-compliance with the Forum verdicts and pronouncements.

In Trinidad, on the other hand, the 60's were a period of consumer outcry. Like the Denver case, the Housewives Association of Trinidad and Tobago (HATT) led consumers to protest high prices, food shortages and a host of marketing ills. These and similar incidents led to the establishment of the Price Control Commission with the mandate to develop and enforce prices on what was considered part of an essential "basket-of-food." However, what followed was a severe shortage of staple items and lax enforcement of the rulings, making it almost impossible to maintain prices. Furthermore, government policies on import and licensing paved way to the creation of monopolistic situations. Sometimes, firms enjoying monopoly status because of government protection from foreign competition, created artificial shortages to induce price hikes. An act similar to India's Standard of Weights and Measures Act was passed in T & T in the late sixties but unfortunately it did not fit into any comprehensive plan to protect the rights of consumers. In the early 70's, the government seated the head of HATT as a senator and thus effectively killed the consumer movement. Since then very little has been done to advance the cause of consumers in Trinidad and Tobago.

Unlike the American movement, consumer organizations in the two countries still tend to be small and loosely networked preventing any massive and concerted action. Businesses, therefore, have never considered them threatening or imposing. Like in the United States, the process has been time consuming and costly but without some of the necessary ingredients to gain prominence. The government remains as the only major player and its efforts are often hampered and rendered ineffective by relatively weak legislation and bureaucratic problems involved in enforcing them (Khandekar 1986). Protection from foreign competition, especially from American, European, and Japanese companies, based sometimes on "infant industry" argument, does not give consumers any real choice and businesses have adopted a general arrogance toward their concerns. This has led to a thriving market for smuggled goods and a general craze for most anything foreign at least in India. But with recent external trade liberalizations in both these countries, the situation is ex-

pected to change steadily.

The Necessary Environment

Under what conditions can the consumer movement take off as it has done in the United States? The following section tries to shed some light on this question. While the two Third World countries seem to have similar backgrounds, root causes for their apparent failure to foster development of consumer orientation are quite different. In India the government has been the forerunner for consumer protection, while in T & T groups like HATT played a more dominant role. T & T has a literacy rate of over ninety percent while it is below sixty percent in India. The per capita income stands in excess of US \$ 7000 in T & T, whereas the Indian figure is below US \$ 800. Population figures for the two countries are vastly different with India having over 800 million consumers while T & T has just over a million.

These differences suggest that the probability of the movement taking off and succeeding in T & T seem greater than in India. A closer look, however, indicates that one cannot predict the likelihood of success for either of them. Notwithstanding, following are some of the necessary conditions to catalyze the consumer movement and business adoption of consumer orientation in these countries.

1. A case or several of abuse or exploitation or mishap of national magnitude is likely to get consumers and their government rethink the strategies for consumer protection.
2. Ability to contain and effectively manage other problems the country faces so as to move consumer protection up the priority list.
3. Effort to educate consumers on their rights and alternative behaviors in the marketplace. Assumption of leadership roles by informed individuals will facilitate a coordinated and united response.
4. Better acquisition and dissemination of information and access to the national media.
5. Increasing accessibility to the countries' markets for foreign marketers especially those from the United States and Japan who seem to have mastered the art of satisfying consumers for a profit. This is likely to influence the local marketers to do the same in order to survive the competition and succeed.
6. A change in attitude of the countries' marketers and the realization that they exist to serve the customers and not vice versa.

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IMPACT OF INTERNATIONAL MARKETING RESEARCH
ON EXPORT MARKETING STRATEGY: AN EMPIRICAL INVESTIGATION

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Abstract

This paper examined the impact of the frequency and extent of international marketing research on export marketing strategy. Of the 18 hypotheses tested, 14 hypotheses were rejected at the .05 level of significance. The study revealed that international marketing research will affect the way in which exporters determine export pricing and export price quotation, frequency with which they conduct face-to-face meeting with their overseas dealers or distributors, provide level of dealer support, the type of direct buyer overseas, and the type of export channel used.

Introduction

The name of the game for corporations in attempting to survive in the turbulent 1980's has been strategic planning. Strategic planning has caught on the imagination of many corporations, particularly the larger ones, as they try to match the needs of the ever changing environment to their capabilities and resources. Strategic planning in export marketing is even more critical, given the fact that exporters have to operate in unknown environments away from their home base. However, compared to domestic marketing in the United States, there is little written about the practices of exporters in strategic planning and marketing research in their foreign environments in which they operate. Furthermore, much of these limited papers about strategic planning in international marketing have focused on the practices and problems of multinational corporations and their subsidiaries. Hulbert, Brandt, and Richers (1980) compared the marketing planning practices of subsidiaries of Japanese, European, and U.S. firms operating in Brazil and concluded that planning efforts in many subsidiaries remain limited and hampered by a variety of problems. Wiechmann (1974) investigated how multinational corporations manage their subsidiaries, and based on his qualitative assessment, concluded that many subsidiaries focused on centralization as their integrative device. As alternatives, Wiechmann suggested corporate acculturation, systems transfer, and people transfer, and the choice of an integrative device would depend on the nature of the firm's products.

Other research efforts in international planning have investigated the question of "globalization versus customization" (for examples, see Buzzell 1968; Keegan 1969; Sorenson and Wiechmann 1975; Levitt 1983; Hill and Still 1984; Quelch and Hoff 1986; Mesdag 1987). Hill and Still (1984) concluded that "most consumer products that MNCs sell in developing countries originate in the companies' home markets. The temptation for many MNCs is to standardize their products across all markets... however,... a "more appropriate" marketing strategy is to tailor consumer products

to local customs and market conditions." (p. 92) On the other hand, Levitt (1983) called for the standardization of products across many markets, and that exporters should modify their products to local conditions only if they are forced to do so. Whether a company standardizes or customizes, it is evident that marketing personnel must have information to make their decisions. Only when the "bundle" of product offerings match the needs of the consumers overseas will an exchange take place. The question that remains unanswered is "To what extent do firms engage in international marketing research that would provide them with the right kind of information for decision making?" The purpose of this research effort is to provide an insight into the impact of international marketing research on export marketing strategy. For the purpose of this study, international marketing research is operationalized as activities made to research any of the following issues concerning the firm's export market(s): forecast of market demand and market share; analysis of competitive strengths and weaknesses; changing consumer needs and cultural trends; technological trends; governmental regulations and political conditions; general environmental conditions; and balance of payments issues.

Methodology

Data were obtained from 233 United States firms involved in exporting various industrial products (agricultural machinery and equipment [SIC 352], materials handling equipment [SIC 353], scientific instruments [SIC 381], and medical and hospital equipment [SIC 384]). The nationwide mail survey (self-administered questionnaires) achieved a net response rate of 24.5 percent. Non-response bias tests between the responding and nonresponding groups were undertaken, and the tests showed no significant differences between the two groups on several attitudinal and demographic characteristics.

Several limitations need to be taken into consideration: the study is cross-sectional in nature, and is basically exploratory and descriptive; and the focus of the study is on four industrial categories; and its results cannot be generalized to producers of consumer product, agricultural commodities, or services.

Findings and Discussion

Sample Characteristics

Responding firms consisted primarily of small and medium size firms. Approximately 86 percent of the respondents had less than 500 employees and about 83 percent had annual sales not exceeding \$50 million. About 35 percent of the respondents reported that they either do not conduct any international marketing research or do so very

infrequently (less than once a year). Eighteen percent reported that they conduct international marketing research only once a year, while 46.8 percent research their foreign markets more than once a year. Of the firms which did conduct international marketing research, 53 percent did so haphazardly (no formal plans) while the remaining 47 percent formalized their international marketing research efforts.

Effects of International Marketing Planning on Export Marketing Strategy

Eighteen hypotheses were developed to test the impact of the frequency and extent of international marketing research on several export marketing strategies:

A. Effects of frequency of international marketing research on:

- Ho:1 Level of product modification
- Ho:2 Level of export pricing
- Ho:3 Export price determination
- Ho:4 Export price quotation method
- Ho:5 Face-to-face contact with overseas dealer or distributor

- Ho:6 Brand-name labeling
- Ho:7 Level of dealer support
- Ho:8 Type of direct buyer
- Ho:9 Type of export channel

B. Effects of the extent to which international marketing research is undertaken on:

- Ho:10 Level of product modification
- Ho:11 Level of export pricing
- Ho:12 Export price determination
- Ho:13 Export price quotation method
- Ho:14 Face-to-face contact with overseas dealer or distributor
- Ho:15 Brand-name labeling
- Ho:16 Level of dealer support
- Ho:17 Type of direct buyer
- Ho:18 Type of export channel

Chi-square analyses of differences showed that 14 of the 18 hypotheses were significant at the .05 level of significance. Summary results of the chi-square analyses are presented in [Table 1](#).

TABLE 1
SUMMARY OF RESULTS OF CHI-SQUARE TESTS SHOWING EFFECTS
OF INTERNATIONAL MARKETING RESEARCH ON EXPORT MARKETING STRATEGY

Export Marketing Strategy	International Marketing Research							
	Frequency				Extent			
	I	II	III	IV	I	II	III	IV
Product modification	Ho:1	5.06	.2810	NR	Ho:10	3.65	.4550	NR
Level of export pricing	Ho:2	18.38	.0053	R	Ho:11	18.22	.0011	R
Export price determination	Ho:3	33.14	.0000	R	Ho:12	29.65	.0000	R
Export price quotation	Ho:4	15.30	.0016	R	Ho:13	11.92	.0026	R
Face-to-face contact with overseas dealer or distributor	Ho:5	44.17	.0000	R	Ho:14	64.44	.0000	R
Brand-name labeling	Ho:6	2.76	.4298	NR	Ho:15	3.88	.1439	NR
Level of dealer support	Ho:7	38.05	.0000	R	Ho:16	38.79	.0000	R
Type of direct buyer	Ho:8	11.19	.0245	R	Ho:17	15.03	.0046	R
Type of export channel	Ho:9	41.07	.0000	R	Ho:18	48.56	.0000	R

I = Hypothesis number
 II = Chi-square value
 III = P-value associated with the chi-square test
 IV = Decision at the .05 level of significance
 NR = Not Rejected
 R = Rejected

Effects of International Marketing Research on Level of Product Modification

Hypotheses Ho:1 and Ho:10 were not rejected at the .05 level of significance. This shows that the level of product modification for the export market is not related to the frequency and extent of international marketing research. The majority (81.8 percent) of the respondents export their product without any modification. Only 18.2 percent of the respondents stated that the domestic product is modified for the export market. None of the responding firms customize or manufacture a product primarily for the export market. Where modifications are necessary, it seems that they are externally induced, perhaps by market conditions or competitive elements within the export market. The focus of this study on industrial products may also account for the marketing of standardized products overseas.

Effects of International Marketing Research on Level of Export Pricing Relative to the Price of Similar Product Sold in the United States

Hypotheses Ho:2 and Ho:11 were rejected at the .05 level of significance. The findings revealed that exporters who conduct international marketing research more often and extensively are likely to price their export product higher than a similar product sold in the U.S. They sell their products at a higher price overseas on the basis of information obtained about conditions prevailing in their export markets. Accordingly, such exporters maintain the degree of competitiveness and market vigilance necessary to remain successful.

Effects of International Marketing Research on the Method of Determining Export Price

Hypotheses Ho:3 and Ho:12 were rejected at the .05 level of significance. Exporters who conduct more frequent and formal international marketing research tend to use competitive pricing in setting export prices. Compared to the U.S. price list (used more often by exporters who do not conduct marketing research), the use of a competitive price list is realistic as it enables the exporter to maintain competitiveness and remain successful. The process of arriving at competitive prices requires more effort and expenses on the part of the exporter as it involves separate costing based on information that have to be obtained from the foreign market. Such information will guide the firm's management in setting export prices.

Effects of International Marketing Research on Export Price Quotation Strategy

Hypotheses Ho:4 and Ho:13 were developed to test the relationships between the frequency and extent of international marketing research and export price quotation strategy (either cost, insurance, and freight (c.i.f.)/cost and freight (c&f) basis or free on board (f.o.b.)/free along side (f.a.s.) basis). They were rejected at the .05 level of significance. The findings showed that exporters who undertake more frequent and extensive international marketing research are more likely to use the c.i.f./c&f price quotation basis.

These exporters are willing to invest time and resources in obtaining pertinent information about international freight rates, insurance, and other charges (consular fees, port charges, and the like). Exporters who do not undertake international marketing research tend to use seller-based price quotations (f.o.b./f.a.s.).

Effects of International Marketing Research on Frequency of Face-to-Face Contact with Overseas Dealer or Distributors

Hypotheses Ho:5 and Ho:14 were rejected at the .05 level of significance. Exporters who undertake more frequent and extensive international marketing research tend to meet more frequently with their overseas buyers. These exporters may be more likely to appreciate the importance of market feedback and dealing personally with problems in the marketplace. Establishing primary relationships with dealers/distributors that goes beyond mere formal business communications may contribute to good profits.

Effects of International Marketing Research on Brand-Name Labeling Strategy

Hypotheses Ho:6 and Ho:15 were not rejected at the .05 level of significance. The frequency and extent of international marketing research do not affect the strategy used by exporters in labeling their product overseas. Once established and protected by patents, exporters do not change their brand-names unless dictated by cultural or legal problems overseas.

Effects of International Marketing Research on Level of Dealer Support Provided

Hypotheses Ho:7 and Ho:16 were rejected at the .05 level of significance. The level of support provided by the exporter was evaluated on a three-point scale--no support at all, providing either dealer training/assistance or advertising support (referred to as "moderate" support), and providing both dealer training/assistance and advertising support ("strong" support). Not surprisingly, exporters who undertake more frequent and extensive international marketing research are more likely to provide greater dealer support. These exporters are likely to be more aware of the competitive conditions abroad and may be more willing to influence distribution channel members by providing dealer incentives in the form of dealer training/assistance and/or advertising support. They may also realize the importance of pre-sale and post-sale dealer support in winning supplier loyalty.

Effects of International Marketing Research on Direct Buyer Strategy

Hypotheses Ho:8 and Ho:17 were developed to test the relationships between the frequency and extent of international marketing research and direct buyer strategy (classified into U.S. export agent, foreign middleman, and final foreign end-user). They were rejected at the .05 level of significance. Exporters are more likely to sell to foreign end-users if they conduct more frequent and extensive international marketing research.

On the other hand, exporters who do not conduct international marketing research tend to sell directly to a U.S. export agent. Strategic research helps exporters to become more knowledgeable about their foreign markets, particularly in terms of the availability of foreign retailers and location of target markets. Exporters who sell to final end-users also tend to know the needs of their customers better than those who depend on export middleman. An implication of this study is that more exporters might export directly to end-users overseas if directories/prospect lists or marketing intelligence concerning overseas markets were more widely available.

Effects of International Marketing Research on Export Channel Strategy

Hypotheses Ho:9 and Ho:18 were developed to test the relationships between the frequency and extent of international marketing research and export channel strategy. Export channel strategy is operationalized in terms of U.S. export agent, own domestic marketing department, or a separate export department/unit. They were rejected at the .05 level of significance. The study showed that exporters who conduct more frequent and extensive international marketing research tend to export their product through a separate export department/unit. Such exporters tend to be more committed to exporting and are willing to invest manpower and resources in establishing a separate department for exporting. An export department/unit enables management to focus continuous attention on exporting activities, with the expectation of achieving better success.

Conclusion

This study showed that exporters who conduct more frequent and extensive international marketing research tend to be more customer oriented. Compared to those who do not conduct international marketing research, such exporters are more likely to use the c.i.f./c&f price quotation, price their product competitively in their export market, meet more often with their overseas buyers, provide a higher level of dealer support, sell directly to final end-users through their own export department, and sell at a higher price than that of a similar product sold in the U.S. A study by Johanson and Nonaka (1983) found that successful Japanese exporting companies search for foreign market information and adopt a policy of providing the customer with "good value" for his/her money. It seems that exporters who are committed to exporting are willing to invest time and resources in searching the foreign market for information that will enable them to decide better. The fact that very few companies are conducting serious international marketing research may also imply that many companies do not know how to go about researching foreign markets. It is recommended that as a public policy implication, the Department of Commerce through its network of agencies and institutions conduct workshops on "How to" in international marketing research for exporting firms. Universities and colleges with a program in international studies may also lend a helping hand. In addition, the Department of

Commerce should make foreign market intelligence data (including prospects list) more readily available, and have them updated in a timely fashion. Small and medium size firms trying to export for the first time are awed by the vastness of foreign markets, and need to be "taken along" by the hand in their export endeavors.

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THE IMPACT OF SOCIAL CLASS ON THE OWNERSHIP OF
CONSUMER DURABLE GOODS IN MEXICO

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ABSTRACT

Path analysis is used to test four hypotheses to evaluate the effects of social class, education, occupation, and income on innovativeness (i.e., the ownership of consumer durable goods). To attain the objective of this empirical study a cross-sectional survey has been conducted in the city of Monterrey, Mexico. The findings confirm all four hypotheses. It is concluded that economic success results in conspicuous consumption of consumer durables and that modern lifestyles are essentially the result of this upward social progression. A discussion of the findings and implications for action by marketing scholars and marketing practitioners in LDCs are also included. These implications indicate clearly a number of avenues wide open in dealing with international markets in LDCs.

INTRODUCTION

Knowledge flows to Less Developed Countries (LDCs) from Developed Countries (DCs) take place mainly through Multi-National Corporations' (MNCs) direct investments. These flows occur mainly because of country economic policies stressing local industrialization through import-substitution (replacing imports with products from locally based industry).

Over the years, Mexico has become target of American investment with natural resources attracting MNCs and causing expansion of its productive base and modernization of consumer sectors (Dymza 1984).

The purpose of this study is to investigate the impact of social class on the acceptance of consumer durables by Mexican consumers. This task encompasses the assessment of the impact of four socioeconomic factors (social class, education, occupation, and income) on innovativeness, that is the degree of ownership of consumer durables.

LITERATURE REVIEW IN SYNOPSIS

Innovativeness and Related Socioeconomic Variables

The cruciality of new product adoption is clear (Engle, Blackwell, and Miniard 1990), and, probably, especially of technological new product adoption.

In most traditional analyses of diffusion of innovations the emphasis is on communications within the social structure. This relational approach analyzes communication networks and how social-structural factors influence diffusion flows in a system (Engel, Blackwell, and Miniard 1990).

Rogers (1962, 1983) reports that over 3,000 studies and discussion of diffusion of innovations processes have been published in at least 12 different disciplines. Of these studies, about 10% have been Marketing. According to Engel, Blackwell, and Miniard (1990), the bulk of consumer behavior research pertaining to the adoption process is on consumers rather than on the social structure and process variables. This fact reinforces the identified need for more research in this domain, which this study aims at fulfilling in some way.

In regard to the variables studied in the report by Rogers literature review, four clusters of critical determinant factors of success of new products are identified and mentioned by Engel, Blackwell, and Miniard (1990):

1. the innovation (new product, service, idea, etc.)
2. the communication (through certain channels)
3. time (at which certain individuals decide to adopt the product relative to others)
4. the social system (interrelated people, groups, or other systems (p. 687)).

Due to the specific focus of this study, the literature review is confined to the fourth cluster, with a specific concentration on socioeconomic variables. Three major groups of variables have been studied extensively to determine their correlation to innovativeness: socioeconomic, personality, and communication behavior (Rogers 1962, 1983; Engel, Blackwell, and Miniard 1986, 1990).

Further analysis of socioeconomic variables indicates that people who may be characterized as innovators are educated, and or literate; have higher social status; are socially upward mobile; have a commercial (rather than a subsistence) economic orientation; have a more favorable attitude toward credit; and are more specialized in operations. Age is found not to be related to innovative-

ness. For example, of 120 studies, 44 show that innovators are younger and 76 show that innovators are older. For more details on more specific variables supported and not supported by studies, the reader is referred to Rogers (1983) and Engel, Blackwell, and Miniard (1990, p. 710).

Impact of Product Innovations on Consumers

Product diffusions are particularly important because of their impact on consumer lifestyles. While technology transfer has benefited many developing nations economically, it has caused social and cultural dislocations in moving from traditional to modern lifestyles. The significance of this matter imposes the reviewing of the positive and negative aspects of technology transfer from a socioeconomic perspective need to be examined.

Technology transfer offers important economic benefits to developing nations by aiding their economic development and contributing to improvements of living standards. However, not all modern technologies are capable of being used and absorbed into mainstream society. Some disrupt traditional behavior patterns and create social problems (Kahl 1969).

Some scholars have reservations about technology transfer benefits. They argue, for example, that MNCs are too powerful economically and can threaten the national sovereignty and cultural heritage of developing nations. Their self-interests may not always be congruent with country goals of employment, growth, and equity as perceived by the most developing nation (Bauer 1981; Korbin 1979; and Vernon 1971).

Industrialization in many LDCs has developed dual socioeconomic structures which constitute the existence, side by side, of modern- and traditionally-oriented groups of individuals in developing nations. These societies do not experience economic, political, and social changes evenly or uniformly (Ditcher 1962; Nurkse 1953; Rostow 1968; Thorelli 1966).

Nurkse (1953) notes the tendency of traditional groups to emulate sophisticated urban lifestyles in developing nations: "Their knowledge is extended; their imagination stimulated; new desires are aroused, the propensity to consume is shifted upward" (p. 59). Hill and Still (1980) formalize this observation with a cultural framework. This framework suggests that MNCs, via technology transfer, foster economic development through their impact on consumer behavior.

Methodology

A survey of a cross-section of Mexican consumers in the city of Monterrey in northern Mexico was conducted. A four-part, self-administered, structured questionnaire with 109 questions was designed for a larger scale study--of which this report covers only the impact of social class on innovativeness.

The constructs of individual modernism, consumer modernism, social class, and innovativeness were measured, in addition to demographic data obtained on the respondents. The questionnaire construction was completed at three steps: (1) selection of measurement scales, (2) translation of the questionnaire in Spanish, and (3) pretesting of the questionnaire.

Measurement Scales

Individual Modernism is measured using Kahl's (1968) Individual Modernism II Scale (short version). The linear combination reliability coefficient of the scale is .64, according to Nunnally (1967).

Consumer Modernism. Consumer modernism is conceptualized as a multidimensional construct consisting of seven aspects of consumption behavior: (1) purchasing roles, (2) sources of information, (3) branding, (4) labor-saving, (5) retail outlet, (6) merchandising, and (7) packaging.

This scale assesses attitudes of individuals toward the adoption of modern consumption habits. A linear combination reliability coefficient alpha .57 has been computed.

Innovativeness. Ownership of modern products is a behavioral indicator of consumption innovativeness. Ownership of modern consumer durables reflects individuality, personal success, and the adoption of modern economic values occurring as individuals move from traditional into modern urban surroundings (Uusitalo 1979). As such, scholars have used ownership level of consumer durables to assess individual's innovativeness (Robertson and Myers 1966; Summers 1972).

In this study, subjects have been given a list of products and asked which ones they owned. The degree of consumer innovativeness is based on how many of the twenty items listed they own. The more products owned, the greater the degree of innovativeness. The twenty consumer durable products are: (1) radio, (2) black and white televisions, (3) refrigerator, (4) range, (5) camera, (6) hair dryer, (7) toaster, (8) stereo system, (9) color television, (10) microwave

oven, (11) videocassette recorder, (12) electric shaver, (13) electric mixer, (14) washing machine, (15) clothes dryer, (16) vacuum cleaner, (17) food processor, (18) electric can opener, (19) dishwasher, and (20) personal computer. All twenty products share the following characteristics: (1) they are culturally-bound products; (2) they are technology transfers; (3) they have effects on consumption patterns; and (4) they are consumer perception-laden.

Social Class. This scale includes the subscales of social class, occupation, education, and income. They are measured with categorical or ordinary scaled data. Therefore, Kendal's Tau-C correlation coefficients for bivariate relationships are computed, which produced values of .612, .487, and .539 for occupation, education, and income respectively, against social class.

Population and Sampling

The population for this study is defined as "individual heads of households, spouses, or other responsible individuals who could be reached at their homes within the metropolitan area of Monterrey, Mexico during the summer of 1987."

The sampling technique used is a combination of disproportional stratified sampling and two-stage area sampling. The original sample size for this study has been estimated at 600 respondents. This number has been based on previous research endeavors (Cunningham, Moore, and Cunningham 1974; Kahl 1968). To obtain a reasonable expectation of the final sample size, the number of planned sample dwellings has been arbitrarily set to 750 to obtain about 600 complete, and usable questionnaires--and also to allow for nonresponses.

Data Collection and Treatment

The response rate was 68 percent. This is considered satisfactory judging by response levels for individual questions, problems of misrepresentation were minimal. A final count of 507 respondents contributed to this study with their responses.

The objective of this study has been set to be fulfilled by (a) measuring the strength of correlational relationships between the dependent and independent variables as presented in the hypotheses, and (b) by analyzing multivariable relationships among variables. In analyzing multivariate relationships among variables that are ordinal and interval in nature, the strength of their linear relationship is best tested by a standardized partial regression coefficient. Path analysis is determined a

useful tool for discerning the strength and direction of underlying causal processes (Asher 1983).

Hypotheses

Based on the reviewed literature, the following Hypotheses are formulated and tested statistically in this study:

- H1: Social class in developing nations is positively related to innovativeness.
- H2: Education in developing nations is positively related to innovativeness.
- H3: Occupation in developing nations is positively related to innovativeness.
- H4: Income in developing nations is positively related to innovativeness.

ANALYSIS OF FINDINGS

Results are presented in two sections: (1) demographic profile of the respondents, and (2) hypotheses testing. An appropriate discussion and interpretation of findings, as well as implications for action follow the analysis of the findings.

Demographic Profile of Respondents

The demographics of the sample have been compared with the most recent demographic profiles of Monterrey. The population of interest is heads of households in the metropolitan Monterrey areas, Mexico. To develop a demographic profile of the sample, frequency distributions relating to social class, sex, age, education, and income have been generated. Every social class is almost equally represented, each having close to 100 respondents. These numbers are not quite proportionate to the 1985 estimates for the total Monterrey population. Specifically, the 507 responses contain more responses from high and marginal social classes than should be the case. These differences do not seem to be too extreme to affect extrapolations that might be made on the population as a whole.

The majority of respondents are males (64%). This may be a response bias in favor of males, which actually represents 49.6 percent of metropolitan Monterrey population as indicated by 1980 estimates. Since the questionnaires have been addressed to heads of households, a position traditionally occupied by males, this is not considered a surprising bias.

Most age groups are evenly represented. Level of education achieved shows a few differences between the sample and parent population. A disproportionate number of respondents (39.8%) have a college education. This is significantly more than Monterrey's actual percentage

of college educated people in 1985 (15.9%), according to Vellinga and Lopez (1987). Similarly, proportionally fewer responses have been obtained from those with primary school education (18.6%) as indicated by the Vellinga and Lopez's study (44.8%). Another category under-represented is the "non educated" (non schooling) people, which constitutes less than a percentage point of the sample but which has been estimated to be 7.3 percent of the total population by Vellinga and Lopez (1987). A minority of respondents (3.6%) have postgraduate education. This appears high for a country that is not completely industrialized. Post graduate degrees, however, are more common in cities like Monterrey in which institutions of higher education draw the brightest degree holders from many parts of Mexico.

Finally, Table 1 shows the distributions of income. Surprisingly, a high percentage of respondents answered this highly sensitive question (nearly 88%).

In summary, with some noted exceptions, the sample appears to be fairly representative of Monterrey's metropolitan population. The sample does contain greater proportions of respondents from

TABLE 1
Frequency Distributions of Sample Respondents by Income

Income	Absolute Frequency	Relative Frequency	Cumulative Frequency
0 - 1000	73	14.4	14.4
1000 - 2500	135	26.6	41.0
2500 - 5000	100	19.7	60.7
5000 >	137	27.0	87.7
Nonresponse	62	12.2	100.0
Total	507	100.0	

U.S. Dollars

the upper social classes (higher levels of education and income). This is probably due to their heightened comprehension of research objectives and their trust in the researchers conducting the survey--based on their personal observations while conducting this study.

Hypotheses Testing

In order to assess the impact of socioeconomic factors on ownership of durable goods, innovativeness is regressed on social class variables. Social class variables are associated with innovativeness. As Table 2 indicates, consumer modernism, individual modernism, and especially social class, show definite associations with path coefficients of $P43=.097$, $P42=.0639$ and $P41=.7219$, respectively. Thus, social class attains the highest path coefficient. Collec-

TABLE 2
Path Analysis Results for the Overall Model

Dependent Variable (X)	Independent Variable (X)	Regression Coefficient (B)	Path Coefficient (P)	Coefficient of Deter. (R)
X4	X3	.1002	.0970	.6027
	X2	.0612	.0639	
	X1	2.3528	.7219	
	Constant	-.9247		
X3	X2	.3404	.3661	.1949
	X1	.5255	.1660	
	Constant	18.913		
X2	X1	.9328	.2740	.0751
	Constant	26.975		

Where: X1 = Social class
X2 = Individual Modernism
X3 = Consumer Modernism
X4 = Innovativeness

p<.01
p<.05

tively, they account for 60.27 percent of the variance in individual innovativeness. However, while this looks impressive, some of these effects are not as strong as they appear. Table 3 shows why.

TABLE 3
Decomposition of Total Associations Between Overall Model Variables

Dep. Var. (X)	Indep. Var. (X)	Zero Order Corr.	Direct Effect (1)	Indirect Effect (2)	Spurious Effect (3)	Total Effect (1+2)	Implicit Corr. (1+2+3)
X4	X3	.316	.0970	-	.2185	.0970	.3155
	X2	.302	.0639	.0355	.2022	.0994	.3016
	X1	.765	.7219	.0433		.7652	.7652
X3	X2	.412	.3661	-	.0454	.3661	.4115
	X1	.266	.1660	.1003	-	.2663	.2663
X2	X1	.274	.2740	-	-	.2740	.2740

Where: X1 = Social Class
X2 = Individual Modernism
X3 = Consumer Modernism
X4 = Innovations

p<.01
p<.05

In the description of effects, the importance of consumer modernism and individual modernism is diluted considerably because most of their attributable effects are spurious (.2185 and .2022, respectively). That is, they are due to a common cause or causes. These spurious effects are significant because they account for 69 percent (.2185/.3155) and 67 percent (.2022/.3016) of their implied correlations. Therefore, consumer modernism and individual modernism are not important predictors of innovativeness.

The social class reflect on innovative-ness underscores the relatively obvious idea that as an industrialization occurs, incomes, educational opportunities, and occupational statuses change and improve. As people become upwardly mobile, discretionary incomes increase and their consumption of durable products increases simultaneously.

In brief, the four hypotheses tested are supported by the data. Social class and its major subcomponents (i.e., education, occupation, and income) relate to innovativeness without any serious reservations. Social class is an important determinant of innovativeness. Those with high social status and economic success engage in conspicuous consumption of consumer durable goods. Modern lifestyles are not an important determinant of innovativeness, but may result, essentially, as a by-product of consumers' upward mobility.

LIMITATIONS OF THE STUDY

The study has several limitations. First, the conceptual framework of this study does not include the intervening effects of marketing strategy, and therefore its impact is not assessed directly. Second, generalizations need to be drawn with caution. This study uses a single city/single country sample. This automatically eliminates comparisons with other urban centers and among nations and reduces generalizability of the findings. Furthermore, this study deals with consumption patterns of consumer durable goods only. Therefore, the results should not be generalized in areas of consumer nondurable goods or services.

DISCUSSION AND IMPLICATIONS FOR ACTION

Implications for Practitioners

Successful marketing depends on understanding consumers. This study contributes to managerial understanding of cognitive and behavioral changes occurring within markets and it may help them in developing more effective product, promotion, and distribution strategies to reach their target markets.

The strength of the relationships between high social class groups and innovativeness confirm that there are, at least in urban areas of developing nations, important markets for consumer durables. There are many instances where respondents report owning all products listed in the survey. This has especially important implications for MNCs producers of household consumer durables such as PCs and VCRs. For example, marketers may determine the

order of acquisition of consumer durables as individuals move from lower to higher social status groups. This has the potential to help promotions by including details of other durable products in the purchase.

Market segmentation may improve the developing of markets for consumer durables. Findings show that conventional demographic variables such as education, income, occupation, and geographical location of dwelling units (social class) can be used to qualify groups of consumers into potentially profitable market segments.

Implications for Further Research

The hierarchical effects of social class groups adopting consumer durables confirm Rostow's (1971) and Uusitalo's (1979) axiom which contends that more durable goods are consumed as industrialization continues and as people improve their living standards. To what extent this finding holds over other nations is unclear. Future research efforts should replicate this study's methodology in other industrializing societies to establish its external validity.

This research supports Cunningham, Moore, and Cunningham's (1974) findings that conventional socioeconomic variables such as occupation, income and education may be useful in segmenting developing markets. Also this study is consistent with previous research findings and confirms the importance of social class in predicting innovativeness (Rogers and Shoemaker, 1971). This should be reassuring for marketers wishing to transfer advanced nation research techniques into developing market contexts. However, this research focuses on consumer behavior aspects rather than on strategy elements. Future studies, within the conceptual framework of this study, may include marketing strategy variables and effects too. Such an approach has the potential to include media sources, store patronage, and personal forms of influence (e.g., opinion leadership, family purchasing roles, etc.).

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**AN EXPLORATORY INVESTIGATION OF ANALOGICAL REASONING
IN INTERNATIONAL MARKETING BASED ON SINGLE INSTANCES**

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Abstract

There is reason to believe that when faced with new and complex situations people tend to use the similarity of that situation with a single prior instance, in making analogical predictions. This may be done at the cost of more objective and relevant information. Since international marketers entering new markets also face new and complex situations, there is a possibility that they too may rely heavily on single instances. An exploratory experiment found that people do seem to rely on subjective, less relevant but vivid information, compared to more objective evidence. Implications for international marketers are discussed.

Introduction

It has recently been suggested that international marketers may be relying on single past instances when making analogical predictions relating to the future (Misra 1989). This paper presents an empirical investigation exploring this issue.

Generally, we believe that people base their decisions on general principles and rules that have been abstracted from experience. Yet, research evidence appears to indicate that people may sometimes rely on the similarity of their present situation to a single past experience in arriving at some analogical judgement. Thus in the wake of "Black Monday" (October 19, 1987) on Wall Street, many experts looked at the parallels to, and for lessons from, "The Great Crash of 1929." Subsequently, their predictions of the future turned out to be wrong because despite the similarity on the surface, there were too many structural dissimilarities between 1929 and 1987. Similar examples of over-reliance on single past instances are found in the area of political decision making (May 1973; Jervis 1976; also see Misra 1989 for a review).

Abelson (1976) first proposed that people might base their decisions on the similarity between their present situation and a single prior event. Some of the studies which have examined analogical reasoning based on single exemplars include Gilovich (1981),

Lewicki (1985), and Read (1983; 1987). Although the availability heuristic (Tversky and Kahneman 1973; 1974) may have a role to play, there has been relatively limited amount of research which investigates the conditions under which analogies using single (or even two) instances might be used in explanation and prediction.

When Are Single Exemplars More Likely To Be Used?

When the cause-effect relationship becomes complex, or when the causal relationship is unknown (and cannot be inferred easily), people tend to make analogical predictions based on the overall similarity of the new instance to a similar instance experienced in the past (Gilovich 1981; Read 1983). Read had his subjects read descriptions of a foreign culture, in which some of the members performed a rule governed behavior. The subjects were then asked to predict the behavior of other members of the culture. One of the members was similar to an individual who performed the behavior, but the rule predicted that this new member would not perform the behavior. The study revealed that subjects relied on the similarity of this member to the previously encountered individual in making these predictions. Additionally, it was found that people were increasingly likely to use a single similar exemplar as the rule governing behavior became more complex. Further, such judgments were made quite confidently.

Another major study found a reliance on highly similar exemplars in two separate areas: rating of college football players in terms of their potential for professional teams, and in the course of action preferred in an international political crisis (Gilovich 1981). It is noteworthy that similarity judgments need not be symmetrical. That is, people may judge A to be more similar to B than B is to A (Tversky 1977).

Analogical reasoning has two parts, a target and a base (Genter 1983). The target of the analogy is the person or situation for which the prediction is to be made, while the base is the person or situation from which the generalization is made. It has been suggested by some researchers that people may be more likely to make analogical predictions

(based on exemplars) when the base and the target share features or attributes that can be causally related to the behavior or outcome of the base exemplar. (Holyoak 1984; Winston 1980) Empirical research has shown that this matching of the base and the target on a causally relevant variable is not necessary for the use of analogy: subjects tend to use the degree of similarity between base and target, in the absence of a causally relevant variable (Read 1987).

Analogical Reasoning in International Marketing

Marketers entering a new foreign market often know very little about it. The prior knowledge may be so meager that it may even be difficult to determine what are the appropriate questions that should be asked. Many businesses rely on their "man in China", in Japan, or elsewhere for crucial information (Gronhaug and Graham 1987). Cavusgil (1985) quotes an interesting remark from an executive:

When we make a direct investment in a foreign market, there is more risk involved. We will then engage in an in-depth analysis. Much of our potential in that market is probably established by a representative prior to that move (p.29, emphasis added).

It appears that much of the initial judgments about the potential of a foreign market may be made in the context of little knowledge. Since the causal relationships tend to be more complex in international settings, the probability of using single instances or exemplars appears to be high (viz. Read 1983; Misra 1989). To the extent that the analogical reasoning is based on single (or even dual) instances this can be potentially misleading.

Alden (1987) has recently pointed out that the weighted average of U.S. tariffs is 4.2%, while Japan's is only 3%. Thus the widely-reported and discussed high Japanese tariff on U.S. beef may be only a (misleading) exemplar, perhaps discouraging potential exporters. Similarly, the recent debate regarding the problems faced by rice exporters in penetrating Japan's market is often cited as exemplars of how "difficult" the Japanese market is for foreign marketers (including markets for products other than rice.) Overlooked are important facts that Coca-Cola holds a 60% market share of Japan's soft-drink market, Schick has 71% of the safety razor market, and McDonald's is the number one fast-food chain. (Japan **does** have significant trade barriers other

than tariffs, though.) Given the difficulty of measuring "lost opportunities", it is hard to say how much of potential business is lost because of the misuse of single instances in international marketing decision making.

The selection of local partners in international markets provides ready examples of the single exemplar effect in action:

After carefully negotiating with the banks and the government, the Irishman orchestrated the entire deal. I saw the advantages of having a partner who knew all the tricks. (Gordon Lankton, president and CEO of Nypro, Inc., quoted in Hyatt 1988)

If Mr.Lankton had had an unsatisfactory experience with "the Irishman", he might have been reluctant to use local partners in future international ventures, despite the more objective reasons in favor of doing so ! As it were, Mr.Lankton went ahead with a similar joint venture in Hong Kong, also with a local partner. Mr.Lankton admits that when he signed the deal he had not taken the time to understand his new partner very well. "But," he says, "I figured I hadn't known the Irish partner all that well, either." (Hyatt 1988) This time the partnership turned out to be quite unsuitable for the corporation.

Theoretical Bases

Vivid information appears to have a greater impact on decision making than pallid information. It has been argued that in influencing peoples' judgments, inferences, and behaviors, vividly presented information is weighted more heavily than are "pallid and abstract propositions of substantially greater probative and evidential value." (Nisbett and Ross 1980, p.44) Thus when the effect of drugs on the brain is presented as being akin to frying of an egg, the effect is expected to be greater.

"Information may be described as vivid, that is, likely to attract and hold our attention and to excite the imagination to the extent that it is (a) emotionally interesting, (b) concrete and imagery provoking, and (c) proximate in a sensory, temporal, or spatial way." (Nisbett and Ross 1980, p.45) (Also see Taylor and Thompson 1982, for a detailed discussion of vividness, and a rationale for expecting its effect on judgments.)

The above definition of vividness is rather general and researchers have used their own interpretations when

operationalizing vividness. Generally, vividness has been treated as a communication characteristic, inherent in the stimulus qualities of the information itself. For example, concrete information has been assumed to be more vivid than abstract information. Pictorial illustration is assumed to be more vivid than unillustrated ads. Direct experience is regarded as more vivid than vicarious experience. And case histories are thought to be more vivid than statistical information. (Taylor and Thompson 1982) To the extent that a single exemplar might be based on personal experience or a first-hand account by an individual, it is likely to be more vivid than objective, statistical information.

"Similar" instances in memory, especially ones which are vivid, are thus likely to be more readily available in memory, and as such are likely to have a disproportionate effect on decision-making (c.f., Tversky and Kahneman 1973).

The Experiment

An exploratory study was designed to empirically test the possible influence of single instances in an international marketing setting. A scenario was created (based in part on the example quoted earlier from Hyatt 1988), in which the president of a company had to choose between countries "A" and "B" for a joint-venture (see Appendix A). There were two versions of this scenario, which were identical in terms of the objective information relating to market size, distribution systems, political risk, past experience and competence of the potential partners, and so forth. In both versions, "A" was somewhat more

attractive than "B" in terms of market size and taxation. The only difference between versions 1 and 2 was the inclusion of subjective, vivid information. In the first version, the president of the partner in "A" was described as being very "likable", and similar to the president of another (existing) highly successful joint-venture partner in another country. In version 2, it was the president of the partner in "B" who was similarly shown in favorable light. (Appendix A shows the second version.)

The 42 subjects were all taking a course in international marketing, and were nearing the end of the semester. They were randomly assigned to the two treatment conditions, with half of them receiving version 1 and the other half receiving version 2. They were asked to rate the attractiveness of the two partnerships on a 7-point scale, where 7 denoted that "A" was a more attractive market, while a 1 indicated that "B" was more attractive. This provided the dependent variable.

Since country "A" was more attractive than "B" on two objective variables (market size and tax rate), while being the same on other objective variables, one would expect subjects to favor "A" over "B" (i.e., scores greater than 4). The mean scores are presented in Table 1. As many as 10 of the 21 subjects in the second treatment condition appear to have been influenced enough to have rated "B" as being more attractive than "A". The ANOVA (Table 2) indicated that the treatment conditions did affect the evaluation, with $F(1,40) = 37.67$, $p < .001$. The a priori contrast between the mean scores was significant ($p < .001$). It thus appears that decision-making does get influenced by less relevant subjective information relating to a single past experience, even when the objective evidence points in the opposite direction.

TABLE 1
RESPONSE CATEGORIZATION AND MEAN SCORES BY TREATMENT CONDITION*

TREATMENT CONDITION	NUMBER OF SUBJECTS RATING:			MEAN SCORE (St. Dev.)
	"A" POSITIVE (>4)	NEUTRAL (=4)	"B" POSITIVE (<4)	
Positive "A"	20	1	0	5.52 (0.68)
Positive "B"	6	5	10	3.71 (1.01)

* For the 7-point scale used see Appendix A.

TABLE 2
ANOVA FOR COUNTRY RATING

SOURCE	d.f.	SUM OF SQ.	MEAN SQ.	F-RATIO	F-PROB.
Between group	1	30.86	30.86	37.67	.000
Within group	40	32.76	.82		
Total	41	63.62			

Conclusion

Research indicates that when faced with new and complex situations, people have a tendency to respond to possibly irrelevant aspects of the situation by relying on single instances or exemplars from past experience to make analogical predictions. This is a function of the perceived similarity between the target and the base. (Also see the literature on "psychic distance" for an alternative approach.) Since foreign markets present, for many small and midsized businesses, a new and complex environment, there is the possibility of over-reliance on single exemplars in decision making. The present study confirms that such an effect might in fact be occurring in international marketing. This was an exploratory study, using a student sample. Even though these were students of international marketing, the findings may have limited generalizability, although the focus of this paper is on theory development. It is hoped that future research will try to validate these findings among international marketing managers.

APPENDIX A

Mr. James Taylor, the President of Apex Corp., Inc., had successfully established joint-ventures in Australia and Hong Kong over the last four years. Both these ventures had proven to be very profitable for Apex. Mr. Taylor was now considering a third joint-venture abroad.

The choice for the next venture had been narrowed down to two countries, code-named "A" and "B". Potential partner companies had been identified in both countries, yet Mr. Taylor was having difficulty in choosing one country over another. Political risk was about the same in both countries, and was not a significant factor. The government as well as the economy were quite stable, and likely to remain so, in both "A" and "B". Country "A" offered a sales potential of \$60 million by 1992, while "B" would be \$55 million. Tax laws in "A" were only slightly more favorable

than in "B". Realizing the importance of finding a good partner, Mr. Taylor decided to personally visit both countries and evaluate them.

On his return, he was trying to analyze the advantages and disadvantages of the two options. The partner in "A" already had collaborations with two other (noncompeting) American companies, and was adept at dealing with U.S. firms. They also had a very good distribution network, and appeared to be quite competent and reliable. The partner in "B" also had dealings with other American firms, and had a good distribution network, which was as good as the one in "A". Although the partner in "B" could not be considered better than the one in "A", he was not inferior in any manner either. On a more personal note, Mr. Taylor had a more enjoyable stay in "B" than in "A". One fact that had made a very vivid impact on Mr. Taylor was the striking physical similarity of the President of the company in country "B" to the president of Apex's partner in Australia. The similarity did not end there, but extended even to their taste in music and wine! He really enjoyed the night they went to the performance of the symphony, just as he had done during his visit to Australia. Given the success of Apex's venture in Australia, Mr. Taylor was thinking that a joint-venture in "B" might be preferable, given the similarities with Australia.

Try to put yourself in the shoes of Mr. Taylor, and use the 7-point scale below for evaluating the attractiveness of the partnership in country "A" relative to the attractiveness of country "B".

**The partnership in country "A"
relative to country "B" is:**

1	2	3	4	5	6	7
"B" is		About			"A" is	
more		the same			more	
attractive					attractive	

(Circle the number which best
represents your assessment.)

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Abstract

This study examined the extent to which MNCs in Turkey standardize their marketing activities. The findings suggest that, in general, MNCs pursue higher levels of standardization when market conditions are similar among host and parent countries. The findings also suggest product category and industry, ownership structure and nationality of the parent as three factors underlying the degree of marketing standardization.

Introduction

The extent to which marketing programs and processes should be standardized across national boundaries has received significant research attention in international marketing. Despite the longstanding interest in the topic, there are sharp differences of opinion concerning the desirability, feasibility, and applicability of standardization. Buzzell for example, stated that significant cost savings, mainly in product design, packaging, and promotion can be achieved by marketing standardization. Sorenson and Wiechmann have argued that successful MNCs have standardized the "process" of marketing decisions by establishing a uniform system for "annual marketing planning". Daniels relates the issue of standardization versus differentiation to centralized versus decentralized marketing management stating that standardization is more likely to occur when decisions are made at the headquarters level.

The arguments for and against standardization are represented in Levitt's main point which says that successful MNCs accept and adjust to differences in the market only after testing their inevitability. The issue is how much standardization can be attained while using an overall global strategy. According to Daniels standardization versus differentiation may be thought of as a continuum, with company operations falling somewhere between the extremes.

This study attempts to identify the factors that determine the degree of standardization in marketing programs and processes of MNCs operating in a developing country. It is argued that the extent of marketing standardization is dependent on three sets of variables. Based on the framework initially proposed by Rau and Preble the first set of variables are evaluated on the basis of similarities between host and home country environment in marketing infrastructure and the legal practices. The second set of factors refer to the product and its marketing plan; and it is claimed that great differences in these may inhibit marketing standardization. The final set of variables consist of firm characteristics such as organizational structure, patterns in sharing control, and nationality of the parent

company which may either accelerate or inhibit the transfer of marketing practices from one country to another.

Previous Research

The topic of marketing standardization has been analyzed empirically in two major streams of research studies; namely standardization of marketing processes and marketing programs. The focus of program standardization is on the uniformity of the international marketing mix elements whereas, process standardization is concerned with marketing philosophy, principles and technology employed in the planning and implementation of marketing decisions. Process standardization studies have concluded that it is often more important and feasible to impose "uniform systems" for international marketing and decision making than it is to standardize the content of marketing programs.

Support for the standardization of marketing processes can be identified in a variety of studies. Sorenson and Wiechmann view the standardized systems for planning local activities as essential for international transfer of marketing skills. Wiechmann states that standardizing the process of marketing decision making can be achieved by systems transfer.

The standardized process approach aims at providing a conceptual framework, a way of thinking together with a methodology for implementation rather than specific detailed guidelines for action (Walters 1986).

Studies on standardization of marketing programs concentrate mainly on advertising and product elements of the marketing mix. Pricing and distribution channels have received relatively little attention in the context of standardization research.

Recent increase of international cooperative joint ventures may decrease the applicability of standardization in marketing processes and programs because the need to satisfy more than one partner's interests may necessitate considerable compromise and decentralization. The problem may be more vital between partners from developing and developed countries.

Research on standardization of international marketing processes and programs mostly concentrated on the markets in the Western world or developed countries. There appears to be a need for further empirical studies on the practice of marketing standardization by MNCs in developing countries. Turkey provides rich opportunities for such research since the number of international joint ventures has been increasing greatly

since the second half of 1980s. As of the end of December 1988, 1109 foreign companies operated in Turkey. The law on "Encouragement of Foreign Capital" extends to foreign capital all the rights granted to domestic firms in comparable fields of activity. There are no restrictions on the transfer of profits abroad. This brief description on the foreign operations in Turkey is indicative of the opportunities that lie ahead not only for companies intending to invest but also for the academia interested in conducting research in this country.

Given the above conditions the objective of this research was to determine the extent to which MNCs in Turkey standardize their marketing activities.

Conclusion

In general, this study found that the level of marketing standardization is highest when:

- o market conditions between the host and home countries are similar;
- o the firm faces similar competitive and legal environments and retail systems in both markets;
- o the target consumer segments are similar;
- o the subsidiary sells a product which is at the same stage in its product life cycle as the home market;
- o headquarters provide strong directions for marketing decisions.

Furthermore, marketing standardization is highest in subsidiaries which are wholly-owned, where the parent company is German or American, and those in pharmaceutical and chemical businesses.

COMPATIBILITY ANALYSIS:
A COUNTRY SELECTION STRATEGY FOR INVESTMENT IN LDCs

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Abstract

The global economy is continually being reshaped as companies expand their operations by means of foreign investment. Increasingly, companies are looking for investment opportunities in Lesser Developed Countries (LDCs). Some companies invest in LDCs for more favorable labor or material costs to help them compete in world markets, while other companies seek access to the fast growing, emerging markets found within LDCs. With either objective, the decision of which LDC to enter is a difficult one. LDCs do share many economic similarities, yet individual countries may differ greatly with regards to the governmental policies used to promote economic growth. This paper provides a managerially oriented framework for identifying governmental policies which complement a company's investment objectives.

Introduction

Since the end of World War II, it has become increasingly prevalent in the business environment for domestic firms to seek overseas investments. Foreign investment is the result of many forces including domestic market saturation, increasing foreign competition, and the discovery of untapped consumer markets abroad. As a result of the expansionistic view possessed by today's firms, the multinational corporation has emerged as a major force in the world economy. It has been shown that multinational firms account for one third of the value of current direct foreign investment (Jain 1987). Although multinational firms are generally considered to be a product of the developed countries, they are increasingly choosing to conduct their overseas business in the developing countries of the world. The impact on LDCs is profound, as multinationals shift the world's resources from country to country, develop and stimulate demand for new products and services, and create new methods of manufacturing and distributing products (Jain 1987).

The motivation for foreign expansion into LDCs can come from several areas including access to markets, natural resources, low cost labor and diversification (Contractor 1984; Jain 1987; Kobrin 1979). First, a company may be seeking untapped markets in new locations and find the rapidly growing markets in developing countries especially attractive. Furthermore, foreign investment into LDCs can extend the life cycle of a product that may be experiencing a decline in its domestic life cycle (Green and Allaway 1985; Lutz and Green 1983). Second, resource seeking firms may find that the natural resources they require are only available or

simply may be more feasible to recover in LDCs. Third, production seekers look for the resource of economical labor associated with the attractive wage rates found in LDCs. Finally, other firms may add facilities in new LDCs in accordance with a diversification strategy to overcome country specific risks.

The Foreign Investment Decision

Previous research on foreign investment has considered why a company chooses foreign investment as a mode of market entry. Anderson and Gantinnon (1986) see foreign investment as a mechanism to exert control. Buckley and Casson (1985) propose that the decision to seek overseas markets considers the increasing levels of financial commitment necessary, as each market entry alternative, exporting, licensing, and direct investment results in ascending fixed costs and descending variable costs. Both licensing to foreign firms and direct investment have gained in popularity due to the trend toward more restrictive conditions in potential host countries (Contractor 1984).

Although firms often begin market entry with exportation and later move to foreign investment, this scenario may only apply to firms seeking to enter the emerging markets found within LDCs and may not capture all foreign investment decisions. For example, firms investing abroad to capture resources and lower wages needed to remain competitive in their established markets may never consider exporting to the country in which the invest. In this case, the local economic issues involved in choosing a mode of entry are of little concern.

What this paper proposes is to develop a framework which can help managers select the best investment location which matches their investment objectives. Surprisingly, the literature on foreign investment has not taken into consideration the various reasons why companies choose to move abroad and, therefore, many managers may find the guidelines on country selection are either ambiguous or irrelevant. This paper proposes an extension to a macroeconomic analysis framework by specifically considering the company's overall investment goals.

Country Selection for Investment Purposes

After a firm makes the decision to expand overseas to meet objectives of competitiveness or market expansion, it is necessary to develop criteria for evaluating potential host countries. Specifically, a company must develop a set of relevant factors upon which each individual coun-

try can be assessed. It will be assumed for the purposes of this paper that the analysis of the market desirability of the product and the technological ability and management skills to manufacture the product has been established.

Investment in an LDC can be evaluated by weighing the incentives to enter relative to the barriers in each country (Orr 1973). Common incentives and/or barriers cited in the literature include capital availability, market size, market growth, input costs, and geographic proximity to markets (Davidson and McFetridge 1985; Green and Cunningham 1975; Jain 1987; Orr 1973). At a more general level, favorable legal, political, and economic conditions are often mentioned (Davidson 1980; Green and Allaway 1985; Kobrin 1976).

It has also been suggested that cultural similarities between the host country and the investing country is a desirable condition (Davidson 1980). Similar cultures can lower the risk of market uncertainty and can facilitate communication with both the new employees and the market. Cultural similarities may be especially important if it is a company's first exposure to a foreign environment (Vernon 1966). For companies seeking market penetration, a similar cultural market may allow the achievement of economies of scale if promotion and distribution strategies can be maintained in the new markets (Davidson 1980). Companies who are not planning to sell their products in the foreign market may find cultural similarities of less importance, but certainly not irrelevant. Negotiating with government officials, finding suppliers, and interacting with employees will all be facilitated if the countries share a common cultural denominator.

This paper also proposes that similarities are a key factor in selecting the most appropriate LDC for foreign investment purposes. However, cultural similarities between the two countries are not the sole similarity of concern. Of greater importance, government development policies and the company's objectives motivating foreign investment should be compatible. The investing firm is better able to insure the success of its overseas operations and develop a synergistic relationship with the LDC by considering the economic development goals of a potential country of interest. Just as companies may seek foreign investment to meet differing objectives, e.g. market expansion, access to raw materials, or production for labor advantages, LDCs may have different developmental objectives which influence the nature of investment desired. Those types of investment which are seen by the LDC as helping it to achieve its economic development goals will be encouraged with incentives while less desirable investment forms may meet stiff barriers.

The act of attracting foreign investment alone does not necessarily insure that an LDC will meet its development goals. Examples abound of foreign investment projects that have had a detrimental effects on development (Caves 1971; Long 1981). Developmental plans encourage foreign investment only to the extent that such

investment brings positive change in the economic structure of the country and improves the standard of living of the population. For example, the investing company may introduce competition, thereby reducing market risks and encouraging further investment in the country. Additionally, the investing company can encourage and increase in demand for many new goods and serviced by creating employment opportunities. Therefore, it is advantageous for the investing firm to seek out those governments desiring to promote economic development through the use of foreign investment.

Although it is possible to negotiate with the host government prior to actual investment, it seems much more reasonable to analyze the development policies of the potential LDC host prior to investment. Developing countries often find themselves in a difficult position for it is the very lack of industry that keeps a lesser developed country from attracting new industry in the first place (Singer 1949). Government planners often must assume the role of creating the initial industrial base. This industrial base forms the basis for industrialization of the LDC.

Industrialization is the process of transforming raw materials into consumer goods. This can be accomplished through either direct foreign investment or domestic firms. Often, the former is the most desirable because the necessary technological skills needed are lacking by domestic firms. Foreign investments also permit greater capital infusion than could be accomplished by relying solely on domestic savings. Hence, the goal of the host country is to use private investment to fill the gap between domestic savings capacity and achieving the goals of economic growth. Therefore, a government seeking to advance an LDC beyond agricultural subsistence seeks to increase the industrialization level of that country. Initially, the most urgent areas for development are food processing, transportation and marketing of village produced goods (Buchanan and Ellis 1955).

In attempting to reach this higher level of economic development, it is necessary for the host country to develop both internal policy changes and external strategies for attracting foreign investment. Both of these strategic implementations is indicative of the underlying economic goals of the host government. Therefore, by analyzing the policies developed by the LDC, as compared to objectives for the investing firm, it is possible to determine the potential investment success of the firm. Hence, to achieve corporate development objectives, it is useful to review the economic development policies of the LDC for the best compatibility possible. Unfortunately, there is not one generally accepted path for government planners to follow. Therefore, policies may vary greatly, not only in the importance they ascribe to attracting foreign investment, but also the specific strategy they may adopt to attract desired investment.

There is a growing interdependence of political, social, and economic development abroad, and this interaction will continue to be of significant interest to multinationals. Specifically, there is concern over the possibility of expropriation, confiscation, and nationalization of the investment (Robock 1971). However, Root (1968) defines political risk in a broader sense to include threats to foreign investment that can arise from the attitudes and behaviors of host governments and significant political and social groups. Political risk, therefore, is a multi-faceted construct.

This broader understanding of the political environment implies that politics shape the setting in which all economic activities take place (Kobrin 1979). Hence, before selecting a location for investment, a company must review the political activities that help develop the economic environment of the country. As such, the "typical" assessment of political risk has been somewhat limited in scope, for it is not only the specific events that are of concern to the firm, but also the potential manifestations that may result. Therefore, in determining an overseas investment location congruent with an LDCs' economic policy, the analysis can be considered as encompassed within the framework of this expanded political risk assessment.

Shapiro (1978) proposes that the easiest way to manage political risk is for a firm is to initially screen out those countries that are unsuitable. In fact, a great many investors have eliminated not only individual countries, but entire geographic regions from their investment considerations due to political reasons. In spite of these analyses, the factors associated with the dimensions of political risk dealing with governmental development policies have not been as explicitly stated as the more traditional variables, such as coups, strikes, guerilla warfare or other forms of violence (Kobrin 1979). Therefore, there is a need to develop a managerially useful way of analyzing this aspect of the political environment. This enables the firm to locate the appropriate LDC congruent with its investment objectives.

Countrywide factors of interest in political risk assessment have generally been grouped into three categories (Micallef 1981). First, the domestic climate including the volatility of the current government and the level of domestic rebellion or turmoil is considered. Second, the economic climate of the potential host country and the government's response to economic problems is investigated. Specific areas of concern may include the inflation rate, the balance of payments, and the likelihood of government intervention in business matters. Last, review of the foreign relations policy of the host country, including the extent of hostility the country exerts towards other nations. This is often accomplished through an analysis of the current defense budget and the incidence of conflict with neighboring countries.

The following factors are suggested as important criteria relating to the development plans of LDCs. The importance of each of these factors to a specific company will depend upon their particular investment objectives. Some governmental policies will be more effective in raising the standard of living of the population and improving internal marketing infrastructure, while other policies may improve the country's ability to be a base for export operations. After evaluating the importance of a policy and the country's individual strengths, a company can determine a country's total for comparison among potential hosts.

Education Policies

A governmental policy to increase the percentage of literate citizens and promote general educational within the population will make an LDC a more attractive investment possibility. Companies that intend to market products within the LDCs will benefit most from improved education as the market becomes more sophisticated and willing to adapt new products and services. Companies who invest to take advantage of labor rates may see an improvement in the overall quality of the workforce, but this is of less concern if unskilled labor is employed. Firms who have invested to take advantage of raw materials will be least interested in the educational level of the population.

The importance of literacy and education can be seen by reviewing the economic turbulence Brazil has recently encountered. Although the economy grew rapidly during the 1970s as foreign companies moved to take advantage of the natural resources and inexpensive, unskilled labor, Brazil did little to educate its people. Brazil now finds that the low level of education makes it difficult to attract high-tech industries and large segments of the population are trapped in poverty (Business Week 1989).

Transportation Policies

Government policies increasing and improving the roads and railroads are important to the success of a foreign investment where market penetration is desired. For companies seeking resources, transportation needs only extend to providing access to the necessary resources. Many companies may even consider building such transportation to be included in the cost of the investment project. For companies investing merely to take advantage of the labor, adequate seaports and airports are of primary importance.

Mexico finds its internal investment being hampered due to the poor state of its transportation system limiting market access (Wilson 1989). The maquiladora plants, however, that assemble products for market in the United States have not been hampered for most of these facilities are located close to the U. S. border and do not travel great distances within Mexico.

Trade Policies

Governmental policies which promote the exportation of domestic products are beneficial to companies who intend to invest and export to their established markets. Such policies include subsidies, free enterprise zones, and special tax advantages. Companies who invest to gain access to raw materials may find these policies beneficial if there is significant value added to the raw material in the country. Otherwise, the LDC may offer more support to domestic companies attempting to recover the same resources, making it difficult for a foreign company to compete. Companies who invest in order to market within the LDC may find the government export policies provide few advantages. In fact, the government may view them as a threat to domestic companies and disallow investment incentives.

The establishment of favorable tariff schedules is consistent and desirable to encourage foreign investment. Developing a low or no duty policy on necessity products can also be beneficial to the investing firm. In a similar vein, a high percentage of revenues raised by the host government from imports is generally inconsistent with the goals of an investing firm. Although many companies use foreign investment as their method of market entry, often companies must still import machinery, equipment and spare parts. The ability to import is crucial to companies who enter markets to recover natural resources. Government receptivity is often due to the lack of technology and equipment necessary to extract the resources. Furthermore, companies who invest to take advantage of lower labor costs often bring in component parts and materials from abroad and high tariffs may prove burdensome. Companies investing to sell to the domestic market may not be as hampered by the trade barriers. In fact, they may find such barriers discourage foreign competitors from the market. These companies still must consider whether necessary spare parts or complementary products can be produced within the market or whether import duties will make them prohibitively expensive.

The problems restrictive trade measures create can be seen in Korea. Korea has pursued an aggressive plan to attract foreign investment over the past 15 years. Although it offers many investment incentives, it has found its tariff structure discourages investment. Import restrictions have made it such that goods manufactured within their country cannot be maintained or serviced due to the inability to supply replacement parts. Needless to say, this policy discourages investment (Worthy 1989).

Economic Policies

A country's economic and fiscal policies can play an important role in determining an LDC's attractiveness. The establishment of public or encouragement of private financial institutions is indicative of a favorable investment environment. Companies who intend to invest in order to sell within the domestic market will benefit

most from these policies, as they facilitate the growth of suppliers and customers. Conversely, companies who invest to obtain natural resources or to reexport products to their established market will not be as concerned with this policy due to access to financial services in their home countries. For companies that are helped by a local financial structure, legal interest rate restrictions are inhibitive to the formation of private financial institutions and may curb the availability of needed funds. But having short-term and long-term credit at government subsidized rates can substitute for the lack of financial services and encourages foreign investment.

Recently, Ecuador was able to initiate favorable fiscal policies to encourage foreign investment. Interest rate ceilings were lifted and market forces were able to determine the exchange rate. These new fiscal policies, combined with the easing of tariffs, quotas and export restrictions, created an inflow of investment into the country (Wall Street Journal 1989).

Investment Policies

It is also necessary for a company to investigate the policies aimed at specifically attracting foreign investment. These include economic incentives provided to potential investors to increase the chances of success. The following factors, therefore, are proposed as leading to favorable investment success. A policy which places no limits on the amount of royalty payments or profits that can be taken from the country is beneficial to the investing firm. Companies who invest to market to the domestic population may be less troubled by such restrictions though, for they may be willing to reinvest profits into the development of the local market. Likewise, time tables to convert invested facilities to joint or locally owned facilities are generally inconsistent with the goals and objectives of the investing firm. Although this policy is not likely to be popular with any investing company, it may be most hindering to companies who invest to sell to the local market, as they may not be willing to develop a market that they know they will someday be turned over to a local company.

For example, Indonesia has recently begun to initiate reform measures to create more flexible time tables in creating joint ventures from foreign companies. This policy will encourage foreign investment by enabling foreign investors to retain control of their investment until an adequate return on investment is obtained (East Asian Executive Reports 1989).

The analysis for the presence or absence of the characteristics of each policy mentioned above, provides a guideline for evaluating a potential LDC. Through the determination of the importance of each of the particular criteria to a company's objective and an understanding of the government policy relating to each factor, it is possible to compare several potential host countries' desirability as an overseas investment location. Exhibit 1 provides a managerial tool for the compatibility analysis.

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Exhibit 1 Analysis of Political Compatibility

Governmental Policy	Importance of Policy to a Firm's Objectives	Evaluation of the Country's Policy
Education Policies		
1. Educational policies to increase the percentage of adult literacy and skilled laborers.	_____	_____
Transportation Policies		
2a. Policies to improve internal transportation system.	_____	_____
2b. Policies to access remote resource rich areas.	_____	_____
2c. Policies to improve seaports and airports.	_____	_____
Trade Policies		
3a. Encouragement of exportation of domestic goods.	_____	_____
3b. Presence of favorable tariff schedules.	_____	_____
3c. Removal of import restrictions on necessity products.	_____	_____
Economic Policies		
4a. Establishment of public or private financial institutions.	_____	_____
4b. Removal of interest rate ceilings.	_____	_____
4c. Establishment of short/long term loan rate protection.	_____	_____
Investment Policy		
5a. Government imposed profit limits.	_____	_____
5b. Government conversion policy to joint or host country ownership.	_____	_____
5c. Regulation of royalty payments by government.	_____	_____
Country Total = Importance X Presence of Policy		
_____	_____	_____

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Abstract

The process of economic integration in Western Europe is substantively under way; 1992 will herald a transformed competitive landscape in the region. This paper discusses some of the major changes in reducing technical, physical and fiscal barriers in the European Community, presents U.S. concerns regarding this process and suggests selective market opportunities and threats for companies.

Introduction

Just a short three years from now, many of the barriers inhibiting the movement of goods, people, and capital in the twelve countries of the European Community¹ will have toppled. The vision of 1957 when the treaty of Rome marked the birth of the European Economic Community (EC) seems less blurred after years of being dormant. Competitive conditions, in a more integrated Europe, will change substantially with far reaching implications for U.S. business posing opportunities and risks.

This paper provides a brief background of the integrative movement in the European Community, the major changes through commission directives aimed at eliminating trade barriers, prime U.S. concerns about these developments and selected opportunities (and threats) for U.S. companies doing business in the changed environment. The paper does not attempt to include all ramifications of a United Europe - that would be encyclopedic - but does intend to be speculative (and perhaps judgmental) in suggesting possible implications of selected reforms. It is hoped that such an effort will help to generate additional ideas and debate on what Europe 1992 will mean for U.S. companies.

Background of Community Integration

The treaty of Rome in 1957 marked the birth of the European Economic Community and the call for a European Common Market. However, after the removal of tariff barriers in 1968 and limited success in forming a common commercial and agricultural policy, the move towards unification slowed considerably. Vested political and economic parochial interests prevented any substantial advances towards meaningful integration. In the seventies, European economies within the community faltered badly and declining economic fortunes prompted EC members to revive the integrative effort. From this emerged a heightened awareness that the community needed to be more cohesive so as to become more competitive, vis a' vis the Japanese, the newly

¹ Belgium, Denmark, France, West Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, and the United Kingdom.

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industrializing countries, and the U.S. But it was not until 1985 that the EC's White Paper "Completing the Internal Market" provided a detailed blueprint on how the goals of the treaty of Rome could be accomplished (EC Commission, 1985; Cecchini, 1988). This was followed by a relatively more politically willing membership adopting the "Single European Act" in February 1986 and ratifying the same in July 1987. The Act called for "measures with the aim of progressively establishing the internal market over a period expiring on 31 December, 1992... an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured..." (Harrison 1989).

This development was substantive in that adopting legislation was made easier through requiring a majority vote in the EC council rather than the previously necessary unanimity, providing the foundation for adopting the needed measures identified in the 1985 white paper. In the latter, the European Commission identified 300 directives -reduced to 279 since then - that were required to get rid of the physical, technical and fiscal barriers between member countries. Through specific directives (128 of which have been adopted as of September 1989) the community is following a systematic process of dismantling trade barriers.

Macro Benefits of Integration

The underlying basis for economic integration is the view that such unification can lead to many benefits for participant states. As tariff and non-tariff barriers decline, terms of trade for countries within the community can improve. With integration there can be multiple effects on the supply and demand side.

On the supply side, the combined larger market can generate opportunities to achieve economies of scale in production, marketing, research and development allowing companies within the area to be cost-competitive in internal and external markets. Increases in productivity could occur with higher rates of innovation spurring more efficient investments. Cost savings can also result directly because of elimination of border formalities, transportation rationalization and reduction in administrative costs. Demand side impacts include lower prices, greater consumer choice, and improved quality as a result of increased competition (Balassa 1961, Balassa 1988, Scitovsky 1988, Pelkmans 1987, Jacques in 1988, Greenaway 1987). However, as "trade creation" occurs between member countries, there can be "trade diversion" to the extent that the integrated groups place barriers externally on goods coming in from the outside, increasing the costs of doing business for third country exporters (Seipp 1989). The benefits projected by the EC commission suggest gains in the medium term of between 200 to 300 billion dollars or between four to six and a half percent of gross domestic product (see table 1); 2 million additional jobs; and consumer prices that the EC's economic models estimate will be lower by about six percent after unification (Harrison 1988; Cecchini 1988).

Changes in Existing Barriers

Among the more notable changes that deserve special attention are the following:

TABLE 1
MACRO BENEFITS OF THE 1992 PLAN:
EC COMMISSION PROJECTIONS

	Benefits (Billions of Dollars)	Percent of Gross Domestic Product
Gains from removal of barriers affecting trade	10-11	0.2-0.3
Gains from removal of barriers affecting overall production	71-89	2.0-2.4
Gains from removing barriers (subtotal)	81-100	2.2-2.7
Gains from exploiting economies of scale more fully	75	2.1
Gains from intensified competition reducing business ineffectiveness and monopoly profits	58	1.6
Gains from market integration (subtotal)	78-134	2.1-3.7
TOTAL GAINS		
- for 7 member states at 1985 prices	159-234	4.3-6.5
- for 12 member states at 1988 prices	213-313	4.3-6.5

Source: Harrison, Glennon J. The European Community's 1992 Plan: An Overview of the Proposed Single Market. Congressional Research Service, Washington D.C. September 21, 1988, p. 10.

Technical

Eliminating such barriers will be attained by harmonizing standards, testing and certification, packaging and labelling requirements. More importantly, rather than trying to achieve one standard, mutual recognition of standards will apply. Practically, this would mean that as long as a product meets the standards of one country, it would be freely admitted into other member countries. Similarly, regulations covering intellectual property such as trademarks, copyrights and patents will be harmonized. Also, major mergers, acquisitions and the like that could have community-wide implications would be considered centrally by the EC Commission for their potential impact.

Government procurement standards will have considerably fewer national restrictions on bids and would be more open to community-wide bidding, expanding opportunities for qualified EC firms in such sectors as telecommunications, water, transport and energy.

Physical Barriers

The EC hopes to eliminate non-tariff barriers that impede the flow of goods and services between member countries. Border formalities that are unduly burdensome will be eliminated. For example, ponderous documentation (70 pages at times) will be replaced by a single document which will include most of the consequential information needed for tax and statistics collection, licensing, plant and disease control, etc. Transportation firms will have free movement throughout the EC and quantitative restrictions such as national quotas applying to EC members would be effectively eliminated. Maintaining external quotas will be more difficult because of the ease with which goods brought in from the outside could move throughout the community. The commission is also attempting to eliminate

the divided, separate and fragmented markets for services existing within the EC countries. In banking for example, a bank authorized to operate in one country will have the right to operate branches in other EC countries and transact business with depositors from them.

Fiscal Barriers

These are perhaps the most difficult to deal with and the most controversial. Differences in indirect taxes - value added (VAT) and excise rates - cannot be easily reconciled and harmonized because of their impact on national economies. For example, the French with high value added taxes will lose significant income. On the other hand, different VAT rates could mean retaining border customs control. At this time the EC is proposing a system with different ranges within which VAT taxes would be set. Similarly, there are tremendous differences in excise rates which would have to be lowered or increased substantially, depending upon the country and the product, to achieve uniformity. Also, differing direct tax rates such as corporate taxes can have a substantial impact on where a company chooses to locate. Similarly, differences in personal taxation rates could have an effect on migration patterns of people. Opposing national and community-wide pressures on taxation uniformity will make this a contentious issue. As trade barriers come tumbling down, the U.S. is naturally concerned about how U.S. business will be affected. The European Community is the largest trading partner of the U.S. Sales of U.S. firms in the EC - from European subsidiaries, joint ventures and exports were about 600 billion dollars, which is three times that in Canada and four times that in Japan (Verity 1988). Overall, the EC market represents a 4 trillion dollar market of 320 million people. There is much at stake.

The American reaction to EC integration has generally been favorable viewing it as an opportunity for enhanced trade and

investment by the U.S. Nevertheless, there have been some concerns expressed and these are considered next.

U.S. Concerns

There are certain issues that are viewed as problematic as the process towards integration continues. These include:

Protectionism

The U.S. worries that as the EC develops its commercial and industrial policies on such matters as granting permission to merge, acquire, set up a plant, incentives for indigenous firms to increase their scale of operations, U.S. firms may not be afforded the same opportunities. Exporters also may face more restrictive barriers and some speak of the possibility of a "Fortress Europe" (Gallagher 1989; Riemer 1988; Montagnon 1988). The U.S. is impressing upon the community to not succumb to protectionist tendencies and honor their agreements such as those of the GATT.

Openness of Directives

Related to the above is the issue of "transparency" of directives. The U.S. expects that it would be able to provide its views on standards, certification and the like before they are adopted, particularly on those directives that adversely impact the U.S.

Reciprocity

The EC has stated that it intends to use "reciprocity" as a fundamental basis for trade and investment relationships. Firms from another country will be provided access to the integrated EC market if their markets are also accessible to EC firms. This could be a knotty issue, as the U.S. would like to interpret the reciprocity principle as "non-discriminatory" i.e. EC firms in the U.S. would be treated in the same way as U.S. firms and vice-versa.

The EC could easily use the reciprocity principle as a cover to promote any protectionist inclinations. The major sectors that would be affected under such circumstances would be those not covered by present GATT agreements, including the service industries.

Public Procurement

The EC has indicated that the bidding process would be opened up for any and all in the EC to participate. This is to be distinguished from the present discriminatory national procedures that are used. Here the major U.S. concern is whether the more competitive open process would be limited to companies headquartered in Europe. In addition, the reciprocity principle mentioned earlier could be applied unevenly to deny access to third country bidders. This is of obvious concern to the U.S. particularly since the EC will be opening up sectors to public bidding such as telecommunications, energy, water - industries which were previously closed to other national companies.

Even as the EC provides assurances that protectionist and similar tendencies would be detrimental to their objectives of an improved trade and investment atmosphere, it is still unclear what the eventual shape and posture vis a' vis the U.S. will be, come 1992. It is within the context of such uncertainty that opportunities (and threats) need to be addressed by U.S. companies.

Selective Market Opportunities/Threats

The impact of EC directives will be broad and far reaching on many sectors and business dimensions. This paper, however, looks at selective market opportunities and threats by examining the following areas: 1) Product adaptations and strategies 2) Public contracts 3) Service industries and 4) Euro-business configurations.

Product Strategies

Product strategies in EC countries will be influenced by technical, health and safety standards. The emerging philosophy of EC members is to agree on basic minimum standards rather than deciding on how best to make a product. A corollary of this approach is to move away from trying to reach consensus on a detailed uniform EC wide standard to one that has some leeway. This implies that barring a few exceptions, product designs should aim at meeting minimum standards of acceptance within the EC countries, in place of one perfect ideal product configuration (Browning 1989).

Singular product designs may be best where differences between Euro-consumers in the generic need, applications, and use of the product are relatively minor. In all other cases, modular product designs with optional add-on features may be able to meet EC standards and still accommodate for differences in preferences among Euro-consumers. Product strategies will also be affected by the controversial stance of the community on product liability, where the burden of proof will shift from the consumer to the manufacturer. As a consequence, insurance claims may rise precipitously (Aldred 1988) and make manufacturers more conservative in introducing new products and more rigorous in product-market testing. On the other hand, new product introductions may simply increase because of increased competition and new entrants seeking advantage of a broadened internal market.

EC legislation may unevenly affect international firms. Some, in fact, would favor U.S. companies. For example, agreement reached on pollution control legislation is close to U.S. standards. To be put in effect for all cars by 1992 this may initially favor current U.S. manufacturers of pollution control equipment. Closer conformance to American standards may also make European automobile exports more appealing and cost competitive (Nelson 1989).

Public Contracts

A EC directive of significant importance deals with the area of public markets. Presently, foreign companies have a meager 3% of this market, the rest is awarded to local business. This may change as a result of measures recently approved to allow other than local companies to bid on many public projects, including those in the next year on contracts pertaining to the water, transportation and telecommunications industries (Nelson 1989). The long-range goals of the EC commission is to make 80% of public purchasing available to competition (Harrison 1988). With public contracts amounting to \$400-600 billion dollars in value and 15% of European GDP (Gallagher 1989) an opening of this market may represent enormous opportunities for international and European companies. It is obvious that companies with a European connection will be the beneficiaries here, which for U.S. firms, would be their European subsidiaries and joint ventures.

Service Demands

Agreements on GATT may complicate and impede European unification. However, it is important to note that GATT deals with products not services. Thus, EC members would have

considerably more flexibility in drawing common service standards that do not violate bilateral trade treaties with foreign countries. Being a net exporter of services, this may disadvantage U.S. companies unless they have a strong presence in Europe.

An approved measure with a pronounced impact on financial services will be in the removal of all controls on capital movements by July 1990 for eight of the most developed countries, to be followed later by Spain, Portugal, Greece, and Ireland (Nelson 1989). This will facilitate foreign direct investment, increase the availability of investment funds, and reduce the cost of credit, thereby expanding consumer demand. Credit options may therefore serve as a highly competitive and aggressive means of obtaining business.

Service industries would also be affected by standardization of rules. For example, internationally active banks must have capital equal to 8% of assets by 1992. With the same minimum capital ratios they would be able to operate under similar rules and requirements (Boreham 1988).

It is significant to note that the extension of benefits for foreign firms will be determined on a reciprocal basis. Thus, for example, a non-EC bank will be eligible for the same benefits as a EC bank only if the latter has the same benefits in the country of the former. Considering that the U.S. restricts interstate banking, this may have implications for American banks. Also, since services are rendered locally, reciprocity would have lesser of an impact on exports than on the EC subsidiaries of foreign service firms (Gallagher 1989).

The deregulation effort in banking may produce overcapacity in the industry and depress profit margins. Japanese banks may be most adversely affected since they have been expanding operations in the EC while U.S. banks have been scaling back theirs. Yet, in the long run as the dust settles on competition, banks with a deeper commitment to Europe may be the ultimate winners. Overall, with greater flexibility to operate services in Europe, the costs of services such as after-sale service, R & D, and consulting will go down, while simultaneously increasing in demand.

Euro-Business Configurations

Efforts towards harmonization and standardization may enhance regional specialization among EC producers. Countries rooted in certain industries and possessing requisite strengths would benefit from this outcome. For instance, manufacturing of consumer durables would increase and become more centered in Germany and Italy and high-tech industries may proliferate in Germany, France and the Netherlands (Bates 1989). Regional specialization may thus force U.S. manufacturers in Europe to re-locate and make quality adjustments. A case in point would be the need to match the quality and high engineering designs of German appliances. Business and taxation structures of EC countries may also pose challenges for U.S. firms.

A potential development of significance is the concept of harmonizing value-added taxes (VAT). The EC is working towards a VAT policy that would levy taxes on not only domestic products and imports, as is the present case, but also tax exports. As a consequence, EC companies that have been exporters will gain revenues while those that have been importers will lose revenues. This will also affect U.S. joint ventures that import or export to other EC countries. VAT taxes are likely to be more standardized (suggested range 11% to 19%) and would reduce price differentials, further exacerbating price wars. It is also to be noted that the smaller European companies and family-owned businesses have traditionally resisted takeovers. U.S. firms may thus be

forced to deal with relatively larger companies in their efforts to acquire increased influence and presence in Europe.

There is also a need to realize that the promise of market opportunities may not fully materialize if significant differences between Euro-customers are not reduced. Not only are there nine different languages in the EC but cultural differences including tradition, national tastes, nationalistic sentiments and age-old national rivalries prevail (Toman, 1989). Convergence in such values is not expected to occur quickly, if at all.

Conclusion

1992 as a date seems to have attached itself to everyone's view of Europe integrating, as if in one sudden moment in December of that year, the European Community will be a totally different place to do business in. That's simply not the case. It is much more appropriate to think of European integration as a process that is well on its way and will continue beyond 1992. While many restrictive technical, physical and fiscal barriers will be reduced, the process could be slowed in its tracks by incalculable events national, cultural and political differences and narrow parochial interests. Existing political differences will probably be aggravated as short-term results of integration will create unemployment and other dislocations in some sectors for each country. Whether the EC reacts to these transitional problems by becoming protectionist vis a vis third countries such as the U.S., will also influence the pace of integration. The process of integration, however, will continue and U.S. companies need to be mindful of this as they prepare their European strategies.

Corporations need to consider whether adaptive business strategies that are more pan-European may be more effective. Here again, strategic alliances with European manufacturers including licensing, mergers and acquisitions should be given careful attention.

Additionally, the horizons of European integration will undoubtedly alter with the dramatic and rapid changes in the political and economic structuring of Eastern European nations such as East Germany, Poland, Hungary and Czechoslovakia. These countries present opportunities and challenges as potential markets and as possible manufacturing locales to serve a consolidated Europe and North America.

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MARKETING DECISION VARIABLES IN THE CONTEXT OF
A DEVELOPING COUNTRY

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Abstract

The interrelationship between marketing and economic development is of great academic interest both to developmental economics and marketing scholars for about four decades. However, most of the early studies mainly emphasized the importance of marketing for economic development. The later research was devoted to emphasizing the macro, social and technology transfer aspects of marketing in the context of developing countries. The micro marketing management aspects in the context of developing countries have not been addressed in the literature. This paper attempts to discuss the marketing management decision variables in the context of a developing country - India.

Introduction

The interrelationship between marketing and distribution efficiency and the process of economic development has been of considerable interest both to economics and marketing experts in the post second world war year. Yearly writings have emphasized the importance of marketing development for economic development (Holton, 1953, Galbraith and Holton, 1955, Emlen, 1958, Drucker, 1956). Emphasizing the relevance of marketing economic development Emlen cryptically remarked that "production may be the door to economic growth of the under developed countries, but marketing is the key that turns the lock" (Emlen, 1958). Following these initial writings, most of the recent literature on this topic dealt with the linkage between marketing and economic development at macro level (Beretherton, 1977, Cundiff, 1982, Dholakia and Dholakia, 1982, Kingsley, 1982, Mentzer and Samli, 1981). Some authors emphasized the social marketing aspects as the proper role for marketing in the context of developing countries (Rao and Oumlil, 1984). Other have advocated active state involvement in the development of marketing process in developing countries (Varadarajan, 1984, Taimni, 1981). Some authors explored the problems of transferring the marketing technology from the developed to developing countries (Etgar, 1983). Although the literature on this topic is considerable and growing, there was no attempt to study the managerial perspectives and functioning at micro level in developing countries. Hence, in this paper it is attempted to evaluate the marketing decision variables in the context of a developing country - India.

The Marketing Decision Variables - A Review

The classification of marketing decision variables referred to as a system of four P's along with two P's added later on, has been employed to systematically analyze the state of marketing mix and changes therein, in context of Indian

market. The inferences are based on historical facts and currently observable trends. Specific illustrations have been given to substantiate the comments.

It should be noted at the outset that the review presented in this paper is of opinionative type. In fact, the subject is too vast to be discussed in enough depth in the form of a single research paper. The review has been designed to ensure, just an overall coverage of various marketing decision variables, and, in the process achieve the following objectives:

- (a) provide help to marketers in identifying the key decision variables which need their utmost concentration to achieve success in the marketing of products/services; and
- (b) provide certain testable hypotheses, and, uncover promising areas in which researchers can pursue useful empirical research.

The various categories of marketing decision variables have been examined in the next subsections. First, the four traditional P's, namely, product, promotion, price and place have been taken up, followed by the two P's - power and public relations, which have increasingly become important during the recent past, and, constitute major considerations underlying the fast emerging concept of mega-marketing, considered to be relevant not only to India, but, conditions prevailing in most of the developing nations, as well.

Product Decisions

In keeping with the generic concept of product, which calls for viewing the goods/services in terms of the essential benefits that the buyer expects to get from them, rather than just the physical/tangible form, product decisions can be said to include every product related issue which contributes directly or indirectly towards satisfaction of consumer needs. The category therefore includes such decision areas like product development (new product design and product modification), product-mix (addition/elimination of product item and product line), product packaging, product branding, and services accompanying the products.

The overall pace of product decisions in India has been slow and characterized by being more of imitation than initiation of something new and creative. In most of the instances, the original idea lay elsewhere, and, once it proved commercially viable, every entrepreneur tried to case upon its success.

For instance, introduction of new products has been at a relatively low ebb with prominent developments occurring at long intervals. In the pre-independence era, there were very few

indigenous industrial products which enjoyed mass consumption. This was basically due to the policy of the British rulers to keep Indian masses under its control by curbing industrial progress in every possible manner. The majority of the industrial goods commonly used here were imported ones. Some such items were soap (bathing and washing), hair oil, cooking media prepared from vegetable oils, sugar, tea, coffee, textile, shoes, electric bulbs, and so on. It was only after attaining independence that major indigenously produced industrial goods could be introduced in the domestic market. Among the products initiated during 1950s were toothpaste, toothbrushes, tooth powder, talcum powder, shaving blades/ razors/soap/cream, hosiery items, torches, batteries, steel furniture and so on. The decade of 1960s saw the introduction of several new products like cooking gas stoves, pressure cookers, electrically operated cooking gadgets like ovens and mixers, synthetic types of textile goods, electrical goods like radios, transistors, refrigerators, air-coolers, air-conditioners, tubelights, two-wheelers like scooters, motorcycles and mopeds, packed foods (on a very restricted scale), and so on. The decade of 1970s was marked by the popularization of still new items like cassette recorders, stereos, sophisticated toys for children, television sets, video cassette recorders/players, cooking range, detergent powders/chemicals, and so on. The current decade of 1980s has witnessed more an more variety in respect of all the above mentioned goods with very few items which can be really termed new. During the past decade or so, the modified versions of most of the consumer goods are coming up at a relatively fast speed, with each new version incorporating some new features or certain improvements over the earlier version. Thus product modification is picking up gradually with goods becoming obsolescent at a rapid rate. During the years to come, the Indian market is expected to be exposed to still more sophisticated consumer durables like domestic computers, microwave cooking devices, and so on. From the above stated facts, the nature of emerging trend in respect of introduction and popularization of new products is quite clear - consumer non-durables have been followed by consumer durable items, and, all developments in this context exhibit a substantial time-lag over those in industrially developed economies.

The reasons behind the above trend lie in the previously mentioned characteristics of the domestic market. While the low purchasing power and general reluctance to change or buying new things, arising out of fairly rigid value systems, are operative on the part of consumers, the manufacturers/marketers have also exhibited aversion towards risk and have not put in enough marketing research efforts. As a result most products, particularly the consumer durables have been designed and promoted "to last for a lifetime".

Packaging of products is one decision area where lot of changes have taken place in the recent past. Whereas earlier, the emphasis of packaging was merely on physical protection of the contained commodity, the focus has shifted to

promotional aspects, convenience to consumers, ensuring usefulness of packing material even after the contained product has been completely used up, convenience of handling/distribution, and, more progressive objectives ideas. The most successful and prominent experimentation in packaging has been done in case of non-durable consumer items like milk, fast-food items, other food products, and, toiletry items like soap, hair oil, toilet powder, perfumes and so on. Polythene packing, light-weight packing, economy packing, and, packing in containers which can be used in various ways after the contents have been consumed are increasingly becoming popular and serving as a basis for competition among manufacturers. Even the government undertakings like the Railways have adopted new packing methods like serving food items, softdrinks and other fast-food items in polythene, aluminum foil packages and easily disposable serving media, in a bid to provide high quality service to the passengers. Such facilities were being hitherto extended only to people travelling by air.

Product branding has always been a promising marketing decision area. Indian consumers have generally exhibited a positive preference for branded products. Many brand names have caught up so well among consumers, that they no longer stand for specific product item of a specific manufacturer but for the product itself. The classic examples are Dalda (cooking media manufactured from vegetable oil), Lipton (tea), Bata (footwear), Godrej (steel almirah), Phillips (electrical goods), Surf (blue detergent powder for washing garments), Vim (white colored detergent powder for washing utensils), Rin (blue detergent soap), Nirma (low-priced high-soda content, yellow-colored washing powder), Amul (butter), Cadbury (chocolate), Usha (fan), Singer (sewing machine), Nescafe (Coffee), Lijjat (papad, a food item), Tullu (water-pump), and so on. The list is endless. It is simply suggestive of the fact that effective brand name, coupled with acceptable quality level and price, is a major determinant of success. Every successful brand name however does bring in problems of imitation and infringement of trademark rights, which the organizations have to resolve through resort to legislation and devising still better brand names. The same holds true for brand image also, although out of the two, brand name continues to be a relatively more significant decision variable.

Promotion Decisions

Indian marketers have attached relatively more importance to the selling objective of promotional devices rather than viewing them as powerful tools for informing, educating, developing positive attitudes and inducing gradual, but, definite change in the behavior of consumers. This is evident from the fact, that although they have employed multiple promotional devices for sustaining and creating more demand for their products, services, there has been a tendency to concentrate more on some specific medium over pretty long spans of time. For instance, the method of directly contacting the consumer and providing them an opportunity to try the product

and get convinced about its utility, dominated over other methods during the pre-independence period. The use of printed media became widespread in the post-independence era and continued to dominate over the rest, till late sixties. Thereafter radio became the most popular medium for promotion and continued to dominate for almost a decade. In the early eighties, television emerged on the Indian scenario in a big way and succeeded in overshadowing all other media. Thus at every specific point of time there has been a sort of "mad rush" for promoting products only in a particular manner. Little effort has been made to investigate the relative appropriateness of the available media and make best possible allocation of funds assigned for promotional purposes. The same imitation tendency extends to the choice of advertisement copy, frequency of advertising, advertisement theme, and so on. What competitors are doing has been the prime consideration in the taking of promotion decisions. There has been a gradual shift of focus from price variables to non-price variables like quality, use of reliable material and components, use of latest technology, application of product to new uses, superiority to other brands and substitute products, after-sales service, effectiveness in satisfying consumer needs, and so on. So much so, that some manufacturers openly acknowledge the fact that their products are high priced in comparison to those of competitors, and, try to justify it on the basis of above mentioned considerations, many of which sound too complex and technical to be understood by an average consumer.

The above trends have not yielded very encouraging results. In fact, marketers who decided to promote products/services 'with a difference' or proved trend-setters, have exhibited unique success in their efforts. Recent examples of such unprecedented success are Maggie noodles (Food Specialties Ltd.), Hot-Shot Cameras (Photophone Industries Ltd.), Charms Cigarettes (Vazir Sultan Tobacco - VST Ltd.), Ponds Dream Flower Soap (Ponds India Ltd.), Vimal textiles (Reliance Industries Ltd.), Maruti Car (Maruti Udyog Ltd.), Rasna Soft drink concentrate (Pioma Industries Ltd.), Promise toothpaste (Balsara India Ltd.) and Nirma detergent (Nirma Chemical Works).

Price Decisions

Of various marketing decision variables, pricing has proved to be most intricate and puzzling for marketers. It is very difficult to estimate the overall effect of price-setting and price-changes on the demand for products and services. This is basically due to certain contradictions in the nature of Indian consumers.

In general, an average Indian consumer exhibited considerable sensitivity to price factor in the past and is still expected to be so on account of the prevailing economic conditions like low per capita income, inflationary trends and rather difficult living conditions. At times, the sensitivity was recorded high to such an extent, that consumers were found willing to

compromise even on aspects of brand, design and quality, if certain low priced items could satisfy their needs. Even now there are frequent complaints regarding prices, and economic exploitation of consumers by manufacturers, traders, and conditions arising out of government control, tax structure, unsatisfactory industrial climate, low productivity, unhealthy competition and corrupt marketing practices. The vast majority of consumers still express fear of being cheated by manufacturers of shoddy products/services. Even in respect of quality products, it is commonly believed that initially the prices are kept low, but once the item has been established well, the manufacturers do not hesitate in revising prices in the upward direction in the name of escalating manufacturing costs. The traders are also looked at with a lot of distrust, because they indulge in all sorts of malpractices, resulting in the consumers not getting the right quality for the given price. The tax structure is too complex to be understood by an average consumer, resulting in unjustified price variations from shop to shop. Even price reductions/discounts offered on festive occasions are believed to be avenues for clearing off excess/substandard goods. However, such festival sales draw large crowds and are becoming a common and perennial feature. All this is a sufficient indication to prove that Indian market has been and can still be quite sensitive to pricing.

Off late, there has been a gradual shift from high to low and even total lack of sensitivity to price changes. Endless, number of examples can be quoted where upward revision of prices have had no impact on demand for the product/service. In fact, the demand has increased despite even unjustified hike in prices. One can quote the example of petroleum products, vehicles particularly two-wheelers, electrical goods, construction material, cosmetic items, toiletry goods, textiles, and so on. This new trend has been widely reported and has put the common hypothesis of price sensitivity to test. There are a number of reasons behind this development. There has been slight improvement in the purchasing power but the more powerful reason is that purchase behavior is governed more by socio-cultural variables rather than economic factors. The characteristic of being tradition-bound and dominated by social values, as well as, perceived need to maintain a certain status level, force an average consumer to withstand all price hikes and make purchases even though adequate economic resources might be missing. These reasons are quite dominant in respect of all Indians, more so in respect of middle-lower strata, who are commonly believed to be price sensitive. Thus it is socially compulsory to have new garments for every family member on the occasion of certain festivals, provide certain items in the dowry package while marrying off girls in the family, and so on. Price becomes totally irrelevant in such instances.

Place Decisions

This part of marketing mix referred to as place factor relates to the choice of distribution channel and all actions necessary to ensure

ready availability of goods/services to consumers. Although at first sight, the area seems to be problem-free, there are a number of challenges to be met effectively by Indian marketers, at least in context of consumer goods/services.

The distribution channel in respect of most products is a long one involving a number of middlemen/institutions like agents, wholesalers and retailers. While this has created obstacles in free movement of items resulting in temporary shortages in the market, it has also added to the final price of the product. In a country like India, these are issues of great social concern. In addition to the above, middlemen agencies and traders indulge in various social malpractices. Hence, their elimination or at least checking their actions has become necessary. In order to solve above problems, a number of new types of retailing institutions like departmental stores, supermarkets, chain-stores and cooperative stores have been tried, though on a very limited scale (again, confined to the higher and middle income sectors of urban consumers). Most of them have not been managed well enough to provide high quality service to the consumers.

Additional Decision Variables

The analysis would be incomplete if no mention is made of two additional P's - Power and Public Relations, which have emerged as dominant forces not only in case of India but all developing nations, giving rise to the latest concept of mega-marketing. Power relates to the capability of the organization to influence environmental factors - economic, technical, competitive, government, socio-cultural, and so on, to her own advantage. Although, this is not a pure marketing decision variable, it holds immense strategic significance and has come to stay as a major determinant of marketing success. It is solely on the basis of power, that many organizations have gone in for product diversification of an extreme order, where new products/product lines have no relationship whatsoever with the already existing ones. They have met with fair success also, which has created intense competition and strong marketing threats for those already in the industry for a long time. Strengthening of bureaucracy, and, unchecked corrupt practices in the administrative machinery and the field of business, have made the hypotheses of the survival of the fittest, and, might is right, sound true. In some cases, the business firms do not even have the manufacturing facilities and are just lending their names for marketing of products manufactured by others, thereby posing stiff problems to other manufacturers. To what extent such trends are beneficial to the society, is an area requiring indepth research and study. Public Relations which used to be considered as a tool for promotion has emerged as a powerful mechanism for image building and gaining power over environmental forces. Many marketing decisions have been inspired by the need to have better public relations, and, in this way public relations has been a constructive force behind major product innovations. It has led to healthy competition

among organizations to provide the best to the consumers in terms of products and accompanying services, undertake socially relevant projects, launching of community welfare programs, and, serve the society to the best of their ability.

Conclusions and Inferences

From the foregoing review of marketing decision variables, following inferences can be safely deduced:

- (i) In Indian market the general order of importance in which marketing decision areas can be arranged is PRODUCT, PROMOTION, PRICE and PLACE, besides POWER and PUBLIC RELATIONS which have assumed great significance during recent times.
- (ii) Product decisions lack originality and are generally inspired ones. The pace of product development has been slow and lagging behind developed nations. The reasons lie in the unique characteristics of the market and professional backwardness of manufacturers/marketers. Product addition/deletion decisions are more due to economic reasons and not based on marketing considerations. Lot of activities are on record in respect of packaging and branding of products, and, there has been a growing consciousness among markets to back up products with strong after-sales services.
- (iii) Promotion is an area calling for creativity and originality of the highest order. Due to its deep impact on the prices and socio-economic dimensions of nation's life, promotional devices need to be chosen with utmost care, and, so should be the methods of promoting sales and funds to be utilized for this purpose.
- (iv) Of all the marketing decision variables, pricing constitutes the most intricate and unpredictable area. This is on account of certain contradictory trends co-existing in the Indian economy. On the one hand there exist instances of high sensitivity to price changes and price exploitation of consumers, making it a matter of social concern, while on the other there are evidences to show that purchasing habits of an average Indian consumer are based more on non-rational, socio-cultural factors rather than rational economic ones, resulting in indifference of consumers towards pricing decisions. The second tendency has become more strong during recent times.
- (v) Place decisions need to be taken with the viewpoint of checking evils and malpractices associated with the middlemen agencies and retail traders.
- (vi) Power and public relations are the two additional variables which have emerged in a big way, and deserve to be highlighted. While power has been instrumental behind radical changes in product-mix and making organizations pose severe competition and marketing threats for their counterparts, concern for better public relations has inspired business houses to be more alive

to social issues and exhibit strong service-orientation towards consumers and society at large.

- (vii) An overall effort is necessary on the part of marketers to design the marketing mix in a manner to make the benefits percolate to the so far untouched rural masses and backward sections, which constitute the majority and integral part of the Indian society.

It would be in the fitness of things to end on a note of optimism and hope that in the times to come Indian manufacturers/marketers will do still better to alleviate the sufferings of the Indian masses, and, in their efforts will get whole-hearted support of the government, consumers and all sections of the society.

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SUCCESSFUL GLOBALIZATION OF PAROCHIAL PRODUCTS

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Abstract

Realizing how often products fail and how many attempts at globalization have met with less than satisfactory results, it is extremely important that a systematic orientation be taken in attempting to globalize. This paper presents a theory to explain why some products succeed globally, whereas others fail. More specifically, the authors first assess what the product characteristics and market considerations of successful global products should be. Secondly, they explore the relationship between successful global products and human needs, before they finally develop alternative strategies available in the globalization process.

Introduction

Most new products are originally developed to cater to a specific local/parochial need. "Blue jeans," for example, were originally developed to meet the need for economical, yet rugged, utility trousers on the western frontier of North America during the mid-1800's. About the same time, Isaac Singer invented the first sewing machine to make the process of stitching cloth together into garments much easier, cheaper, and more efficient. Much later, General Electric developed and marketed the first household garbage disposal, also to serve the needs of the North American market. The first two products, however, have since transcended their original geographical target market: blue jeans, to become a dominant and preferred form of casual wear the world over, including many Communist and Third World countries, and the sewing machine, to become an equally widespread laborsaving device; whereas the garbage disposal is rarely seen outside of North America. Some products, like blue jeans and the sewing machine, seem destined to serve broadly diverse markets; whereas others, like the garbage disposal, remain confined to the specific target market that they were originally developed to satisfy.

In recent years there has been considerable discussion of the feasibility of standardizing, or "globalizing," products for multinational markets (Buzzell 1968; Wind et al. 1973; Levitt 1983; Quelch and Holt 1986; Ran and Preble 1987; Ohmae 1987), yet it is still not completely clear what specific kinds of factors predispose some products to have a successful global appeal, while others remain suited to and successful in only a narrowly defined local, or parochial, market. In this paper, the authors begin to develop a theory that explains why some products succeed globally, whereas others fail. More specifically, this paper addresses three questions: (1) Are there some originally parochial products that are virtually predestined to become global products; (2) Is there any relationship between successful global products and basic human needs; and (3) Are there alternative strategies, or options, avail-

able in the globalization process?

Development of Parochial Products

Research has shown (Booz, Allen and Hamilton 1982) that approximately 700 U.S. manufacturers introduced 13,000 new products in a period of five years. Most of these new products were designed to satisfy very clear-cut, idiosyncratic needs of very specific markets. Many of these products are also doomed to fail before they penetrate even their originally designated target markets. Indeed, the chances that a new product will fail are about 7 out of 8, or 88% (Mansfield et al. 1971), but of those that don't fail and that do "take root" in their original local markets, some are destined to become almost standard household items all over the world, e.g., Coca Cola, aspirin, televisions, and electric drills.

As seen in the literature, because of cultural characteristics, temperament of people, local regional supply of resources, etc., there are many specific markets with well-defined idiosyncratic needs. Kept isolated, every local market is very parochial. In cultures similar to those of North America, however, parochial local markets are typically influenced by national mass media and may eventually develop broader regionalized or nationalized product and service demands. In other words, very local and parochial products do not necessarily remain that way for very long because of national mass media exposure. They have the tendency, at least, to become "national" in time.

In these national markets there are also small market niches for which products may be developed deliberately. In this case, the parochial market is not geographically "local" but a small, well-defined "national" market niche, with New Life Shops and Adult Book Shops being diverse examples. Similarly, there are specialty apparel shops catering exclusively to either large men or large women, and health food stores catering specifically to the health conscious segments of the total food market.

As parochial products are developed, some of them appear to have attributes, or characteristics, that will make them global eventually. Not only should such a product have attributes suited for globalization, but it will also have to be marketed accordingly. Thus, it is important to distinguish product characteristics on the one hand from marketing considerations on the other when assessing the global potential or appeal of any particular product or service. The interaction between product characteristics and marketing considerations is illustrated in Table 1, which identifies four distinct international marketing options here termed: (1) Purely Parochial, (2) Purely Global, (3) Selectively Parochial, and (4) Selectively Global.

TABLE 1
INTERNATIONAL MARKETING OPTIONS FOR PRODUCTS AND SERVICES

International Options	Product Characteristics	Marketing Considerations	Effective Marketing Practices
Purely Parochial	Parochial Designs	Parochial	The products are unique to each market and are sold according to each market's idiosyncracies, e.g., native apparel and ethnic products.
Purely Global	Global Designs	Global	The same basic product is sold in the same standardized way to diverse segments worldwide, e.g., microchips.
Selectively Parochial	Global Designs	Parochial	The same basic product is sold differently in each market according to its idiosyncracies, e.g., evaporated milk.
Selectively Global	Parochial Designs	Global	A basic product is carefully adjusted to local needs and sold in the same standardized way to segments worldwide selectively similar to the original parochial market, e.g., automobiles and carbonated beverages.

(1) Purely Parochial

Consumer behavior is not homogeneous throughout world markets. The lack of homogeneity stems from values and attitudes that are primarily formed by local cultures. As Assael (1987, p. 297) states:

Culture refers to the norms, beliefs and customs that are learned from society and lead to common patterns of behavior. It is reflected in a consumer's value system . . . manifestations of cultural values are diet products, weight-reducing salons, etc.

To a substantial extent, culture formulates and modifies consumer lifestyles and behavior patterns (Jain 1987). This is how market idiosyncracies develop and endure in different countries, regions, or even locales. The most logical marketing strategy in such cases is to cater to these idiosyncracies by developing parochial products and marketing them parochially. Native apparel styles in almost all parts of the world are totally localized and marketed accordingly. Ethnic products, such as gift items and crafts, are also treated in this way.

(2) Purely Global

This option assumes the existence of products that were originally designed and developed to be global and that are marketed in the same standardized way to diverse segments worldwide. Products such as petroleum, microchips, and personal computers are all in this category.

(3) Selectively Parochial

Some products have a very basic international appeal, but for different reasons in different markets. The same basic American "blue jeans," mentioned earlier, are variously sold as rugged utility trousers, as casual comfort wear, or as high-status fashion wear, depending upon the idiosyncracies of the particular market. Carnation's evaporated milk product is an even better example:

The same basic product is used in England for a cake or fruit topping, in Germany as a coffee creamer, in Australia for making home-made ice cream, and in Mexico as a baby food. Certainly the product was marketed according to the separate uses in each of these respective countries (Lucas 1967).

(4) Selectively Global

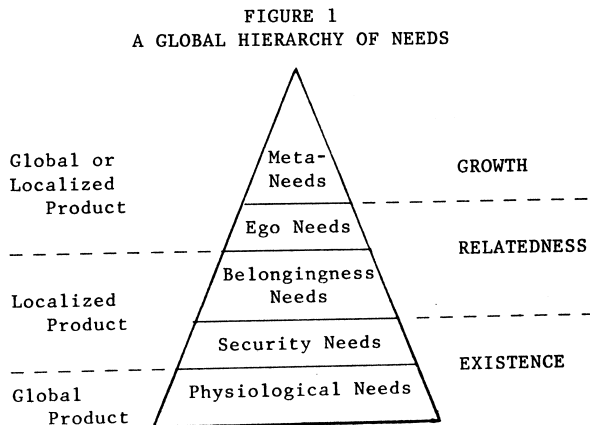
Studies have shown that some market segments are quite similar to one another in different parts of the world, making it possible for a product designed specifically for a particular parochial market to be marketed globally if appropriate design adjustments are made to suit various other parochial markets. Recently it has been claimed that many Western countries, some of the newly industrialized countries (such as Taiwan and Hong Kong) and some of the Third World countries have similar market segments that resemble American "Yuppies" (*Business Week*, March 7, 1987; *Der Spiegel*, November 24, 1986). This may indicate that an originally American product can be marketed globally to these similar "Yuppie" segments throughout the world with appropriate modification and adjustment to best fit local idiosyncracies. The differently formulated tastes of Coke or Pepsi in Germany versus France is an indication of the need for coping with these market idiosyncracies. For different reasons, local needs and tastes vary similarly for automobiles, which makes it necessary for American versions of Nissans and Toyotas to be different from their Japanese counterparts in size, power, special equipment, and styling. McDonalds, Holiday Inns, etc. have managed to establish successful international franchising arrangements based on the existence of such globally homogeneous segments, and licensing agreements for joint ventures are basically founded on the same premise.

The focus of the present article is on this last situation in which the product was originally designed as a parochial product for an idiosyncratic market, but later found acceptance in far broader global markets. Possibly the products that

do eventually make the successful transition from initially parochial to global products share certain common intrinsic product characteristics.

Global Product Characteristics

According to Sheth (1972), buyer needs and expectation assessment are the prime factors in developing an international marketing strategy. When Maslow designed his hierarchy of needs, he may well have done much to explain why certain products, although designed parochially, eventually become global. **Figure 1** illustrates the three general levels of needs in Maslow's hierarchy.



While "Growth" and "Relatedness" needs are either culturally driven or culture laden, the "Existence" needs are primarily culture independent, meaning that all people and all societies have the same basic Existence needs in common; for example, certain standards of nutrition (Steward 1985). If, therefore, certain products were to appeal to these common survival needs, they would be more likely to become global. At the other end of the hierarchy, "Metaneeds" that provide growth toward self-actualization for the individual would call for very parochial product designs, since they depend so much upon cultural and subcultural elaboration. If, however, a product is to appeal to the world elite, a global subculture of its own, it would call for a global design.

Although American cold breakfast cereals were originally developed parochially, they have now

been adopted by most of the cultures of the world. It took about 40 years for cold breakfast cereals to become global products. On the other hand, American-style trash compactors have not been accepted yet in many world markets, while Estee Lauder perfumes have been. It is very difficult to imagine that Turkish classical music will ever become global, or that Japanese Kabuki Theater will ever be accepted internationally. While cereal is related to Existence or Survival needs, arts, crafts, music and cosmetics are more related to the pursuit of Growth and Independence. Within the "Growth" needs category, the product may appeal to nationally or internationally shared norms, beliefs and values. Depending on this criterion, the product may remain local or become global. Thus, it is posited here that if the products appeal to more basic needs, or if they appeal to the world elite, they have a better chance of becoming global.

As discussed earlier, product characteristics and marketing considerations are theoretically independent and must be considered in relation to one another: Thus, a product must have certain attributes to become global, in addition to being marketed with a deliberate global appeal. From this perspective, i.e., the interrelationship between product characteristics and marketing considerations, **Table 2** can be constructed as a combination of **Table 1** and **Figure 1**. **Table 2** reiterates the point that if a product is to be successful globally, regardless of whether it was designed originally to be global or not, it has to have certain specific characteristics, and those characteristics have to emphasize primarily Existence or Relatedness needs, e.g., cereals, soft drinks, and sewing machines, or Metaneeds of the world elite, e.g., Paris designer clothes. **Table 2** also emphasizes the importance of marketing considerations by indicating that successful global products have to appeal to physiological needs of the world population or to Metaneeds of the world elite, and therefore, have to be marketed differently than their parochial counterparts. The lower left quadrant of **Table 2** indicates successful global products dealing with basic Existence or Survival needs of all people, or Metaneeds of the world elite. The upper right quadrant deals with parochial products marketed parochially because they appeal to Ego needs and Metaneeds that are not shared internationally, including cultural, leisure/play, and other similar activity-related products. **Table 2** also indicates that unless the product appeals to the Metaneeds of the world elite, the higher the need level to

TABLE 2
MATRIX FOR SUCCESSFUL GLOBAL STRATEGIES

		UNIQUENESS OF PRODUCT CHARACTERISTICS	
		UNimportant	Important
		Selectively Parochial	Purely Parochial
UNIQUENESS OF MARKETING CONSIDERATIONS	Important	Primarily EGO Needs and some BELONGINGNESS Needs	Primarily GROWTH and some EGO Needs
	UNimportant	Purely Global Primarily PHYSIOLOGICAL and some SECURITY Needs, or GROWTH Needs of world elite	Selectively Global Primarily BELONGINGNESS and some SECURITY Needs

which the product is likely to appeal, the more idiosyncratic the product characteristics and marketing considerations must be.

Playing It Safe

If a product that is originally designed as a parochial product is to become global, and if the producer wants to "play safe," there are two clear-cut entry alternatives: These are "high-end" entry versus "low-end" entry into world markets. The high-end entry strategy may include either the selectively parochial option or the selectively global option. If products need to be marketed on the basis of important influencing factors such as diverse Relatedness needs prevailing in local markets, then high-end entry is recommended. Computers are in this category: They are either nominally adjusted to local needs or are marketed somewhat differently in different markets. However, basically the product remains the same, and companies such as IBM or Apple take advantage of centralized management and perhaps scale economies, although the Japanese use modular production (Ohmae 1985) and decentralized management to achieve similar efficiencies. The high-end strategy will call for entering various world markets on the basis of the existence of similar elite groups that share similar norms, beliefs and customs. In the U.S., the "Yuppies" form such an elite group. They are described as almost anything ranging from a creeping social malady (Kern 1985) to the buyer dreamed of by sellers everywhere (Freundlich 1987) and even the last hope for the cigar industry (Gloede 1985). The American Yuppies are characterized by residing in metropolitan areas, being between 25 and 45 years of age, living on aspirations of glory, prestige, recognition, fame, social status, and power (Piesman and Hartley 1984), with a family income of \$40,000 or more, if married, and an income of \$30,000 or more if single (Batutis 1987). According to Piesman and Hartley, Yuppies cross geographical boundaries. International Yuppies, who have already been identified in the U.K. (Gofton 1986), West Germany (*Der Spiegel*, Nov. 24, 1986), Canada (Remington 1986) and Japan (Birmingham 1967), but who, according to these authors, are supposed to be found in many other countries as well, share a high level of education, a Westernized orientation, relative youth and wealth. At this level, certain common denominators among these groups make it feasible to emphasize specific product attributes, high prices, and marketing considerations for successful partial international marketing, if not total globalization. This segment of international "Yuppies" have more in common with one another than North American "Yuppies" have in common with the American lower middle class. These "international Yuppies" may be used as a target market for high-end entry. Products in the group may have more unique, rare and technical attributes, appealing primarily to the higher-level needs.

If the product, on the other hand, deals with lower or more basic needs, then it may enter world markets through the low-end strategy. These products have broad appeal on universal Existence needs. Low-end entry strategies assume less culture driven or culture laden consumer behavior.

Products must have low cost possibilities, again by using scale economies or modular production systems. Unlike the high-end entry conditions, however, in this case the cost picture must be suitable to enter the low end of the market, which necessitates having lower prices. These products may be marketed in a purely global manner.

How To Globalize

From our discussion thus far, a minimum four-point program is necessary for "failsafe" globalization: (1) Are the product characteristics appropriate for globalization? To qualify, the product must either be unique, technical and rare, and appeal to high-level needs of an international world elite; or it must appeal to the basic Existence needs that are common to all people. (2) Does our company have what it takes to appropriately exploit a global market? To qualify here, the company must either have centralized production facilities large enough to deliver significant economies of scale for mass production items designed for low-end entry, or be organized for a modular type of production for high-end entry items. (3) Is the company emphasizing product characteristics? If the product is appealing to higher-level needs, it must be marketed by using a selectively global international strategy. (4) Finally, is the company emphasizing marketing considerations? Here, if the product is appealing to higher-level needs, it must be marketed by using a selectively parochial international strategy.

Conclusions

Realizing how often products do fail and how many attempts at globalization have met with less than satisfactory results, it is extremely important that a systematic orientation be taken in attempting to globalize. The whole process begins with realizing that all products cannot be marketed globally and that some products are better suited for this than are others. Globalization of products necessitates transcending the cultural boundaries that would otherwise make world markets extremely idiosyncratic. Going into markets that are not culture laden or culture driven implies two extremes: (1) world elite markets at the "high entry" end, or (2) world mass markets at the "low entry" end. In between these two extremes, globalization is not likely to be very successful, or indeed feasible. It appears that certain product characteristics are likely to appeal to world elite markets. These characteristics deal with Growth or Self-actualization motives that are construed to be global. Similarly, global products at the lower end of world markets are likely to appeal to Existence motives and therefore to deal primarily with food, shelter, and clothing.

Much research needs to be undertaken to find out, first, how similar to one another are the world elite markets on the one hand, and how much do world mass markets likewise share in common on the other. Secondly, future research must indicate what specific product characteristics are necessary to appeal to elite markets and similarly what characteristics are most appropriate for

lower end mass markets. Finally, future research must identify successful approaches to high-end elite markets and world mass markets at the lower end. There needs to be a whole new theoretical track developed for markets that happen to be between these two extremes.

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THE UTILITY OF THE U.S. DEPARTMENT OF COMMERCE TO SMALL BUSINESSES: AN EMPIRICAL STUDY

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Abstract

This study empirically tried to determine whether small to medium-sized exporters and non-exporters in West Virginia were (a) familiar with the export-related services offered by the U.S. Department of Commerce, (b) whether they had used any of these services before, and (c) whether they were satisfied with the services they had used. The findings of the survey are reported in this paper.

Introduction

Exports continue to be an area of major concern in the economic activity of the United States. According to U.S. Trade Facts (1988), in 1987, the United States exported 5.4 percent of its Gross National Product, whereas in 1986, West Germany exported 25.9 percent, Canada 25.1 percent, the United Kingdom 19.3 percent, and Japan 10.5 percent. After an unbroken string of trade surpluses from 1891 through 1970, the United States had deficits in every year after 1970, except in 1973 and 1975. The nagging U.S. trade deficit reached a record \$171 billion in 1987. Even though the deficit fell to about \$137 billion in 1988, it is still alarmingly high. With such an enormous trade deficit, the importance of exports in the U.S. economy can hardly be overemphasized.

According to Dichtl (1984), current account deficits and saturated markets in many industrial nations in 1980s has led to wide-ranging efforts by the countries concerned to intensify their export trade activities. However, Edmunds (1986) concluded that U.S. businesses, and small firms in particular, play a much smaller role in international trade than the size and competitive stature of the nation warrants. Barry (1986) and other researchers have determined that small to medium-sized businesses traditionally have viewed international trade as too difficult or complicated to pursue. Weinrauch et al. (1975) concluded that many managers of small businesses falsely believed that only a large enterprise could handle the technical details of exporting.

However, former studies have determined that there are many small to medium-sized manufacturing firms in the United States which have the potential to export but do not do so. Whereas the U.S. currently suffers from a balance of trade deficit with most of its major trading partners, it can be assumed that this deficit would decline if more small to medium-sized industries were to become exporters.

Large firms normally have the resources and the in-house expertise to manage their exports. However, small firms interested in exporting may be at a loss as to where to start the exporting

process. For them, the export-assistance programs of the U.S. Department of Commerce (DOC) can be very helpful. The DOC offers a variety of services to help businesses in their exporting activities.

According to Tesar (1981), interest in export operations and export development was rapidly growing worldwide. National governments, individual states, and economic regions were actively interested in stimulating exports among their small and medium-sized manufacturing firms. Both government and the private sector were interested in drafting comprehensive statements of export policy to provide specific guidelines for export development.

This research attempted to examine small to medium-sized West Virginia exporters', (A) familiarity with export-related services provided by the U.S. Department of Commerce, (B) reported use of any of these services, and (C) their degree of satisfaction with any services they had used.

Delineation

For the purpose of this study, export-related services were defined as the different types of assistance-services that can be provided by the U.S. Department of Commerce to firms interested in exporting. Thirteen such export-related services were listed in the Import and Export Guide for San Diego Small Businesses, compiled by the Small Business Assistance Center of the Greater San Diego Chamber of Commerce (1985). All 13 programs were examined for the study. These programs were:

1. Counseling and Seminar program
2. New Product Information Service
3. Agent/Distribution Service
4. World Traders Data Report
5. Trade Opportunities Program
6. Export Mailing List Service
7. Products Marketing Service
8. Trade Missions and Seminars
9. Foreign Buyer Program
10. Commercial Exhibitions
11. Automated Information Transfer System
12. U.S. Commercial Service
13. Catalog Exhibitions

A firm was considered small to medium-sized if it had less than 500 employees. The term exporting firm was seen as including all small to medium-sized manufacturing firms in West Virginia that had sold products abroad at least once during the last two years, irrespective of the year, of the frequency of foreign sales, or of the dollar volume.

The term non-exporting firm was seen as including small to medium-sized manufacturing firms in West Virginia not currently engaged in exporting.

This could therefore include a company that had never exported or one that for one reason or another had decided to discontinue its export activity.

Instrumentation

After extensive review of the literature and personal and telephone interviews, two structured questionnaires were developed for the purposes of collection of data: Questionnaire A was designed to collect data from current small to medium-sized exporters; and Questionnaire B was used to gather data from small to medium-sized non-exporters. (To assist the researcher and the respondent in quickly identifying and differentiating the two questionnaires, Questionnaire A was printed on white paper, versus the yellow paper used for Questionnaire B.)

The research question required the examination of the perceptions of exporters and non-exporters concerning, (A) their familiarity with the export-related services provided by the U.S. Department of Commerce, (B) whether they had used any of these services, and (C) whether they were satisfied with the services they had used. The questions specifically asked in the survey instrument for the above three categories (A, B, and C) were: (a) "Were you aware this service existed?", (b) "Have you ever used this service before?", and (c) "Degree of satisfaction with the use of the service." Respondents circled "yes" or "no" for responses to questions (a) and (b), and circled "satisfied," "undecided," or "dissatisfied" for their response to Question (c). Boxes were provided in this section, and the respondents were requested to check all applicable boxes.

Data Collection

Primary data for the study were collected through a mail survey of small to medium-sized manufacturing firms in West Virginia, which were defined as those having fewer than 500 employees. A listing of 308 small to medium-sized manufacturing firms, categorized under six different two-digit Standard Industrial Classification (SIC) codes beginning from SIC code 33 up to SIC code 38 was obtained from the 1986 West Virginia Manufacturing Directory. (It was assumed that firms within these six SIC categories had a greater chance of being involved in international trade since they had "exportable products".) Further analysis of this listing led to the exclusion of 24 manufacturing firms from the potential population of 308 firms for not meeting the criteria established for firms to be included in the study. All 24 of the excluded firms were either subsidiaries of other firms or had more than 500 employees. After the omission of the 24 firms from the original list, the total acceptable population size was reduced to 284 small to medium-sized manufacturing firms.

Both questionnaires--one designed to collect data from exporters (Questionnaire A) and the other from non-exporters (Questionnaire B)--were sent to each of the 284 firms. The questionnaires

and the accompanying cover letter, instructed the respondent to complete either Questionnaire A or B based on his firm's exporting or non-exporting status. The respondent in each firm was either the owner or manager of the company as identified in the Directory. It was assumed that these people would be in the best position to respond to the questions concerning the firm's export strategies.

Of the 284 questionnaires that were mailed, 85 usable questionnaires were returned, for a response rate of 30%. Thirty-eight of these responding firms were exporters and 47 firms were classified as non-exporters.

Findings

The exporters' mean scores and percentage of "YES" responses to the first two questions, (A) "Were you aware this service existed?" and (B) "Have you ever used this service before?", are shown in Table 1.

TABLE 1
THIRTY-EIGHT EXPORTERS' RESPONSE MEANS
AND PERCENTAGE OF "YES" RESPONSES
TO TWO QUESTIONS COVERING EXPORT
SERVICES OFFERED BY THE U.S.
DEPARTMENT OF COMMERCE

(Arranged by rank of mean for Section A,
with greater proportions of "YES"
answers being at the top)

Scale: "YES"= 1, "NO"= 0

Export Services Offered by U.S. Department of Commerce	(A)		(B)	
	Were You Aware This Service Existed?		Have You Ever Used This Service Before?	
	%-Yes	Mean	%-Yes	Mean
Commercial Exhibitions	78.4%	.784	19.4%	.194
Counseling and Seminar Program	73.0%	.730	44.1%	.441
Trade Missions and Seminars	73.0%	.730	20.0%	.200
Catalog Exhibitions	59.5%	.595	30.3%	.303
New Product Information Service	43.2%	.432	29.0%	.290
Agent/Distribution Service	40.5%	.405	33.3%	.333
Trade Opportunities Program (TOP)	35.1%	.351	20.7%	.207
Export Mailing List Service	35.1%	.351	20.0%	.200
World Traders Data Report	35.1%	.351	16.1%	.161
Products Marketing Service	29.7%	.297	12.5%	.125
U.S. Commercial Service	27.0%	.270	10.7%	.107
Foreign Buyer Program	21.6%	.216	0%	--
Automated Information Transfer System	16.2%	.162	3.3%	.033

For the exporting group, Commercial Exhibitions service was the most known service provided by the Department of Commerce (DOC). More than 78 percent of the exporters were aware of this

service. Only 16.2 percent of the exporters were aware of the Automated Information Transfer System, making it the DOC's least known export-related service. For the question "Have you ever used this service before?", the service used most often by exporters was the Counseling and Seminar Program (44.1 percent), while the service used the least was the Foreign Buyer Program (0 percent). No exporter had used this service before.

Table 2 shows the non-exporters' mean scores and percentage of "Yes" responses to the two questions, (A) "Were you aware this service existed?" and (B) "Have you ever used this service before?".

TABLE 2
FORTY-SEVEN NON-EXPORTERS' RESPONSE MEANS AND PERCENTAGE OF "YES" RESPONSES TO TWO QUESTIONS COVERING EXPORT SERVICES OFFERED BY THE U.S. DEPARTMENT OF COMMERCE

(Arranged by rank of mean for Section A, with greater proportions of "YES" answers being at the top)

Scale: "YES" = 1, "NO" = 0

Export Services Offered by U.S. Department of Commerce	(A)		(B)	
	Were You Aware This Service Existed?		Have You Ever Used This Service Before?	
	%-Yes	Mean	%-Yes	Mean
Counseling and Seminar Program	59.6%	.596	6.4%	.064
Trade Missions and Seminars	48.9%	.489	0.0%	.000
Commercial Exhibitions	38.3%	.383	2.1%	.021
New Product Information Service	31.9%	.319	6.4%	.064
World Traders Data Report	21.3%	.213	2.1%	.021
Trade Opportunities Program (TOP)	21.3%	.213	2.1%	.021
U.S. Commercial Service	21.3%	.213	0.0%	.000
Catalog Exhibitions	19.1%	.191	4.3%	.043
Export Mailing List Service	17.0%	.170	2.1%	.021
Agent/Distribution Service	14.9%	.149	0.0%	.000
Products Marketing Service	12.8%	.128	0.0%	.000
Foreign Buyer Program	10.6%	.106	0.0%	.000
Automated Information Transfer System	8.5%	.085	0.0%	.000

For the question "Were you aware this service existed?", the service with the highest mean score was the Counseling and Seminar Program. More than 59 percent of the non-exporters were aware of the existence of this service. The service with the lowest mean score was the Automated Information Transfer System. Only 8.5 percent of the non-exporters were cognizant of the existence of this service. For the question, "Have you ever used this service before?", very few non-exporters had ever used the export-related services of the DOC (see **Table 2**).

Table 3, shows the exporters and non-exporters' mean responses about the degree to which they were satisfied with the use of the various DOC's export-related services.

TABLE 3
THIRTY-EIGHT EXPORTERS' AND 47 NON-EXPORTERS' MEAN RESPONSES TO QUESTION EXAMINING THE DEGREE OF SATISFACTION WITH THE USE OF EXPORT-RELATED SERVICES OFFERED BY THE U.S. DEPARTMENT OF COMMERCE

(Arranged by rank of mean for the exporters' response)

Scale: "Satisfied" = 3, "Undecided" = 2, "Dissatisfied" = 1, N = Number of valid responses

Export-Related Services	(A)			(B)		
	Exporters Mean	S.D.	N	Non-Exporters Mean	S.D.	N
Counseling and Seminar Program	2.73	.59	15	2.25	.96	4
Commercial Exhibitions	2.50	.54	8	1.00	-	1
Catalog Exhibitions	2.50	.71	10	1.67	.58	3
Trade Missions and Seminars	2.50	.76	8	-	-	0
New Product Information Service	2.44	.88	9	2.67	.58	3
World Traders Data Report	2.33	.52	6	2.00	-	1
Trade Opportunities Program (TOP)	2.33	.82	6	3.00	-	1
U.S. Commercial Service	2.33	1.16	3	-	-	0
Agent/Distribution Service	2.20	.92	10	-	-	0
Automated Information Transfer System	2.00	.00	2	-	-	0
Foreign Buyer Program	2.00	-	1	-	-	0
Products Marketing Service	1.80	.45	5	-	-	0
Export Mailing List Service	1.57	.54	7	1.00	-	1

S.D. = Standard Deviation

N = Number of valid cases (acceptable responses)

Responses measuring the degree of satisfaction were measured on a scale: 3 = Satisfied; 2 = Undecided; 1 = Dissatisfied; 0 = No Response. Means above 2.00 meant that responding firms in the exporting or non-exporting categories were on the "satisfied" side of the scale. For the exporting group, the Counseling and Seminar Program had the highest mean response (2.73), implying that exporters were most satisfied with the Counseling and Seminar Program of the Department of Commerce. For non-exporters, the Trade Opportunities Program (TOP) had the highest mean score (3.00), indicating that the non-exporters were most satisfied with the Trade Opportunities Program of the Department of Commerce. Both exporters and non-exporters expressed dissatisfaction with the Export Mailing List Service. Non-exporters were also dissatisfied with the Commercial Exhibitions Service.

NOTE: Due to the large number of non-responses for this question (respondents who

had not heard about the services or used any of the services were asked to skip this section), the mean scores for some responses were based on very few cases and, therefore, could be biased.

Interpretations

One obvious conclusion that could be drawn from the findings is that the Automated Information Transfer System service has failed to become an important source for export-related information. While only 8.5 percent of the non-exporters and 16.2 percent of the exporters were aware of the existence of this program, none of the non-exporters (0 percent) and only 3.3 percent of the exporters had used this service before. Of the exporters who had used this service before, they were "undecided" about their degree of satisfaction with the use of this service.

Second, the study indicated that, non-exporters had a relatively lower level of familiarity with the export-related services of the Department of Commerce (DOC). This finding was as expected. Non-exporters, due to their inexperience and/or lack of interest in exporting, may have inadvertently been using selective exposure and retention--looking for an remembering only that information that might be useful or of interest to them.

Third, very few exporters and non-exporters had utilized the export-related services of the Department of Commerce. For the non-exporting group, these findings were as expected. Since non-exporters expressed a low level of interest for exporting, it seems logical, therefore, that few non-exporters would attempt to use any of the export-related services provided by the U.S. Department of Commerce. However, the infrequent use of the export-related services by the exporters came as a mild surprise. A probable explanation could be that many current exporters may have originally begun exporting due to the receipt of an unsolicited export order. Published research has indicated that the receipt of a fortuitous export order from abroad is an important motivator to begin exporting. Consequently, many of these exporters may have continued exporting without the assistance of the Department of Commerce.

Another reason may be that most of the exporters do not depend upon or expect the government to foster their exporting efforts, and therefore, may have not attempted to use the export programs of the Department of Commerce.

Implications and Conclusions.

The findings imply either modifying or pruning some of the DOC's existing export-related programs that most of the exporters and non-exporters are either not familiar with or have not used before. The Automated Information Transfer System, the Foreign Buyer Program, the Products Marketing Service, and the World Traders Data Report, are some of the programs that could qualify for the above-mentioned consolidation strategy. Additional studies could

be conducted to establish specifically the reasons why the above programs have not been used frequently by the exporters of West Virginia. Also, the finding could be state-specific. Similar studies in other states should be undertaken before any broad generalizations can be made.

As an alternative, the above finding could signify the need to aggressively promote the export-related services that presently have a low level of awareness and/or usage rate among the exporters and the non-exporters. The use of aggressive promotional tactics by the DOC might increase the awareness of the small business manager of the availability and the importance of the various export programs and incentives available. It is imperative that the small business manager be aware of the export assistance available, many times at no cost to the business.

The promotional effort should entail a clear delineation of the various export-related services and how these services could be of assistance to businesses planning to begin or to increase exporting. Tesar (1982) concluded that many of the public policy decision makers, as well as representatives of the U.S. Department of Commerce, were convinced that all one had to do was to present the small and medium-sized firm with export opportunities or actual orders, and these firms would export automatically. However, this is certainly not the case. Additionally, the providing of large piles of marginally interesting literature is not a stimulus for an increase of exports. As indicated by Weil (1978:3) firms need to be provided with "better and more specific information...[they must be offered] the kinds of services that are best suited to their needs and capabilities and which they would be most able and willing to use."

The study also reveals the dissatisfaction of exporters and non-exporters with some of the DOC's existing export-related services. This finding indicates that some of the export-related services of the DOC have not been very useful to businesses initiating or increasing exporting.

Czinkota (1982) identified three areas of shortcomings of the U.S. government export promotion efforts. First, the approaches frequently focused on the wrong target audience. Instead of concentrating help on the small and medium-sized firms that were new to exporting, large and experienced export firms received most of the help.

Second, the general policy of export promotion in the United States was ill-defined and lacked continuity. Cassano (1976) postulated that too many programs were established and subsequently abandoned for lack of administrative and financial support. Inconsistencies on the part of the government increased the uncertainties of businesses and led to distrust.

Third, the export promotion approaches in use were not sufficiently responsive to the needs of businesses.

While the above might explain, to some extent, the reasons for the dissatisfaction of West Virginia exporters and non-exporters with some of the Department of Commerce's export-related services, it should be noted that a preponderance of non-responses existed for the level of satisfaction section of the question. The results for this section could, therefore, be biased and unreliable.

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FOREIGN MARKET INVOLVEMENT AND TECHNOLOGICAL
CHANGES AMONG ENTREPRENEURIAL FIRMS

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Abstract

This study examines fundamental relationships between small and medium-sized firms and the large client firms that contribute to developing their foreign market entry and internal technology strategies. It focuses on a particular group of small and medium-sized manufacturing firms classified as entrepreneurial engineering and fabrication firms. The results of this study suggest that these firms are formulating effective market entry and technology strategies to improve their competitive position in international markets.

Introduction

Small and medium-sized firms are confronted domestically and internationally by competitors whose technological competence presents major challenges to them. In order to be competitive, these firms have to develop foreign market strategies that include internationally competitive products and services representing the latest technological developments. This is a difficult challenge for some small and medium-sized firms.

The objective of this paper is to examine fundamental relationships between small and medium-sized firms and the large client firms that contribute to development of their foreign market entry strategies and their internal technology. The paper examines a particular group of small and medium-sized manufacturing firms classified as engineering or fabrication firms. These firms specialize in building custom designed equipment for large clients that use this equipment in processing or manufacturing consumer goods. These small and medium-sized firms are operated by a decision-maker or a small group of individuals sharing managerial responsibilities. These types of firms are currently defined as entrepreneurial firms.

The material presented in this paper is part of a larger study designed to examine competitive positioning by small and medium-sized manufacturing firms in domestic and foreign markets in light of rapidly changing technology. The study started in 1985 in the Upper Midwest and it includes: (1) development of eight cases describing relationships between large client firms and sixteen entrepreneurial engineering firms, (2) a mail survey of seven hundred and eight-four firms, and (3) an empirical examination of two hundred and eight entrepreneurial engineering firms. The concepts introduced in this paper are part of the development of eight cases.

Relationships Between Large Clients
and Engineering Firms

Entrepreneurial engineering firms usually are regionally or locally-oriented. They provide highly specialized technical services for large

client firms with whom they have developed close working relationships. Their services include fabrication of equipment from specifications provided by their clients. In most cases, however, the specifications undergo revisions to expedite fabrication of the equipment and maximize cooperation between the engineering firm and its client. There are occasions when the client requests that equipment be engineered completely by the engineering firm. In these cases the engineering firm must work closely with the client's engineering and purchasing staffs in engineering and fabricating the equipment.

Large firms usually consider the entrepreneurial engineering firms as extensions of their own internal engineering operations. Both groups of firms work together in a system of symbiotic relationships that produce a somewhat false sense of security for the engineering firms. In many cases the engineering firms feel so secure in their relationships that they stop exploring new business opportunities.

Due to the unique nature of their function, which is to fabricate only custom engineered equipment for the large firms, and to already established quasi-formal relationships with the large firms, the engineering firms do not feel the need to systematically develop new technological expertise. Any improvements in their technological expertise comes directly from clients. The engineering firms are simply told what level of technology the particular piece of equipment will represent.

The engineering firms are also not active in any systematic market development. An examination of their marketing operations indicates a strong commitment to maintain status quo. The influx of foreign competition in equipment markets, from Western Europe and Southeast Asia and mostly through direct sales of highly automated equipment, is displacing the engineering firms from their traditional markets. The quasi-formal relationships between the large firms and the engineering firms are being dissolved rapidly. The large firms are contracting for finished equipment with internationally known foreign engineering firms. These foreign engineering firms are much larger than the domestic entrepreneurial type engineering firms.

The large firms perceive some inherent advantages such as cost, quality, service, and technology in buying from foreign suppliers. However, by doing so, they give up their internal flexibility in designing, developing, and installing processing or manufacturing lines. Top management of some of the large firms point out that internal flexibility in production line design and management may have been one of the key ingredients in their past success. Purchases of finished automated equipment might decrease their success dramatically.

In light of the international competition, the entrepreneurial engineering firms are placed in a difficult situation. In order to compete effectively, with the large foreign suppliers of finished equipment, they need to improve their technological capabilities through strategic development of a specific market niche and strong international orientation. To understand the problem faced by the entrepreneurial engineering firms, it is necessary to develop a perspective of their current situation within the context of marketing and technological operations.

Fundamental Literature

The examination of issues related to foreign market involvement and technological changes among entrepreneurial engineering firms is a relatively new phenomenon. Literature dealing with these issues within the context of international, industrial or high technology marketing is almost nonexistent.

Related literature dealing with internationalization of operations among small and medium-sized manufacturing firms has been examined by Bilkey and Tesar (1977). A significant attempt to integrate all related literature dealing with issues leading to internationalization of smaller firms was made by Bilkey (1978) and recently reexamined by Aaby and Slater (1989). Related material dealing with export strategies was presented by Piercy (1982) and Luostarinen (1979). Empirically-based literature dealing specifically with development and marketing of professional or more accurately engineering services in both domestic and international settings generally does not exist.

Literature focusing on the issues of technological changes were discussed by Appleton (1977) and previously by Bruno and others (1973). A more recent discussion of technology transfer by large firms to smaller firms was presented by Yeoman (1984). An overview of technological issues as they relate to small and medium-sized firms was developed by Rothwell and Zegveld (1985). More focused discussion on the issues of technology among smaller firms fabricating equipment for large clients was presented by Tesar and Velu (1989).

Foreign Market Entry by Engineering Firms

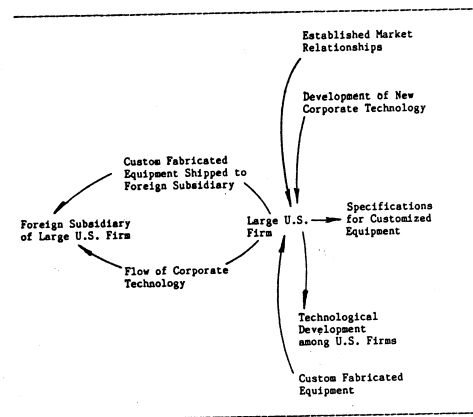
The entrepreneurial engineering firms are reluctant to enter foreign markets. Those firms that are at the lower level of technology have a relatively low volume and frequency of export orders. As they improve their technology they tend to respond more aggressively to foreign opportunities. The firms that have the most advanced technology tend to export their services routinely. These firms get involved in international operations almost exclusively through domestic clients.

The process of foreign market involvement generally begins as a routine request from the U.S. parent firm for equipment that is to be shipped to a foreign subsidiary. The engineering firm fills these orders as long as the process of

shipping and installing the equipment is completely managed by the client. In this situation, the client is also responsible for any required engineering changes, manuals, documentations, or shipping arrangement due to the requirements inherent in the foreign market where the equipment will be used. The engineering firm is responsible only for fabrication and local delivery of the equipment according to the specifications provided by the U.S.-based client.

In interviews with top managers of large client firms, it became clear that the parent firms diffuse information and technology to their subsidiaries through the type of equipment that they send to them. Most large U.S. firms develop their technology domestically and implement the technology in their foreign operations through equipment transfer. It was found that the engineering firms seldom work directly with the clients' foreign subsidiaries; yet, in most cases, foreign subsidiaries can identify the engineering firms that fabricated equipment obtained from U.S. parent firms. These relationships are outlined in Figure 1.

FIGURE 1
U.S. LARGE FIRMS AND THEIR FOREIGN SUBSIDIARIES



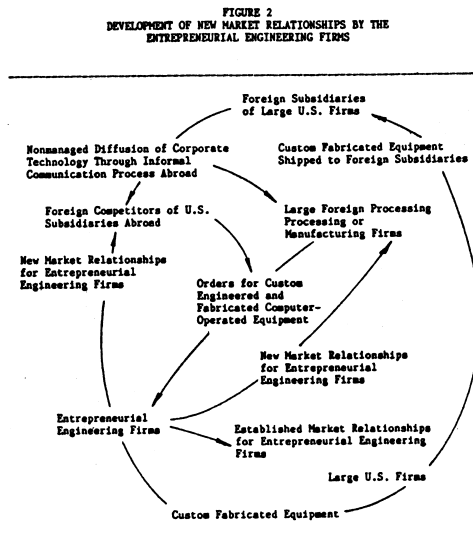
The passive attitude of engineering firms is further illustrated by the fact that if an unsolicited order from abroad is received, the order is generally ignored, unless it comes from an informal source within the domestic client's foreign subsidiary. In that case, the order is turned over to the domestic parent firm for verification and processing.

Those engineering firms which are aggressively seeking clients in foreign markets not only fill orders from foreign subsidiaries directly, but also fill orders from two other distinct groups of foreign clients. The first group consists of direct foreign competitors of foreign subsidiaries of domestic clients. These firms frequently operate side-by-side with the foreign subsidiaries in foreign markets. The second group includes large foreign firms that are competing directly with the large U.S. firms internationally.

The results of this study suggest that initially

all orders received by the engineering firms from abroad are unsolicited, primarily due to the firms' passive attitude. Over time, as their attitude towards foreign markets changes, they become aggressive and proceed to actively solicit orders and to develop new market relationships.

The most technologically advanced engineering firms tend to be the most aggressive towards foreign markets. These firms generally work closely with both domestic clients and all available groups foreign clients. They are very successful in competing with the large foreign engineering firms that originally displaced them from their traditional markets. These relationships are described in Figure 2.



The most important conclusion that can be reached from the above analysis is that there appears to be a strong correlation between a firm's technological capabilities and the degree to which the firm will be involved in international markets. Therefore it can be hypothesized that the level of technological sophistication of an entrepreneurial engineering firm determines the nature and degree of its foreign market involvement.

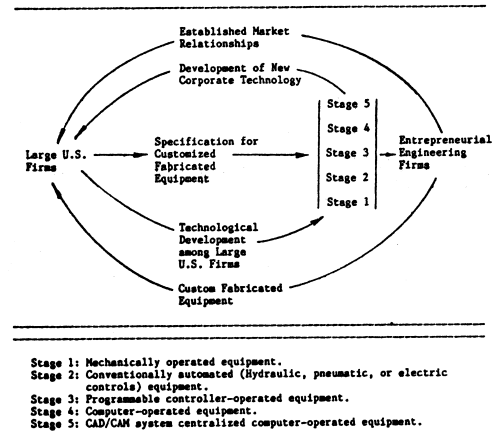
Technological Development

Consequently, any technological development among the entrepreneurial engineering firms must be examined within the context of the technological climate available to both the engineering firms and their clients, the large firms. The available optimal technology can be defined according to the general technological developments dictated by the external business and societal environment in which the firms operate.

The current technological climate among the large client firms consist of five stages. The first stage focuses on the firm's ability to engineer and operate mechanical processing or

manufacturing equipment. The second stage focuses on the firm's ability to engineer and operate conventionally automated equipment. This includes all hydraulically, pneumatically, and electrically controlled equipment. The third stage focuses on the firm's ability to engineer and operate equipment that is controlled by a programmable controller. The fourth state focuses on computer operated equipment. And, finally, the fifth stage focuses on the firm's ability to utilize CAD/CAM equipment in its operations. These stages and their relationships are outlined in Figure 3.

FIGURE 3
TECHNOLOGICAL DEVELOPMENT AMONG LARGE CLIENT FIRMS



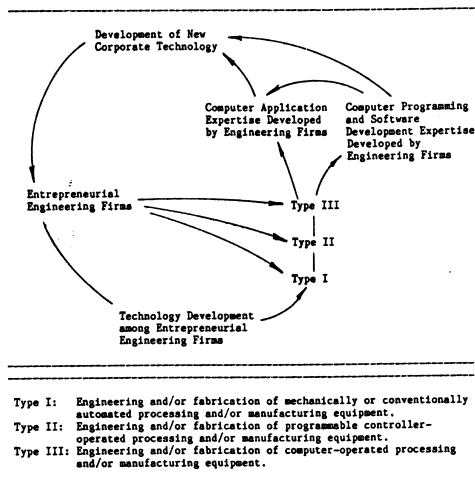
The above description of the five stages of technological development was synthesized from the external business and societal environment and it applies directly to the large client firms. It does not, however, apply to the technological development of the entrepreneurial engineering firms.

The engineering firms follow their own technological development curve. Based on the information generated from the engineering firms, their technological development curve can be characterized by three different types of engineering scenarios presented in Figure 4.

The type I engineering firms engage in both the first and second stages described above. The type II engineering firms are equivalent to the third stage and the type III engineering firms to the fourth stage. The engineering firms have not developed their expertise to participate in the engineering or fabrication of complete CAD/CAM equipment described in the fifth stage above. Instead, these firms tend to diversify into the development of computer application expertise directed towards engineering and fabrication of centrally computer-operated equipment. In addition, some of these firms also develop expertise in computer programming and software development for computer operated equipment.

The technologically most advanced engineering firms fabricate equipment of all three types and perform the two specialized functions of computer

FIGURE 4
TECHNOLOGICAL DEVELOPMENT AMONG ENTREPRENEURIAL ENGINEERING FIRMS



applications and software development. These engineering firms have progressed farthest technologically and are successfully competing in foreign markets.

Some implications of these findings can be summarized as follows. In order for the large firms to compete internationally, they have to remain technologically current and cost efficient. The technology that enables them to remain competitive can no longer be generated within the firms, but must be introduced from outside. To a degree this implies that automation processes can no longer be internally developed, but can only be introduced through purchases of automated components and assemblies from outside, frequently from foreign vendors. The staff engineers in the large firms become integrators of automated processes rather than designers of equipment. Under these circumstances, the corporate engineers cannot continue to cooperate with the entrepreneurial engineering firms.

The unexpected element in this process is that the automated equipment designated for process integration frequently needs to be modified to meet continued performance and quality requirements of the large firms. The regional and local engineering firms are approached to perform these modifications. When the engineering firms work through these modifications they learn how to build similar or even more advanced equipment, and therefore, improve their internal technology. The development of this expertise generated national and international demand for these new types of entrepreneurial engineering firms.

Future Research

In order to understand foreign market involvement and technological changes among the entrepreneurial engineering firms, it is essential to empirically examine the three fundamental issues

that were introduced in this study: (1) to what extent must the entrepreneurial engineering firms grow technologically to develop a sufficient market niche? (2) what are the competitive and market factors that the entrepreneurial engineering firms will face as they try to move along their technology curve? and (3) what is the level of association between the entrepreneurial engineering firm's technological position and its involvement in international operations? Answers to these questions might significantly improve the future success and competitive positions of entrepreneurial engineering firms.

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PEOPLE AS PRODUCTS: AN EXPLORATORY STUDY IN A MARKETING EXCHANGE CONTEXT OF SINGAPORE

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Abstract

The use of the exchange theory as a guiding paradigm or testing of specific resource exchange issues has only been a recent phenomenon. One of these efforts was by Hirschman (1987) when she examined personal dating advertisements as examples of complex, heterogeneous marketing exchange. This study is a replication of Hirschman's work but in the context of an oriental society. The study is relevant in view that marriage is fast becoming a social issue in Singapore.

Introduction

The idea of marketing as an exchange process was introduced more than a decade ago (Bagozzi 1975). Since then, the exchange concept has often been featured in the literature (Bagozzi 1978, 1979; Kotler 1972, 1979, 1984; Hirschman 1987), and proposed as a useful platform to analyse marketing transactions from both a traditional economic (Stern and Reve 1980) and non-economic perspective (Fox and Kotler 1981). The exchange concept was also recently incorporated in the updated definition of marketing developed by the American Marketing Association (Brown 1985).

Although the exchange idea has proved conceptually robust within the marketing discipline, the marketing literature contains few empirical studies using exchange theory as a guiding paradigm or testing specific resource exchange issues (Hirschman 1987). In an effort to address this shortfall, Hirschman (1987) examined personal dating advertisements as examples of complex, heterogeneous marketing exchange. Several hypotheses about the exchange resources offered and sought by both sexes were tested. The results provided useful insights into human dating.

Hitherto, as far as we can ascertain, no study has been conducted in the Singapore context using the exchange theory as a framework. The last decade has seen rapid changes in the island nation in terms of social norms and educational achievements. In particular, well educated men and women are not getting married as they should. This study which replicates Hirschman's (1987) study on people as products, is therefore timely and would offer valuable insights into this social phenomenon. The population of interest in this study is the undergraduates of the National University of Singapore (NUS) -- the only University in Singapore. These undergraduates would soon join the growing ranks of the unmarried graduate population and their perceptions on the marriage issue would therefore be quite representative of this population.

Theoretical Framework

The theoretical framework for this paper draws upon Foa's theory of resource exchange (Foa 1976; Foa and Foa 1974). Foa describes social interaction in terms of an exchange. "Social experiences are interpersonal encounters in which resources are given and/or taken away ... Whether or not an exchange will take place depends on two conditions ... One pertains to the motivational states of the potential exchangers, their need to receive and capacity to give; the other set refers to the appropriateness of the environment for an exchange of a particular type." (Foa and Foa 1974).

Foa's theory identifies six categories of resources: love, status, information, money, goods and services (see Donnenworth and Foa 1974, p.786, and Hirschman 1987, p.89 for definitions).

In this research, the framework described by Foa would be adapted to study the exchange in human dating behavior. Spouses are routinely selected on the basis of wealth, social status, and political alignments (Delderfield 1981). Romantic love and compatible temperament were considered inappropriate variables upon which to evaluate a mate. For example, Mitchison (1982, p.174) wrote that Lord Argyle's (1645-1729) choice of a second wife was due to her wit and beauty and not social position. Thus, the mating behavior is often an exchange behavior in which males and females offer traits of themselves in "exchange" for traits that they seek in their partners.

Drawing upon the work of Hirschman (1987), this study attempts to examine the pattern of heterogeneous resources offered and sought in exchange between men and women. It investigates what resources men sought from women, as well as what resources women sought from men in exchange.

Methodology

A list of 10 personal resource categories -- love, physical attractiveness or status, educational status, intellectual status, occupational status, entertainment services, money, demographic information, ethnic information, personality trait information -- which men and women offered and sought as identified by Hirschman (1987) were used as a starting point for this study (see p.101 of her study for definitions of the 10 resource categories). An indepth focus group interview was held with five business major students to evaluate the appropriateness of using the 10 resource categories. Definitions of the 10 resource categories were given. Following the discussion,

the entertainment service category was found to be generally vague and was subsequently dropped from the list of items. In addition, it was found that ethnic and demographic information were better combined together. Finally, personality was dropped as it was considered too subjective and irrelevant as it could not be easily ascertained through advertised statements. Thus, the final list of resource categories that was tested was seven -- love, physical attractiveness, educational status, intellectual status, occupational status, money, and information (ethnic and demographic information).

A questionnaire was developed based on these items. All items were scaled from 1 (Not Important) to 7 (Very Important). The questionnaire were pretested on a group of 10 students staying in a residential hall.

Hirschman's (1987) hypotheses were used as a basis for this study. She cited the consensus of Buss (1985), and Buss and Barnes (1986) that physical attractiveness/beauty is sought by both men and women, but the former seek this attribute more frequently in women than the converse. Thus:

H₁: Men will more frequently seek physical attractiveness resources than will women.

Furthermore, because this exchange norm is believed to be socially shared and therefore accepted by women:

H₂: Women will more frequently offer physical attractiveness resources than will men.

Hirschman also cited Buss (1985) and Elder (1969) who concluded that women have a tendency to prefer men with above average earning capacity (that is, money resources) and its associated components (that is, educational, intellectual and occupational status), whereas men do not value these three resources as highly as women. Thus:

H₃: Women will more frequently seek money resource than will men.

H₄: Women will more frequently seek educational status resources than will men.

H₅: Women will more frequently seek occupational status resources than will men.

H₆: Women will more frequently seek intellectual status resources than will men.

Because this exchange norm is likely to be socially shared and therefore accepted by men:

H₇: Men will more frequently offer money resources than will women.

H₈: Men will more frequently offer educational status resources than will women.

H₉: Men will more frequently offer occupational status resources than will women.

H₁₀: Men will more frequently offer intellectual status than will women.

Finally, four more hypotheses by Hirschman were also tested in this study. They were:

H₁₁: Women will more frequently offer love resources than will men.

H₁₂: Women will more frequently offer information (ie. on demographic, ethnic) resources than will men.

H₁₃: Men will more frequently seek love resources than will women.

H₁₄: Men will more frequently seek information resources than will women.

To test the above hypotheses, students from three faculties were chosen -- Arts, Business Administration and Engineering. These three faculties were chosen to give a mix of NUS students for the study. Questionnaires were distributed to all the five residential Halls in NUS. A total of 200 questionnaires were sent in November 1988, out of which 198 were usable. Of the sample, 70 were from Business Administration, 62 from Arts and 66 from Engineering (See [Table 1](#)).

Table 1
Breakdown of Sample by Sex and Faculty

Sex \ Faculty	Bus Ad	Arts	Eng	Total
Male	34	20	33	87
Female	36	42	33	111
Total	70	62	66	198

Analysis and Findings

The ANOVA means and Z-statistics computed for the hypotheses are shown in [Tables 2, 3 and 4](#). Because of the manner in which the questionnaire items were written in a simulated advertisement, there were two approaches of examining the hypotheses. The questionnaire described the prescribed set of resources the respondent possessed and also the set of resources he/she desired to receive in return. One approach of examining the hypotheses was to compare the respondents' answers across genders -- that is, what women offered versus what men sought and what men offered versus what women sought. This set of analysis, sequentially by hypothesis, is given in [Table 2](#). The other approach of examining the same hypotheses was to compare the respondents' answers within genders -- that is, what women offered versus what women sought in their simulated advertisements and what men offered versus what men sought in their simulated advertisements. These data are provided in [Tables 3 and 4](#). Ideally, the two modes of comparisons should lead to similar findings.

The data in [Table 2](#) show that hypotheses 1, 3, 4, 5, 6, 10 and 14 were accepted. The results for hypotheses 11 and 12 were significantly reversed and the other hypotheses were rejected at 10%

significance level. These findings showed that male undergraduates more frequently sought physical attractiveness resources (H_1 : $p=0.000$) and information (H_{14} : $p=0.076$) from the opposite sex than vice versa. In return, they more frequently offered intellectual status in exchange (H_{10} : $p=0.042$). In addition, contrary to expectations, male undergraduates more frequently offered love (H_{11} : $p=0.027$) and information (H_{12} : $p=0.060$) resources than the females.

Table 2
Male and Female Intergender Comparisons
(ANOVA Means and Z-Statistics)

Hypo.	Male Mean	Female Mean	Z-Score	Sig.
1	5.149	4.108	7.06	0.000
2	4.000	4.063	- 0.33	n.s.
3	2.678	3.649	5.21	0.000
4	4.632	5.216	3.15	0.001
5	4.115	5.081	5.19	0.000
6	5.333	5.604	1.99	0.024
7	3.035	3.180	- 0.74	n.s.
8	4.782	4.811	- 0.14	n.s.
9	4.724	4.676	0.26	n.s.
10	4.954	4.685	1.74	0.042
11	5.828	5.460	1.94	0.027
12	5.023	4.622	1.56	0.060
13	6.345	6.414	- 0.51	n.s.
14	5.115	4.739	1.44	0.076

n = 87 male, 111 female respondents
n.s. = not significant

Female undergraduates, on the other hand, more frequently sought monetary resources (H_3 : $p=0.000$), educational status resources (H_4 : $p=0.001$), occupational status resources (H_5 : $p=0.000$) and intellectual status resources (H_6 : $p=0.024$) from their male counterparts. In total, 9 (including two in reverse order) of the 14 hypotheses were supported. This contrasted with only 5 out of 16 hypotheses in Hirschman's (1987) study.

The finding on hypothesis 1 was congruent with that of Buss (1985) and Buss and Barnes (1986). Support for hypotheses 3, 4, 5 and 6 were also consistent with those of Buss (1985), Elder (1969) and Vandenberg (1972).

The results on resource sets sought suggested that, at least in the undergraduate population from which the sample was drawn, women disproportionately sought more resources from men. For example, all four female "seek" hypotheses (H_3 to H_6) were supported (see Table 2) and women were found to seek more and offer less in all 7 resource categories, with significant differences in 6 of them (see Table 3). This was not true in the case of men where the results were mixed (see Tables 2 and 3). Thus, resources sought appeared to be gender-linked with female-linkage in preponderance.

These findings were similar to those of Spence and Helmreich (1978) who found some evidence that exchange resources might be gender-linked,

Table 3
Female Intragender Comparisons
(ANOVA Means and Z-Statistics)

Resource	Mean Offered	Mean Sought	Z-Score	Sig.
Money	3.180	3.049	4.20	0.000
Love	5.460	6.414	8.96	0.000
Physical Status	4.063	4.108	0.39	n.s.
Educational Status	4.811	5.216	4.08	0.000
Occupational Status	4.676	5.081	3.80	0.000
Intellectual Status	4.685	5.604	9.85	0.000
Demographic/ Ethnic Info	4.622	4.739	0.34	0.093

n = 111 female undergraduates
n.s. = not significant

especially before the advent of women's liberation. With the entry of the majority of women into the workplace (Bartos 1981), occupational status resources -- and its two primary determinants, educational status and intellectual status -- generally were equally accessible to both sexes in the Western society. As a result, it was not surprising that Hirschman (1987) did not find many significant differences in her study. In the Singapore context, at least as far as NUS undergraduates were concerned, it appeared that they perceived these three resources to be more attributed to men than women. Perhaps, Singapore has yet to catch up with the West in the social strive for sexual equality.

As for the resources offered by either party, the finding suggested that men appeared to offer more resources than women (H_{10} to H_{12} of Table 2), although they also sought resources from the latter (see Table 4).

Table 4
Male Intragender Comparisons
(ANOVA Means and Z-Statistics)

Resource	Mean Offered	Mean Sought	Z-Score	Sig.
Money	3.036	2.678	-2.09	0.020
Love	5.828	6.345	3.54	0.000
Physical Status	4.000	5.149	8.31	0.000
Educational Status	4.782	4.632	-0.75	n.s.
Occupational Status	4.724	4.115	-3.72	0.000
Intellectual Status	4.954	5.333	2.44	0.008
Demographic/ Ethnic Info	5.023	5.115	0.76	n.s.

n = 87 male undergraduates
n.s. = not significant

There were two significant reversals from the expected outcomes. Male undergraduates offered

proportionately more love resources ($H_{11}:p=0.027$) and more demographic/ethnic information ($H_{12}:p=0.060$) to female undergraduates than vice versa. It is pertinent to note that these two resources were also sought by female undergraduates (see [Table 3](#)). Thus, contrary to Foa's opinion (Foa and Foa 1974), the love and information resources might be able to provide male undergraduates additional leverage in the exchange transaction because they were sought by the other potential party to the exchange.

As stated earlier, hypotheses 3 and 13 were found to have significant interactive effects. They were thus examined in greater details (see [Table 5](#)). For hypothesis 3, all three faculties showed results in the same direction -- female undergraduates sought more money resources than male undergraduates -- although there was no significant differences among the engineering students.

Table 5
Male and Female Intergender
Comparisons by Faculty
(ANOVA Means and Z-Statistics)

Hypo.	Faculty	Male Mean	Female Mean	Z-Score	Sig.
3	Bus Ad	2.971	3.750	2.23	0.015
(Women	Arts	2.000	4.000	6.54	0.000
Seeking	Eng	2.788	3.091	1.09	0.141
Money)					
13	Bus Ad	6.235	6.472	-0.77	n.s.
(Men	Arts	6.000	6.429	-2.09	0.021
Seeking	Eng	6.667	6.333	2.18	0.0165
Love)					

n (Bus Ad) =		34 males, 36 females			
n (Arts) =		20 males, 42 females			
n (Eng) =		33 males, 33 females			
n.s. =		not significant			

For hypothesis 13 -- male undergraduates sought for love more than women -- surprising results were obtained. While Engineering students conformed to expectations, there were no significant differences among Business students. More interestingly, the results for the Arts students were significantly different in the opposite direction -- that is, female Arts students sought love more than men. A possible reason for this could be that in Arts, the girls were more liberated than the girls in Engineering and would expect more loving "liberated" husbands. It is worth noting that the study by Hirschman (1987) found no significant difference between the love sought by both males and females. Perhaps the more liberated and modern (this is a commonly held view although whether this stereotyping is true cannot be objectively determined) males and females in Arts are more like their counterparts in the West rather than the more traditional males and females in Engineering. However, the results must be taken with caution as the sample size for males in Arts was small (only 20 males).

Discussion

Based on the data in [Table 2](#), the cross-gender exchange transaction appears to be gender-linked (except for love) with regard to sought resources -- monetary, educational status, occupational status and intellectual status resources which female undergraduates sought; physical attractiveness and demographic/ethnic information resources that male undergraduates sought. However, it appeared that the resources offered by either party were not gender-linked except for intellectual status offered by men. Therefore, only one resource, namely intellectual status, matches the quality that women sought and men offered in an exchange transaction. The data in [Tables 3](#) and [4](#) supported these intergender exchange transaction conclusions, and also extended and clarified them. The first extension drawn from the intragender comparisons was that female undergraduates sought more resources than they offered. Of the seven resources desired and sought by female undergraduates, only one, namely physical status, showed a non-significant result.

A second extension to the initial conclusions was that significantly, both male and female undergraduates sought more love than they offered ($p=0.000$). Therefore, love resource was not gender-linked. One motivation for men and women to use a personal advertisement might be that they were "looking for love". However, Foa's (Foa and Foa 1974) research and that of others (Brinberg and Wood 1983) suggested that the only resource generally considered acceptable in exchange for love is love. Hence, to effect a successful exchange transaction, one must be prepared to give love so as to get love. Material things such as money, beauty and personal information appeared unlikely to "buy" the resource that many of these undergraduates were seeking -- love.

A final extension to the initial conclusions concerned intellectual status. Both male and female undergraduates sought more intellectual status (female, $p=0.000$, male, $p=0.008$) than they offered. This result is consistent with the relatively high educational qualification of the sample of undergraduates. However, on a comparative basis, female undergraduates more than male undergraduates tend to prefer their partners to be educationally superior as the intergender comparison results showed (see [Table 2](#)).

Implication and Conclusion

This study has shown that personal resources sought and offered by male and female undergraduates are significantly different. It also shows that, with the exception of love resources sought, the commonly held stereotype that women seek more wealth, education, occupation and intelligence while men seek more good looks and demographic information seem to be supported by this study.

This result is very significant given the

government's efforts to convince males and females (especially graduates) to be more realistic in their marriage partner selection criteria. The government is trying to get the males to lower their demand for good looking females and at the same time encourage males to accept females who are their intellectual equal or even superior. This study has shown that the government's concern is well founded. It is thus important for males and females to have more realistic expectations of their marriage partners.

Attitudes and value systems of humans are slow to change. Meanwhile, the findings of this study have marketing implications at a personal level. Men and women should capitalise on what the opposite sex desire in their potential mates by projecting, where possible, the desired qualities during social encounters and computer dating scenarios. For example, men could "market" their monetary, educational, occupational and intellectual resources to women as these resources seem to be desired by the latter. By doing so, the probability of finding a suitable life partner could perhaps be enhanced. Of course, there are other intrinsic factors involved besides the cynical bargaining of money, talent, status and love.

It is interesting to note that more hypotheses were accepted in this study than in Hirschman's. This could indicate that Oriental society is still more tradition bound than the West. This is of course not surprising as it is a commonly held view that the Westerners are more liberated and modern in outlook. Thus as Singapore modernises, there is a possibility that our results will change and approach that found by Hirschman. If that is the case, the government's worry would then be a problem that may be resolved by itself where males would be more open about marrying their intellectual equal/superior and stress less on good looks. However, till that happens, the government's efforts to promote value change should be continued.

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ABSTRACT

The present investigation compares the impact of time oriented advertising appeals from two nearly identical experimental studies, one conducted in the United States and the other in Australia. More specifically, it focuses on both present oriented appeals and future oriented appeals for both a high involvement product and a low involvement product and their main and interactive effects on attitude toward (1) the advertisement and (2) the brand advertised and purchase intention. Both studies further assess participants' individual time orientations.

INTRODUCTION

The perception of time varies dramatically among individuals and significantly across cultures (Hall, 1959; Levine and Wolff, 1985; Lindquist and Lane, 1989). Figuratively speaking, a person may be said to be living in the past or in the future as opposed to the here and now. To a large extent, the individual's personal time orientation should be shaped by his/her cultural background and influenced by its values. Just as various cultures are described as progressive, fast-paced or futuristic others are described as laid back or even backward; similar labels can be placed on society's members.

Because time so permeates everyday life, it is often taken for granted. Here it should be noted that time can be processed in three different ways: procedure time, circular time and linear time (Hall, 1959). Notwithstanding, a prospect's response to an advertising claim may also be affected by the consumer's time orientation, the temporal orientation of the message's appeal, or both.

Consumers residing in market-oriented economies are both need-driven and goal-oriented. As such, customers and prospects are continuously seeking to satisfy both innate and socially acquired needs. The latter may differ appreciably from one cultural environment to another. As a consequence, the individual consumer, regardless of background, is often either actively or passively involved in product related decision-making (Stone, 1984). Regardless of the energy expended, the buyer usually anticipates that the attainment of the product or service will satisfy his or her purchase motives. Moreover, the acquisition of the advertised brand will contribute to the solution of a problem or provide either immediate or desired future benefits.

Most advertisements contain both factual product-related information and appeals to produce favorable dispositions and/or prompt action. The brand's appeal could logically be directed either to immediate gratification or a desired future benefit. Does the decision to emphasize present benefits vis-a-vis future gratification produce different responses? More specifically, will appeals to the "here and now" in comparison with appeals to a "future time" generate more favorable attitudes or favorable behavioral intentions? To what extent, if any, does the individual's time orientation affect response? Will

there be appreciable differences in responses between consumers from two separate cultures?

Little appears in the marketing/advertising literature on time and its effects on consumer response (Schar, 1971; Jacoby, Szybillo and Berning, 1976; Settle, 1979; Hornik, 1984; Gross and Sheth, 1989; Lindquist and Lane, 1989). Empirical research in the behavioral sciences (Mischel and Metzner, 1962) has indicated that individual's choices between present and future reward is based upon the expectation that the reward will actually occur and the individual's preoccupation with the future (Klineberg, 1968). A study by Settle, Alreck, and Glasheen (1978), focusing on adult consumers, reported future-oriented individuals to be more consumption-oriented than their past-oriented counterparts. In another study, Settle, Belch and Alreck (1981) found that the future-oriented person is more likely to be an opinion leader and shows greater concerns for risk. Only one previous investigation (Holmes and Calvin, 1986) directly centered on the relative effectiveness of time-oriented appeals. Their study focused on graduate school enrollment and predicted undergraduates would be more responsive to appeals promising future benefits than those pertaining to present concerns. The hypothesis was not accepted; the main effects being overshadowed by covariate effects of predisposition.

PRESENT STUDIES

Research on time can be classified into three broad categories: socio-cultural, economic, and psychological (Settle, 1979). This paper encompasses both the socio-cultural and the psychological perspectives. It presents highlights resulting from two similar experimental studies; one conducted in the United States (Holmes and Wu, 1989) and the second conducted in Australia. Each sought to measure the comparative effectiveness of present-oriented advertising appeals, i.e., those directed to the "here and now" and assuring immediate gratification versus appeals which promised future benefits. Each study viewed time in a linear fashion.

The American study focused on four product categories which reflected variations in level of consumer involvement and frequency of purchase. Previous research on category involvement levels (Lastovicka and Gardner, 1979) combined with observation of purchase patterns lead to the selection of the following categories: beer, high purchase frequency, high involvement; bar soap, high purchase frequency, low involvement; light bulbs, low purchase frequency, low involvement; and jeans, low purchase frequency, high involvement. These choices have been confirmed in a pretest.

The research plan initially called for the inclusion of the same four products in the Australian study. A noticeable difference, however, between prospective subjects from the two cultures became immediately evident. College students in Australia did not perceive the four products the same way as did their American counterparts. Whereas, Americans perceived

beer as high involvement, the Australians perceived it as low involvement. Conversely, the Australians perceived soap as high involvement whereas it was rated as low involvement by the sampled American students. Therefore, the Australian study's was reduced to two categories viz. low purchase frequency, low involvement light bulbs and low purchase frequency, high involvement jeans.

The investigations, therefore, compare the relative effectiveness of future oriented appeals in relation with present oriented appeals for both a high involvement category and a low involvement category between the two countries. The dependent measures for both studies were (a) attitudes toward (1) the ad and (2) the brand advertised and (b) intention to act. It was predicted that present oriented appeals would perform better in low involvement decisions whereas future oriented appeals would produce greater effects for high involvement decisions. Low involvement decisions are made more impulsively with comparatively little information processing and in a here and now context; whereas, in a more involved situation the prospect would be more deliberative and consider a more extended time perspective (Assael, 1987).

The investigations additionally considered the time orientation of the subjects to ascertain whether Australian students' time orientations differed from their American counterparts and the extent to which such orientation might affect attitudes and intentions to a time oriented message. According to consistency theory (McGuire, 1972), future oriented respondents would respond more positively to future appeals, whereas present oriented individuals will respond affirmatively to present appeals.

METHOD

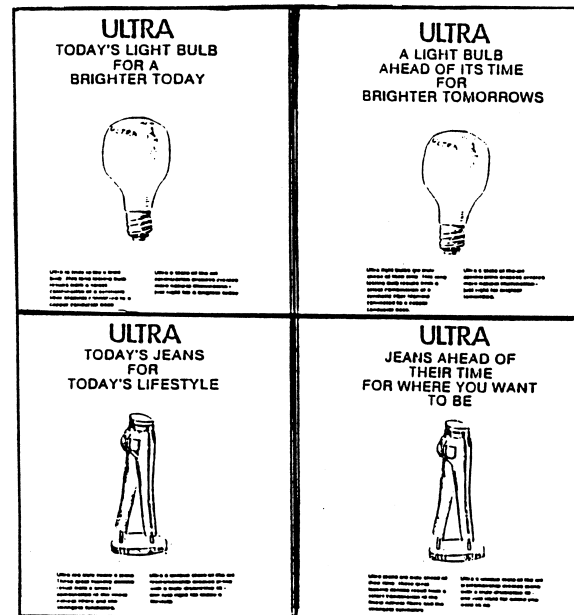
A fictitious brand, ULTRA, was created for each of the chosen product categories. Because the name is fictitious, its usage precludes bias resulting from subjects' predispositions toward existing brands or from favoritism had more than one name been selected.

Two versions of rough layouts for sample ULTRA advertisements were created. The principal difference between each is the time orientation clearly noted in the headline and then developed in the body copy.

A three-part questionnaire was constructed. The first section contained one ULTRA test advertisement. Part two contained fourteen seven-point scaled questions to measure attitude toward the ad, the brand advertised, and intention as well as manipulation verification questions. Involvement has been a nebulous concept (Stone, 1984) and is measured in this study by the effort expended prior to making a mental choice or engaging in behavior. The final part contained the Gonzales and Zimbardo (1985) time orientation scale.

Two hundred and forty subjects in marketing classes at a large Midwestern university served as participants for the between subjects experiment in the United States. Subjects were assigned to one of eight treatment groups (2 message appeals x 4 product categories) and then completed the questionnaire. The procedure in Australia was nearly identical but the test was limited to two product categories. Students from a Queensland business school served as subjects. In a like manner, they were subdivided into four groups and administered the questionnaire.

FIGURE 1
SAMPLE ADVERTISEMENTS USED IN BOTH
U.S. STUDY AND AUSTRALIAN STUDY



RESULTS

To facilitate comparisons, the purchase frequency factor operant in the U.S. study was collapsed such that the analyses are restricted to two treatment factors, appeal orientation and product involvement.

Manipulation Check

Manipulation check questions verified that each treatment had been correctly identified. Among both samples, the main effect for appeal orientation was statistically significant ($p < .000$ in U.S. and in Australia) and in the right direction, assuring that subjects perceived differences between the sets of message appeals. Highly significant main effects for involvement were also observed ($p < .000$) across all three dependent measures in both studies, indicating that subjects recognized differences in product involvement levels.

Effects of Subjects' Time Orientation

An analysis of the subjective measure of time orientation revealed that 92% of the U.S. sample perceived themselves as future oriented, while the remainder saw themselves as present oriented. Among the Australian sample, 88% reported future orientation and the remainder indicated a present orientation. The difference between the samples is not significant.

Both the objective time orientation measures and the subjective measure were treated as a factor and cross analyzed with the message appeal to detect possible interaction. Between the samples, no statistically significant interaction effect was found between an individual's time orientation and the time orientation of the appeal regardless of whether the former had been measured either objectively or subjectively. Thus, the expectation that future oriented subjects would respond more positively to future oriented appeals was not supported.

Interaction Effects

Table 1 presents the mean interaction responses obtained from both samples. As shown, the dependent measures were further classified in terms of their cognitive, affective or holistic impact components.

Among U.S. subjects there were only two statistically significant interaction effects. The impact of message treatment on subjects' attitude toward the ad significantly depended upon the level of involvement ($p < .044$). Contrary to expectations, a future oriented appeal generated a more positive response than did the present oriented message (3.37 vs. 2.67) in a low involvement decision. No significant differences were found between the two appeals in high involvement situations. Subjects' overall reaction was also dependent upon their involvement. Again there was no significant difference for high involvement (3.12 vs. 2.83; $p < .240$), but the future appeal generated greater scores (3.47 vs. 2.92; $p < .031$) in the low involvement situation.

Among Australian subjects, there was only one significant interaction. Future oriented appeals produced a significantly higher evaluation toward the brand than did the present oriented message (3.32 vs. 2.44; $p < .007$) in the high involvement situation, but little difference occurred in the low involvement case (4.81 vs. 4.54; $p < .897$).

Main Effect

Because the interactions between the time orientation of the appeals and level of involvement were for the

most part not significant, an examination of the studies' main effects becomes even more meaningful (Pedhazur, 1982). The main effects for both message appeals and product involvement are presented in Table 2. Present oriented appeals among the U.S. sample scored significantly higher in terms of believability, recall, and fit with today's life style. The future appeal scored significantly higher in impressiveness. Among the Australians, the future appeal contributed to a more significant positive evaluation of product quality.

For product involvement, U.S. subjects gave significantly lower ratings of informative, realistic, convincing, impressive and performance in the higher involvement situation than in the low involvement category. The ads, however, were judged more humorous under the more involved situation. Similar patterns were noted among the Australians.

They also reported a significantly lower purchase intention in the high involvement decision. The overall response patterns for the two studies are shown in Table 3. There was low consistency on the cognitive dimension either for the superiority of future appeal vs. present appeal or for the response patterns between the two samples. Nevertheless, in terms of both the affective dimension and the holistic impact dimension, there was a very high consistency. With but one exception, viz., recall, the future appeal consistently produced higher scores in both studies. For attitude toward the brand, the future message again consistently outperformed the present oriented appeal, except for products' perceived appropriateness for today's lifestyle. Again

TABLE 1
SUMMARY OF INTERACTION MEAN RESPONSES
U.S. STUDY VS. AUSTRALIAN STUDY

Dependent Variables	Dimensions	Scale Items	High Involvement				Low Involvement			
			US (Beer, Jeans) ^a		Australian (Jeans)		US (Soap, Bulbs) ^a		Australian (Bulbs)	
			PA*	FA	PA	FA	PA	FA	PA	FA
Attitude Toward Ad	Cognitive	believable	4.37	3.98	3.78	3.60	4.48	3.98	4.26	4.40
		informative	4.05	4.22	3.78	4.20	4.37	4.62	4.70	4.92
		clear	4.50	4.05	4.41	4.43	4.42	4.60	4.41	4.54
		realistic	4.12	3.75	3.59	3.81	4.47	4.48	4.44	4.44
		humorous	3.17	3.23	3.56	3.45	2.72	2.85	3.63	3.52
	Affective	appealing	3.47	3.42	2.74	2.73	3.22	3.57	2.93	3.00
		attractive	3.05	2.87	2.63	2.77	2.88	3.33	2.67	2.69
		convincing	3.40	3.20	3.15	3.39	3.48	3.90	3.63	3.72
		impressive	2.63**	2.63	2.67	3.03	2.67***	3.37	3.00	3.32
	Holistic Impact	favorable	3.12	2.83	2.63	3.26	2.92***	3.47	3.04	3.11
		overwhelming	2.27	2.31	1.89	2.48	2.18	2.59	2.32	2.56
		recall	5.38	4.73	4.56	4.39	4.88	4.59	3.93	3.67
Attitude Toward Brand	Cognitive	performance 1	3.32	3.56	2.44***	3.32	4.73	4.54	4.85	4.81
		performance 2	4.17	3.98	3.85	4.03	3.83	4.38	4.25	4.11
		quality	4.20	4.13	3.41	4.30	4.27	4.33	4.35	4.52
		life style	4.50	3.75	3.37	3.47	4.32	3.85	3.75	3.56
Intention	Conative	purchase intention	2.95	2.88	3.15	3.58	3.08	3.23	3.64	4.15

*PA indicates Present Appeal, while FA stands for Future Appeal

**on a 7-point scale, the larger the numerical value, the more positive the response

***significant at level of .05

^aBoth products were combined for the analyses.

TABLE 2
SUMMARY OF MAIN EFFECT MEAN RESPONSES
US. STUDY VS. AUSTRALIAN STUDY

Dependent Variables	Dimensions	Scale Items	Appeal Main Effect				Involvement Main Effect			
			US		Australian		US		Australian	
			P*	F	P	F	H	L	H	L
Attitude Toward Ad	Cognitive	believable	4.42**	4.19	4.02	3.88	4.17	4.44	3.68***	4.23
		informative	4.21	4.42	4.24	4.54	4.13***	4.49	4.00***	4.81
		clear	4.46	4.32	4.41	4.48	4.27	4.51	4.42	4.47
		realistic	4.29**	4.12	4.04	4.09	3.93***	4.47	3.71***	4.46
		humorous	2.94	3.04	3.59	3.48	3.20***	2.78	3.50	3.58
	Affective	appealing	3.34	3.49	2.83	2.86	3.44	3.39	2.74	2.96
		attractive	2.97	3.10	2.65	2.73	2.96	3.11	2.70	2.68
		convincing	3.44	3.55	3.39	3.54	3.30***	3.69	3.28	3.67
		impressive	2.65***	3.00	2.83	3.16	2.63***	3.02	2.86	3.15
	Holistic Impact	favorable	3.02	3.15	2.84	3.19	2.97	3.19	2.97	3.07
		overwhelming recall	2.22	2.45	2.11	2.52	2.29	2.39	2.21	2.44
			5.13***	4.66	4.24	4.05	5.06	4.74	4.47	3.80
Attitude Toward Brand	Cognitive	performance 1	4.02	4.05	3.67	4.02	3.44***	4.64	2.91***	4.84
		performance 2	4.00	4.18	4.05	4.07	4.07	4.11	3.95	4.18
		quality	4.23	4.23	3.89***	4.40	4.17	4.30	3.88***	4.44
		life style	4.41***	3.80	3.56	3.51	4.13	4.08	3.42	3.65
Intention	Conative	purchase intention	3.02	3.06	3.40	3.84	2.92	3.16	3.38***	3.89

*P = Present Appeal F = Future Appeal H = High Involvement L = Low Involvement
 **4.42 = on a 7-point scale, the higher the number, the better the response is
 ***significant at .05 level

TABLE 3
CONTRAST OF MEAN RESPONSE PATTERN BETWEEN
U.S. STUDY AND AUSTRALIAN STUDY

Dependent Variables	Dimensions	Scale Items	Appeal Main Effect		Involvement Main Effect	
			US	Australian	US	Australian
			F-P*	F-P	H-L	H-L
Attitude Toward Ad	Cognitive	believable	-	-	-	-
		informative	+	+	-	-
		clear	-	+	-	-
		realistic	-	+	-	-
		humorous	+	-	+	-
	Affective	appealing	+	+	+	-
		attractive	+	+	-	+
		convincing	+	+	-	-
		impressive	+	+	-	-
	Holistic Impact	favorable	+	+	-	-
		overwhelming recall	+	+	-	-
			-	-	+	+
Attitude Toward Brand	Cognitive	performance 1	+	+	-	-
		performance 2	+	+	-	-
		quality	0	+	-	-
		life style	-	-	+	-
Intention	Conative	purchase intention	+	+	-	-

% of match in sign 82.4% 76.5%
 *F-P = future appeal mean response minus present appeal mean response
 H-L = high involvement mean responses minus low involvement mean response

the response patterns were consistent. Overall the degree of consistency between the two samples for the message appeal was 82.4%. Respondents with but few exceptions did not rate either the advertisement or

the brand advertised as positive under a high involvement decision situation as under a low involvement situation; the degree of consistency between the responses was 76.5%.

CONCLUSION

Although the results differed from what had been predicted, the comparative responses between the two samples have shown considerable similarities. Still useful insights for research as well as potential benefits for both domestic and international marketing have been generated.

First, the pretests demonstrated that involvement for identical product categories can vacillate widely across cultures. One, therefore, should never assume the level of involvement strategy for one country will be appropriate for the same product in others.

Second, the two experiments have shown selected interaction effects between perceived level of product involvement and time orientation and that the results obtained were quite similar to each other. Participants overall tended to respond more positively to future oriented messages, which was especially apparent in low involvement situations for attitude toward the message. The appeals' time orientation had no impact on subjects' intention in either study. Perhaps it is unrealistic to expect one exposure to an ad to significantly affect one's intention. Subjects from both samples were significantly less likely to respond favorably under a high involvement situation.

Expectations that future oriented individuals would respond more positively to future oriented messages while present oriented persons would respond more affirmatively to present oriented appeals were not confirmed. Still, the scale generated similar response patterns across the studies. Notwithstanding, the majority of subjects reported a future orientation which could have severely limited the scale's ability to discriminate or predict responses.

Before generalizing the results to other product market situations, their limitations must be noted. First, the research considered only two cultures and subjects were limited to college students. Further, the investigation was restricted to selected product categories. Had either different products or subjects been used, or had the studies been conducted in more divergent cultures, dissimilar results may have been obtained. Lastly, no definite time horizon was specified in the selected test advertisements. The responses may have been different had products with either shorter or longer life expectancies been chosen.

In conclusion, the authors recommend additional research on time oriented appeals. Such investigations should be undertaken in a wide variety of both domestic and international market situations.

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SHOPPING DELIBERATENESS IN A DEVELOPING COUNTRY: AN EMPIRICAL STUDY

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Abstract

This study used personal interviews with Turkish female grocery shoppers to determine their shopping behaviors and attitudes. The sample was divided into two groups: deliberate and nondeliberate shoppers. The two groups were then compared in terms of their sociodemographic characteristics, importance placed on patronage motives, purchase location of selected grocery products, and their attitudinal orientations. Results are outlined and implications discussed.

Introduction

The study of food retailing systems in developing countries is one of international marketing's time-honored traditions (see, for example, Alawi 1986; Amine 1983; Bucklin 1977; Goldman 1982; Hilger 1980; Ho and Lau 1988; Lo, Yau, and Li 1986; Kaynak and Cavusgil 1982; Patton and Patton 1987; Riley et al. 1970; Yavas, Kaynak, and Borak 1981; Yavas and Tuncalp 1984). The interest primarily comes from the realization that improvements in the food retailing system of a country can make major contributions to the welfare of consumers and the country's economic development (Goldman 1981).

One key to understanding the nature of a retail system is through an analysis of the institutions of that system (Goldman 1975/76). Additional insights into the nature of a food retailing system surface from an examination of the consumer (behavioral) dimensions of the system. The study reported here contributes to the latter research stream by comparing a group of deliberate and nondeliberate Turkish grocery shoppers. Shopping deliberateness refers to the pursuit, acquisition, and use of information preceding and during the purchase of products. By studying the level of shopping deliberateness, it may be possible to predict the degree of adoption of supermarkets in the country studied.

Specifically, the study was designed to compare the two groups in terms of: (1) sociodemographic characteristics, (2) patronage motive importance, (3) purchase location of selected products, and (4) attitudes towards shopping.

Four research hypotheses guided the study:

H₁: Deliberate and nondeliberate shoppers do not differ in their sociodemographic characteristics.

H₂: Deliberate and nondeliberate shoppers do not differ in the degree of importance placed on patronage motives.

H₃: Deliberate and nondeliberate shoppers do not differ in their preferred purchase location for selected grocery products.

H₄: Deliberate and nondeliberate shoppers do not differ in their grocery shopping attitudes.

Methodology

Data for the study were collected through personal interviews from a sample of 320 female grocery shoppers residing in Istanbul, Turkey.

Respondents' shopping deliberateness was operationalized by summing their answers to a set of six questions (see Exhibit A). Because of the scaling method used, the overall deliberateness score of a respondent could vary from 6 to 12 where higher scores reflect greater degrees of deliberateness. The internal consistency of the index was assessed by the KR-20 formula (Peter 1979). The resulting coefficient of .57 suggested that the scale demonstrates acceptable reliability (Nunnally 1978). During the analysis stage, the respondents were arrayed according to their overall deliberateness scores and were subsequently assigned into deliberate (upper 25%) and nondeliberate (bottom 25%) categories.

These two groups were profiled according to their sociodemographic characteristics, patronage motives, purchase location (supermarket or other) of selected products and attitudinal orientations. Some of the sociodemographic characteristics were measured by categories and others by applicable ratio numbers. Comparisons of the two groups were tested for significant differences by either chi-square or t-tests. The importance of patronage motives were measured on a scale ranging from 4 = very important to 1 = not important at all. T-tests were utilized to see if the two groups differed on these measures. Chi-square tests were used to compare the two groups in terms of their preferred location for buying selected grocery products. Four-point scales

EXHIBIT A SHOPPING DELIBERATENESS INDEX

Item	Responses
1. On your grocery shopping trips, do you visit one or more than one food store?	One Over one
2. Do you prepare a shopping list before you go grocery shopping?	Yes No
3. Do you make price comparisons between different brands/grades/varieties of the same product while you shop for your groceries?	Yes No
4. Do you "total" the prices of the items in your basket <u>before</u> you check out?	Yes No
5. Do you verify the check-out clerk's accuracy while ringing up the price?	Yes No
6. Do you compare the prices on your sales slip with the prices on your groceries when you get home?	Yes No

ranging from strongly agree to strongly disagree were used to elicit information on the attitudinal orientations of the respondents. A stepwise discriminant analysis was performed to determine if these attitudinal orientations could successfully discriminate between the two groups.

Results

Sociodemographic Characteristics

Table 1 shows the results from comparing deliberate and nondeliberate shoppers in terms of various sociodemographic characteristics. The two groups are quite similar to each other on all measured characteristics except car ownership. In that instance, about 57% of the nondeliberate group are owners of cars compared to only 31% of the deliberate shopper group. Almost three-quarters of both groups are married with just over an average of 1.3 children so that household size averages about 3.3 persons for each group. Around 30% of the members of each group have college educations and another 45% or so of each group have high school educations. The age distribution within each group is also quite similar.

TABLE 1
DELIBERATE/NONDELIBERATE SHOPPER CHARACTERISTICS

Characteristic	Nondeliberate	Deliberate
Marital Status		
Nonmarried	26.9%	26.8%
Married	73.1%	73.2%
Size of Household	3.32	3.35
Number Children at Home	1.38	1.36
Education		
Primary	12.5%	12.7%
Secondary	14.1%	10.9%
High School	43.8%	45.5%
College	29.7%	30.9%
Employment Status		
Employed	44.8%	51.9%
Not Employed	55.2%	48.1%
Age		
18-24	15.2%	23.2%
25-34	25.8%	17.9%
35-44	15.2%	21.4%
45-54	30.3%	23.2%
55 or Older	13.5%	14.3%
Car Ownership ^a		
Own	56.7%	30.9%
Does Not Own	43.3%	69.1%

^ap < .05

Overall, the close similarity of the two groups does not permit the rejection of H₁.

Patronage Motives

Results of the statistical comparison of the two groups' responses regarding the importance placed on various patronage motives are found in Table 2. As can be seen, there are six motives in which the two groups differ at a significance level of <.05. The deliberate group placed greater importance on price, return/exchange

privileges, being able to select the products with their own hands, and being able to use their own knowledge in buying products. The nondeliberate group placed relatively more importance on the convenience factors of having home delivery and the store being close to their homes; they placed less importance on the store being convenient to home. Deliberate shoppers also placed somewhat (p < .10) more importance on cleanliness and having products weighed and packed while they were present.

Neither group placed much importance on such factors as credit availability, convenience of the store to their workplace, having friends shop there, and the decor and reputation of the store. Both groups place moderate degrees of importance on things like sales or advertising, parking, the atmosphere, and having clerks who know them. Greater importance was placed by both groups on other attributes such as quality, value, and variety; courteous and knowledgeable sales clerks; having desired merchandise; and fast service without having to wait in line.

TABLE 2
IMPORTANCE OF PATRONAGE MOTIVES^a

Motive	Non-Deliberate	Deliberate	t
Price	3.07	3.38	-2.35 ^b
Decor	2.08	2.17	-0.56
Quality	3.62	3.75	-1.53
Cleanliness	3.70	3.84	-1.70 ^c
Convenient to home	3.20	2.89	2.10 ^b
Credit	1.55	1.44	0.73
They know me	2.53	2.47	0.38
Convenient to work	2.05	1.90	0.79
Atmosphere	2.52	2.70	-1.05
Return/Exchange	2.07	2.71	-4.08 ^c
Variety	3.23	3.43	-1.53
Ease of access	3.25	3.33	-0.57
Home delivery	2.41	1.98	2.29 ^b
Parking	2.35	2.07	1.27
Delicatessen	2.55	2.54	0.06
Sales/Discounts	2.68	2.85	-1.10
Courteous personnel	3.40	3.54	-1.28
Reputation	2.07	2.01	0.38
Find what I'm looking for	3.28	3.42	-1.19
Prepackaged products	2.76	2.73	0.19
Fast service	3.37	3.36	0.14
Stability of prices	3.22	3.42	-1.52
Products weighed/packaged	2.61	2.91	-1.80 ^c
Ease in getting around	3.18	3.14	0.32
Pick items with own hands	3.17	3.45	-2.31 ^b
Knowledgeable salespeople	3.01	3.03	-0.12
My friends shop there	1.76	1.87	-0.71
Credit card	1.44	1.66	-1.48
Waiting in line	3.17	3.37	-1.50
My own knowledge	2.63	2.98	-2.24 ^b
Get my money's worth	3.49	3.58	-0.90
Advertising	2.24	2.29	-0.30

^aMean scores can vary between 4 (very important) and 1 (not important at all).

^bp < .05

^cp < .10

Consequently, there is mixed evidence regarding H₂. On balance, however, there are many more points of agreement between the two groups than there are significant differences. Hence, there

is insufficient evidence to warrant rejection of H_2 .

Purchase Location

Members of the two groups were compared in terms of where they purchased selected products; results are found in Table 3. There are only two product categories where the groups significantly differed in purchase location. Deliberate shoppers were much more likely to purchase sausages/hotdogs/pastrami and breakfast foods/cheese/olives/jam/butter, etc. from supermarkets.

TABLE 3
PURCHASE LOCATION OF SELECTED PRODUCTS:
DELIBERATE VS. NON-DELIBERATE SHOPPERS

Product ^a	Non-deliberate	Deliberate
Sausage/Hotdogs/Pastrami ^b		
Other	49.2%	29.8%
Supermarket	50.8	70.2
Fresh Produce		
Other	74.6%	70.2%
Supermarket	25.4	29.8
Meat/Poultry ^c		
Other	69.7%	56.1%
Supermarket	30.3	43.9
Canned Goods		
Other	45.3%	31.4%
Supermarket	54.7	68.6
Alcoholic Beverages		
Other	75.0%	66.7%
Supermarket	25.0	33.3
Soft Drinks		
Other	89.1%	80.4%
Supermarket	10.9	19.6
Fish		
Other	87.7%	87.7%
Supermarket	12.3	12.3
Dry Groceries/Rice		
Other	47.8%	35.1%
Supermarket	52.2	64.9
Detergent/Soap/Toiletries		
Other	44.8%	38.6%
Supermarket	55.2	61.4
Milk/Yogurt/Eggs		
Other	72.3%	64.3%
Supermarket	27.7	35.7
Oil/Margarine/Shortening ^c		
Other	59.7%	44.6%
Supermarket	40.3	55.4
Bread		
Other	89.4%	87.7%
Supermarket	10.6	12.3
Salt/Sugar/Spices ^c		
Other	68.7%	52.6%
Supermarket	31.3	47.4
Breakfast Foods/Cheese/Jam/Butter/Olives etc.		
Other	65.7%	44.6%
Supermarket	34.3	55.4

^aAll significance tests are chi-square with 1 d.f.

^b $p < .05$

^c $p < .10$

The same group was also somewhat more inclined to buy oil/margarine/shortening and salt/sugar/spices from supermarkets. Both groups were similarly inclined to purchase nonperishables

such as canned goods, dry groceries, and detergents from supermarkets. Perishables such as produce, meat, fish, milk, and breads were more likely to be obtained from other sources by both groups; a similar pattern is evident for alcoholic beverages and soft drinks.

Based on the preponderance of evidence, there is scant justification to suggest rejecting H_3 .

Attitudinal Orientation

Table 4 presents the results of the stepwise discriminant analysis of responses by members of the two groups to a series of forty attitude statements about their shopping behavior. Seventeen items entered the final solution. The two groups turned out to be quite different in their attitudes (group centroids were -1.53 for the nondeliberate group and 1.45 for the deliberate group); the discriminant function was significant and correctly placed almost 94% of the respondents into their proper membership group.

Deliberate shoppers tend to spend more time in their decision process, to seek and exchange information with others, and to enjoy shopping. They also believe price to be indicative of product quality, to prepare a weekly food budget, to shop around for the best price and to believe that there are price differences by store for the same merchandise. Nondeliberate shoppers, on the other hand, spend little time in preplanning and tend to make decisions while shopping in the store. They are also more old-fashioned, buy their groceries at one place, and are unconcerned about what others think of their selections.

In light of the discriminant results, H_4 may be rejected. The two groups do seem to differ in their attitudes towards shopping.

Discussion

Supermarket "technology" has two main facets: 1) a wide and fairly deep merchandise assortment covering groceries, produce, and meat as well as non-food items, and 2) a mass merchandising orientation which encompasses such things as self-service and prepackaged merchandise in addition to low profit margins and high turnover. Supermarket technology offers greater benefits over a myriad of small specialty (traditional) stores by being more efficient (resulting in lower prices and higher quality) and more effective (resulting in greater variety and the convenience of one-stop shopping). To be effective and efficient, however, supermarket operations are dependent upon the willingness of the local populace to adopt shopping behaviors that are supportive of the technology.

Neither type of shopper in this study has fully adopted supermarkets for all their grocery product needs although deliberate shoppers have to a greater degree than the nondeliberate shoppers. This is not surprising since many of the features of the supermarket conform to the deliberate shopper preferences: an emphasis on low price and the necessity of making decisions based on their own knowledge because of self-service.

TABLE 4
ATTITUDINAL CORRELATES OF SHOPPING
DELIBERATENESS: STEPWISE DISCRIMINANT ANALYSIS

Statement	Standardized Discriminant Coefficient
1. I spend a great deal of time before I buy something important	0.17063
2. I generally prefer a weekly food budget	0.51361
3. I am not concerned with what my friends/neighbors think regarding my choice of groceries	-1.16854
4. I generally buy all my groceries at one place	-0.43807
5. I often buy prepared/canned food	0.33065
6. I generally use a shopping list	-0.32205
7. I generally seek others' opinions concerning grocery products	0.23104
8. I have old fashioned habits	-0.20145
9. Shopping for groceries is an enjoyable task for me	0.18613
10. I don't mind shopping around to get the cheapest prices	0.29656
11. Price of the same brand (quality) of a product varies among stores	0.36296
12. I really cannot decide what to buy until I'm in the store	-0.19236
13. When I want something, I buy it or don't spend time thinking about it	-0.29662
14. High priced products are always good quality, low priced products are poor quality	0.13511
15. Others seek my advice on groceries	0.19089
16. I generally shop at the same places for my groceries	0.26685
17. When I get change from the cashier I put it away without counting or verifying it.	-0.30839
Group Centroids	
Non-deliberate	-1.5391
Deliberate	1.4551
Wilk's Lambda	.3046
Chi-square significance	.00001
Hit Ratio	93.81%

There are some products that the deliberate group purchases from supermarkets to a much greater degree than the nondeliberate shoppers. Supermarkets have been somewhat successful in gaining penetration into some of the nonperishable product purchases by both groups but more so among deliberate shoppers. There is still room for much higher penetration, however. With perishable items, alcoholic beverages, and soft drinks still being bought in traditional stores by members of both groups, supermarkets need to be concerned with this behavior as well. Supermarkets will find it difficult to target promotional messages specifically to either group since they are very similar in sociodemographic characteristics. Instead, supermarkets will have to use broad based appeals and rely on consumers' selective perception processes to attend to messages that are important to them. Both groups

should respond to appeals that talk about quality, value, selection, courteous and knowledgeable sales clerks, and the speediness of service. Deliberate shoppers should also respond to messages that stress price and return privileges. Greater appeal to deliberate shoppers should also occur if supermarkets could solve a dilemma: prepackaged merchandise is an integral part of supermarket technology but deliberate shoppers want to be able to select products with their own hands.

Other appeals may have greater success with nondeliberate shoppers. For example, they desire convenience to home and home delivery in spite of having greater car ownership. Perhaps this is due to their perceptions of the poor parking facilities. Supermarkets might consider offering home delivery -- a rarity in the US but commonly done by traditional stores in developing countries. The convenience of one-stop shopping should also be attractive to this group.

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MARKETING EDUCATION/MACRO MARKETING

MARKETING EDUCATION AND ALL THAT JAZZ

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Abstract

Much of the current debate on business education focuses on the relevance of academic offerings to the "real world" and the importance of internationalizing the curriculum in an era of increased global competition. Fostering students' leadership and interpersonal skills is also recognised as a significant issue. Within this context there is a growing awareness among educators of the need to integrate core theoretical concepts and practical applications, using an array of pedagogic techniques, to develop coherent and meaningful programmes of instruction.

Meeting such diverse, yet complementary, objectives presents enormous challenges. This paper outlines an attempt to address these issues in the provision and delivery of marketing education at the University of Ulster. It focuses specifically on the Postgraduate Diploma in Marketing (PGD), a programme which has been the traditional "innovator" of approaches and activities subsequently "adopted" by other business courses within the institution. In evaluating and discussing this programme the intention is, hopefully, to offer a modest contribution to a debate which, to date, shows little sign of abating.

Introduction

Recent reports on the state of business education in both Britain and the United States highlight the need to forge closer links between business schools and industry (Handy, 1987; Constable and McCormick, 1987; Porter and McKibbin, 1988). Implicitly, this view suggests a failure on the part of educators to provide a service relevant to the direct and indirect consumer. Indeed, Handy et. al (1988) succinctly highlight the perceived inadequacies of existing British academic offerings:

"Many of the courses are criticized ... for being too remote from the world of business and of management about which they claim to teach. They are accused of irrelevancy, of ignoring practical and personal competences, of creating exaggerated ambitions in the minds of their students and of reductionism, of reducing the complexities of management to over-simple rules and principles"

Similar, though perhaps less brutal, conclusions have been reached in studies of American business schools. Porter and McKibbin (1988) find evidence of a lack of integration across functional areas, a limited emphasis in the curriculum regarding the development of leadership and interpersonal skills, insufficient attention given to the "international component" and dissonance between the career aspirations of graduates and the realities of the marketplace. Verlander (1989) furthermore, concludes his synthesis of previous studies into university executive programmes as follows:

"Despite the research interest and after many thousands of hours of programme experience, the best that can be expected of existing programmes is that they 'broaden perspectives', 'engender confidence' and 'provide a prestigious credential'."

Clearly, these outcomes are not totally satisfactory and universities must re-evaluate academic offerings in the light of a generally critical assessment of their current activities. In the belief that our experiences may prove of value to other academic institutions, this paper outlines the PGD offered at the University of Ulster and discusses attempts to better meet constituents' needs. However, a brief elaboration of these constituencies and the prevailing economic and socio-political environment in Northern Ireland is necessary to set the programme in context and understand its philosophy, aims and objectives.

Northern Ireland is both fiscally and politically part of the United Kingdom. As a regional economy it has a limited local market and is geographically isolated from the "domestic" British marketplace. Moreover, the province is a small-firm economy which has witnessed the long-term decline of traditional industries such as shipbuilding and textiles; and has experienced the departure of many multinationals in a period of global recession. Attracting new investment has proved difficult due to the perceived risks associated with a location which has an unenviable, though much exaggerated, reputation for social and political unrest. As a consequence, the region suffers from high levels of unemployment, exacerbated by high birth rates and a recent rapid increase in female participation in the workforce.

Given these circumstances, industrial constituents of the programme are generally small firms, many of whom are dependant on export markets for survival and expansion. Government constituents are primarily organizations seeking to support and develop these firms and thereby stimulate economic growth.

The student constituents, therefore, tend to be employed in small firms or in government bodies which support small business. They have a wide spectrum of academic qualifications, are drawn from diverse sectors of industry and have a broad range of commercial experience. Indeed, one of the primary objectives in selection, for the PGD is invariably oversubscribed, is to ensure that a good balance exists between the public and private sector participants and between the qualifications, experience and skills of individuals in order to create conditions conducive to good programme dynamics and peer group learning.

PGD Programme Structure, Content and Pedagogic Approach

Introduced in 1980 as a response to the acknowledged lack of marketing expertise in Northern Ireland, the PGD is an executive style programme, offered over two academic years on a part-time basis. Classes, lasting six hours in total, are held weekly on an afternoon and evening. The first year comprises four course units, Marketing, Marketing Analysis, Organizational Studies and Quantitative and Financial Methods, and a two day residential (See Figure 1).

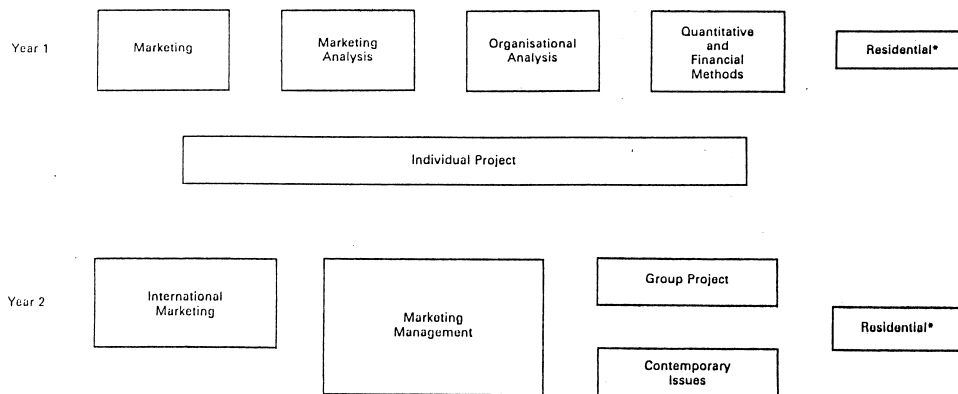
Second year consists of two key courses, Marketing Management and International Marketing, a Group Project, a series of guest seminars on "contemporary issues" and a ten day residential. The last named generally involves international marketing research conducted on behalf of Northern Ireland firms. An individual project involving the investigation of a real world marketing issue, is also undertaken.

With the exception of a small-firm orientation, the content of many of the course units is relatively traditional. Similarly, pedagogic approaches conform with widely accepted norms and include an appropriate mix of lectures, case studies, seminars, group discussions, projects and simulations. Thus, rather than focus on these elements we will seek to amplify the less conventional components and their role in achieving overall programme objectives:

The First Year Residential

This residential is held mid-way through the first year over a weekend. Involving outdoor activity based exercises, it focuses on developing leadership, group dynamics and personal and interpersonal skills. Additionally, workshops in areas such as information technology and communication and presentation skills are offered. As part of the residential each student presents and defends an outline proposal of their individual project before peers and faculty.

FIGURE 1
THE POSTGRADUATE DIPLOMA IN MARKETING - COURSE STRUCTURE



Depth of blocks is approximately proportional to hours per week of contact.

*Residential in Year 1 normally lasts 3 days and in Year 2 an overseas residential will last for one week.

The Individual Project

Each student undertakes an individual project which is completed and submitted by the start of second year. Generally this involves the investigation of a marketing issue within their own firm or organization. The objective of the project is twofold; first it enables students to apply grounded theories to a situation which reflects their own needs and experience. Second, it allows the student to recompense their employers for their support in a practical and meaningful way.

Contemporary Issues

The contemporary issues component is a series of guest lectures by marketing practitioners. Each year a different theme is addressed, in the past these have included marketing communications, new product development, small business issues and the internationalization of small firms. Speakers present case histories of their own organizations and the rationale for their approaches and decisions.

The Group Project

In the early years of the programme, the group project was a business game in which a number of teams competed to obtain the best results for their respective "companies". More recently, this component has become a part of the planning process for the international residential and is given over to group work in preparation for the visit to the overseas market.

The Second Year Residential

Historically the second year residential has involved conducting international marketing research projects on behalf of Northern Ireland firms. As a rule these companies are not the students employers (Bell and Brown, 1987). However, the projects are funded by the firms concerned, who in turn receive financial support from government. Since 1982-83 residentials have taken place in Belgium, France, Holland, West Germany, the United States and Canada. Over 40 companies have participated and, as a result, some 120 students have gained practical international experience.

The programme has traditionally served indigenous small- and medium-sized firms focusing on "psychically" close markets in line with Johanson and Vahlne's (1975) views on the internationalization of small firms. Since 1987-88 Europe has been targeted in preparation for the completion of the Single Market in 1992 (see Figure 2).

FIGURE 2
PGD INTERNATIONAL RESIDENTIALS 1982-89

Year	Market	Projects
1982/83	Holland	4
1983/84	Holland	4
1984/85	W. Germany	8
1985/86	U.S.A	6
1986/87	U.S.A and Canada	6
1987/88	Belgium, France, Holland, W. Germany	12
1988/89	Belgium, Holland	6

The international residential has evolved through a process of trial, adoption and modification and is closely linked to the international marketing course (see Figure 3). During the first ten weeks, through lectures, seminars and case studies, students are given a grounding in the relevant theoretical concepts. At the same time, students and staff prospect for clients wishing to commission research. Potential sponsors are visited, teams constituted, projects agreed and discussions initiated with government agencies.

FIGURE 3
INTERNATIONAL MARKETING/ RESIDENTIAL
- INSTRUCTION AND PLANNING ACTIVITIES

Week	Instruction	Planning
0		Outline Programme Client Prospecting
5	Lectures Seminars	
10	Case Studies	Company Visits Discussions with Government Agencies
15	Company Briefings Research Proposals Desk Research	Formal Grant Approval
20	Field Research	Arranging Appointments Finalizing Travel etc.
25	Company Debriefing Report Preparation	Planning Presentations
30	Report Presentation	

Student activities over the next ten weeks include receiving research briefs, finalizing proposals, conducting desk research, identifying key informants in the market and making appointments in preparation for a period in-field. At each stage staff and outside "experts" provide counselling on the approach to be adopted and on conditions prevailing in the overseas market environments. Where appropriate, support is also obtained from other faculties such as the Departments of Modern Languages, Science and Technology and Art and Design. All travel arrangements are finalized once the projects have been given formal approval by sponsoring companies and they in turn have received offers of support from government agencies. Prior to departure for the market each team ensures that it has the necessary brochures, publicity material and samples in order to best represent the client companies. Additionally, small "token" gifts are organised for key informants.

Normally ten days are spent in-field. The student team conducts pre-arranged interviews from Monday to Friday, review progress with an accompanying member of staff on a daily basis and schedule appointments with new leads. Typically between twenty and thirty visits to government bodies, potential customers and other key informants are undertaken. Over the weekend they assess progress, determine their information gaps and plan activities for the final two working days. The remainder of the weekend is dedicated to cultural and leisure pursuits, according to personal taste and what the market has to offer. These are regarded as an integral part of the educational process.

On their immediate return from the market the student team present the company with an interim report of key findings and advises management of any opportunities which merit their urgent attention. This is followed by a formal presentation of the written report detailing the findings, conclusions and recommended strategies and a discussion and feedback session with the company.

Evaluation

While all the aforementioned components greatly enhance the learning experience and contribute to the provision of an integrated and relevant offering, the international residential is regarded by many students as the highlight of the programme. Participating firms are grateful for an opportunity to obtain low-cost export market research and are well satisfied with results obtained.

Moreover, benefits gained by individual firms are ultimately reflected in an overall improvement in the economy. Faculty also benefit from the chance to recycle practical experiences in future teaching and research activities.

All these factors are significant, but the residential also achieves several important educational objectives. First, as the projects involve the application of concepts from all courses, they integrate the programme by allowing students to apply theory in practice. Second, the international orientation exposes students to different cultural forces, business practices and social and economic conditions in foreign market environments. This is conducive not only to a greater awareness of international issues, but also to a re-evaluation of environmental forces in the domestic market. Third, personal and interpersonal skills are fostered as students interface with companies. Communication and presentation skills are developed as students interview key informants and present reports to decision-makers. Leadership skills are encouraged through group activities. Fourth, extra-curricular skills such as foreign language competence can be enhanced. Finally, exposure to highly sophisticated markets/industry sectors broadens horizons, particularly for students employed in small businesses.

Discussion

In recommending possible improvements to management education Handy (1987) Constable and McCormick (1987), Porter and McKibben (1988), Keys (1989) and Verlander (1989) all achieve remarkable consensus. They maintain that; programmes should focus on students' needs and be more participative in design; that they should offer students the opportunity to apply theoretical concepts in practical situations; that curriculum development must focus not only on content but also on utilising appropriate pedagogic techniques which enhance learning and develop leadership and interpersonal skills; that serious attempts must be made to integrate individual courses into a coherent programme of instruction and, finally, that course and programme design should reflect the impact of environmental forces at regional, national and international levels.

We would contend that the PGD successfully addresses many of these issues particularly through the non-traditional components of the programme. Thus, for example, the individual project aims to meet student needs, enables them to apply theory in practice and is conducive to self-learning. Residentials

provide the scope for development of leadership and interpersonal skills and, furthermore, incorporate a strong international dimension in second year. Of greatest importance is the efficacy of these activities in integrating concepts from different courses and binding individual components of the programme together. The emphasis on group projects also provides an ideal vehicle for peer group learning. Additionally, the programme facilitates the adoption of a broad range of pedagogic techniques, all of which have merits and limitations (Griffin and Cashin, 1989; Osigweh, 1989; Kable 1989; Faria, 1989), but which when combined, create optimal conditions for learning (Keys, 1989).

Finally, according to Porter and McKibben (1988), business schools must demonstrate a strong desire to actively participate in the economic development process for this is a precondition for future support. In this respect the PGD has been particularly successful for its activities are recognised not only in the business community at large, but also by government agencies who are increasingly favourably disposed to support the activities undertaken in pursuit of a common long-term goal; the creation of a more vibrant economy.

It would be easy to conclude that the programme originally set out to achieve these objectives. However, if truth be told, such claims cannot be justified. Rather it has gradually evolved, through a series of continual modifications and by trial and error. In this respect, the authors would concur with Porter and McKibben (1988) who conclude that business schools must strive in pursuit of continuous innovation and be prepared to adapt swiftly and continuously to change. Indeed, at time of writing, a major review of the programme has been concluded which will enable it to be modified and improved in the light of perceived future needs.

Conclusions

This paper outlines and evaluates the PGD offered by the University of Ulster and discusses its modus operandus. It demonstrates how the programme seeks to address many of the criticisms levelled at business schools and educators. However, it also stresses that programme development is a evolutionary process of trial adaption and modification. If there is one firm conclusion, it is that as marketing educators we should continually strive to react to change and that it is our duty to actively pursue innovation. In short, we should assiduously practice what we teach.

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**THE IMPACT OF THE SINGLE EUROPEAN MARKET ON MARKETING EDUCATION:
AN ILLUSTRATED NOTE ON INTEGRATING THE ISSUES**

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Abstract

The impending Single European Market presents significant challenges to businesses both within and beyond the European Community borders. It is therefore appropriate at a conference of marketing educators to focus in on one dimension of the major business concern in Europe - the impact of 1992 on marketing education. This paper suggests that the marketing issues involved should be incorporated to some extent into contemporary marketing programmes concerned with European markets. A series of team projects by final year marketing undergraduates at the University of Ulster in Northern Ireland illustrates how these enabled them to relate Single Market issues to their marketing subject areas in an integrative way. The action orientation of this model helped to develop skills applicable in the business world to complement the greater understanding of this phenomenon.

Introduction

The Single European Market

Since the mid-1980's, with the recognition that Europe was losing ground to the U.S. and Japan in economic terms, fresh attempts have been made to create the single economic framework envisaged in the Treaty of Rome of 1957 which established the E.E.C. Whilst tariffs and quantitative restrictions on trade between member states have been largely eliminated in the community, internal market barriers still exist in the form of frontier delays, arbitrarily differing product standards, conflicting business laws, complex technical regulations, differing tax regimes and so on. The White Paper of 1985 - "Completing the Internal Market" - is the programme and timetable to meet the challenge of integration (Commission of the European Communities 1985). It attempts to identify all those barriers to trade which prevent the free functioning of the market in three main areas: physical, technical, and fiscal barriers, and puts forward legislative proposals for their removal. It is the implications of this process which is concerning business communities across - and indeed beyond - Europe...

1992 Issues are Marketing Issues

If one considers some of the key aspects in the articles, discussions and seminars about the impending Single European Market (eg. Office for Official Publications of the Communities 1988, Department of Trade and Industry (U.K.) 1988, Confederation of British Industry 1988, Cecchini 1988) it can be seen that they relate closely with the core concepts in marketing, eg. the business environment, the market, competition, segmentation, organisation and so on.

One reason for the massive interest in understanding the moves towards the Single Market and the implications for management is the realisation that fundamental changes in the business (read marketing) environment are involved. What is peculiar in this instance is that one particular phenomenon is driving the changes in so many of the environmental variables which make up those analytical frameworks widely proposed (eg. Kotler 1988, Assael 1985, Pride and Ferrell 1989, Baker 1985) eg. economic, socio-cultural, legal, technological and so forth.

It seems likely that the nature of competition will change in a number of ways as the integration of European markets comes about. New entrants will be enticed into markets as public procurement opens up, as administrative and technical barriers are removed or reduced, as distribution cost structures shift and so on (Davis et al 1988). Mitchell (1988) believes that "the whole composition of existing relationships is being radically shaken" and that "...commercial habits of many years standing will be blown away like dead leaves". It is contended that three main ways in which the 1992 programme may affect the structure of European markets are changes in "cost positions of competitors, market segmentation, and entry of new competitors" (Davis et al 1988).

It should be noted that in this case an internal market could actually undermine market segmentation. Manufacturers typically have different price, promotion and distribution policies and mechanisms in their various sub-markets, which, in a Europe of different national technical and safety standards, often amount to country segments. The notion of a 'single market' must be reconciled with this. The question asked is "to what extent does the 1992 process demand different strategies for segmentation?".

Distribution and wholesale patterns across Europe, without national boundaries having the same degree of importance, are likely to change significantly. Indeed, given the different laws pertaining to commercial matters, the contractual arrangements regarding territorial distribution and agency rights will be in need of clarification.

It can be seen that the main concerns of business with regard to the 1992 process and outcome are all within the scope of marketing and marketing curricula, thus marketing must play a leading role in developing businesses for the new, changing European competitive arena.

University of Ulster Model

Student Interest

The experience of marketing staff at the University of Ulster has been that students at all levels are interested in developing an understanding of the Single European Market. As a significant topic in European business developments it needs to be included in course curricula, and in practical terms relevant skills are required by students who will spend their careers in this changed marketplace. As regards undergraduates in particular, it was felt that knowledge and skills in this field would make them more 'marketable' in an economic environment where business practitioners were at the point of assessing their organisational requirements for success in such a changing marketplace. This paper outlines the model used at the University of Ulster in the preparation of marketing undergraduates for this competitive arena.

Among the objectives of the exercise was the need for a wide-ranging but systematic evaluation of this complex issue; the need to integrate marketing subjects; the necessity for an action-learning approach to develop skills; and educational aims such as industry analysis, strategy development etc.

The Assignments

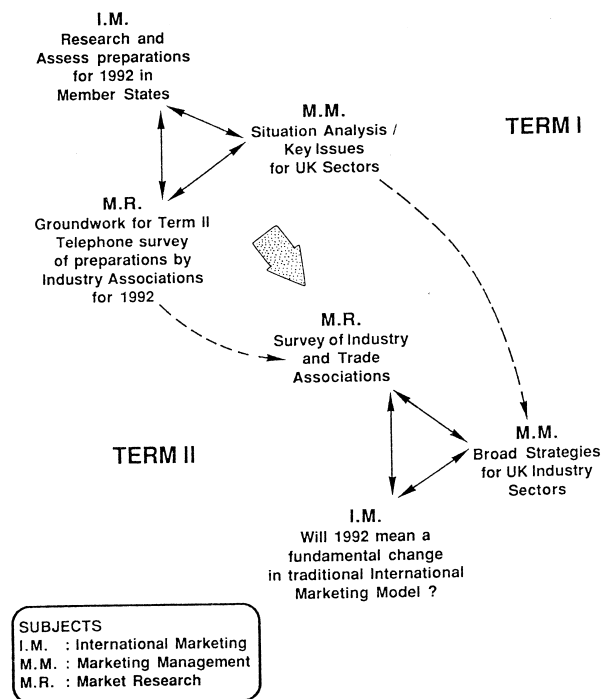
Students were formed into nine teams of three and allocated a series of subject assignments over two terms. As can be seen from Figure 1, these not only involved investigations into integration strategies of Member States but also focused on specific industry sectors which were selected because of their importance to the Northern Ireland regional economy.

FIGURE 1
FOCII OF MARKETING ASSIGNMENTS

Member States	Industry Sectors in U.K.
Belgium	Electrical engineering
Denmark	Banking
France	Retail Multiples
Germany	Construction
Greece	Textiles
Italy	Business Services
Netherlands	Furniture
Portugal	Food
Spain	Clothing and Footwear

The assignments were also designed to integrate into a coherent programme of study (see Figure 2 and the subsequent description).

FIGURE 2
INTEGRATION OF MARKETING ASSIGNMENTS



Term I

International Marketing

Each team of three students was designated a member state of the European Community and the task involved was to examine and assess how that state's business community was preparing for the Single Market. What agencies would be involved?.. Would it be business- or government-driven?.. What coordination was taking place?..

The purpose of this assignment was to expose students to another country's preparations for the Single Market in such a way as to force them to question the general assumptions about the issues involved, as well as developing a broader representation of developments across the community.

Market Research

The first-term assignment was a preparation for a study to be conducted in the next term. This was concerned with how (indeed whether) trade and professional organisations in the U.K. were preparing themselves and their members for the Single Market.

Each team was assigned a particular industry sector, and the task was to identify the appropriate organisations, the membership profile, the contact for the survey, and to design and develop a telephone questionnaire.

A number of broad questions were to apply to all sectors for comparative purposes, and the rest would be industry-specific.

Marketing Management

A Situation Analysis Statement identifying the primary issues for each team's assigned industry sector in the U.K. was required. This demanded a good understanding of the basic structures of the industries involved and was accomplished mainly by reviewing various industry reports, but with some key informant interviews where necessary.

An adaptation of marketing environment analysis and marketing auditing techniques were employed as an integral part of this. In general, the quality of the other parts of the report would largely depend on the teams' knowledge and understanding of the situations facing the countries and the industries.

Term II

Market Research

The second-term assignment in Market Research involved conducting the primary research required to gain the information on whether and how trade and industry associations and professional bodies were preparing themselves and their members for 1992. This entailed each team undertaking telephone interviews with key officers of a range of organisations in each particular sector.

The analysis of this qualitative information formed the second part of this particular exercise.

Marketing Management

Having identified the key issues for the various sectors in the first term, and further researched these and the preparation of each industry's associations in the Market Research assignment in the second term, the task for each student team at this stage was to compile this information and produce a broad strategy for its assigned industry to succeed in the Single Market.

International Marketing

Because the other aspects of the project allowed students to undertake practical work in the marketplace and apply their knowledge in devising industry strategies, it was appropriate at this stage (and to the International Marketing syllabus) that the students would consider the whole 1992 process in terms of its impact on this field of marketing study and practice. Essentially, students were asked to submit an essay on their impressions of whether the Single European Market as a process and/or a result would force marketers to fundamentally change 'traditional' international and domestic marketing models in their particular industry.

Discussion

A number of issues formed the core of this programme:

- the Single European Market constituted a special part of the marketing programme for final year undergraduates;
- the topic was addressed by adopting an integrated approach across the three marketing subject areas;
- an action learning approach was taken; and
- the matter was addressed through subject assignments.

The danger of 1992 hype overshadowing the marketing subject areas needed to be avoided. This was first and foremost intended to be an integrated marketing venture with the Single European Market as the unifying theme.

Integration

The question of integration - crucial to the educational benefits of the entire exercise and recognised by Porter and McKibben (1988) among others as a major criticism of university-based management education - needed to be addressed in this instance from two perspectives:

Firstly, it was necessary to integrate the broad series of business concerns

regarding 1992 in a realistic and useful manner such that their relationship with marketing would be identified clearly.

Secondly, merging the lessons from each of the three subject areas involved would be a high priority. The team wanted to avoid the trap Lavery and Fawcett (1988) warn of:

"Students, as they move from class to class, tend to change their 'discipline hats' and rigidly slot the information gained into discipline pigeon holes'.... this encapsulation represents a relatively logical method for dealing with and organising new knowledge. Such cognitive departmentalisation may be relevant to examination success, but it can artificially cocoon knowledge and create barriers to integrative behaviour and decision making".

The Surveys

Survey work was conducted at industry/sectoral level rather than at company level for a number of reasons: - in a small-business, regional economy it was felt that trade and professional bodies would have a major role to play in preparing their members, and that officers of such organisations could reasonably be expected to be somewhat more informed of the strategic implications of the 1992 process for their industries than many of the company managers they represent. Also, new insights might emerge from a study at this level in terms of a wider perspective than more usual micro-focused studies. A sectoral study would be of some benefit to local business support agencies with whom the marketing faculty collaborate on various projects, and in the process, a database would be built which might prove useful to other groups studying this area, and for deeper research in the future.

In order to ensure that all students had a working knowledge of the institutions, political structures and procedures of the Community, seminars and selected readings were organised at the outset.

The necessity for setting objectives is crucial when developing any educational programme. Close contact and strong relationships with the business community for which marketing educators prepare their undergraduates help in understanding its requirements and therefore in setting objectives (Ward 1989). Support was forthcoming from all those in the business community with whom the project was discussed. It was strongly felt that preparatory work should be conducted at all levels of management - and especially at the stage where the decision-makers of the future

were entering their professions, as was the case with the undergraduates concerned.

Evaluation

As can be seen, this series of assignments achieved a number of broad intentions:

- the assignments are progressive and systematic, moving from analysis of key issues in business community preparations in the various member states and industry sector preparations in the U.K., to broad strategic recommendations for the industries, and a consideration of whether the nature of International Marketing will change in Europe;

- they have a balance of both academic and practical elements;

- they allow for development in three important areas:

- educational - the subject areas, critical analysis, questionnaire design;
- personal - group/team work, working on own initiative, delegation of responsibility;
- skills - telephone interviewing, presentation of reports, evaluative skills etc.

The fact that students worked in teams allowed for other practical skills to be developed. Students are confronted with problems of distribution of authority, influence and power within a workgroup and they develop methods for dealing with these (Lavery and Fawcett 1988). Such problems of task organisation and responsibility delegation are common in all business organisations, making these skills practical and useful.

It is distinctly valuable to students at undergraduate level that they be exposed to thinking and practices in a real business environment and that they be required not only to analyse situations, but to make recommendations based on their analyses (Bell and Brown 1987).

An interesting lesson learned by the students was that organisations need not necessarily know for certain the answers to questions regarding key issues and strategies. The dynamics and uncertainties of the situation at the time were recognised. In fact some of those respondents who seemed to be quite definite on matters during the course of telephone interviews were later considered by the students to be rather out of touch in their assumptions when more information came to light. The important point is that organisations

should be actively engaged in trying to develop an understanding of the issues and their implications. This accords with the opinion that there will be few organisations who will meet all the criteria to be a 'Successful Eurocompany' (Mitchell 1988).

In particular, one of the important benefits of this project for students is less tangible. It is the broadening of their horizons in both general and marketing terms. This aspect takes on a more crucial mantle when it is considered that Northern Ireland and the Republic of Ireland will be the only parts of the European Community not physically attached to the continental mainland when the Channel Tunnel linking England to France is completed in 1993. Students and practitioners of marketing in Ireland must not suffer from also being on the periphery in their strategic thinking...

Conclusions

The onus is on European marketing educators to address the major concern of business at present - the changing business environment brought about by "1992" - and to prepare students to participate in these new, changing conditions. This paper constitutes an outline discussion of key marketing issues related to the integration of the European markets.

At the University of Ulster the marketing team and students used the Single Market as the core of an integrated suite of assignments for final year marketing undergraduates. It effectively served the dual purpose of forming a topical project for the students and integrating their marketing subject areas in a pragmatic and realistic way. The final reports also form the basis of a bank of useful information for future studies, for the dynamic nature of the issue demands ongoing research. Despite the peculiarities of this example in its Northern Ireland context, it is believed that because of the successful progressive and integrative thrust of the model it is useful for marketing students across the European Community. Furthermore, given the concern beyond Europe with 1992, and similar changes in other trading blocs at this time, such an approach to integrated marketing and management education should also be appropriate to faculty and students internationally.

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PERSPECTIVES ON WOMEN IN MARKETING EDUCATION:
A COMPARISON OF THE CAREER PATHS OF MALE AND FEMALE MARKETING EDUCATORS

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Women are moving into the ranks of the marketing professoriate in increasing numbers. They are visible in graduate programs, at conferences, and on marketing faculties of academic institutions granting undergraduate and graduate degrees (AMA 1988; Educational Resources Information Center 1988). Their names appear in the field's top journals. Women, it seems, are well on their way to attaining parity with men in marketing education.

Undoubtedly there has been progress for women in this discipline. However, another dimension may be added to this picture when looking beneath the numbers to the actual career paths of men and women in the field of marketing. Studies of educators in other fields have shown that males and females do not follow the same career paths (Aisenberg and Harrington, 1988; Clark and Corcoran 1986; Hornig 1980; Simeone 1987). Prior research within the fields of journalism, psychology, history, and American Studies has uncovered differences in the way men and women proceed with their respective careers (American Historical Association 1987; Cohen and Gutek 1988; and Grunig 1989). Differences have also been found between men and women in nonacademic business positions, although the divergence seems to occur five to ten years after joining the work force, when many women's careers tend to stall as they bump into what is commonly called the "glass ceiling." Reasons for this "ceiling" effect include both internal factors such as the conflicts women face in reconciling career ambitions with traditional women's roles as well as external factors such as discrimination in the workplace (Devanna 1984; Landau and Amoss 1986).

Some differences between men and women in academic marketing have already been uncovered. Women's research and teaching interests are likely to center on consumer behavior and promotion while men's interests are more evenly divided among the various marketing specialties (Carsky, Kennedy and Waller-Zuckerman 1989 and Hilger and Wafful 1979). A larger proportion of males have been granted tenure and hold higher academic ranks than their female counterparts, but more women teaching in two-year institutions (Carsky, Kennedy and Waller-Zuckerman 1990). These findings suggest that other differences may exist.

The purpose of this paper is to expand on this previous work on marketing educators, and to test whether the trends concerning dissimilar career paths for men and women in other academic disciplines or in business and professional fields are true for academic marketers.

HYPOTHESES

The career path of female academic marketers is expected to be different from the career path of

male academic marketers. This difference may be due to a myriad of earlier experiences. Prior research has demonstrated that earlier socialization, an orientation to the personal rather than the career, experiences in graduate school, and social norms contribute to differences in career paths (Aisenberg and Harrington 1988). From this literature, it is postulated that women's career paths are less linear than men's. Where males might have followed a direct route through school and settled into an academic career earlier, women might have tried several careers before settling into an academic position. The following hypotheses were formulated to explore this more fully:

- H1a: Female marketing educators earned their academic degrees over a longer period of time than did male educators.
- H1b: Female marketing educators have changed jobs more frequently than male educators.
- H1c: Female marketing educators were older than males at the time they received an academic promotion.

Traditionally, women have taken primary responsibility for family life. Women may raise families before pursuing a career, or stop in mid-career to raise a family. Even those women who have married and raised families while continuing their careers may experience pressures and conflicts about these two roles. Relationship and family responsibilities may lead women to change jobs more frequently than males, forego career opportunities, or experience more stress on the job than males (Gutek and Burley 1988; and Landau and Amoss 1986). The following hypotheses investigate these relationships:

- H2a: Female marketing educators with family responsibilities work fewer hours than male educators with similar responsibilities.
- H2b: Female educators with family responsibilities have held more jobs than male educators with similar responsibilities.
- H2c: Female educators with family responsibilities were older at the time of promotion than were male educators with similar responsibilities.
- H2d: Female educators with family responsibilities have received doctoral degrees later than men with similar responsibilities.

The field of marketing stands in contrast to arts and science disciplines for which gender differences have been examined. For the latter, faculty sizes have remained stable over the

past decade and the proportion of doctoral degrees awarded to women (31% - 35%) has remained unchanged. The field of marketing, however, has experienced unparalleled growth during the present decade. The number of doctoral degrees awarded to women has gone from 16% in 1980 to 40% in 1986. There has been an expansion in the number of college and university programs in marketing and a concurrent demand for additional faculty.

As a growing number of women have begun to fill the ranks of marketing educators, differences in career paths between men and women may have narrowed (Erhart and Sandler 1987). Therefore, there may be fewer differences between younger males and females born during post war "baby boom" era than between males and females who are older and who have been in the profession longer. The following hypothesis examines these differences.

- H3: Career paths of women and men born before 1946 will differ more than the career paths of women and men born in 1946 and later.

Prior research indicates that in some academic fields, women come to career choices later than men (Aisenberg and Harrington 1988). Also, women have traditionally given deference to the careers of their spouses or "significant others" and followed the men in their job changes. The following hypotheses look at this more closely:

- H4a: Female marketing educators come from more diverse academic backgrounds than male marketing educators.
- H4b: Female marketing educators have had more diverse job experiences than male marketing educators.

METHODOLOGY

A questionnaire was mailed to 500 female and 500 male marketing educators. Female marketing educators' names were drawn from the mailing list of the American Marketing Association's Educators Division (454 names) and from the Academy of Marketing Science membership directory (46 names). This was, in effect, a census as the total unduplicated list contained fewer than 600 names. The male educators' names were systematically drawn from the AMA Educators' mailing list. The two surveys were conducted approximately six months apart. A follow-up post card was mailed one week following each of the two questionnaire mailings.

The Instrument. The questionnaire contained four sections: The first asked about work status, academic background, involvement in professional associations, and publications. The second asked about workload and type of institution where the respondent worked. The third asked attitudinal questions concerning the work environment, and the last queried respondents on prior professional experience and demographics. This paper examines the information gleaned from the first and last

sections of the questionnaire. Descriptive information on the sample from this survey are available elsewhere and will not be included herein.

RESULTS

Two hundred five completed responses were received from the women. An additional 20 women contacted the authors and indicated that they were no longer active in the profession. This yielded an effective response rate of 45% including 176 women from the AMA membership list and 26 from the AMS directory. Of the 500 male educators surveyed, 147 returned completed questionnaires and an additional 18 indicated that they were no longer active marketing educators. The effective response rate for the male sample was 33%. The combined response rate for both groups was 36%. This compares favorably with the 25-30% rates achieved by other researchers who have surveyed the same population (Glison and Ferrell 1987; Boya and Robicheaux 1988).

HYPOTHESES TESTS

The total sample size used to test the hypotheses was 286. Respondents who indicated that they were not full-time academicians were deleted. This resulted in a 22% reduction in the number of females and 10% reduction in the male sample. The total is further reduced due to missing data on variables used in the analyses. Chi-square tests were used to measure differences in categorical values; two-way ANOVA and t-tests were used for continuous variables for which the data were either ordinal or interval.

The first set hypotheses was formulated to examine basic gender difference between male and female marketing educators on variables which have been previously found to have a moderating effect on career path. Results of t-tests to examine these differences are given in [Table 1](#).

The first hypothesis in the series was not supported. As shown in the table, women did not earn their degrees over a longer period of time. Although there was a one year difference in the time between the B.S. and Ph.D. degrees, this difference was not statistically significant. While time between degrees did not differ, the women were, in fact, three years older than the men when receiving advanced degrees. This latter differences is due to women receiving their master's degrees later.

It was hypothesized that women would have had more frequent job changes than men. The t-test results indicate that there were significant differences between the groups; but these were not in the hypothesized direction. Men, in this sample, had changed academic positions more frequently (including positions outside of marketing) and had more practitioner experience. The final hypothesis in this series was not supported. Differences in age of the last or most recent academic promotion were significant, but they were not in the hypothesized direction. As a larger proportion

Table 1: A comparison of male and female marketing educators on measures to examine career paths.

Dimension	N	Mean	SD	t*
Time between BS and PhD Degrees	F = 96 M = 95	12.20 11.14	5.69 5.91	1.26
Time between MBA (MS) and PhD	F = 95 M = 92	7.86 7.16	4.79 4.95	0.98
Age at which MS/MBA was granted	F = 130 M = 109	28.40 25.70	5.02 6.63	3.50***
Total academic positions held	F = 156 M = 132	1.47 2.20	1.65 3.83	2.03*
Non-marketing academic positions	F = 156 M = 132	1.37 1.85	1.56 1.72	2.31*
Practitioner positions held	F = 156 M = 132	3.51 5.28	4.94 8.16	2.18*
Age at time of academic promo.	F = 156 M = 139	39.30 44.31	6.24 6.50	6.29***

* two-tailed tests; the F-max test was used to determine whether equal or unequal variance t was appropriate.
*** p < .001
** p < .01
* p < .05

of the male sample had achieved the rank of full professor than the proportion of women, this result is likely to be confounded by academic rank to which respondents had been most recently promoted. An additional t-test to assess gender differences for age of promotion was conducted using only the respondents who were at the associate rank (n = 45/f; n = 43/m). The difference was not significant; women were promoted to the associate level at mean age of 42.7 and men at mean age of 43.0.

The second series of hypotheses was concerned with career path differences associated with family responsibilities. Two-way ANOVA was used to examine differences associated with gender, marital status, and parenting. The results are presented in Table 2 and Table 3.

The interaction of gender and marital status was significant for only three of the dependent variables. Married women were younger ($\bar{X}$ = 34.5 yrs.) at the time they received doctoral degrees, but there were no differences among the men due to marital status. Overall men received their doctoral degrees earlier than the women. For the number of academic positions held, unmarried men had held the most jobs ($\bar{X}$ = 3.5) and married women had held the fewest ($\bar{X}$ = 1.3). Married men, however, had the most years of practitioner experience ($\bar{X}$ = 5.3) and divorced men had the least ($\bar{X}$ = 2.4). Among the women, those who were married had the least ($\bar{X}$ = 3.6).

Table 2: a comparison of male and female marketing educators on measures to examine career differences due to marital status.

Dimension	Gender	Marital	G X M	within
Age at PhD				
Mean Square	557.12	523.72	329.19	39.88
F	13.97***	12.88***	8.26***	
Hours worked				
Mean Square	15.94	280.92	163.35	138.45
F	2.03	0.12	1.18	
Other academic positions				
Mean Square	18.95	32.26	34.82	5.23
F	2.67	6.17***	6.66***	
Total academic jobs				
Mean Square	4.04	19.08	4.22	1.59
F	2.54	12.01***	0.04	
Age at promotion				
Mean Square	1847.88	85.41	89.89	39.14
F	47.91***	2.18	2.31	
Marketing practice				
Mean Square	34.574	117.26	93.98	45.04
F	0.77	2.60*	2.09*	

df gender = 1; df marital status = 2 (single, divorced/widow, married)
*** p < .001
** p < .01
* p < .05

Women without dependent children received their most recent promotion earlier ($\bar{X}$ = 39.6 yrs.) than men ($\bar{X}$ = 45.5 yrs.). For those with one or two dependent children gender differences were not significant; however, women with dependent children ($\bar{X}$ = 38.0 yrs.) were promoted one year earlier than their male counterparts ($\bar{X}$ = 39.0). These results regarding promotion must

Table 3: A comparison of male and female marketing educators on measures to examine career differences associated with children.

Dimension	Gender	Children	G X C	within
Age at PhD				
Mean Square	593.00	104.73	146.39	46.21
F	12.83***	2.27	3.17**	
Hours worked				
Mean Square	13.42	524.52	365.73	133.83
F	0.10	3.84**	2.73	
Total academic jobs				
Mean Square	7.81	0.84	3.20	1.71
F	4.61*	0.50	1.84	
Age at time of promotion				
Mean Square	1801.77	316.51	274.27	35.72
F	10.44***	9.86***	7.69***	

df gender (1); df children (2)
*** p < .001
** p < .01
* p < .05

be viewed with caution as previously indicated; the males' promotions may have been to the rank of full professor and the females' promotions to the associate level. Marketing academicians without dependent children work more hours ($\bar{X}$ = 49.08 [F] and 50.8 [M]). Women with one dependent child work fewer hours ($\bar{X}$ = 45) than men ($\bar{X}$ = 50.3), but with two or more children in the home, there were no differences attributable to the interaction of gender and children.

The third hypothesis stated that the career paths of men and women born before 1946 would differ from the career paths of those born in 1946 and later. This hypothesis was supported. The results of two-way ANOVA's to test this hypothesis are given in Table 4.

Gender differences were significant for the academicians born before 1946 but not for the younger respondents. Women in this age group were older ($\bar{X}$ = 42.6) than men ($\bar{X}$ = 33.1) when receiving doctoral degrees and they were older when they received master's degrees ($\bar{X}$ = 31.6 yrs. [F] and 27/5 yrs. [M]). The women born

Table 4: A comparison of male and female marketing educators on measures associated with age difference.

Dimension	Gender	Agegroup	G X A	within
Time between BS and PhD				
Mean Square	52.13	505.32	552.04	28.53
F	1.83	17.71***	19.35***	
Time between MBA (MS) and PhD				
Mean Square	19.55	203.44	249.45	21.19
F	0.92	13.85***	11.77***	
Academic Positions outside of marketing				
Mean Square	10.27	2.62	16.63	1.21
F	8.46**	2.16	13.69***	
Total academic positions				
Mean Square	4.04	19.08	6.53	1.59
F	2.54	12.01***	4.11*	
Age at which PhD was granted				
Mean Square	464.97	493.73	1162.06	34.33
F	13.25***	14.38***	33.85***	
Age at which MBA (MS) was granted				
Mean Square	309.72	4.10	362.15	28.55
F	10.85***	.14	12.58***	
Total years in marketing practice				
Mean Square	244.03	1204.45	245.23	40.42
F	6.04*	29.80***	10.77***	
Total years non-marketing business experience				
Mean Square	29.60	94.97	80.04	27.85
F	0.78	3.41	2.87	
Total Hours Worked				
Mean Square	32.22	567.94	763.06	140.43
F	0.23	4.04*	5.43*	
df gender (1) df agegroup (1)				
*** p < .001				
** p < .01				
* p (.05				

after 1946 received their master's degrees slightly earlier ($\bar{X}$ = 25.7) than the men ($\bar{X}$ = 26.8), but the difference was not significant. Older women were more likely to have held academic positions outside of marketing ($\bar{X}$ = 1.5) than men ($\bar{X}$ = 0.5) as well within the discipline. Older women averaged 2.1 positions in marketing education whereas men in the age group averaged 1.7; but the totals were reversed for younger academicians. Younger men had held more positions ($\bar{X}$ = 1.1) than had younger women ($\bar{X}$ = 1.5).

Two hypotheses were formulated to examine diversity in backgrounds between male and female marketing educators. Chi-square tests were used to assess diversity of academic backgrounds. The results of these tests are presented in Table 5.

Field of study was categorized as liberal arts, hard sciences, business, or other professional field (e.g. nursing, home economics, engineering, or education). As shown above, there were no differences in field of study at the baccalaureate or doctoral levels between men and women. The last chi-square looked at whether or not women came from more backgrounds in that their specialization or field of study at the BS degree level was the same or different from that at the PhD level. Women differed from men on this test. Men were more likely to report the same field of study at the BS and PhD levels, (most generally it was business).

Table 5: Comparison of male and female marketing educators on academic backgrounds

Degree area	N	X ²	df	Sig.
Field of Study B.S. Degree				
	229	2.903	3	0.405
Field of Study Ph.D. Degree				
	212	2.503	3	0.457
Field of Study BS = or ≠ Ph.D				
	289	7.036	1	0.008

The second of these hypotheses posited that women would have had a greater diversity of job experiences. The t-test results presented in Table 1 (p. 7) fail to support this hypothesis. As shown in the table, women held fewer academic positions and spent fewer years as marketing practitioners. Their experiences outside of marketing did not differ from men's in business or in academia.

CONCLUSIONS

A general conclusion to these analyses can be that women in marketing education do not differ from men in terms of their career paths and work experiences. Additionally, the women in marketing who responded to our survey did not evidence the conflicts or frustrations that are endemic to women in other academic

disciplines and professions. For example, the women surveyed were promoted to the associate rank at about the same age as men, they teach the same number of classes and work approximately the same number of hours. Except for less job mobility (which could be negative or positive) and fewer years of practitioner experience (perhaps attributable to age as the men on average were older), female marketing educators' careers did not differ from males with similar family responsibilities.

The greatest difference between males and females in the profession were found to be associated with age. The interaction of gender and agegroup was significant on all variables. There was a greater difference between men and women who were born before the post war baby boom and those who were born during the baby boom era. Differences in career paths did narrow as more women entered the field. This narrowing of differences could be attributed to the women's movement and equalization of the sexes in recent years, but this has not occurred in other disciplines (Simeone 1987; Cohen and Gutek 1988). This finding would seem to indicate that the situation might be unique to marketing and be associated with greater equality of opportunity arising from the growth in the discipline.

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FLORIDA'S MANDATED RECYCLING LAW (1988):
A MARKETING COMMENTARY

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Abstract

The problems and opportunities associated with recycling post-consumer wastes will continue to be a major social and political issue during the remaining years of the Twentieth Century. State legislatures will react by passing mandated recycling laws designed to stem the tide of materials entering local landfills. Marketing can be a major factor in the long-term success of mandated recycling programs by focusing on the need to develop efficient-effective marketing systems for recycled materials.

Introduction

During the 1988-89 session, the Florida Legislature passed comprehensive legislation designed to stem the flow of solid waste into the state's landfills. Popularly referred to as "The Solid Waste Management Act of 1988," this new law represents a major upheaval in the legal environment that will directly impact the marketing of post-consumer recyclables in the state through its "mandated recycling" provisions [Laws of Florida, Chapter 88-130].

It is estimated that by 1990 American households will discard approximately 141.4 million tons of products into the municipal solid waste stream and of this total durable goods will account for 14.1%, non-durable goods will account for 26.9%, and containers and packaging combined will account for 32.2% [Franklin Associates, Ltd. 1986]. In the face of this massive buildup of post-consumer wastes, marketers continue to emphasize the "outbound" process of identifying and fulfilling consumer needs. The coverage given to recycling in the marketing literature has focused largely on discussions of reverse channel systems [e.g., Zikmund and Stanton 1971, Fuller 1979, Guiltinan and Nwokoye 1975], and examinations of redemption/ deposit laws such as those passed in Michigan, Oregon, and New York [e.g., Moore and Scott 1983, Crosby and Taylor 1982, Pollock 1987]. However, the recent emergence of mandated recycling provisions in state laws in Oregon (1986), New Jersey (1987), and Florida (1988), represents a fast moving trend in legislative action that demands the attention of both marketing academics and practitioners [Foran 1986; Sudol and Zach 1988; Laws of Florida, Chapter 88-130].

The purpose of this paper is to broaden the coverage of post-consumer recycling in the marketing literature and to stimulate interest in developing marketing solutions to the challenges it poses. This will be accomplished by re-examining the concept of recycling materials from post-consumer sources, and then commenting on some of the specific marketing

issues raised by the mandated recycling provisions of the new Florida law but which also apply to post-consumer recycling in general.

The Concept of Recycling

Recycling refers to the recovery of material resources from solid waste streams and their subsequent reuse in production processes. As part of the overall marketing mix for recyclables, previously mentioned reverse channels serve the traditional role of linking waste generators sources with markets for given recycled materials. However, the presence of a marketing system (reverse channel) is only one of four conditions necessary for completing the recycling process. As Fuller notes:

... In order for recycling to be feasible, four basic conditions must be satisfied: (1) technology must be available that can efficiently process the material being recycled, (2) a ready market must be available for the end product, i.e., the reclaimed material, (3) a substantial and continuing quantity of secondary product must be available in the waste stream, and (4) a micro-marketing system must be developed that can bridge the gap between suppliers of secondary product and end user on a profitable basis [Fuller 1977, p. 41]

The other conditions--available technology, substantial supply, and available markets--serve to point out that recycling does not really occur until initially reclaimed (recovered) materials achieve the status of end-use in another generation of products.

Traditionally, marketing systems for recyclables have focused on serving a small number of high volume industrial waste generators. In contrast, post-consumer scrap/wastes are created in relatively small, heterogeneous quantities at a relatively large number of dispersed household locations [Fuller 1979]. This material usually ends up comingled with the vast solid waste stream handled by local/municipal governments thus changing the nature and character of required marketing functions.

The above distinction between industrial and post-consumer sources points out one of the major challenges in the area of post-consumer recycling from municipal solid waste streams, that is, the problem of achieving an economical initial separation of selected post-consumer materials into homogeneous categories (i.e., paper, glass, metals, plastics, and organics) for further processing. While most recycling applications require significant amounts of effort to collect

and upgrade materials (referred to "processing" in the industry), the problem is particularly acute when dealing with the large number of post-consumer sources (households) or with materials that are comingled with the municipal solid waste stream. In short, the channels that interface with these sources must be able to accomplish both accumulating and sorting activities on an economic basis while at the same time producing recyclables that meet the technical specifications required by end users.

Three major approaches have been used to solve the initial separation problem associated with post-consumer wastes: 1) the establishment of consumer-oriented recycling centers and other programs by private sector dealer/processors and industrial users, 2) state and local government sponsored recycling initiatives such as curbside source separation/collection programs, and 3) mechanized separation processes. The first two approaches involve diverting potentially recyclable materials prior to their becoming comingled with the municipal solid waste stream and thereby avoids the problems associated with attempting to separate grossly comingled materials. The third approach simply processes comingled garbage "as is" but the economics and quality control aspects of this type of processing tend to be uncertain at best.

The 1988 Florida Recycling Law

The law passed by the Florida Legislature during the 1988-89 session (Laws of Florida, Chapter 88-130) addresses recycling in four basic ways: 1) it mandates the establishment of recycling programs at the county level, 2) it sets recycling quotas/goals for specific post-consumer recyclables, 3) it regulates packaging specifications so as to enhance recyclability, and 4) it attempts to reduce barriers to the purchase, by state agencies, of products made from recycled materials. Each of these areas is briefly discussed below.

County Recycling Mandate

The major recycling initiative of the legislation is the mandate that each county in the state of Florida develop a specific materials recycling program no later than July 1, 1989. The legislation specifies that these programs are to be designed so that the result will be to reduce the amount of municipal solid waste going into local landfills by at least 30 percent by December 31, 1994, and singles out several specific types of materials for recovery from the municipal solid waste stream including plastics, glass, metals, and all grades of paper [Laws of Florida, Chapter 88-130, p. 23].

Quotas for Specific Recyclables

The legislation also identifies specific post-consumer recyclables including newsprint, and containers made from plastic, glass, aluminum, plastic coated paper, or other metals and requires that a sustained recycling rate of 50 percent of the quantities of these materials sold

in the state must be achieved by October 1, 1992. Should this goal not be reached, an advanced disposal fee (ADF) of \$.50 per ton will be levied on newsprint. A similar, but presently unspecified, advance disposal fee (ADF) is also to be levied on the various types of containers if the 50 percent goal is not achieved by October 1, 1992 [Laws of Florida, Chapter 88-130, pp. 80-81].

Packaging Specifications

Several standards have been established for the purpose of enhancing the recyclability of specific materials. Plastic containers are required to bear a molded label indicating the resin used in that particular application (e.g., polyethylene terephthalate--PET, high density polyethylene--HDPE, etc.) so that separation into specific resin types can be more easily accomplished through visual inspection. In addition, metal containers must have tabs that are inseparable from the container body [Laws of Florida, Chapter 88-130, p. 31, 32].

Stimulation of Markets

In an attempt to increase sales of products containing recycled materials, the legislation requires a review of State of Florida purchasing requirements to insure that no discrimination exists in regard to state government purchases of products containing recycled materials [Chapter 88-130, p.55]. Also, several demonstration projects are to be set up to investigate the potential use of products made with recycled materials in various high-volume purchases related to state facilities and road construction/maintenance. The recyclables involved include glass aggregate, mixed-plastic materials and reinforcing rods [Laws of Florida, Chapter 88-130, p.57].

Marketing Issues Raised by Chapter 88-130

The marketing issues raised by Chapter 88-130 are discussed in terms of the four basic conditions previously cited as necessary for completing the total recycling process [Fuller 1977]. In short, does the legislation address or ignore each condition? What scenario will likely emerge in the not too distant future?

Availability of Processing Technology

Technology is available for processing paper, metals, and glass that is source separated through municipal curbside and private enterprise programs aimed at consumers, schools, and other non-profit organizations. A potential problem, however, exists in the area of post-consumer plastics. In short, the plastics industry lacks experience because serious research into post-consumer recycling began only in 1985 with the opening of the Center for Plastics Recycling at Rutgers University. In fact, the current interest in post-consumer plastics recycling is derived almost exclusively from the passage of mandated recycling laws which have now created a source of supply and have also sent a clear

message to the plastics industry to make recycling a priority or face additional restrictive legislation [Rankin 1988].

One of the major barriers to the recycling of post-consumer plastics is the difficulty of separating post-consumer containers into specific resin types. If different types of plastics remain comingled, the resulting "mixed plastics" product has unfavorable chemical and structural characteristics which presently restrict markets to a limited number of non-load bearing "plastic lumber" applications such as fenceposts and park benches. A recent study has also shown that hand separating plastics which are comingled with the municipal solid waste stream is uneconomic at prevailing minimum wage rates [Resource Integration Systems, Ltd. 1989]. Consumer curbside collection programs which result in plastics that are comingled only with other post-consumer recyclables (metals, glass, paper) and then later sorted into specific resin types may provide one solution to the separation problem. The previously described product specification (labeling) program should also aid in this process.

Even when separated into resin types (PET, HDPE, etc.), the secondary recycled resin can not be used for food packaging applications. This is because the polymer molecules that make up plastics can absorb contaminants directly into the molecular structure [Selke and Lai 1988]. This somewhat limits the applications in terms of products and markets.

Substantial and Continuing Source of Materials

A major effect of the legislation will be to create large scale, continuing supplies of post-consumer paper, metal containers, glass, and plastics in each urban area in the state. Even given the usual delays associated with implementation in the public sector, the timetable of the legislation (the statute requires immediate compliance with recycling mandates) will force a surge in supplies in the very near future. In addition, stocks of recyclables will tend to be proportionate to the general population level, and the continuing growth in Florida population will further increase available stockpiles of recyclables in the years to come.

Availability of Reverse Marketing Systems

Recent research has documented the structure of the recycling industry in Florida and indicates that at least in the function/mechanical sense, the existing channel structures of dealer/processors have adequate processing capacity to handle significant increases in the volume of post-consumer paper, metals, and glass. The research also indicates that plastics recycling activity within the state is almost non-existent [Fuller and Gillett, 1988].

While it is apparent that a plastics marketing system will have to be literally developed from scratch, a major issue still remains as to whether the existing dealer/processors will actively seek the new business created by

mandated recycling. Two factors appear to be important here. First, dealer/processors have largely developed and evolved in response to the needs of industrial waste generators and through specialized consumer-oriented programs. Today, Florida dealer/processors receive only a small fraction of the materials they process, estimated at between 1-7%, from municipal sources while they receive approximately 20-70% from private individuals and non-profit organizations [Fuller and Gillett 1988]. It is likely that mandated recycling will cause a significant portion of this private/non-profit volume to be diverted through curbside collection programs thereby creating channel conflict to an unknown, but significant, degree.

Second, the functional capabilities necessary to collect and initially separate/process the post-consumer recyclables associated with "new" municipal sources are quite minimal compared to those required to service many industrial sources. For example, it appears that one of the more expedient approaches to initial materials separation, consumer curbside collection programs, will become a very common component of county-level mandated recycling programs because of the "free" labor implied by in-home separation of materials [Foran 1988]. This means that the materials collection approach used will likely be one in which specialized trucks follow a garbage collection route on specified days to collect recyclables from participating households. This, in turn, clearly puts the current waste collector/hauler in a favored position to gain access to a long-term municipal contract to perform this service because of the similarity of this task to the refuse collection work already being done, thus removing the traditional dealer-processor from the channel. Since the material processing functions required for post-consumer recyclables collected via curbside programs are strictly "light weight" in character (e.g., hand sorting, baling, minimal ungrading of materials, etc.), it may also follow that waste collector/haulers or municipalities themselves will find it feasible to create facilities to handle these minimum processing functions at present landfill locations which are the logistical focal points of municipal solid waste collection systems. Again, this seems to imply that present dealer/processors may have a small or non-existent role in the process.

Availability of Markets

The success of any recycling program is a function of the availability of markets for the recyclables produced. Chapter 88-130 does little when it comes to addressing the issue of markets. Although the law does attempt to sway state purchasing preferences towards products with recycled material contents (e.g., fence posts made from mixed plastics, use of glass aggregate in road construction, demonstration programs etc.), it is apparent that such limited attempts at market stimulation will do little to increase overall market demand necessary to absorb the "instant" supplies of recyclables that are likely to emerge due to mandated recycling.

The issue of "markets" becomes even more important when one looks at additional characteristics of recyclables which influence their marketability as substitutes for virgin materials. These characteristics include: 1) the need to meet exact material specifications of end users, 2) the relative value of recyclables in comparison to their virgin counterparts, and 3) the location of end-user markets.

In regard to material specifications, some materials are easier to separate and process to specifications than others. For example, UBC (used beverage containers) are relatively easy to handle through a curbside separation program because known alloys are used in can construction and contamination via water, foodstuffs or other materials is not a factor in final manufacturing processes when making new containers. However, this is not the case for paper, glass, or plastics. In the case of paper, the intrusion of water and other contaminants pose a constant problem when it comes to meeting "clean and dry" specifications required by end users. Glass has the additional problem of needing to be sorted by color and being kept completely free of dirt and metal enclosure rings, while plastics need to be sorted by resin type (PET, HDPE, etc.), a process that is not economically feasible at the present time if the plastics sought are comingled with municipal solid waste [Resource Integration Systems, Ltd., p. 41]. Sorting and decontamination processes add costs which must be viewed in relation to the second factor above: the relative value of each recyclable in comparison to virgin substitutes.

In the case of aluminum, its relatively high value in comparison to virgin aluminum smelted from ore is derived from the energy savings associated with the recycling alternative. This has been estimated at 95 percent savings in comparison to virgin ore processing [Walker 1973, Selke and Lai 1988]. Thus, recycled aluminum has a basic economic advantage over virgin ore processing which is reflected in price and a relatively stable market over time.

This is definitely not the case for post-consumer paper, glass, and plastics. Although glass and paper markets have been established for years, the increased quantities of materials that will be made available through mandated recycling raises the significant issue of massive oversupply, especially in the short run. Already one source suggests that mandated recycling has caused a severe glut of news (recyclable newspapers) on the paper market in the Midwest [Recycling Today 1988a]. The same source also reports a strong market for glass cullet at the present time [Recycling Today 1989b]. In the case of post-consumer plastics, however, the general consensus appears to be that a market has not yet materialized because active involvement in plastics recycling research and applications is in its infancy [Rankin 1988].

One final factor concerning markets relates to geographic location, that is, the number of industrial users of recyclables in the state or

region. Previous research into the recycling industry in Florida has revealed that the "resident" market is very limited. In terms of users of recyclables, there are only 13 metal users, 7 paper users, 3 glass users, and 3 plastic users in the state [Fuller and Gillett 1988, p. 50]. This low level of local demand translates into the need to transport recyclables to distant markets, creating a cost factor which will negatively impact the marketability of post-consumer paper, glass, and plastics, thus suggesting the need for at least regional markets for these materials. Due to its inherent high recycle value, aluminum tends not to be affected by this factor.

Conclusions

The above comments make it easy to envision a scenario of massive oversupply of materials resulting in low or even negative prices for some recyclables. Present marketing systems would likely be disinterested in handling post-consumer recyclables under such conditions and, in fact, to do so would be a gross violation of intelligent marketing practice. After all, what well managed business would purchase products for resale, in this case recyclables, when there are no end-user markets in sight?

Florida's Chapter 88-130 is the latest in a series of state laws using mandated recycling as a means of diverting significant quantities of materials from dead-end landfill disposal. However, the legislation focuses on the initial reclamation and diversion of materials from the solid waste stream and not on the ultimate objective of recycling which is reuse of materials in the manufacture of additional products. In short, adequate consideration of markets is missing in this legislation but probably for good reason.

Mandated recycling, redemption/deposit programs, and outright bans on specific products/package materials represent government restrictions that tend to be placed on marketplace activity after all else fails. The bottom line is that post-consumer solid waste is piling up and something has to be done about it. Still, many will argue that markets should be established first, and indeed, in most cases the usual marketing approach is to analyze market needs first, then develop appropriate marketing strategy. However, others recognize the high risks associated with establishing businesses based on the usage of recycled materials when supplies are uncertain. To them the approach called "materials first with markets to follow" seems to make more sense.

Under these conditions marketers have choices including avoiding the issue altogether, thus acquiescing to the notion that a blind legislature has simply gone too far in the wrong direction. A more supportive approach would be to accept the fact that the law is in place and to work towards finding private enterprise solutions to the problem of creating markets for recyclables. After all, the problem of post-consumer wastes is not going to go away. One

positive aspect of the present legislation is that it forces the issue to the forefront and thus demands creative solutions to supposedly insurmountable marketing problems.

This leads to the suggestion that marketing efforts be directed towards finding large scale, productive uses for the recyclables being generated. Two major strategies that immediately come to mind are: 1) new product applications which utilize large quantities of recyclables as input materials, and 2) market development which brings appropriate industrial users (markets) into the state and region, thus creating strong localized markets for recyclables over the long-term.

As an indication of what may lie ahead, both product applications and market development appear to be moving ahead on both the industrial and consumer levels. For example, the FSC Paper Corporation pursues an active marketing program that incorporates long-term contracts with local communities to supply its plant in Alsip, Illinois while at the same time aggressively marketing its product, recycled newsprint, to major newspapers [Watson 1988]. Waste Management, a major waste collector/ hauler, has entered into an agreement with Dupont that may lead to the creation of a major national market for post-consumer plastics such as milk jugs and soft drink bottles [Time Magazine 1989]. Proctor and Gamble is presently experimenting with the marketing of cleaning products, such as Tide and Cheer, in containers made from post-consumer plastics [Time Magazine 1989]. For such products, dubbed "green products" in the trade, their success will largely be a function of consumer preference for products packaged in containers made totally or in part from recyclables. In any event, the eventual success of post-consumer recycling will be highly dependent on the creative application of marketing technology to the problem of creating widespread end-user markets given the availability of constant, large scale supplies of post-consumer recyclables.

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Abstract

The issue of ethics in business, and marketing in particular, has received much attention over the years in the popular press and academic journals as the debate continues over a working definition of ethics, how it applies to business, and why marketers should be especially concerned about ethics. This article reviews the literature on ethics and attempts to offer an applied ethical action model that marketing managers can use in all decision-making situations.

Background

- Rockwell International Corporation has been indicted for defrauding the Air Force ("Businesses are Signing" 1988);
- Ocean Spray Cranberries, Inc., has been indicted for polluting the environment ("Businesses are Signing" 1988);
- American Express has admitted planting defamatory stories in the press about a competitor ("Faxpoll" 1989);
- Rite Aid's president has been indicted for allegedly trying to bribe a state official ("Faxpoll" 1989).

These are just some of stories in the news almost every day dealing with marketing ethics. Stories appear on bribery, pricing, environmental considerations, product quality and safety, layoffs, advertising, honesty, and fairness. Companies that are affected by such ethical lapses range from the small to the large and cover all industries. The issue is not to condemn nor comment on the ethical lapses of specific businesses, but rather to develop an understanding of the concept of ethics in marketing by reviewing the literature. The end result of the process -- the purpose of this paper -- is the development of a four-stage ethical behavior model.

Potential ethical misconduct in marketing has been researched in great depth in the past 20 years, looking at such topics as the ethics of marketers (Baumhart 1961; Farmer 1967, 1977; Steiner 1976; Walton 1961), the ethical issues confronted by marketing managers (Chonko and Hunt 1985; Ferrell and Weaver 1978; Trawick and Darden 1980), and the influences in ethical decision-making (Alderson 1964; Bartels 1967; Chewning 1984; Colihan 1967; Lacznia 1983b; Patterson 1966; Pruden 1971; Westing 1967).

There seem to be two schools of thought on why ethics in marketing receives so much attention. The first makes the conjecture that since marketing is the business function charged with communicating and satisfying customers, that marketing is closest to the public view and thus is subject to deeper scrutiny than other functions (Lacznia 1985). The second states simply that marketing is the area of business most prone to unethical practices (Lacznia 1985).

Ethical Tools

The issue of ethics has kept philosophers busy for centuries, struggling to define right and wrong -- long before the issue of business ethics ever existed (Robin et al 1989). Of the several major ethical philosophies that have been developed, two fundamental types, utilitarianism and deontology, dominate the literature (Robin et al 1989). Deontology is favored over utilitarianism by moral philosophers, although both are considered popular (Robin et al 1989).

Utilitarianism is rooted in the thesis that an action or practice is right if it leads to the greatest good for the greatest number or to the least possible balance of bad consequences (Beauchamp 1983). Reaching this ideal of the greatest good or least bad involves performing a social cost/benefit analysis of all possible actions in question and choosing the action that meets the criteria (Robin et al 1989). Some of the major philosophers from the utilitarianism school include David Hume (1711-1776), Jeremy Bentham (1748-1832), and John Stuart Mill (1806-1873).

Deontology, on the other hand, maintains that the concept of duty is independent of the concept of good, that actions are not justified by the consequences of the actions, and insist on the importance of the motives and character of the agent rather than the consequences actually produced by the agent (Beauchamp 1983). This branch of philosophy focuses on universal statements of right and wrong; however, where there are exceptions, philosophers have suggested that there are *prima facie* (at first sight) universals that allow exceptions in certain situations (Robin et al 1989). The principle is always to act so everyone, faced with the same situation, should take the same action. The major philosopher who advanced deontology is Immanuel Kant (1734-1804).

Robin (1980) broke away from the two main schools of ethical thought in business -- deontology and utilitarianism -- by proposing that marketers use the relativist philosophy in dealing with ethics.

Moral relativists believe that all moral beliefs and principles are relative to individual cultures or individual persons (Robin 1980). Moral relativists believe that rightness is contingent on individual or cultural beliefs and that the concept of something being right or wrong is meaningless outside of the specific context (Beauchamp 1983).

The difficulty for managers is how any of these ethical philosophies relate to everyday business decisions. Because of this problem, many business leaders developed "rules of thumb" to guide business practices, none of which are practical enough for managers to use in ethical decision-making. (Lacznia 1985). [Table 1](#) summarizes these primitive guides.

Table 1
Simplistic Ethics Rules of Thumb

- *The Golden Rule:* Do to others as you would expect others to do toward you.
- *Ethical Egoism:* Act in a way that maximizes your long-term interest
- *Utilitarianism:* Act in a manner that maximizes good for the greatest number of people.
- *Kant's Categorical Imperative:* Act in such a way that the action taken for a given situation could be universal law or rule of behavior.
- *Rawl's Rule:* Never act in such a way as to further weaken the social positions of persons who are already relatively disadvantaged.
- *Societal Ethic:* Act in such a way as trust, cooperation, honesty, and fairness determine your actions.
- *Professional Ethic:* Take only actions that would be viewed as proper by a disinterested panel of professional colleagues.
- *The TV Test:* A manager should always ask, "Would I feel comfortable explaining to a national TV audience why I took this action?"

Ethics of Marketers

The study of ethics in marketing management is relatively new, with the first major article appearing in 1961 when Walton wrote that the ethics of most marketers appear to be on a lower plane than society. Since Walton's (1961) article, most of the articles that have been written about the ethics of marketers have had a negative slant. Farmer (1967) emphasized the need for change by suggesting that the number of ethical issues in marketing caused a perception of hucksterism. Ten years later Farmer (1977), in a sequel to his 1967 article, reported that the ethics of marketers were still questionable because marketers dealt with greed, selfishness, and base human desires.

Baumhart (1961) wrote of the eight major ethical problems that business people wanted to eliminate, including: gifts, gratuities, bribes, and "call girls;" unfair pricing; dishonest advertising; miscellaneous unfair competitive practices; cheating customers, unfair credit practices, and overselling; price collusion by competitors; dishonesty in making or keeping a contract; and unfairness to employees. It should be noted that five of the eight are marketing-related.

Steiner (1976) reaffirmed that marketers were viewed as having lower ethics than the rest of society. Steiner theorized that the reason was that people could not understand the value of time, place, and possession utilities.

Ethical Issues Facing Marketing Managers

In the mid-eighties, Chonko and Hunt (1985) conducted an empirical study of 1,076 marketing practitioners who were members of the American Marketing Association to determine the major ethical issues facing marketing managers and the effectiveness of top management in reducing the ethical problems of marketing managers. The authors found that the major ethical issues facing marketing managers included bribery, fairness, honesty, price, product, personnel, confidential-

ity, advertising, manipulation of data, and purchasing, and that the most frequent source of ethical conflict arose from the relationship between corporate interests and interests of customers (Chonko and Hunt 1985).

The problems associated with short-term perspectives and profit maximization by organizations and shareholders and within the marketing function have received attention from several authors (Davis and Frederick 1984; Sorenson 1988; Steiner and Steiner 1985; Webster 1981). Sorenson (1988) states that "too much emphasis on short-term results not only can lead to operational distortions and penny-wise/pound-foolish decisions, but also can provide an incentive to falsify financial results" (p. 29). In a study of chief executive officers of major companies, Business Month (1987) found that eighty-nine percent of CEOs believe American business is too short-term oriented. One executive is quoted as saying: "Companies with short-term profit motives are pushed into doing things to be profitable that are not necessarily ethical."

Ethical Influences

Several scholars have examined the influences in ethical decision-making (Alderson 1964; Bartels 1967; Chewning 1984; Colihan 1967; Laczniak 1983b; Patterson 1966; Pruden 1971; Westing 1967). Chewning (1984) states that all ethical considerations revolve around how people ought to be and act and because managers are always taking actions, that managers are deeply involved in ethical considerations all the time -- whether they are consciousness of it or not.

Alderson (1964) wrote that personal morality is constrained by organizational and ecological factors, and these factors could improve or retard a person's ethical standard. The thrust of Alderson's article was that ethical decision-making of marketers directly affected employees, so that if the company participated in unethical practices, the situation might cause an employee to commit actions against his or her conscience.

Bartels (1967) identified some of the factors that come into play in reaching an ethical decision, including cultural influences, economic implications, organizational expectations, and the effects on the various publics (including stockholders, employees, customers, government, etc.) the organization served. Trevino (1986) agrees with Bartels, stating that ethical issues are ever present in uncertain conditions where multiple stakeholders, interests, and values are in conflict and unclear.

Pruden (1971) examined ethics by differentiating among personal, organizational, and professional ethics, noting that all three interact in influencing decision-making. Individual ethics developed from a person's beliefs and values. Organizational ethics, partially a product of many personal ethics, represented the needs of the organization to survive and grow (Pruden 1971). Professional ethics were the collective norms of the particular discipline. Pruden (1971) also noted that professional ethics could act as a countervailing force when organizational ethics

seemed to overwhelm the ethics of an individual.

Westing (1967) theorized that personal morality was the overriding determinant in most situations involving marketing ethical questions and that the ethics of marketers were about the same as the ethics of other professionals. Westing (1967) also noted that many people fell prey to the idea that as long as a law is not violated, then the actions the people take are ethical.

The Missing Element

While the literature does a good job in examining the ethics of marketers, the issues facing marketing managers, the ethical influences on decision-making, and methods to improve ethical decision-making, what seems to be missing from the literature is a practical model managers can use in decision-making. Pastin (1986) notes that without this practical concept of ethics that "all too often, managers avoid thinking in ethical terms because they are unsure what ethics is and why it matters. Many are frustrated by the vague, nebulous term ethics and find that trying to define it is like nailing down Jell-O" (p. 33). Pastin adds that managers need a practical concept of ethics to apply to the problems they face in the workplace.

The Need for a Decision-Making Model

Over the years several models have been developed for analyzing ethical decision-making in marketing (Bartels 1967; Dubinsky and Loken 1989; Ferrell and Gresham 1985; Fritzsche 1985; Hunt and Vitell 1986; Klein 1985; Laczniak 1983a; Pruden 1971; Skinner, Ferrell, and Dubinsky 1988; Trevino 1986; Zey-Ferrell, Weaver, and Ferrell 1979; Zey-Ferrell and Ferrell 1982). The problem with the models that have been published, however, is that they only analyze ethical decision-making behavior rather than develop a guide that managers can refer to when trying to make ethical decisions.

Robin, Giallourakis, David, and Moritz (1989) state that "if very specific guidance could be combined with a value-based approach to social responsibility and corporate ethics, it could have an important impact on performance. There is simply no way to create enough rules to cover even the most ethically important occurrences, even if they could be identified before they occurred" (p. 72). The authors add that some statement of a company's ethical and socially responsible values, if one could be developed, would be a document that is open to all of the organization's publics and a constant reminder to employees about the expected approach for conducting all activities.

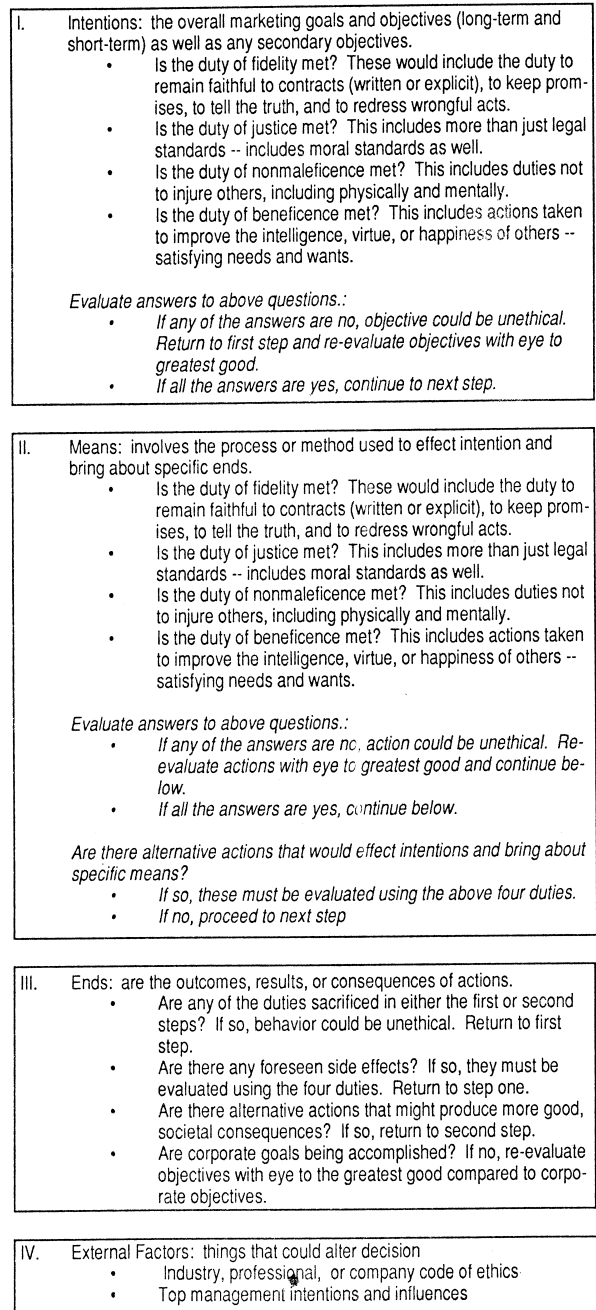
The first attempt at developing such a model will be developed in the next section and can be found in **Figure 1**.

Marketing Ethics Model

The Marketing Ethics Model, as can be seen in **Figure 1**, is a four-stage process that incorpo-

rates the philosophical theories of utilitarianism and deontology with applied logic in an attempt to give clear answers to all types of marketing decisions. The first three steps are basic components of ethical decision-making (Beauchamp 1983; Garrett 1966). The fourth and final step acknowledges the notion of outside influences on all marketing decision-making (Alderson 1964; Bartels 1967; Chewing 1984; Laczniak 1983b; Mason and Mitroff 1981; Patterson 1966; Pruden 1971; Westing 1967).

Figure 1
Ethical Marketing Decision-Making Model



Implicit in this model is an understanding of all the publics a manager must deal with, including stockholders, regulators, the media, customers, suppliers, organized public interest groups, informal interest groups, leaders, foreign governments, criminal elements, and other outside constituencies (Mason and Mitroff 1981).

The first stage deals with the intentions of the decision -- keeping in mind the overall marketing purpose, including primary goals and objectives as well as any secondary objectives. In this section managers should evaluate their intentions based on four of the *prima facie* duties of utilitarianism. The four duties, as can be seen in [Figure 1](#), are the duties of fidelity, justice, nonmaleficence, and beneficence. If the decision-maker answers negatively to any of the questions regarding the four duties, the objective could be unethical. If, however, the decision-maker answers affirmatively to all four questions, he or she moves to the next stage.

The second stage involves an evaluation of the means -- the process or method used to effect intention and bring about specific ends. This section includes an evaluation of the current action using the same four duties as in the first stage. In the second stage, however, the decision-maker is forced to come up with alternative actions that might be more ethical. Thus, the decision-maker goes through the same four questions of duties relating to the means, and if the answer to any is negative, the action should be assumed to be unethical. If the decision-maker answers affirmatively to all four questions, he or she, before moving to the next stage, also has to evaluate -- using the same four questions of duty -- any and all alternative actions, thus arriving at the most ethical action.

In the third stage, the decision-maker evaluates the ethical nature of the ends -- the outcomes, results, or consequences of his or her actions. Having passed the first two stages, the decision-maker is now forced to look at a larger picture; the first two stages were narrowly defined, but in this stage, the decision-maker is forced to consider the four duties once again, possible side effects of the actions, whether there might be better alternative actions, and whether goals are being accomplished from the actions.

In the fourth and final stage, the decision-maker moves from an internal focus to an external focus, examining outside influences that could affect the decision. The decision-maker must consider both codes of ethics (industry, professional, or company) and the intentions of top management in evaluating all aspects of the actions.

Discussion

Several propositions, yet to be empirically tested, result from the development of the model:

1. If marketing managers use the model for decision-making, the resulting decisions will be more ethical. Chewning (1984) discusses how ethics can be brought to the conscious level of the mind and interacted with

internally -- that people can become more ethical.

2. If marketing top management or company top management introduce the model and stress the importance of using the model, the model will be more readily adapted. Several authors (Alderson 1964; Pruden 1971; Westing 1967) have mentioned the importance of top management involvement in setting the ethical tone of an organization.
3. If marketing managers use the model for decision-making, the resulting decisions will not only be more ethical but also aid the company's short-term and long-term success. Several authors (Cavanagh and McGovern 1988; Davis and Frederick 1984; Steiner and Steiner 1985) discuss the problems with a short-term outlook and that ethical decision-making has a greater effect than just on the one decision, the short-term, but also helps make possible long-term success.

Further Research

Just as researchers have continued in their attempt to refine the ethical behavior models, so too, one hopes, researchers in the future will work to test and refine this model of ethical decision-making. Are there yet more influences and considerations managers have to deal with in ethical decision-making?

Another area of research may lie in an analysis of the business and industries most prone to ethical lapses. Are these ethical lapses due to poor decision-making, higher concentration of ethical dilemmas, varying environmental pressures, or a combination of these factors? How do companies choose to be ethical or unethical?

Further research needs to be done on the effects codes of ethics on ethical decision-making. Researchers seem undecided on the effectiveness of industry and company codes of ethics.

A final area of future research may be in the teaching of ethics. Should a course on general ethics be taught -- and if so, at what level? Also, should individual companies have ethics seminars for new employees as part of the orientation process? Can ethics even be taught? Henderson (1988) found that education on ethics is likely to have the greatest impact on "men and women of college age -- in the most formative years of their business careers" (p. 54). Gavin (1989) concurs; he found that significant changes can occur in problem-solving skills as related to ethical issues for people aged 20 to 30.

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CONTROLLING THE COUNTERFEIT PRODUCT PROBLEM:
MARKETING AND PUBLIC POLICY IMPLICATIONS
OF THE TRADEMARK COUNTERFEITING ACT OF 1984

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Abstract

Product counterfeiting is a growing problem for consumer and industrial marketers. In 1984, the Lanham Act was amended by the Trademark Counterfeiting Act in an attempt to more effectively control product counterfeiting. For the first time, federal trademark legislation includes criminal, as well as civil, penalties for product counterfeiters.

Introduction

A free market economy presents a multitude of challenges for competing firms. One challenge that a firm faces is the task of differentiating its products from those of the competition by creating a unique product concept and building a reputable brand name. Unfortunately, a successful brand name often attracts emulators hoping to skim short-term profits without making a similar capital investment as did the legal owner of the respective brand. In some cases, emulators may compete illegally by marketing a counterfeit of the brand name product.

The problem with counterfeit products has reached epidemic proportions as it is estimated that costs to U. S. business of counterfeits have increased from \$8 billion in 1982 to over \$20 billion in 1988 (Business Week 1988, Dugan 1984). During the same period, it is estimated that counterfeit products caused an almost sixfold increase in the loss of jobs in the United States from 131,000 to 770,000. The counterfeit problem is expected to continue in the future as developing countries view product counterfeiting as a way of attracting much needed hard currency and assimilating technology into their economies (Ball 1984; Dugan 1984).

In an attempt to protect owners of brand names from counterfeiters, several governments, including the United States government, have enacted trademark legislation. Trademarks allow free markets to operate more effectively and efficiently by providing firms with the incentive to innovate, produce improved products, and reduce consumer search costs. Left unchecked, counterfeiting drastically reduces the benefits a firm and society receive from a trademark.

Since product counterfeiting poses such an anticompetitive threat, the Trademark Counterfeiting Act of 1984 was enacted to provide more protection to trademark owners. As yet, little has appeared in the marketing literature about the effects of the Trademark Counterfeiting Act of 1984. The purpose of this paper is to address this shortcoming by: (1) discussing the meaning and detriments of product counterfeiting; (2) relating legislative attempts to control product counterfeiting in the United States; (3) providing an overview of

the provisions of the Trademark Counterfeiting Act of 1984; and (4) presenting the marketing management and public policy implications of the Act.

Meaning and Detriments
of Product Counterfeiting

The problem of product counterfeiting is not unique to the twentieth century. Counterfeiting has occurred ever since people used unique words, symbols, or designs to differentiate products of value from those of their competitors. For example, the Romans attempted to protect many products that were in high demand through the use of trademarks. Jugs of Roman wines were labeled with the origin of the grapes, the manufacturer, and the date of pressing (Rakoff and Wolff 1982). Even so, inferior wines from Gaul have been found with fraudulent labels indicating that they were Roman in origin.

Meaning of Counterfeiting

It has been estimated that since the early 1970s counterfeits have been manufactured on over 10,000 consumer and industrial products (Business Week 1985). Worldwide product counterfeiting exists today for four basic reasons (Kaikati and LeGarce 1980). First, trademark products are very popular. Second, popular trademark products are often in short supply. Third, the technological diffusion of production processes has allowed today's counterfeiters to produce creditable counterfeits at a low cost. Fourth, the growth of mass marketing in foreign markets has made trademarks more recognizable to more consumers, and thus, provides a broader market for counterfeiters. The combination of these factors allows counterfeiters to thrive, extracting high, short-term profits by servicing the pent-up demand that exists for trademark products.

Many activities are related to product counterfeiting. In legal terms, counterfeiting involves the unauthorized copying of some or all parts of a product that has a registered trademark, such that the copy would confuse, cause mistake, or deceive the consumer. An example of a counterfeit would be a cola drink that is packaged with the Coca-Cola logo. The term fake is slang for counterfeit. An imitation is not an exact replica of a trademark product. Rather it uses a name or shape which differs from the original, but is close enough that the consumer will associate the imitation with the original. For example, the Izod alligator logo might be imitated by a lizard.

Other terms used in conjunction with counterfeiting include knockoff, piracy, and passing off. A knockoff is a product that

copies the design of an original product but carries a different brand name. Piracy has been used in the recording and software industries to describe the copying of an artistic or creative original product. Passing off involves the simulation of a trademark, but not necessarily putting the name on the same product for which the original trademark is known.

The gray market does not involve counterfeit products. Rather the gray market consists of trademark products that are diverted from one market and sold in another market at a discount against the wishes of the trademark owner (Duhan and Sheffet 1988).

Detriments of Product Counterfeiting

The detriments of product counterfeiting involve both short- and long-term costs and impact both society and the marketer of the trademark being counterfeited. The immediate cost that counterfeiting inflicts on society is the loss of tax revenue that would have been generated from the sale of the more expensive trademark product and duties from illegally imported counterfeits. The longer-term economic and social cost born by society centers on the loss of jobs to counterfeiters who often operate in cheap labor markets (e.g., Mexico and the Philippines).

The cost of controlling counterfeiters to a trademark marketer can be substantial and have a significant impact on profitability. For example, in 1985 Chanel, which produces the often counterfeited Chanel No. 5 perfume, spent approximately \$1.2 million on security against counterfeiters (Business Week 1985). In the case of a small company, the cost of stopping counterfeiters can literally drive it to bankruptcy. This happened to Kidco, a small toy manufacturer, after they spent over \$300,000 in pursuing counterfeiters (Dugan 1984). Social costs also are incurred when firms expend resources to control product counterfeiting. These resources are often directed away from investments in research and development and new plant and equipment which may lead to new technological advantages and the creation of jobs.

Counterfeiting also imposes a cost on consumers by defrauding them into paying trademark product prices for counterfeits of inferior value and unenforceable warranties. For example, in 1985 counterfeits manufactured in the Far East and in South America not only copied the trademark and packaging of Carrera sunglasses but inserted in the package a warranty registration card complete with a false serial number (Green 1985). Consumers were angered when Optyl's Carrera's Division returned the bogus warranty cards and refused to register the sunglasses. In addition, consumers may vent their displeasure on the trademark marketer by eroding consumer goodwill and tarnishing the reputation of the trademark. Optyl's Carrera Division estimated the fake warranties cost it millions of dollars in consumer goodwill beyond the \$10 million it lost in sales.

The damage to a reputation of a trademark can be potentially more severe and long lasting than the short-term loss of sales to a counterfeiter. For example, Chevron Corporation's reputation took a long time to repair when a counterfeit pesticide bearing the Chevron brand name was used on the coffee crop in Kenya with devastating results. Two-thirds of the 1979 crop was lost to insects because ground chalk was substituted for the insecticide in the counterfeit pesticide (Green 1985).

Finally, counterfeit products may inflict health and safety costs on the firm and society. These costs usually take the form of product liability actions. To give just a few examples:

- A counterfeit of G. D. Searle's Ovulen 21 birth control pill resulted in several product liability actions against Searle when heavy bleeding and/or unwanted pregnancies were traced to low estrogen levels in the counterfeit pill (Business Week 1985).

- Several children were burned when their counterfeit Cabbage Patch Kids, stuffed with rags soaked in kerosene, broke open and exposed the rags to the children (Business Week 1985).

- In 1978, the Federal Food and Drug Administration recalled over three hundred heart pumps, which maintain a patient's heartbeat during surgery, because they contained an eight dollar counterfeit part (Rakoff and Wolff 1982).

- Counterfeit polio vaccines have been given to unsuspecting patients (Rakoff and Wolff 1983).

- Fake brake shoes have caused numerous car and bus accidents resulting in many injuries (Business Week 1985).

Legislative Attempts to Control Product Counterfeiting in the United States

Historically, protection from product counterfeiting in the United States has rested with the states. Most states have as part of their business and professional codes a section that addresses consumer fraud. Although fraud is usually punishable by a jail sentence, most states consider fraud perpetrated by product counterfeiters as a misdemeanor. Hence, the states have not been able to adequately deal with the problem of product counterfeiting because the potential benefits gained from counterfeiting far outweigh the costs of getting caught.

The first attempt in the United States to establish a federal trademark statute to control product counterfeiting occurred in 1791 when Boston sailmakers sought the exclusive use of marks to identify their sailcloth (Rakoff and Wolff 1983). This attempt was rejected by a Congress which at the time was sharply divided on the issue of the strength of the central federal government. The federal Trademark Act of 1870 provided for the exclusive use of marks that were registered and civil damages for product counterfeiting or infringing on a registered mark. However, the lack of criminal

penalties is thought to have contributed to making the Act an ineffective deterrent to product counterfeiting (Rakoff and Wolff 1982). An attempt to amend the Act in 1876 to include criminal penalties of up to two years and a fine of up to \$1,000, was declared unconstitutional because it infringed on states' rights (Rakoff and Wolff 1983).

Several federal trademark laws that did not include criminal penalties were passed after 1881. Most significant of these was the Lanham Act (1946). The Lanham Act (1946) established procedures for registering a trademark. The Act defined a trademark as any word, name, symbol, or device, or any combination, used by marketers to identify their goods. Since the Lanham Act was passed, trademarks became valuable assets worthy of consideration in strategic planning (Cohen 1986).

The Lanham Act attempted to deter product counterfeiters by providing civil penalties of up to three times the damages incurred by the marketer of the infringing trademark and ordering injunctions and seizure orders against confirmed product counterfeiters. However, many courts did not award treble damages for lost profits under the Lanham Act (Rakoff and Wolff 1982). Instead, court orders routinely forced the counterfeiter to pay a percentage of the sale price on the total number of counterfeits sold. In essence, such decisions made the counterfeiter a licensee of the firm that owned the trademark (e.g., Playboy Enter. Inc., v. Baccarat Clothing Co. 1981). No criminal penalties were included in the Lanham Act and the trademark marketer was required to discover and gather the evidence for a case to be brought against a suspected counterfeiter. Cartier, for example, spent over one million dollars in 1981 to track down and prosecute counterfeiters (Rakoff and Wolff 1982).

The Trademark Counterfeiting Act of 1984

It was believed that amending the Lanham Act with the Trademark Counterfeiting Act of 1984 would take a major step toward deterring product counterfeiting since it provided for criminal as well as civil penalties. First time offenders faced fines of up to \$250,000 for individuals and \$1 million for companies. Prison sentences of up to 5 years also could be imposed. Repeat offenders could be fined up to \$5 million and serve 15 years in prison.

The Act applies to cases that involve intentional product counterfeiting and defines a counterfeit mark as one that is likely "to cause confusion, to cause mistake, or to deceive." Counterfeit goods and services are both covered by the Act.

Since most counterfeiters operate in secrecy, deal only in cash, and do not keep records, they are difficult to convict (Business Week 1988). Therefore, the Act allows district courts to order United States Marshals to search the premises of a suspected counterfeiter and seize any counterfeit products that may be found. This provision makes it somewhat easier for a plaintiff to build a civil case against a

counterfeiter. The Act also allows plaintiffs to collect treble damages, the counterfeiter's profits, and the costs of investigating and prosecuting a civil suit, including reasonable investigator and attorney fees.

The Trademark Counterfeiting Act of 1984 has had a deterrent effect on product counterfeiting. In the first year and a half that the Act was in effect, more than 500 civil suits and many criminal actions were brought against suspected counterfeiters (Business Week 1988). Several companies have reported a decrease in counterfeit activity. For example, Jordache has had 80% fewer problems since the Act became law (Business Week 1988).

In the long-run, much of the success or failure of the Trademark Counterfeiting Act will come from the amount and stability of resources invested in enforcing it and additional international efforts to limit the problem. Presently, federal support to control product counterfeiting has been scarce (Business Week 1988). In addition, international treaties have not dealt with the problem. Although international treaties provide for the registration of trademarks, they do not have a mechanism for prosecuting counterfeiters, and therefore, have been relatively ineffective (Rakoff and Wolff 1983). The International Anti-Counterfeiting Code, which has already been signed by the United States and the European Common Market, is a new approach toward controlling product counterfeiting. The Code would require signatory countries to seize counterfeits when they attempt to clear customs.

Implications of the Trademark Counterfeiting Act of 1984

Marketing Implications

The Trademark Counterfeiting Act of 1984 holds several important marketing management implications. First, it acknowledges that product counterfeiting poses a real threat to the effective and efficient operation of a free market and reinforces the federal government's commitment to the protection of trademark owners. This should provide further incentive for marketers to continue to differentiate their products through product innovation and improved product quality.

Second, the Act provides trademark owners with a practical means of, and adequate financial remedies from, prosecuting suspected counterfeiters. Rather than relying on a federal agency to react slowly to a complaint, a brand name marketer can now take a proactive approach by taking the lead and moving quickly to stop counterfeiters from profiting from the trademark's reputation.

Third, the Act may serve to strengthen the trademark owner's position in the distribution channel since court orders would be issued to seize suspected counterfeit inventories. These inventories could be destroyed if they are found to be counterfeit. Depending on the size of the trademark marketer, the threat of a seizure order

could allow the brand name marketer to become a channel captain. The trademark owner should then be in a position to achieve its channel objectives by administering more effective and efficient channel operations.

Fourth, if product counterfeiting is reduced, the cost of customer dissatisfaction also should be reduced. Thus the full benefit of any investment in product quality and/or customer goodwill will be received by the trademark owner.

Public Policy Implications

The full extent of the public policy implications of the Trademark Counterfeiting Act may not be known for some time and will require public policy researchers to focus on many issues. At the moment, the following set of issues related to the effective and efficient operation of the market and the marketing activities of trademark owners are suggested by the passage of the Act.

1. The Act may eliminate sources of trademarked products for retailers that compete solely on a price basis.

The concern here is that low-price retailers, such as discount stores, will be singled-out as the predominant method of distributing counterfeit products, and thus, face increased scrutiny by government, trademark owners, and other retailers. The Act only encourages all retailers, discount or otherwise, to make an effort to ascertain whether trademarked products are genuine. Closeouts on trademark products are not affected. Low-price retailers may be helped by eliminating low-priced counterfeits that compete with closeouts.

2. The Act may encourage resale price maintenance by trademark owners. This would reduce competition and raise prices to consumers.

The interpretation of the antitrust laws has found resale price maintenance to be per se illegal. In addition, the proposed Retail Competition Enforcement Act of 1987, if passed, would codify the per se rule against resale price maintenance. Therefore, retailers of genuine trademark products are protected from attempts to establish a resale price maintenance plan. Only retailers that carry counterfeit products should be eliminated from the market.

3. The Act may eliminate low-price retailers and their suppliers by allowing trademark owners to bring false charges for trafficking in counterfeit products.

The burden of proving the retailer or supplier had the intention to counterfeit products. The Federal Trade Commission Act would provide a check on the filing of false charges as retailers and suppliers could countersue alleging false charges are anticompetitive and an unfair restraint of trade.

4. The provision of the Act that allows seizure of counterfeit inventories is anticompetitive. A retailer or supplier that purchases counterfeit products that are believed to be

genuine should not bear the full cost of their disposal.

The seizure of counterfeit products to prevent their sale before a court action may be necessary for the effective control of product counterfeiting. Otherwise, the seller of the counterfeit products has time to benefit from the sale of the counterfeits. The seizure provision allows a neutral judge to determine the authenticity of the products. Innocent retailers and suppliers benefit in the long-run from the elimination of counterfeit products from the market.

5. The value of seasonal products may be lost if the products are seized in error and later returned. In addition, the bad publicity may damage the retailer.

The Act suggests that retailers take some responsibility for knowing the source of their products, whether seasonal or not. It is possible that mistakes will be made. Strong evidence that the inventory is counterfeit would be required before a court order that allows seizure of inventory is issued and the inventory is ultimately destroyed.

6. The Act may be unnecessary because the original Lanham Act was adequate.

Throughout the trademark history in the United States, civil penalties alone have been ineffective in dealing with the counterfeit problem. The inclusion of criminal penalties inflict a greater cost on product counterfeiters and seems to have provided a greater deterrent to product counterfeiting.

Conclusion

This article provides an overview of the Trademark Counterfeiting Act of 1984 and the problem that it is designed to control. Although the Act has provisions for criminal sanctions, it is too soon to determine the long-term effect on reducing the trade of counterfeit products. Marketing and public policy researchers need to address some fundamental questions before the effectiveness of the Act can be determined and/or additional actions against product counterfeiters planned. These questions include: (1) How do product counterfeiters insure long-run survival? Is it possible that they move from the legitimate production of products to counterfeits as the market and enforcement efforts change?; (2) Do counterfeit products compete with a brand name product in the same or different market segments? If they compete in different market segments (e.g., upscale segments versus price-conscious), how is the trademark marketer that operates in a different market damaged?; (3) What methods could retailers use to insure their inventories are genuine; and (4) What are consumers' attitudes toward counterfeit products? Are they aware that a product is counterfeit, but choose to purchase it anyway?

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"NEEDS" AND "WANTS" IN MARKETING LITERATURE: PEDAGOGICAL DIFFICULTIES

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Abstract

The diversified definitions of "needs" and "wants" in marketing textbooks are compared in terms of similarities and differences. The two themes that emerge from this chronicle include the notion that both constructs represent a discrepancy between actual and desired states and that needs and wants differ in various cultural environments.

Introduction

Marketing education's phenomenal progression can be witnessed as the number of marketing courses taught proliferates in high schools and universities. Marketing, simply speaking, concerns the understanding of the nature of consumption so that producers can deliver goods, services, and ideas in a profitable way. Understanding consumer behavior begins with an understanding of what motivates consumers to engage in any particular consumption pattern. And the phenomenon of motivation is inextricably linked to the constructs of needs and wants.

Interpreting the meanings behind consumption necessarily includes a discussion of the terms "needs" and "wants." Most textbooks define these constructs by means of Maslow's familiar hierarchy of needs (1954). Maslow's views often form the basis of the common and the advocated definitions for "need." Despite this simple solution to the interpretation problem, many other definitions have been proposed in the literature which purport to provide better insight into the nature of needs and wants. Educators and students alike may be surprised by the variety of definitions and lack of consensus available concerning these very important constructs. Some authors treat needs and wants as synonymous while others distinguish between them using a variety of different definitions.

This paper attempts to provide exposure to the great variety of definitions for the terms "need" and "want" which are proposed in principles of marketing and consumer behavior textbooks. As vehicles of marketing language and knowledge dissemination, these books represent the generally accepted or mainstream views on the issue of definitional differences (Plank and Canedy 1989). See the Appendix for a complete list of textbooks referred to in the following sections (all textbooks reviewed are listed in this appendix, whether mentioned directly or not). The presentation begins with a discussion of selected theoretical definitions of want, followed by definitions of need. Subsequently, rationale for the many distinctions between wants and needs are discussed. An overview discussion is presented in the last section.

Selected Definitions of Want

In an effort to capture the nuances of the constructs' meanings, authors and researchers have proposed various definitions of needs and wants. Tables 1 and 2 summarize selected definitions of these constructs offered in various textbooks, attesting to the diversity in conceptualizations. Table 3 demonstrates the ways in which selected authors have distinguished between the two constructs.

Concentrating first on the definitions of "want," six definitions of the construct are presented; three of which originate from Principles of Marketing (M) and three from Consumer Behavior (CB) textbooks (Table 1). Some authors define wants variously as motives, felt deprivation, problems, or goals. Some authors treat needs as wants, drives, desires, wishes, and so on. For instance, Kotler (1984) proposes that wants can be learned and are defined by cultural influences (p. 119). For Kotler, wants are almost unlimited, and it is impossible to fulfill all of them. The determining factor of what wants are taken care of is the level of an individual's resources. For Kotler, wants are related to needs in that when needs are converted into drives, the nature of society, learning, and individual traits further influence drives to become wants. That is, once needs become strong enough to require satisfaction, they convert into wants.

McDaniel and Darden (1987) advance a different conceptualization of want. Wants express themselves as products/services (hereafter, products) which are identified for satisfying unfulfilled needs (p. 126). These products can be either brand-specific or in terms of product class or category. For example, a brand-specific want concerns the choice between brands of soft drinks such as Coca Cola or Pepsi. An example of wants in terms of product category would be the choice of different thirst-quenching options, for example, beer, soft drink, or juice.

McCarthy and Perreault (1987) offer a different point of view. According to these authors, a want is something capable of being learned in a person's lifetime. However, wants will constantly change unlike needs which remain unchanged.

In consumer behavior textbooks, varying viewpoints on the construct "want" are also evident. Schiffman and Kanuk (1987) treat wants as synonymous with several other constructs, specifically, needs, motives, drives, desires, goals, and driving forces. In regard to these terms, four dichotomies are pointed out: motives can be positive or negative, goals can be generic or specific, needs can be primary (innate, biogenic) or secondary (acquired or psychogenic), and finally, secondary needs are subconscious

whereas primary needs are considered conscious. Harrell (1986) presents a different argument. In his definition, wants are alternative ways of fulfilling needs. Unlike needs, which indicate requirements, wants indicate preferences for alternatives. This approach suggests that as product alternatives proliferate, buyers' wants will commensurately increase.

Zaltman and Wallendorf (1983) provide yet another definition of want. Want is a specific requirement at the product class level (p. 300). It is preceded by conscious or unconscious needs (p. 366) which represent a broad fundamental requirement at the product group level (p. 360). Once strong enough to be transformed, wants convert to demand which represents a requirement at the brand-specific level (p. 360).

Selected Definitions of Need

This section presents selected theoretical definitions of "need" (Table 2). Six definitions of needs are discussed; three of which come from principles of marketing textbooks, and the other three from consumer behavior textbooks.

For Kotler (1984), needs are interpreted as an innate condition of tension, a state of unhappiness, or a feeling of deprivation, all of which arise when one's actual state become inconsonant with one's desired state. According to Kotler, needs are characterized as biogenic (physiological) and individual. Needs transform into drives or motives when the level of tension preceding needs crosses some threshold.

McCarthy and Perreault parallel Kotler's interpretation in that needs are looked upon as basic forces that motivate an individual to act. However, McCarthy and Perreault also recognize that needs can be learned from one's social background and cultural origin, and that needs are always changing. When a need is not satisfied, it becomes a strong stimulus to action. Needs are converted to drives which spur actions aimed at reducing needs.

Gross and Peterson (1987) note that "needs are neither behavioral acts nor intentions to act... [but] tensions that trigger mental activities" (p. 100). These tensions arise from recognition of some problem. Such a problem can be some felt deficiency that results in physical or mental states of tension.

Among the consumer behavior texts, Zaltman and Wallendorf identify needs as broad, fundamental requirements that could accept a wide variety of satisfactory solutions. Like Kotler, Zaltman and Wallendorf recognize that needs arise when a discrepancy exists between the actual and desired states (p. 659). However, in addition to a discrepancy, social influence, either conscious or unconscious (p. 361, 366) can also trigger needs.

Mowen (1987) ascribes the origin of needs to the discrepancy between the actual and desired states like Kotler. However, though needs can be innate or learned, they are never fully satisfied as new

needs always appear to replace old needs. When two needs conflict with one another, the more basic, or physiological needs are satisfied first.

Berkman and Gilson (1986) describe needs as the fundamental motives for goals set by consumers. Consumers attempt to fulfill specific goals via certain types of preferences or alternatives as well as through purchasing behavior. Also, Berkman and Gilson state that needs cannot be created, and that they may be rational or irrational in nature.

It is interesting to note that overall, a greater number of authors define needs, and that only a few define wants. In fact, of the thirty textbooks examined, those defining need numbered twenty eight, while want was only defined in nineteen cases. No author mentioned only wants to the exclusion of needs. A possible explanation to this imbalance in the number of interpretations between needs and wants is that perhaps some authors have subjectively placed greater emphasis on the construct of "need" than "want." They appear to believe that essential requirements must be met first before an individual can fulfill other, nonessential desires.

Relationships Between Wants and Needs

Despite the foregoing discussion of a variety of interpretations of the constructs of needs and wants, we still cannot easily differentiate between the two constructs. This section will chronicle selected authors' attempts to differentiate the constructs (Table 3). The table provides six chief distinctions between the meanings of wants and needs as proposed in the reviewed literature.

1. Wants can be created, needs cannot.

Kotler distinguished between needs and wants in terms of susceptibility to influence. Needs cannot be created because they are considered innate and hence presented as beyond the influence of marketers. On the other hand, wants can be created because they are culturally defined, they are subject to learning, and they can be influenced by individual traits (p. 119).

2. Needs are innate for functioning efficiently, wants are products chosen.

McDaniel and Darden broadly conceptualize needs as anything people depend upon to function efficiently. On the other hand, wants are products/services identified for satisfying unfulfilled needs (p. 126). The search for need-satisfiers is influenced by societal, environmental, and technological changes, and wants are also influenced by similar forces.

McDaniel and Darden's distinctions between the two constructs is partially similar to Kotler's. While they recognize Maslow's hierarchy of needs, they assert that unlike needs, wants can be created. However, McDaniel and Darden additionally view a more generalized impact of cultural and learning influences in the creation

of wants as opposed to Kotler who sees learning and culture influencing consumer behavior only at the transformation of drives into wants. Specifically, Kotler sees drives as resulting from excessive tension due to a discrepancy between actual and desired states. In the process of satisfying this drive, the nature of society comes into play. Poorer societies may cause individuals to extinguish their drives. Individual traits and learning also influence the satisfaction of drives in the manner in which the drives transform to wants. According to McDaniel and Darden however, learning and cultural influences in society affect all the stages of transformation from needs into wants. Learning and culture can materially influence the very nature of needs themselves. The same forces affect the identification of products and services to meet these unfulfilled needs.

3. Needs are generated by developments over which there is no choice while wants are generated by choices that can be made either way.

Wilkie (1986) gives no formal definitions on needs or wants, but speaks of "new need circumstances, and new want circumstances," (p. 500). An example of new need circumstance is change resulting from movement through the family life cycle. For a new want circumstance, his example is a student opening up to travel, classical books, and art because of exposure in college. An implicit differentiation is that needs are requirements generated by developments over which consumers have no choice whereas wants are requirements generated by choices which consumers can make either way.

4. Needs are limited necessities of consumers while wants are limited only by the boundaries of the imagination.

Markin (1974) makes several relevant remarks about needs and wants distinctions. He conceives of needs specifically as the limited, bare necessities while he sees wants as being more broad, limited only by imagination. In addition, new wants are said to constantly crop up as previous wants are satisfied. Markin depicts wants as the nonessential products people desire. His conception partially parallels Kotler's in that Markin also sees the discrepancy between the present condition and the desired condition as being the cause of tension which is linked to goals that propel behavior (p. 100).

5. Needs are requirements for survival while wants are extravagant ways of meeting those needs, and other requirements.

Schoell (1985) reserves the term need for basic requirements for survival and the term want for extravagant ways of satisfying needs. An example of a basic requirement could be simple transportation, while an extravagant way of meeting this need would be through the purchase of a luxury automobile.

Schoell appears to imply that a distinction could be proposed between needs and wants by reserving the term needs for basic requirements of survival and the term wants for extravagant ways of

satisfying such needs. However, he chooses to use the terms interchangeably because "distinguishing between needs and wants in a mass consumption society like ours is inevitably based on value judgments" (p. 5).

6. Needs are basic and broader, and refer to a product group, wants are more specific and pertain to a product class.

Zaltman and Wallendorf identify three varying degrees of consumer requirements. Needs are the broadest, most fundamental requirements at product group level that could accept a wide variety of satisfactory solutions. Wants are more specific and pertain to product class, while demands belong to brand-specific level (p. 360). For example, at the product group level, an individual exposed to the winter chill may need a coat or a heater to keep warm. At the level of product class, s/he can choose among coats, heaters, or thermal underwear, and at the brand-specific level, a J.C. Penney or a London Fog jacket.

Where Do We Go From Here?

After reviewing the bewildering array of opinions on the definitions of needs and wants, we are left with the significant question of what to do with them. Clearly, students should be informed of the lack of consensus and the considerable controversy on this topic, instead of arbitrarily selecting any one particular viewpoint. However, in terms of marketing pedagogy, educators might use several possible perspectives for elaboration on the controversy beyond the mere recognition of the problem. Three potential ways in which the problem can be approached are: 1) by referring more directly to the underlying issue of motivation and motivation theories; 2) by seeking knowledge from other philosophic orientations outside the marketing discipline since wants, needs, and consumption are interdisciplinary constructs; and 3) by isolating and understanding the important commonalities in various textbook definitions for the constructs of need and want.

The first potential path for resolution of just how needs and wants should be presented to students is to dig deeper into the underlying issue of motivation. Although the motivation literature is large and relatively well-developed, scholars have not resolved their differences on all the issues relating to motivation. For example, in a behaviorist orientation to motivational phenomena, psychological states per se are deemed irrelevant if the manifest behavior is inconsistent with them. Behaviorism is diametrically opposed to the cognitive orientation, which emphasizes thought processes as important precursors to behavior, worthy of investigation for their own sake. These examples reflect the state of a field in which writing and research are usually paradigm-driven. Since philosophical paradigm differences are nearly impossible to reconcile (Anderson 1983), it is the opinion of these authors that the controversies in the area of motivation will not be settled in the foreseeable future. Therefore, an appeal to the motivation

literature for clarity on the meanings of need and want would not be a useful exercise, at least in the immediate time frame required by marketing educators for pedagogical purposes.

A second potential way of resolving issues concerning need and want as concepts related to consumption phenomena is to assess the contributions of other philosophic orientations that view consumption activities from a more macro perspective. Recently, several macromarketing scholars presented comparisons of these differing orientations as they deal with need and want in particular (Dholakia, McIntyre and Joy 1988; Firat 1988; Roberts and Dant 1988).

Firat (1988), for instance, states that one cannot successfully attempt to find distinctions between need and want without understanding the history of human society and consumption. That is, without a knowledge of significant sociocultural antecedents that influence consumption, and the recognition that needs and wants are relative to cultural contexts, the distinction between these variables may be reduced to a superficial and purely semantic one. Firat goes on to say that within the social sciences, business scholars may be the only ones interested in such a distinction at the constructs level. For Firat, at least, the distinction is conceptually a meaningless one since an appreciation of the macro determinants of consumption is the more significant issue. An appeal to other social sciences and philosophic orientations, then, is not likely to give the desired results of relieving the more immediate pedagogical concern of how these controversies should be presented to marketing students.

Although the suggestion that the controversy can be settled by chalking up the differences to mere semantic distinctions has an intuitive appeal and offers an easy "out" to marketing educators, the literature review has shown that the distinctions proposed by the various authors go far beyond simple semantics. Various conceptualizations actually present distinct interrelationships between wants and needs, and other constructs. It is therefore the recommendation of these authors that a more correct short-run solution might be to examine the commonalities or points of consensus between the definitions as presented in available textbooks. Hence, students should be informed of the controversies and then made to appreciate the commonalities and the remaining irreconcilable differences.

Looking over the tables, there appear to be two main themes which emerge in the definitions. First is the notion that needs and wants may both be related to some discrepancy between the actual and the desired state. The second important feature of the definitions of both constructs is that they appear to be relative, both culturally and individually. Note that need and want are thought of as relative by some, not all authors (i.e., "innate" suggests non-relativity). However, the definitions offered by most authors allow for the development of the idea that needs and wants are indeed relative and are culturally bound. The following sections describe more

fully the two commonalities among the definitions.

Discrepancy Theme

The idea that both need and want can be conceived of as emerging from some discrepancy between an actual and a desired state is not an original one. Kotler for instance, speaks of needs as felt deprivations, indicating discrepancy. The definitions given for both constructs by Schiffman and Kanuk (who see want and need as synonymous) include "desires," a term related to discrepancy. Moreover, the discrepancy idea has been used in the literature to define many other behavioral constructs, including conflict and dissatisfaction. Marketing scholars often refer to marketing as a way of closing the "gaps" which exist between the actual and desired states of the consumer.

If a distinction is to be made between need and want, it is probably best to do so by considering the level of abstraction at which either physiological or psychological discrepancy might occur. For example, hunger is triggered by a discrepancy. However, hunger is an abstract, generic idea. The desire for a Burger King hamburger, on the other hand, is very specific and concrete, and illustrates a plausible notion of want as a discrepancy. In other words, desire for both hunger satisfaction and a Burger King hamburger were triggered by a physiological discrepancy in actual and desired states, but the two are distinct in their level of abstraction.

The fact that both need and want can easily be conceptualized in terms of a discrepant state of being, supports the idea that proposing a strong distinction between the constructs may be unwise. Their real difference may be how they vary on a continuum of abstraction. Indeed, Zaltman and Wallendorf do propose their distinction based on a level of abstraction, but seem to limit their argument too narrowly to product-related terms such as "product class" and "product group." When dealing with broad issues of the meanings of need and want, such narrowness of scope is inappropriate. However, the ideas that both needs and wants represent discrepancies, and that if a distinction is meaningful, it is likely to be at the level of abstraction are positive steps toward more meaningful and consistent definitions of the terms.

Relativity Theme

A review of the distinctions between need and want as proposed by the text authors reveals that some see needs as innate, while others see both needs and wants as subject to macro influences. We propose that the latter viewpoint is the better approach in terms of exposing students to the constructs.

Most human needs and wants are relative to the immediate or salient learned environment. Dholakia, McIntyre and Joy (1988) and Roberts and Dant (1988) recently discussed the reasons and the process behind the relative nature of needs

and wants. Needs and wants are strongly influenced by cultural boundaries, economic pressures, and technological innovations that vary greatly from society to society. A review of Table 3 indicates that many of the definitions can be re-interpreted in light of the relativity argument. For example, Schoell defines needs as "requirements for survival." What exactly constitutes an acceptable level of consumption for "survival" is likely to be highly variable from society to society, and situation to situation. Harrell refers to needs as "fundamental requirements." Like survival, the notion of "fundamental" is very open to interpretation and is likely to be determined by environmental influences and social learning.

Some text writers have used the word "innate" to describe needs. We believe such descriptions do not delve deeply enough into understanding need. Societal and cultural conditioning begin to shape our thinking and behavior almost from the time we are born. Moreover, in the course of life, people change and re-learn things due to societal, environmental changes -- all attesting to the premise that we are creatures of our environments. For the same reasons, environmental influences greatly affect consumer perceptions of what they need and want. Innate in the sense of no environmental influences, then, is a superficial interpretation, and does not fully capture the meanings of the constructs of need and want.

Conclusions

This study has reviewed and chronicled the diverse opinions of marketing textbook authors as to the meanings of the constructs of "need" and "want." In terms of pedagogical clarity, suggestions have been made as to how the terms are similar, and whether there are workable, teachable distinctions for the educator's use. In general, two themes are worth noting for the terms need and want. The first is the notion that they both represent a discrepancy between actual and desired states, and that students should be aware of differing levels of abstraction. The second theme (which admittedly has a lesser degree of consensus) is that of cultural relativity, that is, needs and wants are likely to be different in different cultural settings. If distinctions between needs and wants are to be proposed, the authors suggest that it be done very carefully with due cognizance to the two discussed themes.

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Appendix Texts Referred To:

Principles of Marketing:

- Cravens and Woodruff (1986); Cunningham, Cunningham and Swift (1987); Evans and Barry (1987); Gross and Peterson (1987); Gwinner, Brown, Hagan, Ostrom, Rowe, Schlacter, Schmidt and Shrock (1977); Kotler (1984); Lusch and Lusch (1987); McCarthy and Perreault (1987); McDaniel and Darden (1987); Murphy and Enis (1985); Pride and Ferrell (1987); Schoell (1985); Schwartz (1981); Shaw and Semenik (1985); Zikmund and D'Amico (1984).

Consumer Behavior:

- Assael (1987); Berkman and Gilson (1986); Harrell (1986); Kassarian and Robertson (1981); Loudon and Della Bitta (1984); Markin (1974); Mowen (1987); Peter and Olson (1987); Robertson, Zielinski and Ward (1984); Runyon and Stewart (1987); Schiffman and Kanuk (1987); Wilkie (1986); Williams (1982); Woodside, Sheth and Bennett (1977); Zaltman and Wallendorf (1983).

TABLES are available on request from the first author at: Department of Marketing, Old Dominion University, Norfolk, VA 23529-0220.

WHO'S LOOKING OUT FOR THE CONSUMER?: A PROFILE OF CONCERNED MARKETERS

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ABSTRACT

This study investigated one aspect of marketer's acceptance of their responsibility for the well-being of consumers. It considered the extent to which retailers are oriented toward protecting their customers from counterfeit products. The empirical segment of the study identified both "accepting" and "rejecting" groupings of retailers and provided a profile of each group. Portraying concerned, accepting marketers made it possible to draw conclusions about the nature of involvement by the marketing system in consumer welfare. It also aided suggesting means by which marketers can be motivated to accept greater responsibility for the welfare of the consuming public.

Supporters of marketing commonly boost the profession by citing examples whereby concerned marketers have demonstrated social concern by performing caring acts for the consuming public. For example, Kellogg has committed itself to providing information to consumers openly, promptly, and completely (Business and Society 1988). Such highly visible contributions to public welfare are commendable, of course, but as isolated incidents of marketers' concern they may misdirect public attention from the extent of an underlying societal problem. Specifically, does the marketing system truly feel concern for consumers, or must they heed the adage "protect thyself?"

Clearly, the public welfare depends heavily on the enlightened concern of marketers. In this increasingly complex society, consumers are often unable to adequately care for themselves, because the American marketing system annually distributes an increasingly wide range of technologically advanced products and services. Consumers have a limited knowledge of this technology, consumers must thus continually depend on others to look out for them. They must rely on institutions that have the knowledge and hopefully the diligence required to inform them about and protect them from the often faulty--and sometimes dangerous--products and services that find their way into the American distribution system (Betancourt and Gautschi 1988; Bush, Bloch and Dawson, forthcoming).

For example, consumers rely on pharmacists to fill prescriptions with safe and effective medicines. They assume the vehicles they purchase are safe in when operated "normally." Consumers cannot themselves determine whether the fumigants dispensed by a household pest control company will endanger their own health. They assume the bottled water they buy is free from harmful chemicals. Unfortunately, evidence suggests that some marketers often consider their own "best interests" to differ from those of consumers (Forbes 1987). As a result, thousands of cases every year demonstrate that consumers' trust in producers and distributors of these and other products and services is often misplaced (Maynard 1986; Sewell 1986).

Therefore, several pertinent questions arise from the realization of American consumers' dependence on marketing institutions: (1) who will watch out for the safety and well-being of consumers; (2) what are the characteristics of these concerned institutions; and (3) how can knowledge of these characteristics be used to encourage marketers to demonstrate greater concern for consumers? The purpose of this study is to examine these questions as a way of considering certain aspects of the interface between the marketing system and the consuming public. Specifically, this research investigates acceptance of the role of public watchdog as assumed by certain retailers. As a vehicle for studying this role of retailers, this study focuses specifically on distribution of counterfeit automobile parts.

THE NEED FOR CONSUMER PROTECTION BY THE MARKETING SYSTEM

The problem of counterfeit auto parts is a salient example of a larger issue: the need for marketing institutions to defend the interests of consumers. As early as 1984, the U. S. Office of Consumer Affairs estimated three billion dollars of fake auto parts were currently for sale in this country (Dugan 1984). While some of these bogus products are manufactured in the U. S., most come from abroad; namely, from Asian countries such as Taiwan, Indonesia, Korea, Thailand, and India (Dugan 1984; O'Donnell, et al. 1985). Losses to society from fake products take various forms: billions of dollars of sales revenues lost to illegitimate producers and distributors; hundreds of thousands of jobs lost to these same companies; loss of goodwill when customers blame the legitimate producer for the failings of fake items; and the cost to government and industry in attempting to stem this illegal activity (Bush, Bloch and Dawson, forthcoming; Dugan 1984; Foltz, et al. 1984; Marketing News 1986; Stephens 1988).

The danger to consumers from counterfeit auto parts is multifaceted. The U. S. Health and Human Services Office has labelled fake auto parts a serious threat to consumer safety. These fakes have caused a number of automobile fires and even fatal auto accidents (Dugan 1984; O'Donnell, et al. 1985). Counterfeit brakes can take six times as long to stop a car as the genuine article (Foltz, et al. 1984; Stephens 1988). The Ford Motor Company estimated that fake auto parts last only 5 to 25 per cent as long as genuine parts (Bush, Bloch and Dawson, forthcoming); therefore, many millions of dollars have been lost in the replacement of the installation of substandard parts. Auto owners have suffered the cost of correspondingly many hours of lost time in rectifying the problems caused by fakes.

Basically, the need for protection arises because the typical consumer has neither the knowledge nor the ability to inspect replacement parts for authenticity. Rather, the auto owner must rely on others for protection. Specifically, the car owner usually assumes the institution that provides these parts acts as the guardian of his/her best interests. In particular, scholars have identified the parts dealer as the person best situated to provide needed protection (Bamossey and Scammon 1984). If this is true, then the consumer lies at the mercy of the parts retailer. When the dealer accepts this assigned responsibility, the consumer may be to some significant degree shielded from loss. When the dealer rejects this responsibility, the consumer lies at risk. Thus, a first step in improving the current situation involves identifying those retailers who accept and those who reject this responsibility.

CONCEPTUALIZATION OF THE CHARACTERISTICS OF A RESPONSIBLE PARTS RETAILER

The conceptualization underlying this study posits that auto parts retailers decide whether to accept responsibility for the consumer on the basis of a defined set of beliefs. These beliefs fall into seven classes: (1) Danger from Counterfeiting; (2) Retailer Anomie; (3) Availability of Counterfeits; (4) Perception of Consumers' Feelings; (5) Government Responsibility; (6) Manufacturer Responsibility; (7) Wholesaler Responsibility. To successfully characterize the accepting retailer, research must determine the beliefs typical of the dealers in this class. In preparation for a report of the empirical segment of this study, this section discusses these seven sets of characteristic beliefs.

Danger from Counterfeiting. Danger from Counterfeiting reflects the retailer's beliefs that the problem is serious and worthy of concern. The seven items in this class reflect a variety of beliefs, specifically including such issues as the influence of counterfeiting on the general economy, the financial ruin it may cause business firms, the danger to consumers from using fake parts, and the possibility the retailer can be held legally responsible for damages.

Retailer Anomie. Retailer Anomie represents whether the retailer believes firms at its level in the channel can and should become involved in solving the counterfeiting problem. The four items in this class include whether retailers can have much impact on counterfeiting, whether they should contribute more to solving the problem, and whether current societal controls are adequate to handle counterfeiting.

Availability of Counterfeits. Availability reflects dealers' access to fakes. The set of beliefs concerning Availability includes items on retailers' perceptions of the availability of fakes and their prior experience with distribution of these products.

Perception of Consumers' Feelings. Perception of Consumers' Feelings mirrors how the dealer thinks of its customers in this regard. The four items in this set indicate the perception of customers'

willingness to buy fakes and to accept these products. Two items deal with consumers' ability to detect fakes and whether they should try to detect them.

Government Responsibility. Government Responsibility indicates the extent of belief that the government bears a major anti-counterfeiting responsibility. This set includes two items for ascertaining beliefs about whether the government has sufficiently accepted this charge and whether government customs agents should bear primary responsibility for stopping the flow of counterfeit goods.

Manufacturer Responsibility. Manufacturer Responsibility similarly refers to the burden assigned to manufacturers of genuine products. It features three items dealing with the extent to which manufacturers should increase their anti-counterfeiting activities and whether consumers hold them responsible for the problem.

Wholesaler Responsibility. Wholesaler Responsibility in the same fashion represents beliefs concerning the wholesaler's role in the battle against counterfeit goods. These three items represent beliefs concerning whether wholesalers are shirking their duty and should become more involved in the process of stemming the flow of fakes.

Retailer Concern. As stated, the criterion construct in this study indicates whether a retailer accepts or rejects responsibility for its customers. Nuances of this construct involve the retailer's belief about the necessity and appropriateness of its assuming responsibility for protecting its customers from counterfeiting. This criterion construct reflects a necessity from the viewpoint of both the retailers and consumers.

METHOD

Data Collection

Managers of auto parts stores listed in the Yellow Pages of telephone books in the southern U. S. provided data for this study. A total of 306 managers were selected for a mail survey; the first mailing was preceded by telephone calls to respondents to heighten their interest. A second mailing was used to increase response rate, with the result that 98 completed questionnaires were received. Of these, 97 provided complete data for the purpose of this study, a usable response rate of 31.7%. Non-response bias was checked by telephoning 28 non-respondents and administering eight items from the questionnaire. As no significant differences between respondents and non-respondents were revealed by statistical tests on these items, non-response does not appear to be a problem.

Measurement

Respondents completed eight-point Likert scales to provide data on the 30 variables used in this study. The four items used to measure the criterion variable stated: (1) "It is really the customers' responsibility to make sure the products

they buy are not counterfeits;" (2) "Most customers would be happy with counterfeit parts as long as they believed they were getting a good deal;" (3) "I am concerned about receiving counterfeit auto parts;" and (4) "I believe my customers are concerned about purchasing counterfeit auto parts." Reliability of the four criterion measures was assessed using Cronbach's Alpha, resulting in a value of .74. Given sufficient reliability to form a multi-item scale, these four items were reversed as appropriate and summed to form a single scale. The cumulative scores for the 97 retailers on the resulting scale were checked to find the breakpoint for forming two near-equal groups based on their acceptance of responsibility. The resulting split categorized 45 retailers into the Accepting group and 52 into the Rejecting group.

Data Analysis

Given a single categorical criterion variable and a set of 26 continuous predictor variables, multiple discriminant analysis was selected as the technique appropriate for testing the multivariate hypothesis and providing a summary description of the beliefs of the two retailer groups. In addition, ANOVA was used to test the 26 univariate hypotheses concerning the equality of the two group means for each of these beliefs taken singly and to provide supplementary descriptive information about the two groups.

RESULTS

Table 1 gives the results of the statistical analyses. The discriminant function was highly significant ($p < .0001$), as determined by the chi-square statistic based on the Wilks' Lambda for the function. Twenty-two of the 26 individual items reached significance beyond the .05 level; 20 of these were significant beyond the .001 level.

The single discriminant function is most concisely characterized by considering those five beliefs whose loadings reached an absolute value of .35 or greater. In decreasing order, those beliefs are: (1) manufacturers are being hurt by fakes; (2) manufacturers are not exaggerating the harm from counterfeits; (3) customers who are harmed will hold the retailer responsible; (4) retailers are concerned about the problem; and (5) retailers should do more about the problem. These beliefs express sympathy for the plight of manufacturers and acknowledge that they are not exaggerating the magnitude of the problem. They also express the notion that retailers recognize the problem and both should do something to alleviate it; if they do not, they may be held liable for the results. The group centroids reveal this set of beliefs characterizes the mindset of the accepting retailers.

At a lesser level of importance, as indicated by loadings in the range of .31 to .34, these beliefs further characterize the function: (6) counterfeit parts are of much lower quality; (7) manufacturers should educate consumers about the problem; (8) wholesalers are more concerned about distributing fakes than dealing in goods that command a good price; (9) retailers can have an impact in stopping

counterfeits; (10) current controls in our society are inadequate to stop counterfeiting; (11) wholesalers are bothered about fakes; and (12) manufacturers should do more to stop counterfeits. This additional information indicates retailers believe that the current situation requires action, and they believe wholesalers share this viewpoint. Manufacturers should take various actions to stem the flow of counterfeit parts, and retailers who join them can make a contribution. This set of beliefs also characterizes the orientation of the accepting retailers.

In all cases, the univariate results for these 12 beliefs support the multivariate portrayal of the accepting retailers. In addition, the significant individual beliefs of accepting retailers indicate the problem is pervasive enough to harm the economy and individual businesses. Government is not doing enough to fight counterfeiting, although customs agents should not bear the primary burden for this failing. In addition, wholesalers should inspect goods to detect fakes. Accepting retailers are report less pressure from suppliers to buy fakes in the past. The accepting group believes more firmly in the integrity of its customers.

The four non-significant beliefs held approximately equally by the two groups of retailers indicate the accepting group believes that it has access to bogus parts, may have received them in the past, that consumers who have been harmed will hold the manufacturer responsible, and that customers can detect counterfeits.

DISCUSSION

Although one must interpret the responses to behavioral scales with caution, the results indicate there are indeed two distinct retailer orientations represented in the sample data (albeit with considerable variance within groups). In the terms of a simple dichotomy, the accepting grouping of retailers acknowledges a responsibility for the best interests of its customers and the other does not. The profiles of the two groups based on their characteristic beliefs provide an interesting description of opposing viewpoints on the responsibility of marketers in the business world of today.

The accepting retailers take the position that they should act as agents for their customers, making purchases that are socially responsible and in the best interests of the consumers. They recognize that, given the current state of technology, consumers are relatively helpless in distinguishing the genuine from the fake; they are thus committed to serving as a consumer watchdog. The accepting group has a broad appreciation for the magnitude of the problem as referred to various levels the societal hierarchy: the society, the economy, the distribution channel, and the consumer. This group expects the government and other members of the marketing system to similarly accept responsibility for protecting consumers and working to stem the flow of counterfeit products. Thus, in some sense they see the members of the marketing system as a team that can work together to battle counterfeiting.

For their part, the rejecting retailers tend to downplay the seriousness of the problem. They display a narrow consideration of the implications of counterfeiting, and are willing to assign the burden of protection to others. They downplay the magnitude of the danger to society at various levels and they feel they cannot have much impact on the problem. These beliefs facilitate their passing responsibility to consumers. They are willing to let caveat emptor reign; thus, in their view consumers must bear the burden of defending themselves.

But they do not similarly "pass the buck" to other channel institutions. They do not hold manufacturers and wholesalers responsible in their stead. Rather, they do not feel manufacturers should increase their efforts to combat counterfeiting. They believe wholesalers share their orientation and consequently absolve wholesalers from responsibility for action. Further, they believe consumers do not care about receiving fake products. Taken together, this pattern of beliefs suggests these retailers have a somewhat cynical concept of people in general.

Obviously, the protective influence of the consumer advocacy groups is limited. In general, they are not present when counterfeit parts are sold or installed in an unsuspecting purchaser's car. Consumer advocacy groups may threaten or take legal action against offenders. But it is the retailers that have the ability to monitor distribution of safe/unsafe products coming through the channels. In addition, retailers can act as an information source. Retailers are in the best position to communicate personally with their customers about the counterfeiting problem. Therefore, the answer to the problem seems to lie at least in part with enlisting greater cooperation from retailers.

The empirical findings suggest how anti-counterfeiting programs can direct the efforts of retailers toward stemming the flow of counterfeit items. A program to aid consumers can encourage the beliefs held by the accepting group by providing information that will strengthen retailers' beliefs that the problem is serious. The program can find a way to organize retailers, wholesalers, and manufacturers to work together to combat counterfeiting. It can provide educational materials to inform these channel members and the consumers themselves about the problem and provide means for all parties to recognize and prosecute instances of counterfeiting.

A program aimed at the rejecting group might similarly feature an information component. Convincing dissident dealers that the problem is serious and pervasive may motivate some to help their customers. However, informal feedback from in-person conversations with auto parts dealers during this research effort revealed a sizable amount of dealer animosity toward manufacturers. Apparently, many dealers feel manufacturers are "gouging" the public by selling parts at very high prices. If these retailers believe that manufacturers themselves are not being harmed but are simply exaggerating the harm done to consumers as a strategy to limit competition, some rejecting retailers may be selling dangerous parts out of

resentment toward the manufacturer's perceived greed and dishonesty.

By extension, some of this fairly specific resentment may form the basis for the rejecting retailers' more general belief that it is not their station to act as industry watchdogs. Given this belief, they will justify their own lack of concern by absolving manufacturers, wholesalers and government from responsibility. As a result, they may thus be more accepting of counterfeit offerings from wholesalers. If so, a corrective program would have to reach beyond an altruistic motive to convince rejecting retailers that it is in their best interest to help their customers. For instance, the program might assure them of their legal liability as distributors of counterfeit goods by pointing out that lawsuits have previously been pressed against retailers in this situation (Hollander 1987). Consumer advocacy groups should thus direct their efforts against these rejecting retailers, rather than against retailers in general, as is often the case today.

SUMMARY AND CONCLUSIONS

This research investigated the issue of marketing institution's involvement in watching out for the safety and well-being of consumers. As a specific point of reference, it examined the problem of counterfeiting, with a focus on distribution of counterfeit auto parts. The study found that retailers vary in their concern for consumers, and that they can be conveniently classified into those who accept and those who reject their responsibility for the well-being of their customers.

The accepting retailers have a broad appreciation of the seriousness of counterfeiting and call for a broad-based attack on the problem. They feel they themselves can have an impact and want other marketers to join in the battle. Conversely, the rejecting retailers take a narrow orientation, and are relatively disinterested in both the general problem and the specific well-being of their customers. They express a feeling of reduced power and willingness to deal with the problem. It appears the best approach to solving the problem is to motivate accepting retailers to work in concert with other channel members against counterfeiters. However, alternative information campaigns designed to reach the accepting and the rejecting retailer groups may also be useful in reducing the magnitude of the problem.

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TABLE 1

Means, F-Ratios, and Loadings for Accepting and Rejecting Retailer Groupings

Variables	Means		F-Ratios	p	Loadings
	Accepting	Rejecting			
<u>Danger from Counterfeiting</u>					
Counterfeits are hurting the economy	5.44	5.06	13.04	.001	.26
Counterfeits are forcing businesses into bankruptcy	4.97	3.67	13.35	.000	.26
Counterfeits are of much lower quality	7.07	5.37	23.61	.000	.34
Counterfeits are dangerous	6.10	4.62	14.93	.000	.27
Legitimate manufacturers are being hurt by fakes	7.00	4.58	48.62	.000	.49
Hurt customers will hold my store responsible	7.16	5.67	27.92	.000	.37
<u>Retailer Anomie</u>					
Retailers can have much impact on the problem	5.78	3.79	20.41	.000	.32
Retailers should do more to solve the problem	6.04	4.02	26.26	.000	.36
Retailers are concerned about the problem	5.00	2.71	25.61	.000	.36
Current controls on counterfeiting are adequate	6.32	4.48	20.85	.000	.32
Manufacturers exaggerate the harm from counterfeits	6.29	3.75	40.47	.000	.45
<u>Availability of Counterfeits</u>					
I may have been sold counterfeits in the past	3.90	3.12	2.78	.099	-.12
I would have no problem acquiring counterfeits	5.35	5.90	1.42	.236	-.08
I have been pressured by my suppliers to buy fakes	2.38	3.27	5.47	.022	-.17
<u>Perception of Consumers' Feelings</u>					
Customers should check the products they buy	3.00	2.70	.64	.426	.06
Customers can tell the difference from genuine goods	5.21	5.25	.01	.916	-.01
Customers would buy fakes if they are cheaper	4.41	2.81	17.50	.000	.30
Customers believe counterfeit parts are safe	4.93	3.44	16.26	.000	.29
<u>Government Responsibility</u>					
The government is not doing enough to stop fakes	6.55	5.06	14.99	.000	.27
Customs agents are responsible for stopping fakes	3.89	4.88	6.67	.010	-.18
<u>Manufacturer Responsibility</u>					
Manufacturers should do more to stop counterfeiting	6.13	4.33	19.75	.000	.31
Manufacturers should educate consumers	7.04	5.35	21.77	.000	.33
Hurt customers will hold manufacturers responsible	5.18	4.97	.30	.586	.04
<u>Wholesaler Responsibility</u>					
Wholesalers care less about price than stopping fakes	4.66	2.65	21.22	.000	.33
Wholesalers are bothered about counterfeits	5.18	3.27	18.77	.000	.31
Wholesalers should inspect goods they distribute	6.05	4.52	12.25	.001	.25
Group Centroids	1.54	-1.34			

NONCUMULATIVE COLLEGE EDUCATION IN MARKETING:
RETARDING PROFESSIONALISM

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ABSTRACT

This paper examines undergraduate level marketing programs with the premise that the noncumulative design of the curriculum hinders the development of marketing as a profession. It is suggested that marketing lacks a common base of knowledge. In defining a profession and applying that definition to marketing, a number of actions are delineated which would lead to the professionalization of marketing. Of paramount importance to this end is a common base of knowledge and the professional attitude of autonomy, both of which could be developed as students mastered a cumulative marketing education.

INTRODUCTION

An informal title of this paper could be: "No Prerequisites - No Profession." One major premise of this paper is that while many marketers, both practitioners and academics, would like to advance the professional status of marketing, it is very doubtful that marketing is widely recognized as a profession at this time. A second premise is that professions are not born, they are made. That is, broad societal changes create the fundamental opportunity for moving an occupation towards greater professionalization. However, collective actions taken by members of the occupation can have a major impact on the process of professionalization. Those two premises relate directly to the main thesis of this paper which is that the noncumulative design of the typical undergraduate curriculum in marketing hinders the development of marketing as a profession. It is a barrier that is controllable by the academic community in marketing and this paper calls for action on the issue.

This paper is based on the reasonable premise that a number of marketing practitioners and faculty wish to advance professionalism in marketing and we will offer a modest suggestion towards that end. Professionalism is a very broad topic and the scope of this paper did not allow us to consider a number of issues such as the pros and cons of professionalism for marketers, the ultimate possibility of a profession of marketing, barriers to professionalism beyond a cumulative marketing education and so on.

In order to develop and support the arguments that will be advanced in this paper, the following topics will be covered: (1) The concept of a profession and evidence that marketing is not recognized as a profession; (2) interest among marketers in advancing professionalism; (3) the process of professionalization; (4) impact of the noncumulative undergraduate educational experience on professionalism in marketing; (5) opportunities and barriers to cumulative undergraduate education in marketing and (6) summary and conclusions.

WHAT IS A PROFESSION?

Defining A Profession

A profession can be defined from a number of perspectives, however this paper will take a cognitive approach which assumes that basic attributes of occupations, that is elements of social structure such as length of training, serve as information that people use to categorize occupations, Coxon and Jones (1978). The interest here is in those cognitions that are used to categorize occupations in terms of how professional they are perceived to be. The essence of a profession is that the client comes to the professional because of a problem that the client judges he cannot handle (Hughes 1958, 141). The client gives the professional license, the freedom to carry out certain activities which nonprofessionals may not, (Hughes 1958, 78). In turn the professional claims a mandate to define the proper conduct of both the professional and the client regarding professional services.

A License and Mandate Gap In Marketing

It is clear that marketing lacks a strong professional image in terms of license and mandate. If the essence of a profession is that both users and "professionals" believe that only a professional is capable and should be allowed to deliver the service, then marketing has a gap to close.

Evidence of a license and mandate gap in marketing is strong. Many job openings for college students in marketing such as sales or retailing specify that any major will do, such as marketing, management, history, etc. Employees and clients alike have indicated in no uncertain terms that marketing is not a

profession. In general, the work of the beginning, as well as the experienced, marketer is subject to legitimized criticism by his/her manager. An essential point is that management is expected to evaluate the actual work of the marketer. In occupations that are more advanced in professionalism, the lay person may legitimately question some of the outcomes of the professional's activities, but not whether the work done was up to professional standards, e.g. the patient died, did the physician practice competent medicine. Changes in current practice would be necessary to advance professionalism in marketing.

MARKETER INTEREST IN ADVANCING PROFESSIONALISM

In recent years there has been interest expressed in advancing professionalism in marketing through education (Muncy, 1984). A panel discussion at the 1986 AMA Winter Educator's Conference (Walker et. al. 1986) suggests that the benefits of increased professionalism would include increased role satisfaction and greater productivity of marketers.

Panel members made particular note of the role university-based marketing education has in furthering the professionalism of the discipline. It was noted that "the history of occupations that are now widely regarded as being highly professional, such as medicine, have shown that the linkage of the occupation to university-based research and training is a critical step in moving from an occupation to a profession" (Walker et. al. 1986, p. 6).

Rich and Swan (1986), using Chartered Life Underwriters as an example, suggest that some specialties of marketing are acquiring the characteristics of a profession. These efforts may be a function of a specific industry's attempts to advance. However, an initiative by the Sales and Marketing Executives association to establish the accreditation of Certified Marketing Executives in 1986 is not widely recognized.

It seems there is consensus that value would be added to the profession and to society as a whole if marketing earned the right to be viewed as a profession. The role of education is perceived as vital to this process, yet attempts at moving the discipline towards this goal have been ineffective.

An examination of how marketing could be developed into a profession is contained in the following section.

THE PROCESS OF PROFESSIONALIZATION AND MARKETING

The Process

Studies of the history of medicine and engineering, two occupations that are currently considered to be well established as professions, have shown very clearly that an occupation can start with humble beginnings and advance in professionalization, Larson (1977). The process of professionalization has been described by Wilensky (1964) as consisting of a six step sequence:

1. The occupation becomes a full time job;
2. Training becomes university based, linking knowledge to practice which provides a rationale for the profession to have exclusive jurisdiction;
3. Professionals form an association and control entry into the profession;
4. Political agitation gives the support of law to the profession's claim of exclusive jurisdiction, by licensing;
5. A formal code of ethics evolves to protect the users of the profession's services and will include the "service ideal" that the needs of the client come before the professional's self interest, resulting in a sense of calling among the professionals;
6. Occupations which have gone through the above steps acquire the authority and freedom to regulate themselves.

A detailed appraisal of the standing of marketing on Wilensky's "steps" is beyond the scope of this paper. However, we believe that on a judgmental basis, it is very apparent that marketing has not walked Wilensky's steps. As a generic activity, university based training schools for marketing have been established. Beyond that event, other steps have either not been taken or have only been attempted by some specific occupational groups that, among other activities, engage in marketing. To further explore a cumulative curriculum of these university based training schools, a curriculum study was conducted.

A STUDY OF THE CUMULATIVE NATURE OF MARKETING AND ACCOUNTING CURRICULUMS

Cumulative Education Defined

Basically we define a cumulative collegiate marketing educational experience as one in which a definite and extended sequence of courses and

other educational activities gives students a sense that effective marketing is grounded in the mastery of specialized knowledge and skills acquired over time.

The Study

An analysis of undergraduate marketing and accounting programs was undertaken for a random sampling of seventeen AACSB universities nationwide, of which fifteen responded to our request for a recent catalog, (1988-89, 1989-90). The operational measure of a cumulative structure was the number of steps from the first course in a program to the last course. As an example, in **Figure 1** the marketing program starts with basic marketing (Step 1), which is a prerequisite for a second tier of ten courses (Step 2). Of the ten courses, three are prerequisites for the last course in the sequence (Step 3). The curriculums were also examined for the number of classes made available at each step. The assumption being made is that the greater the number of classes within each step, i.e. the greater the nonsequential choice, the less cumulative the educational experience, see **Figure 1**.

The marketing curriculums have fewer steps and are less cumulative in comparison to the accounting curriculums, see **Table 1**. Two of the fifteen schools have a two step marketing curriculum. Nine of the schools have a three step marketing curriculum. Four of the schools have a four step process. As many as sixteen courses are potentially made available in the second step after the introductory principles of marketing course. The average number of classes available in the second step was eight. For those schools having a two step marketing curriculum the average number of courses in the second step was eight. For those schools having a three step marketing curriculum the average number of courses in the third step was five. It appears that after the introductory class little effort is made to offer marketing courses in a sequential manner.

Five of the fifteen accounting curriculums had five steps. Seven of the schools had six steps. Two of the schools had seven steps in their accounting programs. One school had four steps in the accounting curriculum. The accounting curriculums also appear to be more cumulative in nature in that fewer options exist within each step. The average number of classes offered in the second step was two. The average number of classes offered at the third step was four. There is a sequential ordering of the class offerings not found in the marketing curriculums.

CONTRIBUTIONS OF A CUMULATIVE CURRICULUM TO MARKETING PROFESSIONALISM

Perhaps the most important way that a solid cumulative organization of the undergraduate marketing curriculum could contribute to professionalism is to provide a strong sense of having a "career" as a marketing student. The term "career as a student" refers not just to a sequence of occupational positions but to a sequence of experiences that conveys to the individual who she is, her abilities, capabilities and so on, Hughes (1958: 63). Ideally, a sequence of marketing courses would serve as "career markers", information used by the individual to interpret his experiences in terms of growing competence and mastery of marketing. In turn, it is hoped that the student would come to believe that marketing had the attributes of a profession. In particular, a cumulative education in marketing could contribute to "professional attitudes" discussed by Hall (1968). Hall's (1968) concept of professional attitudes was that one of the foundations of a profession is that practitioners would come to hold a set of distinctive attitudes that were reflections of the attributes of a profession. Professional behavior would flow from professional attitudes. At the individual level, professionalism could be said to be the acquisition of professional attitudes.

In particular, a cumulative marketing education could help advance six professional attitudes as explained below:

1. Belief that the occupation is grounded in complex knowledge. With few prerequisites, marketing sounds like a simple subject that is based more on "craft" skill than cognitive knowledge. After all, if it only takes basic marketing to take most "advanced" marketing courses, marketing must be a relatively simple subject.
2. A feeling that the occupation requires a long training period. What is "long enough" may sound like a paradoxical question, but it is not. People interpret their experiences in light of a socially defined reality, (Berger and Luckmann (1967)). Of all "business school" trained occupations, public accounting is likely to most strongly exhibit the attributes of a profession and to be most widely accepted as one. Since collegiate level training for public accounting now requires four years, the traditional four year marketing program may be long enough!

However, it is likely that the noncumulative nature of the marketing

curriculum makes it seem relatively short. The marketing student does not face and complete a long sequence of courses as does the accounting student.*

3. Peer group identification may be strengthened under a cumulative curriculum. This would be a possible in direct effect. Peer groups could be strengthened in at least a couple of ways. First, if a longer sequence of marketing courses are required, students may be sorted into cohorts of students that take the same courses together. The higher frequency of contact between students may contribute to peer group formation. Secondly, if students do feel marketing is more complex, they may develop a stronger sense of being a marketing man/woman and be more receptive to peer group activities.

4. The professional attitude of autonomy, that only a professional should make decisions in and evaluations of the work, is probably rooted in a conviction that the job is too complex for a lay person. If as argued above, a more cumulative curriculum suggests to marketing students that the field is complex and peer groups develop, the autonomy dimension would be advanced. Peer groups yield "in" vs "out" groups. A phenomena of the peer group is the development of an attitude, that on many issues only an insider will have the knowledge to properly judge member activities.

5. A sense of "calling", which is dedication to the profession, and "altruistic" service, i.e., the client has first priority, are attributes that are likely to spring from a conviction that the profession is essential to society and that the client can't judge a professional effort. It would seem that both of those professional attributes would develop if the processes discussed in points one to four occurred. As an example, autonomy logically implies altruism.

6. A code of ethics and license both depend on peer group processes. Research has shown that all sorts of groups, even "deviant" groups develop norms, rules of behavior, Hughes (1958). Norms provide a foundation for a code of ethics. License depends upon political action that is probably only feasible when a peer group has developed to push for it.

* A movement is currently underway to require a "five year" program for public accounting and is scheduled to be implemented in some states. Also, accounting courses normally start at the sophomore level, with marketing courses starting at the junior level.

However, the furthering of these professional attitudes through a cumulative education in marketing is subject to some barriers.

BARRIERS TO CUMULATIVE EDUCATION IN MARKETING

The idea that successful completion of a principles class qualifies a student to take any of the next four, or eight, or twelve classes in no particular order, suggests that the discipline of marketing has made little progress in codifying a specialized body of knowledge. The problem starts with introductory principles courses which are typically complete surveys of the entire scope of marketing. Students come away from such courses with a wide exposure to topics, but a shallow depth of understanding. Little attempt is made to integrate concepts or build upon prior learning.

Perhaps the largest barrier to advancing marketing into the ranks of the professions lies in academics' inability to agree on a common body of increasingly sophisticated marketing knowledge. It is difficult to present to students a cumulative educational experience if there is confusion in the discipline as to the content and sequence of the information to be presented. The answer to these issues may be found in a redesign of the introductory course for marketing majors. If the introductory course was drawn so that fewer topics were covered but greater attention given to those retained, a base for the development of a cumulative marketing education would be laid. As an example, the introductory course might cover marketing history, environmental analysis and consumer behavior including market segmentation. Students could be given detailed assignments in uncovering environmental opportunities or developing segmentation strategies. These acquired tools might then be reinforced in a hypothetical second step of product development and management.

Note that the introductory accounting courses are not comprehensive surveys of accounting theory and practice. Rather a slice of accounting skills are introduced and practiced to a given level of proficiency. Then the student is allowed to progress and build upon previously learned skills.

In order to serve other business school majors, it may be necessary to continue with a broad survey course of marketing. However, the very fact that marketing students take a different track will serve to set apart and professionalize the marketing curriculum.

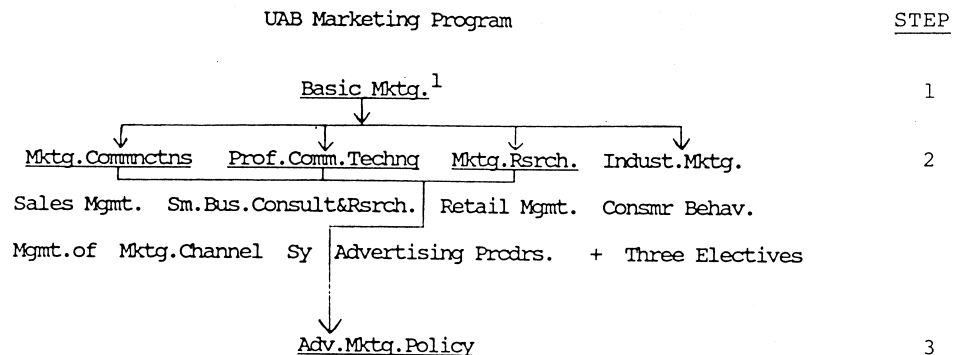
SUMMARY

This paper has examined marketing as an occupation, and concluded that marketers lack the professional status to which they aspire. An opportunity exists for moving marketing towards greater professionalization, if a cumulative marketing education were offered instead of the current noncumulative design of the undergraduate curriculum. The main outcome of a cumulative curriculum, because of the educational and socialization processes that would be involved, could well be marketing professionals in fact as well as name. The professional is especially well qualified in terms of technical knowledge, is dedicated to the profession and has internalized a code

of ethics. As a result, the employer has a competent and ethical employee. Students would benefit in the short run as hiring preferences for "professional" marketers should develop. In the long run, students would enjoy the personal satisfaction of the respect and rewards of a professional career. It is unrealistic to expect that a cumulative education alone would advance marketing to a profession. However, it is a step that would support professionalization and it is a practical action that the academic community can take. These findings provide a call for action to the academic community who must take the initiative in moving marketing towards professionalization.

References are available upon request.

FIGURE 1.



¹Underlined courses are those required.

TABLE 1.
Number of Steps in Program.

<u>School</u>	<u>Accounting</u>	<u>Marketing</u>
Auburn University at Montgomery	7	3
Brigham Young University	6	4
Cal. Poly. State University, SLO	6	4
Cal. State University, Long Beach	4	4
Cal. State University, Sacramento	6	3
East Texas State University	5	3
Fordham University	6	3
Lamar University	6	3
Memphis State University	6	4
New Mexico State University	5	3
Tennessee Technological University	5	3
Texas A & M	7	3
University of Iowa	5	2
Western Carolina University	6	3
College of William & Mary	5	2
Average Number of Steps	5.67	3.13

THE IMPACT OF MARKET STRUCTURE, VERSUS COMPETITOR STRATEGY, ON SIMULATION OUTCOMES

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ABSTRACT

The present study, using a controlled experiment based on three experimentally manipulated environments, was designed to investigate the internal validity of a marketing simulation game. If the players in such a game make decisions which are consistent with the environment with which they must contend, then this type of exercise can be considered to be internally valid. The results offer only limited support for the internal validity of this type of learning experience.

INTRODUCTION

The popularity of computer-based simulation games as an academic learning tool is well established. Instructors at the more than 95 percent of the AACSB member schools which make use of such games (Faria 1987) can choose from an array of more than 200 published games (Horn and Cleaves 1980). Notwithstanding the extensive use being made of business simulation games in academia, a number of researchers have questioned the internal and external validity of such games (e.g., see Norris 1985; Whiteley and Faria 1989; and Wolfe 1985).

While the issue of the internal and external validity of business games has been of concern to a number of researchers (e.g., see Dickinson, Faria, and Whiteley 1988, 1989; Mehrez, Reichel, and Olami 1987; Norris and Snyder 1982; Wolfe 1976; and Wolfe and Roberts 1986), the present study, using a controlled experiment, will only focus on the internal validity aspect.

PAST RESEARCH

The usual approach to the measurement of the internal validity of a simulation exercise is to focus on some performance or learning characteristic of the participants. A number of researchers claim that their results provide evidence of the internal validity of the simulation exercise carried out since the players learned certain concepts by their participation in the game [e.g., sales forecasting, goal-setting, or how to analyze a financial statement] (e.g., see Edwards 1987; Hall 1987; and Snow 1976). Other researchers state that the internal validity of the simulation exercise was supported by the fact that better students (as measured by GPA) outperformed poorer students in the competition (see Gray 1972 and Vance and Gray 1967).

Perhaps a better approach to the investigation of the internal validity of a simulation exercise is to base the analysis on a situation in which an experimental manipulation of the parameters of the game has been carried out. In an experimentally controlled setting, internal validity refers to the extent to which significant differences in results are due to an experimental manipulation (Borg and Gall 1983; Kerlinger 1973). In the context of a simulation game ex-

perience, such an exercise is considered to be internally valid if the events which take place during the game reflect the relevant conditions of the game. In each of the studies cited, experimental manipulation did not take place; there was simply game participation followed by an examination of some factor at the conclusion of the competition.

There are two preliminary studies which did incorporate the experimental manipulation feature in a test of the internal validity of a simulation game, but in each study the analysis was based solely on an analysis of the trends in the data; no statistical analysis was carried out (see Dickinson, Faria, and Whiteley 1988, 1989). In both cases, it was concluded that evidence for the internal validity of the simulation game was limited. The conclusions drawn in these studies, of course, are speculative at best.

In an attempt to advance the level of knowledge in this area, the present study will build upon past research by statistically investigating the internal validity of a business gaming situation through the manipulation of variables in a simulated competition. Participant reaction to each of the manipulated variables will serve as the dependent variables.

PURPOSE AND HYPOTHESES

If the participants in a simulation exercise make decisions which are consistent with the environment with which they must contend, then the exercise can be considered to be an internally valid experience. While the actual decisions made will be influenced by the dynamics of the game used, the actions of competing companies, the objectives of the game, and the capabilities of the participants, the simulated environment must also be considered as an important uncontrollable variable to which the decision makers must respond.

This premise is investigated by means of a controlled experiment using a marketing simulation game in an introductory marketing course. The game, LAPTOP: A Marketing Simulation (Faria and Dickinson 1987), can be parameterized in such a way so as to define theoretically meaningful and distinctly different environments.

Experimental Environments

Strategy decisions in LAPTOP are made at the product-market level (4 levels), at the territorial level (2 levels), and at the company level. A total of 32 specific types of decisions must be made in the game in order to generate sales for the standard (Product 100) and deluxe (Product 200) versions of a laptop computer available for sale in each of the two territories (Territory 1 and Territory 2). Twelve different

marketing research reports can also be ordered.

When initializing a new LAPTOP competition, the game administrator can specify the weights of the demand-affecting strategy elements, each of which can be weighted using an index ranging from 1 (low importance) to 10 (high importance). For the purposes of the present experiment, the parameter weighting feature of the game was used to define three distinct environments. One environment resulted in a situation that would reward the use of a "pull" strategy. A second environment resulted in a situation that would reward the use of a "push" strategy. The remaining environment, the default environment, served as a control--i.e., a point of reference.

All basic marketing textbooks provide a discussion of pull and push strategies. Under a pull strategy, the manufacturer attempts to stimulate consumer awareness and demand for a product by focusing its marketing efforts on the final consumer. In the case of a push strategy, the emphasis shifts to aggressive personal selling and trade promotion aimed at gaining the co-operation of distributors and retailers to carry a product (McDaniel and Darden 1987; Schewe 1987).

The strategy decision areas that were deemed to be "pull" variables in the study were final household price, broadcast and print advertising, and premiums. Weighted average price and exact competitive price research information were also considered to be pertinent to the decision-making process under such an environment. Trade advertising, co-operative advertising allowances, sales force size, trade show participation, and point-of-purchase sales promotion materials were deemed to be "push" variables. Co-operative advertising allowance and sales force size research information were also considered to be pertinent to companies in this latter environment.

In order to create an industry which would reward the use of a pull strategy, all of the identified pull variables were initialized with a weighting of 10 in one of the experimental conditions (i.e., the pull environment). The push variables in this environment were given a weighting of 1. The decision variables which did not fall within either a push or pull environment were given a middle weighting of 5.

In order to create an industry which would reward the use of a push strategy, all of the identified push variables were initialized with a weighting of 10 in the second experimental condition (i.e., the push environment). The pull variables in this environment were given a weighting of 1. The decision variables which did not fall within either a push or pull environment were given a middle weighting of 5.

In the remaining experimental condition (i.e., the default environment), the middle weighting of 5 was used for all decision variables. As a result, all of the decision variables under this condition were of equal and moderate importance.

In total, the variable weight manipulations in the push and pull environments involved 20 of the 32 decision areas of the LAPTOP simulation. The

default value of 5 was assigned to the remaining 12 decision areas in these environments and to all of the decision variables in the default environment. Furthermore, the parameter weights for each company were the same across all product-markets and between territories.

The marketing research information available to the companies under any of the environments did not require the assignment of weights. In this case, the company either requests or does not request the pertinent information.

Hypotheses

The nature of the dependent variables used in the study vary as a function of the decision area under consideration (e.g., actual price, dollar advertising budget, percentage of companies requesting a certain type of research). Nonetheless, the general hypothesis is that, if marketing strategy formulation in a simulation environment is an internally valid experience, then the nature of the decisions should gravitate toward the more pertinent and more heavily weighted strategy elements. As a result, the nature of the decisions should vary as a function of the environment in which a company operates. Specifically, it is expected that

- [1] for each product-market, the price (H1), the trade advertising expenditure (H4), and the percentage of companies using the sale promotion approaches of point-of-purchase materials (H7) and trade shows (H8) will vary as a function of the environment, such that Pull < Default < Push;
- [2] for each territory, the co-operative advertising allowance percent (H5) and the sales force size (H6) will vary as a function of the environment, such that Pull < Default < Push;
- [3] for each product-market, the broadcast advertising expenditure (H2), the print advertising expenditure (H3), and the percentage of companies using the sales promotion approach of premiums (H9) will vary as a function of the environment, such that Pull > Default > Push;
- [4] the percentage of companies requesting each of average price and exact price research information (H10) will vary as a function of the environment, such that Pull > Default > Push; and
- [5] the percentage of companies requesting each of co-operative advertising allowance and sales force size research information (H11) will vary as a function of the environment, such that Pull < Default < Push.

The test of the general hypothesis reflecting the preceding 11 specific hypotheses requires a total of 36 across-environment comparisons. In each case, the values to be used are the actual company-wide values, the territorial values, or the product-market values, as is appropriate.

METHODOLOGY

The competition executed in the study involved approximately 400 undergraduate students who were enrolled in five sections of a one-semester introductory marketing course. The players were advised that the game was worth 20% or 25% of the course grade (depending on the section) and that the performance objective of the game was to maximize the company's earnings per share relative to the competition in the same industry.

The students were assigned to teams (companies) of up to four players on the basis of self-selection or, when necessary, on a random basis. A total of 105 teams were formed, with each team being randomly assigned to an industry consisting of 5 companies. Each of the resulting 21 industries was randomly assigned to one of three environments. Seven industries (i.e., 35 companies) were assigned to the "push" environment; seven industries (i.e., 35 companies) were assigned to the "pull" environment; and seven industries (i.e., 35 companies) were assigned to the "default" environment. At no time during the game did the game administrator inform the players about the nature of the environment which they faced or that an experiment was being run.

The first weekly decision of the game was made during the third week of the course. This decision and the subsequent one served as trial decisions, thereby providing the players with the opportunity to become familiar with the technical aspects of the game and to try various strategies without risk.

At the end of the trial period, a new game was started, but the environment and the competition faced by each company during the trial period remained the same. The knowledge which the teams acquired during this period therefore had the potential of being relevant to the new game. The new game consisted of eight weekly decisions. For all but one of the decision variables, the decisions for the final (i.e., the 10th) period of play were utilized for hypothesis testing, thereby allowing time for the companies to adapt their strategies to the simulated environment. Given the performance objective of the game, the research requests for the next-to-the-last period of play were utilized since the companies would not order such information in the final period.

RESULTS

Statistical Analysis Approach

Each of the 36 decisions that the participants in the game were required to make can be considered to involve theoretically unrelated variables, even though some may be statistically correlated. For example, a price decision in one product-market is conceptually unrelated to a price decision in another product-market. Similarly, a request for one type of research is conceptually unrelated to a request for another type of research. The importance weights for each variable were also set independently.

In an experiment of this nature, it is appropriate to analyze each dependent variable separately

(see Biskin 1980, 1983). For this reason, the data collected for each dependent variable in the study were initially analyzed using analysis of variance. When a significant result was obtained, a follow-up analysis was carried out.

Test of Hypotheses

The results of the data analysis are presented in [Tables 1](#) and [2](#). The ANOVA results for the 36 dependent variables included in the 11 specific hypotheses of the study indicate that significant differences across environments exist for 7 of the variables included in 4 of the hypotheses (see [Table 1](#)). The exact nature of the differences across the experimental environments where significant differences exist can be determined by carrying out paired-comparison follow-up analyses. [A MANOVA analysis of the data also reveals a significant difference across groups ($F = 2.34$; $df = 74, 132$; $p < .001$; Wilks' lambda value = .187).]

The results of the paired comparisons are presented in [Table 2](#). Only 9 of the 21 paired-comparisons are significant. And all of these are in the direction hypothesized.

In each of the two product-markets revealing a significant F-value for the variable of price (i.e., Product200/Territory1 and Product200/Territory2), as expected, the average price in the pull environment is significantly lower than the corresponding value in the push environment (see Hypothesis 1). However, none of the other between-environment comparisons are significant.

Significant F-values similarly exist for two of the four product-markets for the variable of trade advertising (see Hypothesis 4). The follow-up analysis for this variable for the Product100/Territory1 product-market indicates, as expected, that the average level of expenditure in the pull environment is significantly lower than the average value in the push environment and that the average value in the default environment is significantly lower than the average value in the push environment. No significant difference exists between the values for the pull and default environments. With respect to the Product200/Territory1 product-market, even though the ANOVA result is significant (see [Table 1](#)), no significant differences between any pair of environments is uncovered in the follow-up analysis. (These results might have been more positive had a less conservative follow-up technique been used.)

The strongest results in the study appear to be associated with the level of co-operative advertising allowance (see Hypothesis 5). In each territory, as expected, the percentage-of-sales allowance level in the pull environment is significantly lower than the corresponding value in the push environment and the value in the default environment is significantly lower than the value in the push environment. However, in neither case are the values for the pull and default environments significantly different.

The final significant F-value is associated with the sales promotions approach of premiums (see

TABLE 1

COMPARISON OF MEAN DECISION VARIABLE VALUES

Variable	Environment						F-value
	Pull		Default		Push		
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	
1. Price (\$):							
Prod100/Ter1	811.03	(999.21)	759.63	(163.83)	1141.03	(1549.22)	1.31
Prod200/Ter1	1280.54	(485.95)	1546.69	(324.54)	1863.77	(1461.86)	3.61
Prod100/Ter2	966.74	(1158.66)	895.86	(212.12)	1568.69	(2118.67)	2.44
Prod200/Ter2	1542.89	(984.01)	1799.57	(507.85)	2254.97	(1434.79)	4.16*
2. Broadcast advertising (\$'000):							
Prod100/Ter1	30.29	(35.97)	41.60	(32.08)	36.91	(37.29)	.91
Prod200/Ter1	40.37	(52.63)	49.31	(37.28)	41.80	(37.55)	.44
Prod100/Ter2	47.66	(67.55)	61.00	(45.84)	53.51	(39.71)	.57
Prod200/Ter2	65.91	(94.73)	68.26	(57.55)	61.17	(44.48)	.10
3. Print advertising (\$'000):							
Prod100/Ter1	20.74	(22.23)	25.86	(19.74)	30.26	(35.39)	1.11
Prod200/Ter1	29.20	(35.12)	30.37	(25.22)	40.89	(43.11)	1.17
Prod100/Ter2	29.91	(39.89)	36.91	(28.34)	36.09	(34.80)	.43
Prod200/Ter2	48.40	(66.00)	41.49	(34.92)	43.51	(39.81)	.19
4. Trade advertising (\$'000):							
Prod100/Ter1	9.00	(12.62)	9.29	(13.54)	17.63	(15.32)	4.37*
Prod200/Ter1	9.91	(15.79)	9.89	(14.40)	18.11	(16.64)	3.22*
Prod100/Ter2	12.63	(22.00)	14.71	(25.41)	22.26	(22.34)	1.65
Prod200/Ter2	20.09	(35.50)	17.17	(26.60)	25.17	(30.33)	.60
5. Co-operative advertising allowance %:							
Territory1	2.06	(1.35)	2.46	(2.42)	5.29	(2.81)	20.88**
Territory2	2.20	(1.49)	2.57	(2.51)	5.54	(2.76)	21.84**
6. Sales force size:							
Territory1	8.11	(3.02)	7.40	(1.96)	8.43	(2.62)	1.47
Territory2	12.17	(4.00)	10.97	(3.96)	11.71	(3.94)	.82
7. % of companies using P.O.P. sales promotion:							
Prod100/Ter1	25.71	(44.34)	17.14	(38.24)	25.71	(44.34)	.48
Prod200/Ter1	28.57	(45.83)	14.29	(35.50)	14.29	(35.50)	1.55
Prod100/Ter2	20.00	(40.58)	14.29	(35.50)	22.86	(42.60)	.42
Prod200/Ter2	20.00	(40.58)	8.57	(28.40)	8.57	(28.40)	1.40
8. % of companies using trade shows:							
Prod100/Ter1	5.71	(23.55)	2.86	(16.90)	2.86	(16.90)	.25
Prod200/Ter1	5.71	(23.55)	5.71	(23.55)	2.86	(16.90)	.20
Prod100/Ter2	2.86	(16.90)	2.86	(16.90)	11.43	(32.28)	1.59
Prod200/Ter2	8.57	(28.40)	8.57	(28.40)	17.14	(38.24)	.84
9. % of companies using premiums:							
Prod100/Ter1	22.86	(42.60)	22.86	(42.60)	42.86	(50.21)	2.28
Prod200/Ter1	34.29	(48.16)	31.43	(47.10)	54.29	(50.54)	2.30
Prod100/Ter2	42.86	(50.21)	17.14	(38.24)	22.86	(42.60)	3.30*
Prod200/Ter2	34.29	(48.16)	31.43	(47.10)	34.29	(48.16)	.04
10. % of companies requesting price research:							
Average prices	2.86	(16.90)	2.86	(16.90)	8.57	(28.40)	.83
Exact prices	68.57	(47.10)	74.29	(61.08)	74.29	(44.34)	.14
11. % of companies requesting other research:							
Co-op. adv. all.	0.00	(00.00)	2.86	(16.90)	11.43	(32.28)	2.80
Sales force size	2.86	(16.90)	0.00	(00.00)	8.57	(28.40)	1.83

Notes. $n = 35$ for each environment. Prod100 = Product 100 (Standard); Prod200 = Product 200 (Deluxe); Ter1 = Territory 1; and Ter2 = Territory 2. Co-op. adv. all. = Co-operative advertising allowance.

* $p < .05$. ** $p < .001$.

^aF-value is significant but no significant differences identified in paired-comparison follow-up analysis (see Table 2).

Hypothesis 9), but only in the Product100/Territory2 product-market. In this product-market, as expected, the percentage of companies in the pull environment using this sale promotion approach is significantly higher than the corresponding value for the default environment. No other significant between-environment differences exist for this product-market.

DISCUSSION

Overall, the results of the study offer only limited support for four hypotheses (Hypotheses 1, 4, 5, and 9) and no support for seven hypotheses (Hypotheses 2, 3, 6, 7, 8, 10, and 11). Only in the areas of price, trade advertising, co-operative advertising, and the use of the sales

TABLE 2

MULTIPLE COMPARISONS (VIA TUKEY HSD TECHNIQUE) OF THE ENVIRONMENTAL GROUP MEANS FOR THE HYPOTHESES (VARIABLES) WITH SIGNIFICANT F-VALUES

Variable	Means Compared			Result ^a
	Pull	Default	Push	
1. Price (\$):				
Product200/Territory1	1280.54	1546.69	1863.77	NS
	1280.54		1863.77	S
Product200/Territory2	1542.89	1799.57	2254.97	NS
	1542.89		2254.97	S
4. Trade advertising (\$'000):				
Product100/Territory1	9.00	9.29	17.63	NS
	9.00		17.63	S
Product200/Territory1	9.91	9.89	18.11	NS
	9.91		18.11	NS
5. Co-operative advertising allowance %:				
Territory1	2.06	2.46	5.29	NS
	2.06		5.29	S
Territory2	2.20	2.57	5.54	NS
	2.20		5.54	S
9. % of companies using premiums:				
Product100/Territory2	42.86	17.14	22.86	S
	42.86		22.86	NS

Notes. Analysis for each hypothesis (variable) based on FWI = .05.

^aS = significant; NS = nonsignificant.

promotion approach of premiums do at least the results for some of the product-markets or territories reflect decisions that are consistent with the environment under which the decisions were being made. However, no such environmental differences were found in the areas of print and broadcast advertising, sales force size, the use of the sales promotion approaches of point-of-purchase materials and trade shows, and requests for average price, exact price, co-operative advertising, and sales force size research.

These findings indicate that by the end of ten periods of play the participants in the game were only to a very limited degree making operational and strategic decisions that were consistent with the environment with which they had to contend. The results of the study therefore provide only some support for the general hypothesis that, if marketing strategy formulation in a simulation environment is an internally valid experience, then the nature of the decisions should gravitate toward the more pertinent and more heavily weighted strategy elements. In this experiment, there is evidence to suggest that the decision makers were at least beginning to properly adapt to the simulation environment in which they operated.

Since only some of the results of the study can be attributed to the experimental manipulation carried out in the game, support for the internal validity of the gaming situation under in-

vestigation is limited. The failure of the companies in the game to totally adapt to their respective environments may be due to a number of factors: the number of periods for which decisions were required, the level of marketing knowledge of the participants, or the competitive focus of the game. The results might have been more positive had a longer game been played (i.e., more than 10 periods of play), had more advanced marketing students been used, and/or had some other performance objective been set (e.g., market share or market share and earnings).

CONCLUSION

The present study sought to empirically investigate the internal validity of an experimentally manipulated simulation game environment. The results indicate that the participants in the game were making operational and strategic decisions that were only to a very limited degree consistent with the environment with which they had to contend. Based on these findings, future research needs to investigate whether a longer game, the acquisition of greater knowledge about the marketing planning process, or a focus on a different marketing objective would lead to more positive results.

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Abstract

Three surveys of graduating MBA's at "General" University Graduate Business School in 1988, two surveys of corporate recruiters and two published reports have led to the conclusion that MBA students want and need to acquire certain business skills. Among them are: Influencing, Negotiating and Networking. This paper describes initial attempts at teaching these skills and students' reaction to the experience. Next steps are defined and guidance is provided to educators planning to add business skills to their programs.

Background

General University Graduate Business School is located in a large city in the northeastern part of the country. Total enrollment is over 3,000 students, 80% part-time and 20% full-time. Many of the full-time students are from Latin America, Europe, the West Indies and Asia. The part-time students are employed in entry level and first level management jobs. Average age of students at entry into the MBA program is about 25-26 years.

Enrollment at General GSB peaked about four years ago. Coupled with the recent decline is awareness that a population dip in the relevant age group is still to be faced. Consequently, it was deemed prudent in the Spring of 1988 to find out how present students viewed their experience at General. The concern was that if students were not well satisfied, they would be less likely to encourage others to enroll and the decline would continue.

What General Found Out

Surveys of Students

The survey sampling frame consisted of all the students enrolled in the capstone Business Policy courses. This group of students had accumulated the most experience with the MBA program and would be in the best position to provide useful information. During the Spring 1988 semester, a sub-sample of one class was selected and a ten open-ended question form was administered. Based on the results, a five-page questionnaire was developed and administered to 104 students to test the questions and refine the issues further through additional open-ended questions.

The sampling frame for the first quantitative study was all the students enrolled in Business Policy during the Summer 1988 semester, a total of 293 students. Questionnaires were administered in regular class meetings by research assistants, with permission of the instructors. A total of 209 usable questionnaires were returned for a 71% response rate. The second quantitative study was conducted during December of 1988, with 110 graduating Business Policy students, for a 68% response rate.

The two surveys gave highly consistent results. Students identified five goals and nine objectives as being important and insufficiently satisfied by their experience at General.

As shown in Exhibit 1, on an eleven point importance scale, with 0 = "Not at all important," and 10 = "Extremely important," five goals received average ratings of 7.5 or higher. Furthermore, on an eleven point satisfaction scale, with 0 = "Not at all satisfied," and 10 = "Extremely satisfied," ratings of these goals ranged between 5.3 and 6.6, considerably lower than the "importance" ratings. Exhibit 1 displays these average ratings of "How important" and "How satisfied" data for the five goals, along with "gaps," which are the differences between the importance measurements and the satisfaction measurements. Data shown on Exhibits 1 and 2 are taken from the December 1988 survey.

With respect to objectives, on an eleven point importance scale, with 0 = "Not at all important," and 10 = "Extremely important," nine objectives received ratings of 6.5 or higher. Furthermore, on an eleven point satisfaction scale, with 0 = "Not at all satisfied," and 10 = "Extremely satisfied," ratings of these objectives ranged between 3.4 and 6.1. Exhibit 2 displays average ratings of "How important" and "How satisfied" data for the nine objectives, along with "gaps," which are the differences between the importance measurements and the satisfaction measurements. Substantial gaps were discovered, ranging from 1.6 to 2.4 for the goals and from 1.9 to 3.9 for the objectives.

Surveys of Corporate Recruiters

Findings from these surveys caused trepidation at "General" University. Verification was sought from other sources. Two surveys were taken of corporate recruiters. In both of these surveys, recruiters asserted that General University MBA's would benefit from further development of the skills identified in the "Objectives" section of the exit surveys.

Recruiters emphasized communications skills, such as writing and presenting and interpersonal skills such as influencing and negotiating. The feeling expressed in one of the surveys was that MBA's are very good analysts of data but are not as effective as they could be because they do not communicate clearly and persuasively. In the other survey, the idea that came back most strongly was that managers need to deal with conflict, in various forms. Respondents on this survey felt that negotiating skills are helpful in resolving conflicts.

Two Published Surveys

Carnevale, Gainer and Meltzer (1988), in their study sponsored by the American Society for Training and Development and the United States Department of Labor and Porter and McKibbin (1988), in their three year study sponsored by the American Assembly of Collegiate Schools of Business both verified the exit surveys unequivocally. Business students need to develop skills, in addition to gaining knowledge in a business discipline and broadening their business perspective. It is especially noteworthy that Porter and McKibbin, based their conclusions on broadly based surveys that included large representations of business school deans and faculty.

Effects of the Studies

The findings listed above were disseminated among the faculty and administrators of the General GSB and received a mixed response. Some recognized the need for teaching skills, while others felt that they needed to "cover" so much content that they could not afford to spend time on skills.

Two specific outcomes emerged from the studies. One effect was that the principal worker on the student surveys, having had the longest and most intimate contact with the findings, initiated skill development work in his classes. Another effect was that another faculty member who had been involved in the studies set up a "Leadership Skills Task Force" to develop a School-wide program of skill development.

The Leadership Skills Task Force

The Task Force had several goals:

1. To develop working definitions for the nine skills identified in the "Objectives" category of the surveys. This was accomplished. See Exhibit 3.
2. Determine best ways to incorporate skill development into the curriculum. The inclination was to include skill development in existing core courses, as well as selected courses in major fields. This

was to be done in a content-sensitive way so that content would not be sacrificed and students would perceive clearly the relationships between content and skill in application of content. Faculty of the General GSB would have to learn the skills themselves, as well as optimal techniques for imparting skills to students.

3. Identify ways to develop faculty capabilities in the nine skills, including books, articles, other published materials and seminars and workshops. This activity is in progress.

Skill Development in Existing Classes

The Business Policy Course

Business Policy is a capstone course in the MBA program. A typical rendition of the course consists of ten Harvard Business School case studies of a general management nature that students prepare and discuss in class. Some instructors at General assign students to write, analyze and present in class an original case study.

In one section of Business Policy, during the Spring 1989 semester, students were given classroom experiences with Influencing and Negotiating.

The structures of the two experiences were similar. The instructor distributed a two page hand-out describing applicable key concepts at the beginning of the 2.5 hour class meeting. This was accompanied by a 15 minute lecture covering the high points of the hand-out. The instructor also brought along two sets of working scripts for each experience, which he distributed after assigning roles to individual students.

In the Negotiating exercise, the first experience consisted of a negotiation between a "Vendor" and a "Buyer." Pairs of students were assigned to play each of the two roles. For each set of buyers and vendors, a team of students was appointed to act as "observers."

The scripts started with information about a hypothetical vendor-buyer relationship. Identical opening information was presented on Vendor and Buyer scripts. This set the stage for the negotiation. Then, each script presented the goals of that side, some secret information and some ideas about the needs of the opposing side. "Observers" received both scripts.

Students were given time to read and discuss the hand-outs and the scripts and were instructed to start negotiating whenever they were ready. The teams were strongly encouraged to discuss their negotiating strategy before they started negotiating. The instructor made it clear that there was no "correct" outcome. The negotiation could end with a contract, or with an agreement to meet again, or with an agreement not to meet again. The only point of the exercise was to have an experience in negotiation.

The mission of the observers was to note what happened during the negotiation and to make notes comparing actual behavior to behavior recommended in the hand-out.

Students moved into the experience with gusto and completed the first exercise within 45 minutes. Then, observers gave their reports and there was an open discussion.

There was time for a second negotiation exercise, involving "Brand Managers" and "Operations Managers." Roles were changed and one set of negotiators became observers and the observers became negotiators. Again, the negotiation was followed by observers' reports and open discussion.

During the subsequent evaluation, students reacted very positively to the experience. They recommended it as a permanent feature in the course and recommended inclusion of negotiation exercises in other courses. They also offered constructive suggestions for improving the scripts, which had been written by the instructor on the basis of personal experiences and published case studies.

The Influencing exercises were similar in structure and administration, with only one major difference. Instead of assigning students to work as members of two-student teams, they worked as individuals.

One of the Influencing exercises dealt with a Job Applicant / Corporate Recruiter encounter. The second exercise consisted of a Corporate Planning Director attempting to persuade a Vice President to approve expenditure of \$50,000 to upgrade 12 personal computers used by the planning staff.

Students' reaction to the Influencing exercise was also favorable, but not as strong as the reaction to the Negotiation exercise. Again, they offered suggestions for improving the scripts. Students were not graded on either of the two exercises.

The instructor's evaluation was that the exercises were valuable and that they would be repeated, with improved scripts. In addition, the instructor, as a member of the Leadership Skills Task Force, reported these experiences to the Task Force and offered to run workshops in Influencing and Negotiating for members of the faculty.

The Advanced Case Studies in Marketing Management Course

The "Advanced Cases" course is structured like the Business Policy course, with one difference: the cases have a marketing theme as opposed to a general management theme.

As in the Business Policy course, during the Spring 1989 semester, students were given experiences in Influencing and Negotiating.

In addition, they were given experiences with Lotus 123 and in Networking. The Lotus experience consisted of having a case assigned, "Stafford Catalog Showrooms," and being required to prepare and hand in a spreadsheet analysis of the profitability of the 20 odd merchandise lines carried by the company. They were also required to evaluate the results of the analysis and to recommend appropriate strategies for achieving the objectives of the company's management.

The Networking experience, outlined in the Appendix, required students to exchange information with people who might enlighten them about career opportunities and strategies. The exercise had several objectives, including acquisition of career information and development of networking skills. This exercise required a written and oral report and counted for 10% of the semester grade. By way of contrast, the Influencing and Negotiating exercises were not graded and the Lotus exercise counted for 2.5% of the semester grade.

Students' reaction to the Influencing, Negotiating and Lotus exercises was favorable. They recommended inclusion of these exercises in the future and they offered suggestions for improving the scripts and the instructions for the Lotus exercise. Their reaction to the Networking exercise, on the other hand, was enthusiastic.

Exhibit 4 compares "How Satisfied" student ratings with respect to the five goals and the 9 objectives of three groups: the 110 respondents in the December 1988 study and the students in the Business Policy and Advanced Case Studies in Marketing Management courses described above. The classes were small, 13 and 8 respectively, and the results may not replicate exactly in subsequent experiments. Nevertheless, observations may be made:

1. Students rated the Business Policy course about the same as the students who rated the entire program in the December 1988 survey. Students rating the Marketing course, on the other hand, expressed much more satisfaction. The inclusion of a greater array of skills exercises increased perceived satisfaction substantially. Considering the enthusiasm expressed for the Networking exercise, this is likely to have been a determining factor.

2. The Networking exercise contributed to satisfaction with "Career Planning," where the difference in satisfaction rating is greatest between the two classes. Reporting on the Networking exercise doubled the

presentation experience of the students. This increased satisfaction with respect to presentation skills. Students appear to value exercises that contribute directly to their career-related goals as shown by the difference in satisfaction with respect to goals.

3. The Lotus 123 experience contributed to satisfaction in that area.

Conclusions

Students need skills. Evidence to support this comes from surveys of students and corporate recruiters and from published surveys conducted by prestigious organizations. We should help students to develop these skills, without sacrificing content. Skills should be developed in a content sensitive way, so that the connection between knowledge and application of knowledge is clearly established. Therefore, skill development should not be delegated to specialists. Skills must be developed in regular business school courses.

To accomplish this, we shall have to acquire these skills ourselves. We must also develop, evaluate and improve ways of imparting these skills.

Positive implications abound. If we acquire these skills ourselves, we are likely to become better teachers, more effective managers of our own personal and professional business activities and we are likely to add substantially to enjoyment of life. After all, if Influencing, Negotiating, Networking, Creative Problem Solving, Writing, Presenting, Lotus 123, Business Planning and Career Planning are good skills for business students are they not just as good for business teachers?

We will expand our teaching responsibility from being lecturer, assigner of homework and papers, giver of exams and grader, to being manager of the learning process.

Our students will be appreciated more by their employers. Instead of corporate recruiters complaining that our graduates are prima donnas with analytical skills, they will praise our graduates for being valuable performers in business. This will reflect well on us, with consequent benefits to our schools and to ourselves.

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Appendix - Outline of the Networking Exercise

- I. Objectives of the Networking Exercise
 - A. To give you first hand experience with networking.
 - B. To help you to develop career plans.
 - C. To expand your opportunities for career advancement.
- II. Networking strategies and tactics.
 - A. Define your career goals and interests.
 1. Reflect, introspect.
 2. Seek the views and evaluations of friends and relatives.
 3. Have yourself evaluated objectively. Visit the Career Planning Office.
 4. Have appropriate business cards printed.
 - B. Identify organizations that might help you to advance these goals and interests.
 1. Consult with at least three teachers in your Major.
 2. Consult professional organization lists in the Library.
 3. Consult the telephone directory.
 4. Ask friends, relatives, fellow students, alumni.

- C. Attend business and professional meetings,
 1. Introduce yourself to as many people as possible.
 2. Ask them what they do, what their interests are.
 3. Tell them what you do, what your interests are.
 4. Exchange business cards with as many as possible.
 5. Jot down notes on their cards.
 6. File the cards on the basis of potential usefulness.
- D. Make business and professional contacts in every way possible and network:
 1. Introduce yourself to seat neighbors on airplane trips.
 2. Call former employers, teachers, classmates.
 3. Contact alumni of the School.
 4. Call people named in newspapers as having been promoted.
 5. Ask people in your company, discreetly, of course.
- E. Industry specific approach.
 1. Select an industry that is important to you.
 2. Draw up a list of attractive companies.
 3. Determine the title(s) of people you want to meet.
 4. Find out the names of people with the right titles: consult directories or call the switchboard.
 5. Call for an appointment.
 6. Prepare a list of topics to be discussed.
 7. Conduct the interviews.
- F. **NOTE:** *Ask whom else you should contact.*
- III. Engage in additional contact-expanding activities.
 - A. Serve on committees and task forces of business and professional groups.
 1. Join groups of interest to you.
 2. Contact officers.
 3. Offer to serve.
 4. Focus on activities that will maximize contacts.
 5. Do a great, enthusiastic job.
 - B. Publish.
 1. Obtain copies of professional association newsletters.
 2. Submit articles.
 3. Submit letters to the editor.
 4. Submit articles to other publications.
 - C. Give presentations at professional group meetings.
 1. Identify target groups of interest to you.
 2. Choose topics of interest the group and that will enable you to make a good impression.
 3. Contact the program chairperson.
 4. Make known to this person that you would like to address the group.
 5. Prepare an outstanding presentation.
 6. Give your presentation, if invited. Give handouts. Encourage audience to contact you for additional information or to convey comments. Have business cards with you at all times.
 - D. Attend appropriate job fairs.
- IV. To complete the networking assignment:
 - A. Write a summary and evaluation of your experiences.
 - B. Hand in your written report.
 - C. Report to the class, about 5 to 10 minutes.

Exhibit 1. Five Goals Identified in the MBA Survey

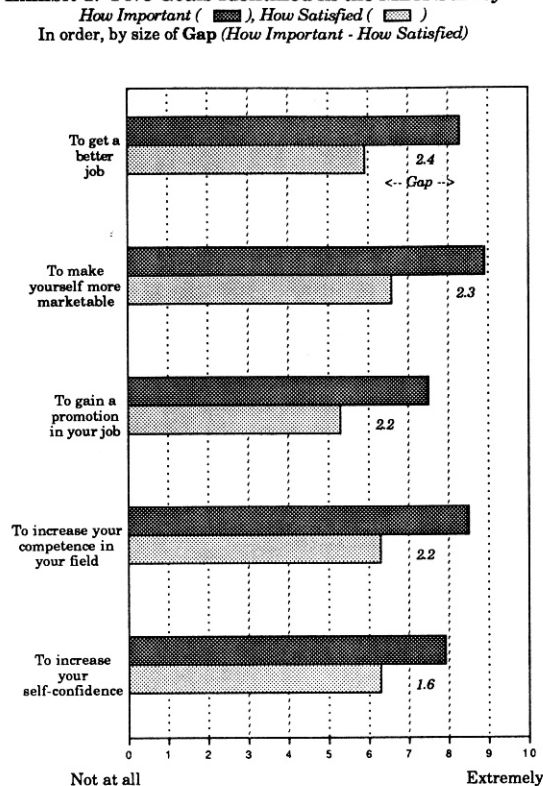


Exhibit 2. Nine Objectives Identified in the MBA Survey

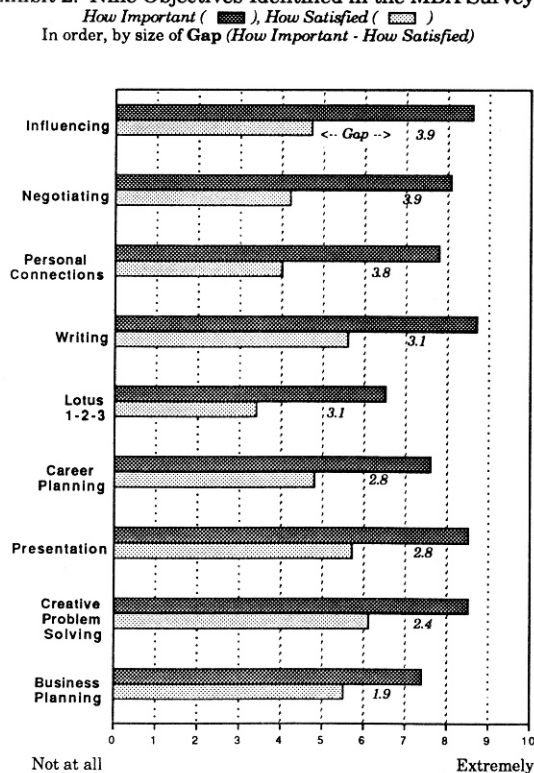


Exhibit 3. Leadership Skills

I. Influencing

Being able to affect the behavior of other people without apparent exercise of force or direct exercise of command. Influencing skills are developed through role playing.

II. Negotiating

In a conflict situation, conferring with the opponent to arrive at a mutually acceptable settlement. Negotiating skills are developed through role playing.

III. Networking (Personal Connections)

Exchanging of information or services among individuals or groups. Students develop networking skills by joining professional organizations and exchanging information with other members and then reporting their experiences orally and in writing.

IV. Writing

Business writing skills are developed through completing many writing assignments of the following types: memos, reports, case study analyses, original case studies and critiques of other students' work.

V. Lotus 123

The ability to apply Lotus 123 to the analysis of a wide variety of business plans and problems, by designing, developing and operating Lotus 123 models. Students develop skills by developing a variety of Lotus models after mastering fundamental Lotus 123 techniques in a prerequisite course.

VI. Career Planning

Developing the skills and the written plan for establishing and advancing one's career in business. Students visit business firms for "information interviews."

VII. Presentation

Giving business presentations of proposals, plans and research findings, using visual aids. Students develop skills by giving many presentations and receiving advice and critiques.

VIII. Creative Problem Solving

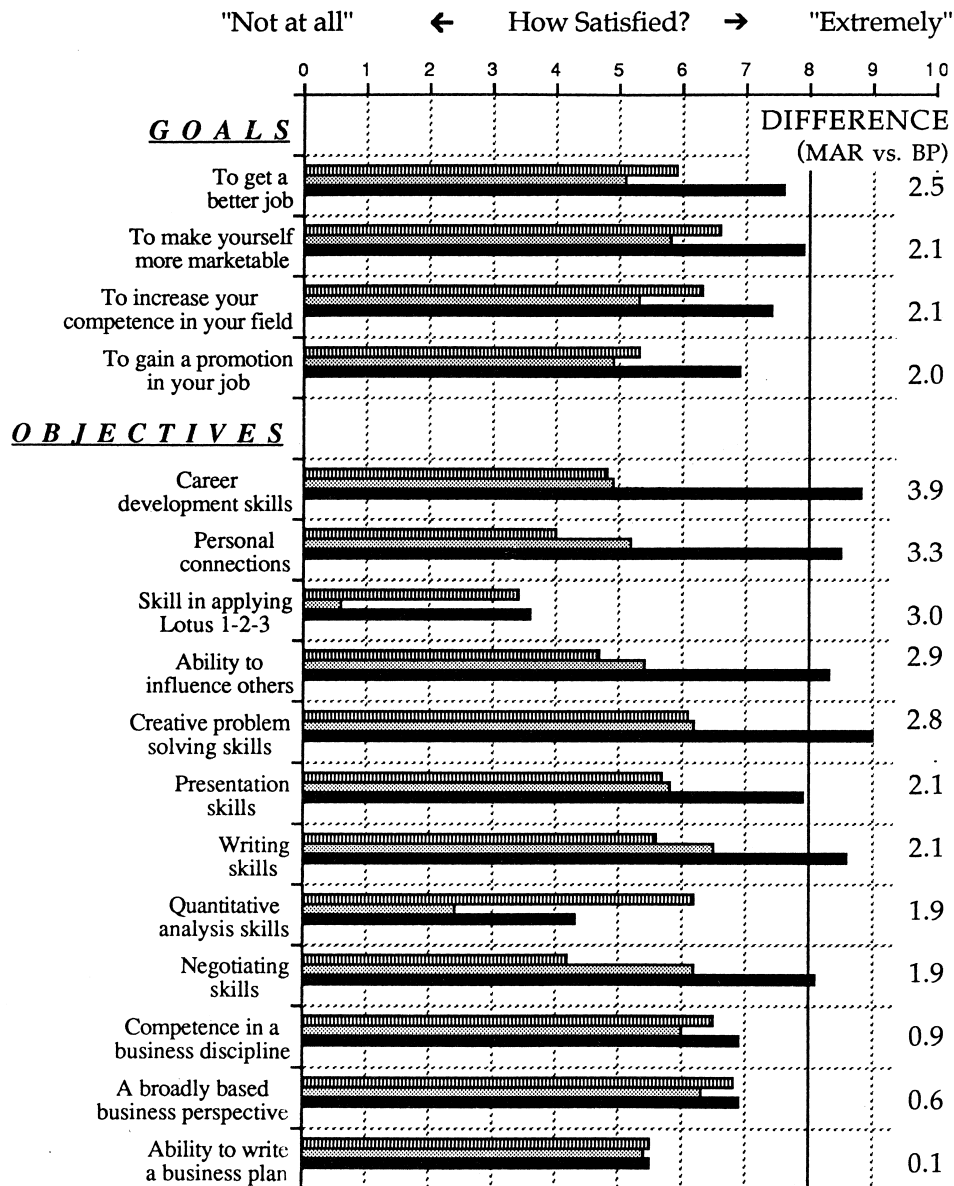
Correct definition of objectives, followed by generation of many relevant alternatives, selection of the most productive strategies and development of action programs for implementation. Students develop skills by analyzing case studies using creative processes.

IX. Business Planning

Developing and documenting plans for various business situations, such as marketing plans, business plans for new enterprises and short and long term plans for on-going businesses. Planning skills are developed by writing, presenting and critiquing business plans.

Exhibit 4. "How Satisfied" Ratings of Three Groups

Entire MBA Program (Dec. 88) vs. "Business Policy" (May 89) and "Marketing Cases" (May 89)
 In each set of 3 bars, top bar is Entire MBA Prog. (n=110), middle is BP (n=13), bottom is MAR (n=8)
 In two categories: Goals and Objectives. Ranked within each category by DIFFERENCE, MAR vs. BP



Notes:

1. BP incl.: 1 presentation, Negotiating and Influencing.

2. MAR incl.: 2 presentations, Lotus 123, Negotiating, Influencing and Networking.

**THE GENERALIZABILITY OF MEASUREMENTS:
AN APPLICATION TO "BLIND REFEREEING" PROCESS**

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ABSTRACT

This paper introduces generalizability theory as a means of assessing and improving the dependability (reliability) of the refereeing process used in journal article publication decisions. Concepts and computational procedures are presented and the power and flexibility of generalizability analysis are illustrated. It is shown that the refereeing process may be "optimized" by trading off costs and desired levels of generalizability.

I Introduction

This paper applies generalizability theory (Cronbach et. al, 1972; Brennan & Kane, 1979; Shavelson & Webb, 1981) to "blind refereeing" process. Thus, the investigation is about acceptance (rejection) of a manuscript for publication in a journal, and/or inclusion in a conference program.

In recent years, journal editors and conference organizers have shown increasing interest in the procedures used in selecting manuscripts to be published. This is due in part to the proliferation of journals in many fields, making the choice of quality manuscripts all the more difficult for "top" journals. Secondly, as "publish or perish" has become the norm in many more universities academicians, too, become interested in the use of formal methods used in evaluating their scholarly work. Clearly, decisions regarding tenure and/or promotions and associated gains depend, to a large extent, on publication records. Considering the importance of such decisions for all the parties involved, one would expect the evaluation process to follow well-defined, accurately measured, objective rules. It is difficult to argue, however that this is the case.

One reason why there have been problems in evaluating manuscripts is found in the criteria used. Often, selection criteria, if stated, are vague and seldom measured. In other cases, criteria used do not lend themselves easily to discriminating among the manuscripts evaluated. Referees are asked to rate manuscripts as "not suitable for publication", "publishable if revised", or "publishable" without really agreeing on the operational meaning of these terms. In addition, weights associated with different criteria are seldom specified. Another problem of the refereeing process results from the process itself. Even when the criteria used are clear, personal factors, such as who does the evaluations, and their areas of interest affect

critically the outcome. The present paper addresses the question of dependability of the refereeing process using a technique known as generalizability theory. As such, the paper should be seen as an attempt at identifying the source of the problem so as to improve the reliability of the "blind refereeing" process. Therefore, the focus is on both the number of criteria used, and the number of referees included. This is so because both factors contribute to the variability in ratings assigned toward making a final acceptance /rejection decisions.

A review of the relevant literature indicates growing use of formal methods of evaluations. Examples include country risk assessments (Yavas, 1988), employee performance evaluations (Marcoulides & Mills, 1986 & 1988), student ratings of instruction (Gillmore et. al., 1978). Furthermore, other researchers have suggested the use of statistical methods in personnel decision making (Jauch & Glueck, 1975; Yavas, 1989). The present paper therefore, extends the application of generalizability theory to manuscript acceptance /rejection decisions in an attempt to address the problem of reliability of the "blind refereeing" process.

The next section summarizes the basic concepts in generalizability theory. For a thorough coverage, however, the reader is referred to Cronbach et al. (1972) or Shavelson and Webb (1981). In part III, the selection criteria are explained, and the application of generalizability theory to manuscript acceptance /rejection decisions is described. In the final part, the results of the analysis are presented along with a brief discussion of their implications.

II Generalizability Theory: Basic Concepts

Generalizability theory is the theory of the multifaceted errors of a behavioral measurement (Cronbach et. al., 1972 ; Shavelson & Webb, 1981). Dependability or reliability of a measure is investigated because one typically wants to generalize from the available observation to some class of observations to which it belongs. In other words, generalizability refers to the "extent to which one can generalize from the observations in hand to a universe of generalization" (Rentz, 1987).

In contrast to the classical test theory, generalizability theory explicitly recognizes multiple sources of error of a measurement. Each source of error, together with interactions among the

sources, can be estimated. Also, the combined effects of these sources can be evaluated. For example, in acceptance/rejection decisions of the journal articles dealt with in the present paper, there are three sources of error that must be examined. The first is due to the items (manuscripts). The item effect is the facet of differentiation (object of measurement) and therefore does not constitute error variation. The referees are another source of error because they can contribute to the undependability of the measure. For the same reason, the selection criteria are the other source of error. The last two facets (referees and criteria) are facets of generalizations in generalizability terminology. A facet of generalization refers to a set of conditions that contribute to measurement error. These are the facets over which one wants to generalize. The facet of differentiation on the other hand, refers to a set of objects to be compared in an investigation. The intent in this paper is to differentiate manuscripts on the basis of the rating scores. Therefore, manuscripts (m) are the facet of differentiation, and criteria (c) and referees (r) are facets of generalization. The question, then, is: What is the extent to which ratings can be generalized over the universe of criteria and referees?

III Estimates of Variance Components

The estimates of variance components can be obtained using traditional analysis of variance techniques. As shown in [table 1](#), numerical estimates result from the solution of the set of simultaneous equations obtained by setting the expected mean squares equal to the observed mean squares. See [Table 1](#).

The main objective in this paper is to utilize generalizability theory to examine the measures used in evaluating manuscripts. The two facets of generalizations are criteria used to evaluate the manuscripts submitted and the referees. Therefore, the application of this method to the present study requires that seven variance components be estimated. These correspond to three main effects (one for manuscripts, one for criteria, and one for referees), three two-way interactions (manuscript by criterion, manuscript by referee, criterion by referee), and the manuscript by criterion by referee interaction (that is confounded with residual error). See [Table 2](#).

The data used are obtained by asking four faculty members to evaluate two previously published articles using five different criteria. The criteria were then converted to a likert type five-point scale, ranging from "very poor" to "very good". The "referees" were not told that these were published articles, nor were the names of the authors revealed. In short, "blind refereeing" process was

thought to be replicated. Data collected in this manner were analyzed using the ANOVA (Analysis of Variance) procedure in the SPSS (Statistical Package for the Social Sciences) package. Appendix presents the ANOVA results.

It should be noted that the sample of referees was not random and did not represent any particular population. In addition, criteria were not randomly sampled. Since the main purpose of the study is to illustrate an application of generalizability theory to a process rather than precisely establish dependability of the process, it is thought that the procedure used would suffice for that purpose.

Evaluation Criteria:

- 1) Significance (How significant is the work reported?)
- 2) Originality (Has this or similar work been reported before by the author or others?)
- 3) Relevance (Is this work of interest to academicians and/or managers?)
- 4) Validity (Is the paper technically sound? Is the methodology used valid?)
- 5) Clarity (How well is the work presented?)

Inspection of the calculated variance components given in [table 3](#) provides useful information about the measurement design. Four estimated variance components are large relative to the other components. The first is the residual term (.44) which represents unidentified source of measurement error. The second, for manuscripts, is expected to be large (.22) since manuscripts are a facet of differentiation. The third, the manuscript by referee interaction (.24), indicates inconsistencies in referee ratings of manuscripts. It appears that referees are rank ordering manuscripts differently. The fourth, for criteria (.15), shows that the criteria used to evaluate manuscripts are not producing consistent results. Therefore, considering the last two variance components, manuscript by referee interaction and criteria, these findings suggest that in subsequent studies, the number of referees as well as the number of criteria used may need to be increased if a higher level of generalizability is desired. See [Table 3](#).

In generalizability theory, the same score may be used in different ways by different decision makers. In particular, two types of error variance corresponding to two decisions may be considered. The relative error variance (σ^2_e) is utilized when the decision maker is interested in a relative interpretation of the scores. For example, if the editor of a journal is interested in rank ordering of the manuscripts submitted according to their scores given by the referees (perhaps because the five highest ranked manuscripts are to be published), then the relative error variance is of concern. The absolute error variance ($\sigma^2_{e_0}$) is

appropriate for absolute decisions. For example, a manuscript may be considered for publication if its score exceeds some minimum score established before. In manuscript evaluations, both relative and absolute decisions may be appropriate depending on such factors as the prestige of the particular journal, number of manuscripts submitted for review, deadlines for publication ... etc.

$$\sigma^2_{\epsilon} = \frac{\sigma^2_{ar}}{n_r} + \frac{\sigma^2_{ac}}{n_c} + \frac{\sigma^2_{acr,e}}{n_c n_r}$$

Note that relative error variance includes variance arising from the interactions of manuscript by referee, manuscript by criteria, and the three way interaction.

Absolute error variance, on the other hand, includes all variances except the one due to the manuscripts (universe score).

$$\sigma^2_{\epsilon_a} = \frac{\sigma^2_r}{n_r} + \frac{\sigma^2_c}{n_c} + \frac{\sigma^2_a}{n_r} + \frac{\sigma^2_{ac}}{n_c} + \frac{\sigma^2_{cr}}{n_c n_r} + \frac{\sigma^2_{acr,e}}{n_c n_r}$$

Generalizability theory also provides a generalizability coefficient for both relative and absolute decisions. Generalizability coefficient is basically an intraclass correlation coefficient obtained as the ratio of universe (true) score variance to expected observed score variance. This is so because generalizability theory assumes random sampling of levels of facets so the observed score variance may change from one application of the design to another.

$$G_r = \frac{\sigma^2_{\epsilon}}{\sigma^2_{\epsilon} + \sigma^2_{\epsilon_a}} \quad G_a = \frac{\sigma^2_{\epsilon_a}}{\sigma^2_{\epsilon} + \sigma^2_{\epsilon_a}}$$

Note that G-Coefficient is equal to one (1) if the error variances (absolute or relative) are zero. This is the maximum value for the G-Coefficient. G-Coefficient may be interpreted as a validity coefficient since it indicates how accurately population (universe) can be inferred from the sample. Therefore, the question is whether observations are a random sample from the universe of generalizations (Kane, 1982). If a particular G-study can not claim to have randomly sampled the universe, the G-Coefficient may alternatively be interpreted as a reliability coefficient. In that sense, the G-Coefficient indicates the extent to which one can generalize over the subset of facets that has been investigated (Rentz, 1987).

The magnitude of generalizability coefficient, both absolute and relative, is affected by the sources of variation as well as the number of observations for each source of variation. The implication is that the investigator can determine how many conditions of each facet are needed to obtain a given level of generalizability. For example, if a generalizability study indicates that certain facets contribute large error (little error), number of conditions of

those facets can be increased (reduced) to attain an acceptable level of generality. In short, resources can be allocated in such a way so as to increase generalizability in subsequent studies. Therefore, generalizability theory allows an investigator to differentiate a decision study (D study) from a generalizability study (G study). While a G study is carried out to investigate various sources of measurement error, D studies utilize the information regarding variance components derived through a G study and permit the practitioner to "optimize" the measurement procedure. This is accomplished because D-studies point to the attainment of maximum generalizability at a given cost or alternatively, minimizing costs at an acceptable level of generalizability. As an example, for relative decisions, generalizability coefficient is calculated for the design studied in this paper as .68. If a journal considers .68 to be high (bearing in mind that the maximum value is 1), costs may be reduced by decreasing number of referees. The generalizability coefficient can easily be computed when the number of referees is 2 by changing the value of n_r from 4 to 2 in the formula for the relative error variance. When there are two referees, relative error variance equals .184 and the generalizability coefficient equals .544 (Table 4). Clearly, generalizability has been reduced but it may still be acceptable. Perhaps more importantly, halving the number of referees may imply substantial cost saving in terms of time, money and other practical constraints. Moreover, both n_r and n_c can be changed simultaneously and the joint impact can be estimated. If the values of referees and criteria are changed to 2 and 3 respectively, the relative error variance equals .226 and the generalizability coefficient equals .493. In general, increasing (decreasing) the levels of facets which contribute substantial error will result in greatest increase (decrease) in the generalizability coefficient. It is important to note again that even though the generalizability coefficient will continue to rise as the number of referees or criteria increases, the rate of increase declines. This suggests that there is a point at which it will not be worth the cost of increasing the number of referees or the criteria used. It is in this sense that a generalizability study provides "optimal" number of referees and criteria for manuscript evaluations. That is, optimal in the sense that maximum generalizability is achieved at a given level of costs. See Table 4.

IV Conclusions

This study has presented an application of generalizability theory to manuscript evaluation. The results of the analysis

indicate that generalizability theory can be used to increase reliability of the manuscript selection process. As such, generalizability theory gives guidance to those responsible for the design and administration of manuscript evaluations (journal and proceedings editors). One of

the major advantages of the analysis presented in this paper is its ability to modify subsequent decision studies more efficiently on the basis of the information from the generalizability study.

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Appendix:

Analysis of Variance Score by M,C,R.			
Source of Variation	SS	DF	MS
Main Effects	22.46	8	2.80
C	8.64	4	2.16
R	7.38	3	2.46
M	6.44	1	6.44
2-way Interactions	15.02	19	0.38
CR	6.72	12	0.56
CM	3.36	4	0.84
RM	4.92	3	1.64
Residual	5.28	12	0.44

Table 1
Estimates of Variance Components For One-facet mxr Design

Source of variation	Mean square	Expected mean square	Estimated variance component
manusct. (m)	MS_m	$\sigma^2_{mcr,e} + n_r \sigma^2_m$	$(MS_m - MS_{res})/n_r$
referee (r)	MS_r	$\sigma^2_{mcr,e} + n_m \sigma^2_r$	$(MS_r - MS_{res})/n_m$
mxr,e	MS_{res}	$\sigma^2_{mcr,e}$	MS_{res}

n_r = number of referees, n_m = number of manuscripts.
Source: Shavelson & Webb (1981)

Table 2
Estimates of Variance Components for two-facet mxcr Design

Source of Variation		Expected Mean Square
Manuscripts	m	$\sigma^2_{mcr,e} + n_c \sigma^2_{mr} + n_r \sigma^2_{mc} + n_m n_r \sigma^2_m$
Criteria	c	$\sigma^2_{mcr,e} + n_m \sigma^2_{cr} + n_r \sigma^2_{mc} + n_m n_r \sigma^2_c$
Referees	r	$\sigma^2_{mcr,e} + n_c \sigma^2_{mr} + n_m \sigma^2_{cr} + n_m n_c \sigma^2_r$
Two-Way Interactions	mc	$\sigma^2_{mcr,e} + n_r \sigma^2_{mc}$
	mr	$\sigma^2_{mcr,e} + n_c \sigma^2_{mr}$
	cr	$\sigma^2_{mcr,e} + n_m \sigma^2_{cr}$
Residual	mcr,e	$\sigma^2_{mcr,e}$

Table 3
Anova Estimates of Variance Components

Source of Variation	Estimated Variance Component	Percentage %
Manuscripts (m)	.22	17
Criteria (c)	.15	12
Referees (r)	.07	5.5
mc	.10	7.8
mr	.24	18.7
cr	.06	4.6
residual (mcr,e)	.44	34.4

Table 4
Error Variances and Generalizability Coefficients

	n_c	5	5	5	3	3	3
	n_r	4	2	1	4	2	1
σ^2_s		.102	.184	.348	.129	.226	.419
σ^2_a		.152	.255	.461	.202	.321	.559
G_s		.683	.544	.387	.629	.493	.344
G_a		.591	.463	.323	.521	.406	.282

MINORITY MARKETING

AN INVESTIGATION OF SERVICE PROVIDER CHOICE:
ETHNIC IDENTITY OR BETTER SERVICE?

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Abstract

A survey of Mexican-Americans was conducted to investigate the relationship between variables related to service quality and ethnic identification and the choice of an Hispanic service provider versus a non-Hispanic service provider. Selection of Mexican-American service providers is found to be based on the respondent's perception that they provide better and more friendly service, rather than her/his strength of ethnic identification.

Introduction

Recent work in the area of subculture behavior has focused on subculture characteristics and strength of identification. Initial research into the behavior of Hispanic subcultures identified numerous differences between this ethnic group and Anglos. Shopping attitudes, search behavior, and self perception have been compared for Anglos and Hispanics (Gillett and Scott 1974), along with differences in food consumption patterns between Anglos, Mexican-Americans, and Mexicans (Wallendorf and Reilly 1983). Other variables investigated include body care rituals (Wallendorf and Nelson 1986), family decision making (O'Guinn, Faber and Imperia 1986), and information overload (Dolinsky and Feinberg 1986). Differences between Mexican-Americans and Anglos have been shown to exist with respect to degree of brand loyalty, price consciousness and preference for familiar stores (Seagert, Hoover and Hilger 1985). Some of these variables have also been investigated to better understand differences between Mexican-Americans and Blacks (Wilkes and Valencia 1986).

The focus of current research in ethnicity is changing to within-subculture differences, rather than differences between the subculture and the general population. For example, differences between Hispanics who preferred Spanish-language media versus English-language media relate to age, education, place of birth, and various consumption patterns (O'Guinn and Meyer 1984; O'Guinn et al 1985). More recent contributions have highlighted the importance of ethnic identification in describing within-subculture differences for Hispanics (Seagert, Hoover and Hilger 1985; Deshpande, Hoyer and Donthu 1986). Strength of ethnic identification for Hispanics relates to attitudes toward institutions and advertising, use of Spanish media, purchases of prestige products, and household size, income, and education. Beyond tendencies toward brand loyalty and preference for prestige products, specific Hispanic choice has not been studied in relation to strength of ethnic identification. In particular the influence of Hispanic ethnic identification on choice within the service context has not been investigated.

The choice of a service provider is quite different from the selection of a product because of the interpersonal nature of the decision. One might hypothesize that if an individual had strong ethnic identification, they

would be more likely to choose a service provider from within the same ethnic group. On the other hand, the decision could be based solely on the perception of the quality of service offered by a particular service provider. If this is true, even if the quality of service (e.g., friendliness, better service) is moderated by some feeling of the consumer that the service provider might provide better service due to the consumer's ethnicity, the consumer is really shopping for quality service. In sum, it is not the consumer's ethnic identification that leads to a decision, rather, this decision seems to be based upon some response on the part of the service provider.

In addition to quality, the selection of a particular service provider is often based on word of mouth. Therefore, personal interaction variables such as the number of friends who have similar ethnic identification could be expected to affect the choice of service provider. Clearly, these factors are not mutually exclusive and can easily interact to produce a final decision.

This study focuses on the choice of service provider by Hispanics and attempts to determine which of the explanations provided above is a more accurate representation of the service provider selection process. In this study, a service can be viewed as an "Hispanic product" surrogate, for not only can respondents indicate use of a service (e.g., plumber), but they can also indicate the ethnicity of the provider (the plumber or plumbing firm). This decision differs from choices made regarding tangible products, since ethnicity is not as easily derived from brand name, manufacturer, or retailer of a product. Furthermore, not all tangible products have both Anglo and Hispanic counterparts, while many services may be obtained from both Hispanic and non-Hispanic service providers (Bateson 1977; 1979; Zeithaml, Parasuraman and Berry 1985; Lovelock 1983; Enis and Roering 1981).

By investigating differences in perceptions held by those who prefer Hispanic service providers over non-Hispanics, insight may be gained into the characteristics of services that influence choice. Given this objective, a survey was conducted of Mexican-Americans, a subgroup of Hispanics, to investigate both service provider choice and strength of identification, as well as the correlates of these variables.

Data Collection

Sample

The sample used in this study was drawn from a list containing 804 members of a Mexican-American organization located in a southwestern county. Of the 804 questionnaires mailed, 120 were returned, representing a 14.9% response rate. While low, this response rate is not surprising given past response rates in Hispanic research (Seagert et al 1985). A comparison of the sample demographics with the demographics of

the county revealed that the sample matched on all population characteristics with the exception of education and income. Respondents tended to have slightly more education and income higher than the county average.

Instrument

For this study, a questionnaire was developed that consisted of three sections. The first section contained questions concerning use of Mexican-American services and Spanish-language media. The second section measured attitudes. The first part of this section measured attitudes toward a broad spectrum of issues ranging from choice of a service provider to the individuals' personal values. The second part of this section used semantic differential scales to measure attitudes toward Mexican-American service providers. The third section gathered demographic information such as origin of one's parents and income, as well as a measure of respondents' strength of ethnic identification. Variables used in the analyses are described in Table 1.

TABLE 1
DESCRIPTION OF VARIABLES

Service Provider. *If I had to choose between two firms identical in every way, I would prefer doing business with the one owned by a person of Mexican descent (Likert type scale).

Identity. *How strongly do you identify with the Mexican-American ethnic community? (Categories were provided).

Friendliness. *When compared to others who have provided services for me, people of Mexican descent have been more unfriendly/more friendly (Semantic Differential Scale).

Good Service. *This variable is a composite of responses to the following two Likert type scales:

*Because I am of Mexican descent, people that are also of Mexican descent give me better service than they give to their other customers.

*I am more successful in getting what I need done the way I want it done if I deal with someone of Mexican descent.

Community. *In the Mexican community, people help each other (Likert type scale).

Friends. *Most of my close friends are of Mexican descent (Likert type scale).

Actions. *It is important that my actions be accepted by those around me (Likert type scale).

The questionnaire was pre-tested twice to determine whether the questions were understood, and whether or not a Spanish version was needed. Similar to findings from past studies (Seagert et al 1985), the interviews following administration of the pre-test revealed that a Spanish version was not necessary given the characteristics of the sampling frame.

Analyses

The primary question addressed was whether there are variables that distinguish between those who are more likely versus less likely to choose a Mexican-American service provider. This issue was addressed by first questioning respondents about the likelihood of their selecting a Mexican-American service provider (See Table 1). Respondents were then divided into two groups based on a median split. This criterion resulted in a group of 63 with higher likelihood and a group of 45 with a lower likelihood of selecting a Mexican-American service provider.

A discriminant analysis was then conducted using variables listed in Table 1 to determine which variables might explain the difference in likelihood between the two groups. The discriminant function was statistically significant and allowed for correct classification of 72% of the respondents. As is indicated by the standardized coefficients reported in Table 2, strength of ethnic identification was not a significant factor in determining choice of a Mexican-American service provider. This is contrary to what was initially hypothesized in this study. Examination of the other variables in the discriminant function suggests that favorableness toward choice of a Mexican-American service provider significantly increases when the perception is that Mexican-American providers are friendlier (Friendliness) and/or when an individual believes Mexican-Americans provide better service (Good Service) than non Mexican-American service providers. Furthermore, the perception that people in the Mexican-American community are more helpful to one another also related positively to the likelihood of selecting a Mexican-American service provider.

In addition to the perception held by some respondents that Mexican-American providers were friendlier, better service providers, and more helpful, one of the two personal interaction variables was also significantly related to the dependent variable. Those responding favorably to choice of a Mexican-American service provider indicated that most of their friends were of Mexican descent. There was no significant difference between the groups with respect to their concern that their actions be seen as "acceptable" by others. Thus, even though a respondent's interaction with friends of their own ethnic orientation may lead to use of a Mexican-American service provider, it is unlikely that there are strong normative pressures toward use conformity. A more logical explanation is that circumstance may facilitate use of a Mexican-American service provider simply by "word of mouth". This suggestion, however, is purely speculative and requires further investigation before a definitive conclusion can be drawn. Finally, while use of Spanish-language radio was fairly low in this sample, it does provide some discrimination between the two groups.

TABLE 2
DISCRIMINANT ANALYSIS RESULTS

	Choice of Mex.-Am Service Provider Coefficients**	Choice of Mex.-Am. Service Provider		T Test Significance Level
		Agree ¹	Disagree ²	
Identity	.001	1.75	1.59	.071
Friendliness	.540	5.80	4.72	.000
Good Service	.440	2.92	2.13	.000
Community	.420	3.68	3.08	.017
Friends	.330	3.87	2.91	.000
Actions	.050	3.72	3.35	.187
Spanish Radio	.170	2.46	1.96	.020

** Chi Square = 3.16, df = 7, p .0001, Classification rate 72%

¹
n=63

²
n=43

Discussion

The aim of this study was to determine whether ethnicity affects the choice of service providers and/or if other factors contributed to this choice. The choice of service provider is correlated with the perception that Mexican-Americans provide better and more friendly service, rather than with the degree of ethnic identification of the consumer. The concept that individuals in the Mexican-American community care for one another, and the existence of a larger proportion of a respondent's friends that are Mexican-American jointly influence the decision making process, along with a tendency to listen to Spanish-language radio.

Strength of ethnic identification of an individual was not found to relate to the choice of service provider, a finding counter to the basic hypothesis initially set out in this study. It is possible that the scale used to measure strength of ethnic identification did not effectively measure the underlying construct, or that the present measure failed to adequately capture all factors involved in ethnic identification. However, this explanation is questionable since this study used measures very similar in structure to other studies investigating strength of ethnic identification where significant correlation was found with various behaviors (Deshpande, et al 1986). A second possible explanation for the fact that strength of ethnic identification was not significantly related to choice of

service provider is simply that the decision is not one determined by the service provider's ethnicity. Instead, individuals who choose Mexican-American service providers do so not because they view themselves as distinctly Mexican-American, but rather because they view the service provider as offering service of a high quality. This could be true because cultural similarity may facilitate the service provider in understanding and evaluating the needs of the customer, or because characteristics valued in a service provider are the same as those valued in other interpersonal interactions within the culture. These hypotheses should be further investigated.

Individuals choosing Mexican-American service providers are also influenced by their friends and a belief in community cooperation and mutual support. Therefore, personal interactions within this community may produce recommendations of Mexican-American service providers and in turn, result in the choice of a Mexican-American service provider.

Conclusions

This research should be viewed as exploratory in nature. It has identified variables that significantly correlate with the choice of service provider among a sample of Mexican-Americans. Future research should explore whether or not the variables associated with quality of service, along with other variables such as service provider attitudes and intra-community relations, influence consumer choice of providers in other subcultures. The precon-

ceptions and belief systems affecting a consumer's selection of a service provider allow for a very rich context in which to study consumption patterns and values within and between subcultures. As these services often result in personal contact between the service provider and consumer, the nature of this contact will depend in part on the cultural background of the participants. It is possible, given the results of this study, that consumer expectations may vary based upon the ethnicity of the service provider. Future studies within other subcultures that attempt to identify the individual differences among consumers of services and the attributes that attract them to these services should provide additional insight.

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THE "DEAD ZONES" IN MINORITIES MARKETING

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Abstract

The intent of this paper is to present a review and classification of minorities marketing literature derived from selected journals and proceedings during the time period of 1976-1989. Marketing categories are identified to enhance the classification process thereby setting the stage for a discussion on the "dead zones" or potential areas of future investigation and theory development.

Introduction

In Stephan King's thriller *The Dead Zone* (1979) his doomed character, Johnny Smith, refers to his inability to interpret certain aspects of his coma induced precognitions as a "dead zone." Perhaps these "dead zones" aptly describe the dearth of theory development and variety of research issues in minorities marketing literature. A first glance at the literature base could mislead an individual into believing that considerable research involving minorities marketing has been performed. However, a closer inspection would indicate that a preponderance of the literature is proprietary in nature and for the most part, performed without consideration for existing and long term theoretical implications. Relatively few journals publish studies on minorities marketing issues and according to Sackmary and Wilson (1987 p.69) "...there is limited continuity in the literature, few theoretical or conceptual linkages across studies and no clear focus on a research agenda". Although literature reviews of Black and Hispanic consumer behavior may be found in Assael (1987) and Engel et al (1985), a literature review of Blacks in advertising (Snuggs and Qualls 1987), current research has not developed a minorities marketing literature review that identifies and classifies the articles into topical areas of marketing from 1976 to the present.

We felt that a focused review and classification of minorities marketing literature would not only clarify research questions and issues previously discussed, but also enable us to isolate and classify the "dead zones" - topical areas of marketing that have been either largely ignored, overlooked or avoided entirely for one reason or another. Therefore, supportive of the observations proffered by Sackmary and Wilson (1987), the purpose and intent of this work is to structure a classification framework that identifies and categorizes topical areas of interest that have focused on minorities marketing issues. We posit that a comprehensive review and classification of the literature from approximately 1976 to the present will generate new focus, direction and motivation for expanded issues to be researched. By identifying what has been accomplished, it is expected that the "dead zones" will evolve with

more clarity and eventually and receive more attention as viable research issues. Our approach involves setting the stage with a brief discussion of the research environment that pervades minorities marketing issues. Next, we identify a starting point in the literature, examine the articles and assign the article to a specific topical marketing category. Finally, an attempt is made to identify and conceptualize the "dead zones" across and within various marketing categories with some perspectives offered for future research endeavors.

The Environment of Minorities Marketing

Andreasen (1976) posits that minorities marketing issues received considerable attention during the late 60's and 70's. However, after the mid-70's, interest in this area subsided considerably. Samli (1987) believes that this decline was a result of a lack of scholars and interest in the field, inadequate training, the changing environment of academic research, and the perception that it was innately prejudicial to undertake a racially oriented study. Also, mass marketing and mass advertising strategies (Peter 1987) were embraced by academics and practitioners but the "inefficiencies and unfairness in marketing practices" was largely ignored (Samli 1987 p. 1). Samli (1987) also calls for the investigation of minority markets and sets forth a four point agenda:

1. Different minority markets must be identified.
2. These markets must be analyzed.
3. Minority markets must be understood.
4. The needs of each and every market must be satisfied separately, particularly and as effectively as possible." p. 1.

In keeping with the spirit of these directives and to present an analysis that is truly representative of minorities marketing research, the *Proceedings of Minority Marketing: Issues and Prospects*, Vol. III, 1987, from the first conference devoted entirely to these issues, is used as a focal reference point to identify journal and proceedings references. The year 1976 was chosen as the starting point for the review because in Andreasen's (1976) work, he mentions specifically the decreased interest in minorities marketing research in the mid 70's. We were interested in examining the literature from the downturn to the present. Although other relevant journal sources have been used in prior literature reviews that were not focused specifically on minorities marketing (Helgeson et al 1984, Kassarian 1982, Jacoby 1976), it was perceived that the references provided in the 1987 *Proceedings* would provide the most focused direction for our purposes as well as a manageable number of articles to review and classify. Clearly, the review is limited by

the journals and proceedings derived from the source articles. Many other sources of information such as texts, monographs, trade journals, etc., were not included in this review since our inclusions were limited to only those articles in refereed journals and proceedings that specifically addressed minorities marketing issues from 1976 to the present and utilized distinct minorities samples (i.e., Asian, Black, Hispanic). Although certain studies were identified as using a minority sample compared to a non-minority (typically a Caucasian sample), many of these studies were not included in the classification scheme because they were performed for the sake of having a two group comparison and did not address nor discuss minorities marketing problems or issues.

Procedure for Classification of Articles

The intent of the classification process is to delineate the literature base into topical areas based on the content of the articles with respect to specified marketing categories. In some instances, an article could have been classified into more than one distinct category. For example, the article by Sackmary and Wilson (1987) "Perception of Health Care Service Among Black Hispanic and White Consumers" could have been classified under a general consumer behavior category that included perception studies. However, we have classified this article under Services Marketing: Healthcare because it distinctly identifies a major services marketing category that is specifically focused on health care issues. One of the major stumbling blocks we encountered was the classification of "consumer behavior articles" because the tentacles of the consumer behavior discipline have enveloped so many research issues. Therefore we did not incorporate a general consumer behavior category but rather more specific categories which provide the reader with a definitive direction and understanding of article content.

Once specific journals and proceedings were identified, subsequent electronic and manual searches were performed to locate research that was written but not cited in the proceedings literature as well as research performed after the 1987 Proceedings publication. Next, approximately 1,200 referenced materials were examined by the authors to determine which references were in fact proceedings and journal publications, evidence of a minority sample and most importantly, whether or not the article directly addressed minorities marketing issues. However, this work is not an attempt to evaluate either the product of the research, nor whether or not an article is considered to be empirical or non-empirical.

The next step required defining marketing categories that were appropriate for each article. As suggested in Kassarijian and Orsini (1980), annotated indices for publications were reviewed wherever possible to validate the classification category. Also, when multi-topic materials were evident, a consensus was taken between the authors to determine the most appropriate marketing category thereby maintaining consistent classification procedures.

Results

The classification process yielded 78 articles dispersed over 24 topical areas of marketing with (29.5%)(23) appearing in journal publications and the Journal of the Academy of Marketing Science exhibiting the largest share of the contributions (22%)(5). Of the total proceedings papers (55), over (54%) were published under the sponsorship of the Academy of Marketing Science with (60%)(18) representative of the Minorities Marketing Conference Proceedings (1987). An analysis of the samples indicate that seventeen (17) studies incorporated Blacks exclusively, with Asian and Hispanic samples totalling four (4) and twelve (12) each. Studies that performed comparisons using an unspecified non-minority group were seven (7) for Hispanics vs. non-Hispanics, for Blacks vs. non-Blacks three (3), and one (1) study that did not specify the breakdown of minorities in the sample. Comparative studies across and within minority samples included, on (1) for Asians and Blacks and two (2) studies that incorporated Blacks and Hispanics. Of the remaining studies, all included a Caucasian sample as compared to Blacks twenty-two (22), Asians one (1), Hispanics three (3) and Blacks and Hispanics four (4). the twenty-four (24) categories that evolved from the search and examination of article content appear to exhibit breadth, but for other areas, particularly, acculturation, color preference and perception, direct and industrial marketing, information processing, market characteristics, opinion leadership and retailing, there appears to be very little in depth and continuity.

Discussion

The purpose of the classification scheme was to identify and categorize research related directly to minorities marketing issues. Our findings, clearly suggest that significant research gaps are evident, spanning several years between the publication of articles in most, if not all, of the 24 categories. In general, the results show that most of the experimental studies have been generated under the auspices of the Academy of Marketing Science in either a proceedings or journal publication and the greatest number of contributions appear after 1982, with a significant increase during and after the (1987) Conference. However, the following topical areas were not specifically identified: 1. channels of distribution 2. attitude theory research 3. experimental design and measurement issues 4. new products research 5. pricing research 6. sampling 7. public policy 8. marketing education 9. personal selling The aforementioned areas are perceived as the "dead zones" in Minorities Marketing. Although many of the articles included were inferential in nature, a considerable portion were purely descriptive. Therefore, we posit that aside from identification and classification of current and "dead zone" areas, the real issues are provided by a pronounced absence of hypothesis generation continuity of research in a specific category, normative and positive construct development and adaptation from other disciplines,

conceptual linkages and lastly, metatheory (within the field) development. Our findings not only support the assumptions made by Sackmary and Wilson (1987), but also provide a well defined direction for their well intended criticisms. Two important issues are worthy of discussion: First, it may be argued that the classification categories are, in some instances, either narrowly or broadly defined. However, we justify this criticism in that the approach taken, despite any shortcomings of the authors' decisions as to how and where to classify the research, represents a step in the right direction for minorities marketing. Previous research on minorities marketing issues has not classified existing studies, nor identified future research needs. Although we have not attempted to identify research inconsistencies and contradictions, we felt as though an attempt at delineating the "dead zones," generalized as they may be, would at least draw attention to future research needs in the field. This classification scheme is meant to be perceived as an evolving classification structure, subject to change and refinement, as research progresses in the field. Since we expect to witness increased interest and contribution among academic researchers in the near future, we suggest that future article submissions to either journals or proceedings be examined more closely to identify specific categories of marketing, particularly those articles which address "consumer behavior" issues. Although a general classification is efficient for review purposes, it may not be as effective as a guide for future research if the general classification is broadly defined. The four point agenda proposed by Samli (1987) sets a well defined set of objectives for minorities marketing research. However, we must acknowledge what we have accomplished and where future research endeavors should be focused in order to achieve those objectives.

All References available upon request.

TABLE 1
Categorization of Minorities Marketing Literature Review 1976-1989

Category	Author(s)	Year	Sample	Source
1. <u>Acculturation</u>	Cervantes	1980	M	American Marketing Assn.
2. <u>Buyer Characteristics</u>	Hover & Deshpande	1982	H	American Marketing Assn.
	Saegart, Hoover & Hilger	1985	H & NH	J. Consumer Research
	Wilkes & Valencia	1984	B & H	Southern Marketing Assn.
	Zallocco & Lin	1989	C & H	Academy of Marketing Science
3. <u>Evaluation of Ethnic Models & Celebrity Endorsers</u>	Kerin	1979	B & C	J. of Communication
	Solomon & Bush	1977	B & C	American Marketing Assn.
	Solomon, Bush & Hair	1976	B & C	J. of Marketing Research
	Williams	1987	B, C & H	1987 Minorities Marketing
4. <u>Color Preferences & Perceptions</u>	Liebman	1989	B & C	Academy of Marketing Science
	Rucker, Kim & Ho	1987	A & C	1987 Minorities Marketing
5. <u>Communication-Language, Ethnic Factors & Strategy</u>	Foster	1984	H	Southern Marketing Assn.
	Hirschman	1980	B & C	J. Academy of Marketing Sci.
	Shama & Coughlin	1979	B & C	American Marketing Assn.
	Williams, et al	1989	B & C	Academy of Marketing Science
6. <u>Consumption Patterns</u>	Shaw, Lazer & Smith	1987	B & NB	Academy of Marketing Science
	Spratien	1987	B & C	Academy of Marketing Science
	Tat	1982	B	Academy of Marketing Science
7. <u>Direct Marketing</u>	Friedman, et al	1987	B & C	Academy of Marketing Science
	James & Harris	1987	B, C & H	1987 Minorities Marketing
8. <u>Entrepreneurial Issues</u>	Bolden & Awadzi	1987	B	1987 Minorities Marketing
	Dunn, Cooper, Kiel & Miles	1987	Minorities (not specified)	1987 Minorities Marketing
	Okran & Richmond	1987	B & NB	1987 Minorities Marketing
	Ryan	1987	B	1987 Minorities Marketing
	Spratien	1987	B	1987 Minorities Marketing
	Stevens	1984	A, B, & H	
9. <u>Industrial Marketing</u>	Stevenson & Paksoy	1981	B	Southern Marketing Assn.
10. <u>Information Processing</u>	Calcich & Hankel	1987	B, C, & H	Academy of Marketing Science
11. <u>Market Characteristics</u>	Paltrack	1987	A	Marketing Media Decisions
	Paskowski	1986	A	Marketing Media Decisions
	Menon & Platzner	1985	H & NH	Southwestern Marketing Assn.
	William, Nelson & Duncan	1986	H	American Marketing Assn.
13. <u>Media Exposure, Selection & Source</u>	Choudhury et al	1976	B & C	American Marketing Assn.
	Rahtz & Kosenko	1987	B & C	1987 Minorities Marketing
	Soley & Reid	1983	B & NB	J. of Advertising
14. <u>Opinion Leadership</u>	Goldsmith & Statler	1987	B & C	J. of Retailing
	Tat	1984/5	B	Mid Atlantic Journal of Bus.
15. <u>Promotional Strategy</u>	Choudhury	1988	B	American Marketing Assn.
	Snuggs, Lee & Yoon	1989	A	Academy of Marketing Science

Category	Author(s)	Year	Sample	Source
16. <u>Purchase Behaviors</u>				
	Deshpande & Hoyer	1982	H & NH	American Marketing Assn.
	Edmonds & Samli	1987	B & C	1987 Minorities Marketing
	Pangrahi & Stuart	1987	A & B	1987 Minorities Marketing
	Saegert	1987	H & NH	1987 Minorities Marketing
	Samli, Tozier, Harps	1978	B	J. Academy Marketing Science
	Samli, Tozier, Harps	1980	B	J. Academy Marketing Science
	Shipchandler & Wilson	1977	B & C	American Marketing Assn.
	Valencia & Bellenger	1982	H	Southern Marketing Assn.
	Wollendorf & Reilly	1987	B & H	J. Consumer Research
17. <u>Research Methodology Issues</u>				
	Alemedo & Padulla	1978	C & M	J. Social Psychology
	Bachman & O'Malley	1984	B&C	Public Opinion Quarterly
	Friedman, Sax & Augustine	1979	B & C	J. Academy Marketing Science
	Johnson & Sachder	1987	B & C	Academy of Marketing Science
	Linhardt	1987	B	1987 Minorities Marketing
	Saegert & Benitez	1983	H & C	American Psychological Assn.
	Slurzberg	1987	H	1987 Minorities Marketing
18. <u>Retailing</u>				
	Kizilbash & Garman	1975-76	H	J. of Retailing
19. <u>Segmentation</u>				
	Cervantes	1980	H	American Marketing Assn
	Deshpande, Hoyer & Donthu	1986	H & NH	J. Consumer Research
	Johnson	1982	B	Academy of Marketing Science
	Lee & Cook	1987	A	1987 Minorities Marketing
	Loudon & Simpson	1982	H	Academy of Marketing Science
	Munson & McIntyre	1978	H & NH	Assn.of Consumer Research
	O'Guinn & Meyer	1983-84	H	J. Advertising Research
	O'Guinn, Farber & Meyer	1985	H	J. of Advertising
	Stamps	1986	B & C	Southern Marketing Assn.
	Valencia	1989	H & NH	J. Academy Marketing Science
20. <u>Services-Banking</u>				
	Reese & Stanton	1984	B	J. Banking Research
21. <u>Services-Healthcare</u>				
	Sackmary & Wilson	1987	B, C, & H	1987 Minorities Marketing
22. <u>Services-Tourism</u>				
	Edmonds & Samli	1987	B & C	1987 Minorities Marketing
	Goodrich	1985	B	J. of Transportation Research
	Robbins & Robbins	1982	B	Southern Marketing Assn.
	Spratlen	1986	B	American Marketing Assn.
	Washburne	1978	B & C	Leisure Science
	Uysal & O'Leary	1987	B & C	1987 Minorities Marketing
23. <u>Shopping Patterns</u>				
	Solomon & Bush	1989	B	American Marketing Assn.
	Valencia & Bellenger	1982	H	Southern Marketing Assn.
	Wilkes & Valencia	1986	M	American Marketing Assn.
24. <u>Social Responsibility & Ethics</u>				
	Tat	1981	B	Southern Marketing Assn.

A FRAMEWORK FOR DEVELOPING RELIABLE AND VALID INDICATORS OF
STUDENTS' PERFORMANCE IN MARKETING COURSES

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Abstract

A major hazard associated with marketing educators' increasing reliance upon test banks is that the test construction process becomes a causal undertaking, rather than a serious attempt at developing a reliable and valid indicator of student performance. The authors of this paper propose a more systematic approach to test construction based upon Churchill's seven step procedure for developing better psychometric measures.

Introduction

The number of college students electing to study within American schools of business has increased dramatically over the past decade. This situation has produced mixed blessings for administrators and professors alike as schools strain to meet the resulting demand for more sections of required courses and additional classroom space. Compounding the problem of inadequate physical resources is the shortage of qualified, terminally degreed business faculty. In response to this set of circumstances, schools of business have come to rely more and more upon large sections of undergraduate core courses, sections with enrollments as high as 200 or 300 students on some campuses around the nation.

Professors who find themselves facing such large classes more often than not resort to the use of multiple choice examinations when the time comes for assessing student performance. Some critics of the "multiple guess" format decry this practice, maintaining that the test format is inadequate in that it 1) encourages rote memorization rather than in-depth understanding of key concepts, 2) does not challenge students' ability to apply what they have learned in the way that essay questions do, and 3) fails to develop the writing skills which, according to surveys of corporate executives, are so sorely lacking in today's business graduate (Harper 1985; Huneycutt and Little 1986). The multiple choice exam also has much to recommend it, however, including such advantages as 1) fast grading turnaround which saves the professor's time and provides students with almost immediate feedback on their performance, 2) a higher degree of grader objectivity than is possible with essay exams, and 3) the potential for broader coverage of topics which motivates students to become well-versed in the full range of course content (Hill 1981; McMillan 1986).

These advantages associated with usage of the multiple choice examination are sufficiently attractive that most professors have come to rely upon them heavily, especially in lower-level undergraduate courses. As a result of the popularity of multiple choice tests, multiple

choice test banks accompany all of the major marketing text books, usually appearing in both printed and computerized form. The computerized form allows the user to select test questions from a pool of items appearing on a computer diskette and then to have the chosen items printed, steps which can be completed in the span of perhaps an hour or so. Or if the professor so chooses, the computerized program can be used to randomly generate a set of test questions, none of which were purposely selected by the class instructor. This latter alternative poses particular dangers in that it so simplifies test construction that the instructor may come to treat the process as a casual undertaking, rather than a serious attempt at developing both a reliable and valid indicator of students' performance. Whatever the technique used in creating a multiple choice instrument, the development of a valid, reliable examination is a considerable challenge, yet it is an important one. What instructor has not experienced a tinge of self-doubt about exam quality when confronted by questioning or even disgruntled students? Most instructors are also quite familiar with the situation where specific test items have had to be thrown out after a test was administered due to disturbing results of an item analysis.

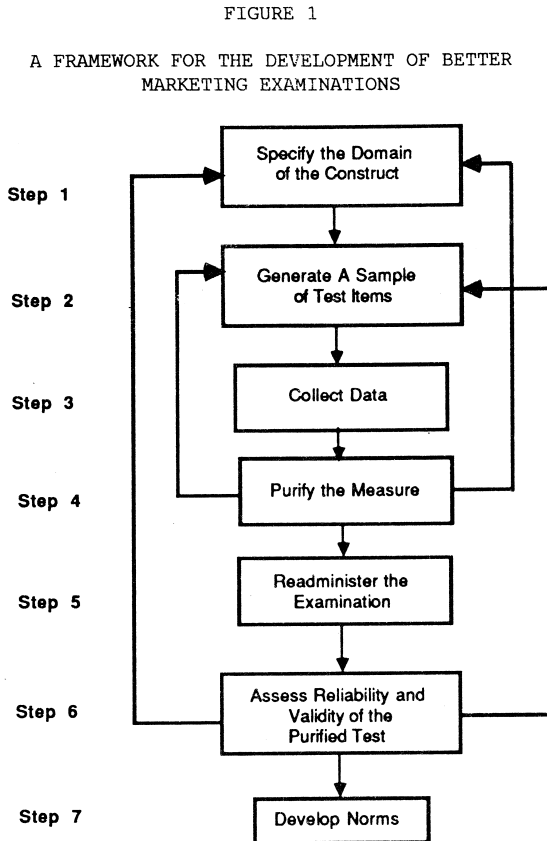
The purpose of this paper is to suggest a methodology which can be used to significantly increase the odds of producing a sound examination which has the characteristics of reliability and validity. Based upon Churchill's approach (1979) to developing better measures of marketing constructs, a seven-step model for creating sound multiple choice exams will be proposed.

Methodology for Developing Sound Exams for
Marketing Courses

Noting that the field of marketing suffered from an absence of standardized procedures for measuring marketing constructs, Churchill (1979) proposed a systematic approach for developing more valid and reliable measures. Although his concern was with improving the tools of research, his seven-step procedure can also be employed by the college instructor who is dissatisfied with the seemingly random, "roll-of-the-dice" approach many of us use in developing multiple choice exams. Using the methodology below, however, the instructor is in greater control of the test generation process. Use of this approach can increase the instructor's confidence that a student's exam performance is indeed a reflection of his ability and mastery of course materials. The methodology is also beneficial in improving exam cross-subject reliability so that, all else being equal, the distribution of class scores will remain constant from one semester to the next. While utilization of this approach is

initially time-consuming, the widespread availability of sophisticated item analysis and test scoring programs on college campuses makes this task fairly simple and straight forward.

Based on Churchill's (1979) paradigm, **Figure 1** presents the seven steps involved in the development of better marketing examinations. Justification for each step, as well as detailed discussion of how to employ the paradigm, are presented below.



Step One: Specifying the Domain of the Construct

The initial step in our proposed procedure for generating multiple-choice test items is to specify the domain of the construct. In Churchill's framework, the construct is that variable which the researcher wishes to measure (e.g., customer satisfaction), while the domain of the construct refers to the full gamut of definitions and possible ways of conceptualizing the construct. For example, the construct of consumer satisfaction can be defined to include perceptions of cost, durability, quality, operating performance, and aesthetic features of a product as well as expectations at the time of purchase and reactions at some point after purchase. As Churchill noted, this first step is expedited by an exhaustive search of the literature in order to determine how the variable of interest has been operationalized in past research.

In the test construction process, the construct--

that which the instructor is to measure--is the degree to which a student has mastered a relevant body of knowledge. The domain of the construct pertains to the array of concepts which are germane to the discipline or subdiscipline currently being taught. In the principles of marketing class, for instance, the domain would include such topics as the distinction between micro- and macro-marketing, the marketing concept, marketing mix, target marketing, segmentation, product life cycle, diffusion of innovation, and all such key concepts which constitute the body of marketing knowledge. A central starting point for identifying this domain would be the table of contents of the text in use, as well as other principles of marketing texts on the instructor's bookshelf. In addition, lists of topics appearing in current and older syllabi might be consulted, as well as any departmental and college catalogue descriptions of the course. Branching out beyond the boundaries of the course as currently taught by the instructor not only serves to improve the measurement process (that is, measurement of student mastery of a common body of knowledge), but it also can lead to better teaching and a higher probability that students are well-grounded in the basics of the discipline.

Step Two: Generating a Sample of Test Items

The second step in the procedure for creating an improved measurement instrument is to generate items which capture the domain. In constructing a measure of student performance, this task entails the development of a large pool of questions which covers the full range of relevant topics previously identified through specification of the construct domain. While the current textbook's test bank is a good place to begin, it is important that the instructor consult several other sources as well, including old exams and test banks which accompany books other than that currently in use. The pool of items should be large and contain more questions than are required for one examination, since, at a latter stage of the process, it will be necessary to cull some questions and replace them with others. In order to accurately assess student comprehension and have a finished product which possesses high discriminatory power, the instructor should be sure to select different types of questions, some of which are definitional in character, others of which are more application- or comprehension- oriented. From this pool of items, at least 50 should be selected for administration during the initial round of testing. Of course, this sample of fifty should be representative of the larger pool from which it was drawn.

Consideration should also be given to the construction of individual test items. While such guidelines are beyond the scope of this paper, this important topic is fully covered elsewhere (Gay 1985; Hill 1981).

Step Three: Data Collection

The examination derived in the preceding step from the generated pool of questions should be administered to a group of students. While the

students are clearly serving as "guinea pigs" on whom the instructor is experimenting, this experimental first draft is likely to be of at least comparable quality to that exam the instructor would otherwise be administering. It is desirable to have at least forty students to complete the exam, since item analyses based on any fewer than 40 students are rather unstable. This situation can be addressed by administering the test to different sections of the same course and combining the answer sheets for one analysis.

Step Four: Purification of the Measure

Armed with scores on the first draft of the exam, one is now ready to begin the process of systematically refining the measure. The goal at this stage in the process is to identify those items which work best while culling those which perform poorly.

Compute Item Discrimination Score. The item discrimination score refers to the percentage separation on a particular question between the top and bottom halves of the class. In short, a higher percentage of correct responses to an item should come from those students whose overall test score falls within the top 50% of the class than the bottom 50%. An item discrimination score should be calculated for each question on the exam; then, questions with low discrimination scores should be eliminated from the examination because they fail to discriminate between higher- and lower-scoring students. An item discrimination score of $+0.05$ is too low, for example, because it suggests that low scorers performed almost as well as high ones. Questions with negative scores should be discarded as well, for they indicate that the lower half of the class performed better on a question than did the upper half.

Calculate the Percentage of Correct Scores. At this stage, the instructor should eliminate those questions on which either a very high or very low percentage of the students responded correctly. Ideally, all items on an examination should be of the same level of difficulty. The optimal range of correct responses on a question varies, depending on the number of alternatives each item has. Lord (1952) empirically demonstrated the optimum difficulty levels for test items. For example, true-false items should produce 85 percent correct response, while items with three alternatives should result in 77 percent correct response. Seventy-four percent and 69 percent correct response is expected of tests with four and five alternatives, respectively. A figure falling outside this range suggests that the item is probably either too difficult or not sufficiently challenging. At this stage, it's also helpful to examine the distribution of incorrect responses, since a question on which an alternate, incorrect response is more often selected than the correct one is problematic. This is usually an indication of a bad question or a question that has been incorrectly keyed.

Calculate Item Total Correlation. Next, the correlation between the percentage correct on each item and the total test score should be calculated. Good items should be highly

correlated with a student's overall test performance; questions with low correlation coefficients should be culled. The biserial correlation coefficient is the appropriate measure to be used in this instance. Generally, questions with high item discrimination scores will also have a high item total correlation.

Assess the Distribution of Correct Response Categories. To ensure that there is no cross-question pattern in the correct response category, one should calculate the percentage of times that A,B,C,D, and E appear in the exam as the correct alternative. Representation should be approximately equal.

Compute the Reliability Coefficient. At this stage, it is necessary to assess the reliability of the examination through consideration of the internal consistency of all items. The appropriate method is to calculate a reliability coefficient such as KR20 or coefficient alpha (Cronbach and Snow 1977),

While most item analysis programs automatically generate the reliability coefficient, the following is a simple method for hand calculations of the reliability coefficient. Calculate the range of scores by subtracting the lowest score from the highest score on the test. Divide the range by 6 to obtain an estimate of the sample standard deviation. Obtain an estimate of the variance error of measurement by multiplying the number of items (n) by 0.2. Once the standard deviation and the variance error of measurement have been estimated, reliability is equal to:

$$r_{tt} = 1 - VEM / SD^2$$

For example, if the grades on a fifty item multiple choice examination ranged from a high of 98 to a low score of 50, then the reliability coefficient for this test is .844.

As can be seen, the reliability coefficient for a test depends on the number of items on an examination and the range of the grades. Thus, in general, longer exams and tests with a large grade distribution will have a higher reliability coefficient. While the acceptable value of the reliability coefficient depends upon the number of items in the examination, it should not fall below a minimum value of 0.70.

Selection of Questions. The last step towards purifying the measure is the selection of only those questions which meet all the criteria mentioned above.

Step Five: Readminister the Exam

The purified test should now be administered again, preferably to another group of students not exposed to the original. Since some of the original questions have probably been eliminated in the preceding step, it will be necessary to augment the test with additional questions from the larger pool of items generated in Step 2. Once again, the test should contain at least fifty items.

The following three hypothetical examples present different types of questions on a typical examination and are designed to highlight the points discussed in this section. The first example illustrates a good item. Table 1, Case 1, indicates that 70 percent of the students selected the correct option. As mentioned above, if an item is performing satisfactorily, you should expect a greater percentage of students in the upper half to answer the item correctly than in the lower half. This is the case for this specific question. Eighty-seven percent of the upper and 53 percent of the lower group selected the correct response (Option A) and 34 percentage points separate the upper group from the lower group. Conversely, smaller percentage of students in the upper half should select each of the incorrect options than students in the lower half. This condition has occurred for each of the incorrect options associated with the illustrated item. If this condition did not occur, then the instructor should review this item to establish why a greater percentage of the more capable students are selecting the incorrect option. In general, item 1 is a desirable item. The item is of moderate difficulty (70 percent) but more importantly, this item distinguishes between the more and less knowledgeable student with respect to the content being measured. In general, an item is considered to be a fairly high discriminator when 20 to 35 percentage points separate the upper and lower groups.

In contrast to the previous question, the item presented in Table 1, Case 2 did not perform at expectations. This item is fairly easy (96 percent answered correctly). Therefore, it is impossible for this item to distinguish very well between the upper and lower students in the class. Even if 100 percent of the students in the upper group had answered this item correctly, with 92 percent of the students in the lower group responding correctly, the maximum difference between groups would be 8 percent. Although this item does not discriminate highly between groups, it may still be a good item. If inspection of the item shows a clear relationship to a relevant course objective, the inability of this item to discriminate is the result of all students being at or near the mastery of the objective. The instructor should be cautious, however, since the easiness of such an item may be the result of a single concept that is common knowledge prior to instruction rather than the result of an important concept that has been taught well.

The final example is designed to illustrate an inadequately performing item. While the item is of moderate difficulty, a greater percentage of the lower than upper students selected the correct response. In order to determine the cause of this problem, the instructor must determine whether the item is associated with a significant course objective. If it is, then the difficulty must result either from insufficient instruction or from the item not being clearly perceived by the students. If the difficulty is with the item itself, review the percent of students who selected each option. If students, particularly the upper group, prefer one particular incorrect response, it may be that the

interpretation given to this preferred option makes it as correct, or more correct, than the keyed response. If students simply avoid the keyed response in favor of the other responses, the difficulty often is that the item is mis-keyed or that the keyed response is not stated clearly.

If a test includes a high percentage of items similar to that illustrated in Case 1, a wide range of test scores will result. Such a distribution of scores will allow the instructor to distinguish differences in student performance levels. If a test consists largely of items similar to the one described in Case 2, most students will receive high scores. Such a test will not allow the instructor to readily differentiate between levels of student performance. However, if items are matched to significant and clearly stated course objectives, this type of test will allow the instructor to determine the mastery/non mastery status of each student relative to the objectives. Finally, if a test consists largely of items as shown in Case 3, the test will not be very useful, as it will not present any meaningful level of material comprehension.

TABLE 1

AN ILLUSTRATION OF ITEM ANALYSIS AND INTERPRETATION OF THREE HYPOTHETICAL QUESTIONS

Case #1

Percent Selecting Each Alternative

	A*	B	C	D	E
Upper Half	87	5	0	3	5
Lower Half	53	12	7	26	1
Total	70	8	4	15	3

Case #2

Percent Selecting Each Alternative

	A	B	C*	D	E
Upper Half	0	0	100	0	0
Lower Half	4	0	92	4	0
Total	2	0	96	2	0

Case #3

Percent Selecting Each Alternative

	A	B	C	D*	E
Upper Half	0	12	70	18	0
Lower Half	10	0	12	58	20
Total	5	6	41	38	10

* Denotes the correct response

Step Six: Assess Reliability and Validity of the Purified Test

In this second round of improving the measure, each question should be carefully examined again, and those which fail to meet the criteria established above should be eliminated. In light of the changes implemented in the scale, reliability should be recomputed; a reliability coefficient over .70 is adequate in this instance as well. Establishing the validity of the test is somewhat more difficult. The instructor might attempt to compare a student's test score with other performance measures such as homework grades or class attendance. In essence, however, the validity which can best be determined is face validity. In this case the instructor can discuss the items with a sample of good students in the class after they have taken the test and received their scores. Often good students will see things in items that the instructor never intended, and sometimes they can make cogent suggestions to improve the items.

Step Seven: Developing Norms

Once the pool of appropriate items has been established, the instructor will want to determine what score constitutes typical performance on the examination. This process, which Churchill refers to as "developing norms," consists quite simply of adding the percent correct for all questions and dividing by the total number of questions, and then calculating the average of this number across all students. Based upon the outcome of this process, the instructor may want to make the test more or less difficult. It should be kept in mind that the larger the number of cases from which the norm is developed, the more representative the norm will be; therefore, the instructor will want to exercise caution in generalizing from a single, small class of students. Poor test performance may be more a function of student characteristics in a particular class than of the test itself, especially if the class is small in size. It may also prove necessary that the instructor develop distinct norms for different groups of students, e.g., honors students, students at a different college from where one has taught before.

Conclusions

While the process outlined above is time-consuming in nature, utilization of it will result in better exams and may, in the long run, produce other positive benefits. Having generated a sound, reliable exam, the instructor will find it less necessary to scrutinize an item analysis and throw out questions each time an exam is administered. With a "proven" exam in hand, the instructor will be able to re-utilize past exams, not having to start from scratch from one semester to the next. In addition, by careful consideration of the domain, one is more likely to adequately cover the body of knowledge around which a course ought to revolve, thereby improving student preparation for more advanced courses.

This method can also be used at the departmental level in generating a common exam to be used by all instructors of introductory level courses. Such an approach is particularly appropriate where adjunct instructors are used to teach the lower-division courses and where administrators are seeking some means of assessing and standardizing the quality of their teaching.

In concluding, a few final recommendations are in order. In order to reuse an exam generated through use of the procedures discussed above, the instructor must maintain strict security so that an exam doesn't fall into student hands for wide, unauthorized distribution. Second, it is a good idea for the instructor to routinely remove some of the old, reliable items and replace them with new, experimental ones. Thus, over time, the instructor can develop two or more versions of each exam that meet the psychometric standards set above.

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An Exploration of Intergenerational Differences Among Mexican-Americans:
Consumption-related Attitudes and Behavior

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Abstract

A debate in the marketing literature has appeared concerning whether Mexican-Americans should be treated as a homogeneous group or whether they contain distinct segments. The findings of this exploratory research suggest that Mexican new arrivals and first and second generation Mexican-Americans do not differ with respect to attitudes towards advertising, brand loyalty, parental influence and price consciousness. Buying the brand that people think has the most prestige was the only consumer choice tactic where a significant difference was found, but only between Mexican new arrivals and the other two groups.

Introduction

Hispanics comprise the second largest ethnic minority group in the United States after Blacks. They have the fastest growth rate among ethnic groups in the United States, and it is estimated that their number will increase by a dramatic 85 percent between 1980 and 1990 (Sugarman 1987).

Hispanics possess considerable purchasing power. In 1980, it was conservatively estimated at \$50 billion. Recent increases in Hispanic purchasing power have been driven by both an increase in absolute numbers and a corresponding increase in aggregate household income. Even so, the average Hispanic household income is more than \$10,000 below the United States median household income, and 25.8 percent live in poverty (Bureau of the Census 1989).

The Hispanic population is younger than the U.S. population; 49 percent are under 25 years of age (Bureau of the Census 1989). Hispanics are largely concentrated in ten major metropolitan areas (Schwartz 1987). Four of the 10 are in Texas. The Rio Grande Valley, which includes the city of Brownsville, is considered the 8th largest U.S. Hispanic market, with approximately 85 percent of the population being Mexican-American (Torres 1985). Mexican-Americans were estimated to comprise nearly 60 percent of the total Hispanic population of 19 million in 1988 (Bureau of the Census 1989).¹

It was not until the latter part of the 1960s that marketers began to realize the value and market potential of the Mexican-American consumer (e.g., Sturdivant 1971 and 1973; Longman and Pruden 1971; Gillet and Scott 1975).

Recent studies have raised questions regarding the degree to which Mexican-Americans have the same consumption patterns as Anglos as well as the extent to which Mexican-Americans are homogeneous in their consumption patterns (Shields 1984). A study conducted by Wallendorf and Reilly (1983) found that Mexican-American consumption patterns were not a simple blend of Mexican and Anglo patterns; rather they were comprised of a unique set of

characteristics. Zavaleta et al. (1985) arrived at a similar conclusion when they described what has been called the "frontera effect" on mental health. That is, Mexican-Americans possess a unique culture which is neither Mexican nor Anglo but "Mexican-American." Earlier, Cervantes (1980) had made the interesting observation that the Mexican-American market was not homogeneous, but could be stratified into four distinct segments on the basis of acculturation level, language and income. Other research has focused on the degree and strength of ethnic identification as a means of segmenting and stratifying Mexican-Americans (Valencia 1985). These studies found significant differences among Mexican-American groups and Anglos on shopping orientations, consumer choice tactics, brand loyalty, attitudes toward institutions, and attitudes toward advertising.

Despite the growing interest in Mexican-American consumption behavior, little empirical attention has been directed to generational effects--the number of generations a person or family has lived in the United States. It is intuitively expected that persons belonging to recently migrated generations would be more likely to maintain an adherence to their ethnic background, whereas generations longer established in the United States would be more likely to assimilate those practices and patterns associated with Anglo culture. If differences between generations of Mexican-Americans exist, one marketing implication would be the potential for segmenting the Mexican-American market by generation. If no differences are found to exist, however, such segmentation would not appear to be a viable strategy.

The purpose of the present investigation was to examine whether Mexican-American generations have a similar set of consumption-related attitudes and behaviors. The results of the investigation will provide insights into whether there is a "universal" Mexican-American consumer, reachable via a general marketing strategy, or whether there are differences within Mexican-American groups significant enough to warrant different marketing strategies.

Although there are many aspects of consumption-related behaviors and attitudes that could be researched (see, for example, Saegert and Hoover 1985), this investigation will be restricted to attitude towards advertising, brand loyalty, and consumer choice tactics. These three areas have been found to differentiate between groups of Mexican-Americans (Deshpande and Hoyer 1983; Saegert et al. 1985; Segal and Sosa 1983; Hoyer and Deshpande 1982).

Attitude Towards Advertising

Advertising may play a significant role in the acculturation process for Mexican-Americans. If immigrants want to learn values and behaviors of their new host society without personal contact, advertising is an easily accessed vehicle to achieve that objective (O'Guinn et al. 1986). Early studies found that Mexican-Americans' attitudes toward advertising were less positive than Anglos (Longman and Pruden 1971). However, more recent studies found that Mexican-Americans displayed a more positive attitude towards advertising than Anglos (e.g., Yankelovich 1981). Increased Spanish-language advertising since 1968 and increased command of the English language by Mexican-

¹ According to Miller and Valdez (1984), Mexican-Americans are defined as people living in the United States who were born in Mexico or whose ancestors came from Mexico, no matter how many years ago. Mexican-Americans have a distinctive mother culture and language and generally retain a strong belief in the Catholic religion.

Americans have been suggested as reasons for the differences obtained (Deshpande and Hoyer 1983; Marin 1985).

Advertising as an information source may be viewed more positively by new immigrants and recently settled generations than more established generations because it may be relatively more useful in assisting their formation of behaviors and values. Therefore, it is hypothesized that:

- (H₁) Attitudes toward advertising should be negatively correlated with length of residence in the U. S., i.e., should be more positive among new arrivals than among first generation residents, and more positive among first generation residents than second or older-generation residents.

Brand Loyalty

No other consumer behavior trait has been more frequently associated with Hispanic consumers than brand loyalty (Guernica and Kasperuk 1982; Segal and Sosa 1983; Yankelovich 1981). However, Saegert et al. (1985) found that Hispanics were no more brand loyal than Anglos. It is hypothesized that Mexican-Americans become progressively more acculturated and confident in their consumption behaviors by a process of trying a variety of brands in a product category. Specifically, it is hypothesized that:

- (H₂) Brand loyalty should be positively related to length of residence in the U. S., i.e., should be greater among second or older-generation residents than among first-generation residents, and greater among first-generation residents than among new arrivals.

Parental Influence

The role and influence of family members in purchasing decisions as well as in determining an individual's attitudes, values, motives and personality characteristics have been extensively studied. Segal and Sosa (1983) found that Hispanic consumption patterns, as compared to Anglo consumption patterns, reflected stronger nuclear family and extended family ties. Stronger patterns of husband dominance and less joint decision-making in Mexican-American families than in Anglo families were found by Imperia et al. (1985). Hoyer and Deshpande (1982) found that Mexican-Americans were subjected to more family influences than were Anglos. Because traditional patterns of consumer behavior can be preserved through the immigrant's family and because later generations of Mexican-Americans are further along in the process of cultural assimilation, it is hypothesized that:

- (H₃) New arrivals are more family-oriented in their consumption behavior than first generation Mexican-Americans who in turn are more family-oriented than the second generation.

Price-Related Tactics and Buying Prestigious Brands

In general, Hispanics have been characterized as being price conscious and careful in their shopping habits, but, simultaneously, as expressing less confidence in their shopping abilities than non-Hispanics (Gillet and Scott 1975;

Bellenger and Valencia 1982). Saegert et al. (1985) found partial support for price consciousness as a purchasing tactic used more by Mexican-Americans than by Anglos.

On the other hand, Cervantes (1980) found that Mexican-Americans paid high prices for expensive Mexican imported beers or liquor, especially when these products were served at social occasions. Similar results have been obtained for greeting cards, for which Hispanic consumers manifested preferences for quality over price. Segal and Sosa (1983) concluded that Mexican-Americans were more likely to insist on quality products and to spend more money on status items than were their Anglo counterparts.

In brief, the marketing literature offers two different portraits of Mexican-American consumers. One views them as careful shoppers, very price conscious and economically oriented; the other portrays them as buyers of high quality, expensive, prestige products. One possible explanation for such apparent inconsistencies may be found in the area of risk-reduction strategies. Consumers use different risk management styles and strategies to reduce financial, social, or physical risk in purchasing products and services. To reduce social risk, especially when dealing with socially visible products (e.g., liquor or beer), consumers may choose the risk-reduction strategy of "buying only the most expensive brand." Deshpande and Hoyer (1983) pointed out that Mexican-Americans were more prestige-conscious when buying laundry detergent than when buying soap or margarine. According to them, one possible explanation is that laundry detergent has the potential to be more socially visible than the other products (e.g., the brand of laundry detergent would be visible if the laundry were being washed in a laundromat). If risk reduction is a purchasing strategy for Mexican-Americans, a tactic to buy the brand that people think has the most prestige would be frequently used for socially visible products.

The existence of two distinct segments is a second possible explanation for the apparent inconsistency of Mexican-American consumption behavior. Instead of a homogeneous group using different tactics depending on the type of product or service, there may be two different segments. One prefers brands that have a prestigious image; the other appears to be more price conscious. If this explanation is true, Mexican-Americans, as a group, would appear to behave more like Anglo than Mexican consumers. This explanation would appear to be supported by the lack of concern given to price by Mexican consumers relative to Anglo consumers (Villarreal-Camacho 1983).

A third possible explanation relates to the usage situation. A consumer may pursue a price conscious strategy and buy a low-quality brand if it is to be consumed in one particular situation, but purchase a high quality brand if it is to be consumed in a different situation. For example, a consumer may buy a low-price beer for personal consumption but a high-price, prestigious brand when entertaining friends. In this case, the usage situation dictates the purchasing strategy.

Consistent with the "distinct-segments" explanation of observed inconsistencies, the following hypotheses are offered:

- (H₄) First generation Mexican-Americans are more likely to use choice tactics that are related to price (e.g., "I buy the brand which costs the least" and "I buy the brand that is on sale") than are Mexican new arrivals but less likely to do so than are second generation Mexican-Americans.

- (H₅) First generation Mexican-Americans are more likely to use the choice tactic "I buy the brand that people think has most prestige" than are second generation Mexican-Americans but less likely to do so than Mexican new arrivals.

Methodology

The geographical area studied was Brownsville, Texas. Brownsville, located at the southernmost tip of Texas and on the border with Matamoros, Mexico, contains a substantial population of new arrivals as well as first, second and third generation Mexican descendents whose ancestors moved to the area before and during the Mexican revolution in 1910. Additionally, large numbers of both middle and upper social class families from Matamoros and other parts of Mexico (e.g., Monterrey) have moved to the Brownsville area.

To control for factors that might contaminate or confound the effect of generation on the variables studied, a multi-stage sampling procedure was used to ensure that the samples included only middle-class Mexican-American females. Middle-class neighborhoods were first identified from a planning map. Then, once the neighborhoods (or colonias) were selected, streets were randomly selected within each of the selected areas. Personal interviewers conducted only one interview in any one block of a sampled street. The final sample consisted of 139 Mexican-American middle-class females--41 Mexican new arrivals, 49 first generation Mexican-Americans, and 49 second generation Mexican-Americans.

Generational groups were delineated on the basis of questions regarding personal and parental nativity. Groups were distinguished according to whether study participants were born in Mexico (new arrivals), whether they were born in the United States but whose parents were born in Mexico (first generation), or whether they and their parents (or at least one of them) were born in the United States (second-or-higher generation). Comparison of the groups on five demographic variables (marital status, income, family size, age, and education) revealed they differed only in terms of education. Of these variables, education is the only one found to be significantly different ($\chi^2=46.59$, $p<.001$) across the groups. Level of formal education of the new arrivals is lower than that of first and second generation Mexican-Americans.

The instrument used to collect the research data followed that developed by Deshpande and Hoyer (1983; Deshpande, Hoyer and Jeffries 1982)). It contained scales to measure attitude towards advertising, brand loyalty, and purchase tactics.

The scale used to measure attitudes consisted of 11 Likert-type items ($\alpha=.85$). A procedure similar to that used by Deshpande and Hoyer was used to estimate brand loyalty for three products--laundry detergent, soap, and margarine. The scale consisted of two kinds of questions: (1) an assessment of repeat purchase over time, and (2) strength of brand preference. Purchase tactics are simplified decision rules used in making a brand choice (Deshpande et al. 1982). Study participants were asked to indicate the extent to which each of several rules or "factors" influenced their decision on a five-point scale ranging from 1 (never) to 5 (always). For instance, parental influence was measured by the item "I buy the brand that my parents bought" for laundry detergent, soap, and margarine.

Results

Responses to a composite attitude towards advertising index (CATAI) revealed that, in general, Mexican-Americans have a positive attitude towards advertising. There were no significant differences among the three generational groups. Therefore, there is no empirical support for H₁.

Table 1 presents percentage responses for the relationship between generation and a composite brand loyalty index obtained by summing responses across the three products studied. No differences exist among the Mexican-American generational groups; H₂ is not supported. The results of testing whether parental influence differs among new arrivals, first, and second generation Mexican-Americans revealed no significant differences ($F=2.86$). No difference exists among the generational groups; hence H₃ is not supported.

TABLE 1
COMPARISON OF BRAND LOYALTY INDEX FOR ALL PRODUCTS
(LAUNDRY DETERGENT,
SOAP AND MARGARINE)
FOR THREE GENERATIONAL GROUPS

Brand Loyalty	Percentage Response		
	New Arrivals (N=41)	First Generation (N=49)	Second Generation (N=49)
Completely brand loyal	7.0	10.2	12.2
Mixed brand loyal	26.8	18.4	18.5
Selective brand loyal	41.6	40.8	42.8
Not brand loyal	24.6	30.6	26.5

$\chi^2 = 1.467$, nonsignificant

Neither was H₄ supported. The F value (2.47) obtained from the analysis of variance for price consciousness was statistically insignificant. Thus, as in the case of the above hypotheses, there appears to be no difference among the generational groups on price-related consumer purchasing tactics.

Buying the brand that people think has the most prestige was the only trait associated with generation. An analysis of covariance resulted in an adjusted F of 5.78, significant at the 0.01 level. Post hoc contrasts were used to test differences between pairs of means. This analysis revealed that differences between new arrivals and first generation residents, as well as between new arrivals and second-generation Mexican-Americans, were significant, but no difference was found between first and second generation Mexican-Americans. Therefore, only partial support was obtained for H₅.

Generational groups within the Mexican-American population appear to be similar in their attitude towards advertising, brand loyalty, parental influence, and price consciousness; they differ somewhat on buying prestigious brands. The latter suggests that Mexican new arrivals select brands that are held in high regard by others to reduce social risk.

By definition, the study was exploratory in nature. Consequently, several limitations of the study should be noted. First, the study was restricted to middle-class Mexican-American women in Brownsville, Texas. As such, it is not possible to generalize the findings to other populations. Further, the study is only concerned with selected aspects of consumption-related attitudes and behaviors. Third, the group sizes were small. Fourth, study participants were selected on the basis of *reported* personal and parental nativity. Finally, this research explored the Mexican-American generational effect under the assumption that Mexican-Americans belonging to recently migrated generations would be more likely to adhere to their Mexican origin, whereas generations living in the United States for a longer period of time would be more likely to assimilate consumer behavior patterns associated with the Anglo culture. Therefore, the results are subject to limitations that reflect the study characteristics. Further, the lack of differences found among the Mexican-American generations made it difficult to precisely evaluate their acculturation level.

In spite of these limitations, the results are suggestive of Mexican-American characteristics that marketers can at least expect to find in border cities. Additional research of the nature described here should utilize different geographical and demographic samples, variables, and products. It is possible that in different marketplace environments, more distant from the border, generational differences will exist. Further research to empirically determine the acculturation level of Mexican-American generations is needed. Knowledge of at least two cultures--Mexican and Anglo--is needed and a minimum of three samples--Anglos, Mexicans, and Mexican-Americans--are required. By simultaneously studying these distinct groups, the impact of Mexican culture on the Mexican-American acculturation process, if that is the case, relative to Anglo culture, can be assessed.

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BLACK/WHITE DIFFERENCES IN REBATE PERCEPTIONS:
AN EXPLORATORY STUDY

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Abstract

This study examines black and white consumers' perceptions of rebates. The findings indicate that a higher percentage of black consumers have a negative perception of rebates than white consumers. Implications and future research suggestions are discussed.

Purpose and Background

According to United Marketing Services, rebates have the second highest consumer participation rate, next to coupons, among various consumer promotions (Bowman 1987). In 1987, 45 percent of the households participated in rebate offers. Although approximately 50 percent of white households participated, only 34 percent of non-white households are rebate users. The objective of this study is to find out why non-whites, specifically black consumers, are less prone to use rebates. In particular, this study investigates the differences between the attitudes of black and white consumers toward rebates.

Research on attitudes toward rebates has focused on three areas: pricing (Lincoln 1978; Jolson, Wiener and Rosecky 1987), redemption process (Jolson, Wiener and Rosecky 1987; Tat, Cunningham and Babakus 1988) and manufacturers' motives for offering rebates (Tat, Cunningham and Babakus 1988; Avila, Chapman and Avila 1989). Regarding pricing, Lincoln found a fair rebate value to be 9 to 13 percent of the retail price. Jolson, Wiener and Rosecky reported that the minimum rebate as a percent to trigger a consumer to buy was 17, 19, and 24 percent for the frequent, light, and nonusers, respectively. Further, rebate users indicate that they are more price conscious than are nonusers.

To realize the savings, the rebate redeemers have to fill out the rebate form and submit it with the required proofs of purchase to fulfillment center before the expiration date. The redemption process is perceived by the consumers as difficult, complicated, and time consuming (Jolson, Wiener and Rosecky 1987; Tat, Cunningham and Babakus 1988). This perception is especially strong among the nonredeemers.

The stringent redemption requirements, such as those reported by Consumer Report (1986), might have prompted the consumers to question the manufacturers' motives for offering rebates. In their study, Avila, Chapman and Avila (1989) reported that manufacturers are perceived to benefit the most (61 percent) from rebate programs, followed by retailers (21 percent) and consumers (18 percent). Tat, Cunningham and Babakus (1988) found that consumers have a neutral perception of the rebate system. Moreover, these researchers found that nonredeemers are more likely to pos-

sess a negative perception of manufacturers' motives for offering rebates than are redeemers.

Methodology

A structured-nondisguised questionnaire was constructed as the measurement instrument. The questionnaire was divided into 3 sections, the first containing 5 questions concerning the delineation of rebate users/nonusers.

Section two was comprised of 24, five-point Likert scale items with potential response categories ranging from "strongly agree" to "strongly disagree." A "don't know" response was also included. The initial scale was developed using input from the authors' experience, an extensive literature review, and personal interviews with users and nonusers. This preliminary data was finalized into the 24 item scale through joint discussions by the authors, and pretests utilizing marketing students, both graduate and undergraduate, and marketing faculty. The final section was 8 questions concerning the demographic characteristics of the respondents.

The data collection procedure consisted of a one-stage telephone survey in a major mid-south metropolitan area. The sample was stratified by the use of three-digit telephone prefixes in conjunction with census block data to insure adequate representation of the various socioeconomic and demographic groups. The potential respondent's last 4 digits of the phone number were selected using a random number generator. Once a household was contacted, the questionnaire was administered to the adult member responsible for the majority of shopping expenditures. Clarification was provided as to the definition of rebates to avoid confusion, especially with coupons. Verification was attested to by the use of callbacks. A total of 486 questionnaires were completed, with 172 (35.4 percent) of the respondents being black, and 314 (64.6 percent) white.

Analysis and Results

Table 1 shows the results of an analysis of the respondents who either chose "agree" (A) or "strongly agree" (SA) on each of the individual items, segmented by race. What is of interest is whether or not consumers' perceptions of certain rebate practices by manufacturers differed significantly by race.

Chi-square analysis was performed on each of the items, and the level of significance for each item is reported in Table 1, in all cases with 1 degree of freedom. Four confidence levels are reported: .01, .05, .10, and all others, which are considered not significant differences.

TABLE 1

PERCEPTIONS OF BLACK AND WHITE CONSUMERS ON
VARIOUS ASPECTS OF REBATE PRACTICES

Scale Items	Percent agree\strongly agree	
	Black	White
1. Taking advantage of a rebate offer is a good way to save money.	66.3	79.6
2. Manufacturers offer rebates because consumers want them.	43.6	51.9
3. Manufacturers offer rebates to get consumers to buy something they don't need.	55.8	41.1
4. Today's manufacturers take a real interest in consumer welfare.	32.6	34.7
5. Manufacturers make the rebate process too complicated.	55.2	48.7
6. Consumer benefit is usually the primary consideration in rebate offers.	36.6	32.2
7. In general, manufacturers are sincere in their rebate offers to consumers.	46.5	60.5
8. I would buy a brand which offers a rebate.	54.7	56.1
9. Consumers will be better off if manufacturers lower the price instead of using rebates.	85.5	84.4
10. Manufacturers use rebate offers to induce consumers to buy slow moving items.	68.0	57.3
11. I would use more rebates if I knew about them.	50.0	40.8
12. Mail-in rebates are not worth the trouble involved.	57.6	52.2
13. It takes too long to receive the rebate check from the manufacturer.	77.3	65.3
14. The amount of the rebates are generally too small to get my attention.	64.5	57.3
15. I would like to see more rebate offers in the future.	50.0	50.3
16. I always look for rebate offers.	22.7	23.2
17. Rebates primarily help consumers not manufacturers.	40.7	21.7
18. Rebate offers require you to buy more of a product than you need.	50.6	40.8
19. I use rebates, but I don't like them.	27.3	25.2
20. Rebate offers should not require you to mail in the sales receipt.	65.1	51.9
21. Manufacturers could do more to make rebates easier to use.	82.6	77.7
22. Rebates are seldom offered on brands I prefer.	58.7	52.5
23. Rebates are usually offered on low quality products.	41.3	25.5
24. Rebate offers by competing brands make buying decisions more difficult.	45.9	29.3
*significant at the .01 level *significant at the .10 level		
*significant at the .05 level not significant		

Significant differences exist between users and nonusers in terms of race. Of the total sample, 41.4 percent were users and 58.6 percent were nonusers, users being defined as having purchased any product with a rebate within the past 12 months. A further breakdown revealed that 21.6 percent of black respondents were users and 78.4 percent were nonusers. This compares with 52.2 percent users and 47.8 percent nonusers for the white group. These results are significantly different at the 0.01 level. The results indicate that in 12 of the 24 items, there was a significant difference, at a minimum .10 level of confidence, in the percentage of black respondents versus white who chose either A or SA (referred to simply as "agreed") as their response. The remaining 12 items showed no significant difference by race.

Several interesting results can be obtained from examining Table 1. The questions can be grouped into those that are positive to rebates and rebate practices (items no. 1, 2, 4, 6-8, 15-17) and those that indicate negative perceptions (3, 5, 9-14, 18-24). Of those positive items that have significant differences by race (1, 2, 7, 17), all but one show a greater percentage of whites agreeing than blacks. The one exception is item 17, which states that the primary beneficiary of rebates is consumers, not manufacturers. A higher percentage of black respondents, almost twice as great, than whites agree. The reverse is true concerning those statements that are negative. Where significant differences exist on

item percentage response rates (3, 10, 11, 13, 18, 20, 23, 24), in all instances the percentage of blacks that indicate agreement is greater than that of white respondents.

The general inference that can be made from the above is that blacks tend to have a more negative view toward the rebate process than do whites. This, however, is not to imply that whites have a favorable attitude towards rebates, and blacks have a negative attitude. In several instances, both blacks and whites had high (over 50 percent) agreement with negative statements, i.e. items 9, 12, 19, 21, and 22, with no significant difference in percentages.

Given the above general finding that where significant differences in percentage of agreement exists, blacks tend to agree in higher percentages with negative statements than whites, while higher response rates for whites are associated with positive statements, the differences in usage rates are not surprising. Further illumination is possible by examining individual statements and response percentages from Table 1. While a majority of both blacks and whites agree that rebates are a good way to save money (item 1), the percentage is significantly greater for whites (79.6 percent versus 66.3 percent). As evidenced by item 8, there is no difference in blacks or whites who are predisposed to using rebates. However, there is a difference between blacks and whites who seemed to indicate that lack of information may be a problem (item 11). There was no difference in the two groups in percentage of agreement on statements concerning the trouble involved in mail-in rebates (item 12), the amount of the rebate (item 14), and the perception that rebates are not available on preferred brands (item 22). There were, however, significant differences on item agreement on the required purchase quantity (item 18) with 10 percentage points more of the black respondents in agreement that the quantity required was in excess on needs. In addition, blacks more than whites felt that the quality of rebated products was low (item 23) a significantly greater percentage of blacks felt that rebates complicate buying decisions (item 24), and that rebates attempt to get consumers to purchase products that are not needed (item 3). Finally, regardless of the perceptions held by both blacks and whites, fully 50 percent of each group would prefer to see more rebate offers (item 20).

As stated before, blacks tend toward a more negative view of rebates than do whites. In addition, less blacks, as a percentage, use rebates. These two results are probably related. The specific reason(s) for the lower usage rate by blacks can be inferred, based on the results of an analysis of the individual items in Table 1. Those negative items where the black percentage agreement rate was significantly higher (3, 10, 11, 13, 18, 20, 23, 24) seem to be concerned with the rebate process. These statements concern the products on which rebates are available (3, 10, 23), lack of information (11), and the tasks required and the administration of rebates (13, 18, 20, 24). It does not seem apparent that blacks simply do not like rebates any more so than do whites, nor does it appear that an anti-business

bias can explain the significant differences between the two groups.

Conclusions and Recommendations

Past research has shown that rebate usage is affected by consumers' attitudes toward rebates. The higher the negative attitudes that a consumer has toward rebates, the more likely that he or she will not participate in rebate offers, and may even perceive the product in a negative manner simply due to the rebate offer. The results of this study indicate that a higher percentage of black consumers have a negative perception of rebates. This negative attitude might contribute to the low black consumers' participation rate.

The findings of this study shed some additional light on why black consumers are less likely than their white counterparts to participate in rebate offers. First, blacks tend to have negative perceptions concerning the products on which rebates are offered. These are perceived as slow moving and/or low quality items.

Second, blacks, to a greater degree than whites, dislike the rebate redemption process and requirements. They tend to agree, more than whites, that the time required to receive the rebate check from the manufacturer is excessive, and they feel strongly that rebate offers should not require the mailing in of the sales receipt.

This study explored consumers' attitudes toward rebates and how these perceptions relate to usage. Other factors, such as income and education, might contribute to rebate usage. Since a large percentage of offers require multiple purchases, low income consumers might not be able to take advantage of these offers. Further, except for automobiles and major appliances, rebate offers are not widely advertised. Consumers with limited exposure to newspapers and other types of media might not be aware of the offers. Future research should attempt to take into account these factors to understand black consumer rebate usage.

There are two major implications from this paper that are applicable to manufacturers. The first is that, overall, consumers in general do not have strong, positive attitudes towards rebates. This would suggest that the entire process be examined, and the exact rationale for using rebates be delineated. If rebates are used as an advertising tool to change the perceived price in the minds of the consumer, then attitudes may not be that important. If, however, the purpose of rebates is to encourage product usage, then consumer perceptions are very important. Manufacturers must realize that the attitudes of the consumer toward any type of promotion can affect the attitudes and perceptions of the product itself.

The second implication concerns the use of rebates to market to the black segment. Research should be performed to ascertain the potential of rebates as a promotional tool for this segment. This study seemed to indicate that, unless modified, rebates may be a less desirable strategy to use for the black market than the white, due to

the more negative perceptions the former has concerning rebates. Further research is needed to find out the necessary modifications required to fully utilize rebates as a part of the marketing mix for the black segment.

Obviously, more research needs to be conducted in this area. The purpose of this paper was to discover if differences in perceptions exist, concerning rebates, between blacks and whites, and to offer some insight as to the source of these differences, if found. If black consumers are to be treated as a separate segment, then there is an implicit assumption that blacks react differently to various components of the marketing mix. Both those components where differences exist and those where blacks do not behave as a separate segment need to be identified if this potential segment is to be marketed to correctly.

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PROMOTION AND PRICING

OBTAINING A PREMIUM PRICE BY MANAGING THE FIRM'S REPUTATION FOR QUALITY

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Abstract

A price-quality model is presented and tested using the PIMS database. Relative price is shown to be a function of a business's overall reputation for quality. A business's reputation for quality is in turn, heavily influenced by three marketing mix variables: product quality, customer service, and marketing communications efforts. Three environmental variables - relative market share, type of market entry and number of customers exert a smaller influence. The need to effectively manage these relationships in order to obtain a price premium is discussed.

Obtaining a Premium Price by Managing the Firm's Reputation for Quality

At the heart of any pricing policy is the relationship between a firm's reputation for quality and the price it can charge for its products. It is widely believed that the more favorable a firm's reputation for quality, the greater its ability to command a high price for its products. Stanley Tools, for example, has a stated corporate philosophy the belief that the customer will pay higher prices for higher quality (Hennessy 1980).

Though actual product quality is an essential ingredient in building a firm's reputation for quality, it is only one of several marketing mix variables and situational influences that can impact on the overall quality position obtained by a firms in the marketplace (Lambin 1975; Riesz 1978; White 1978).

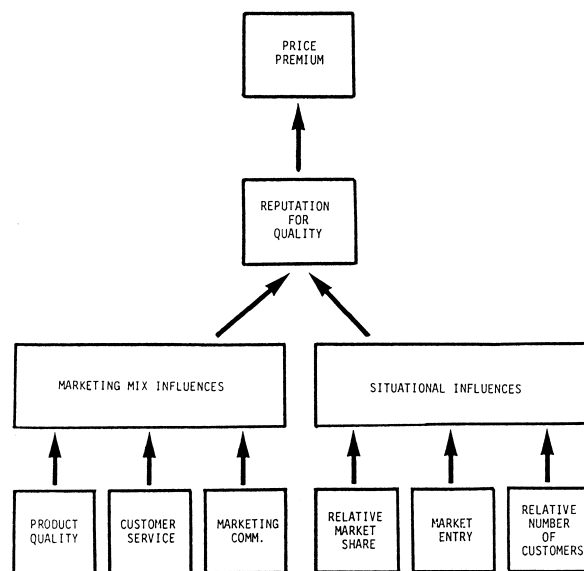
The purpose of this article is to present a price-quality model developed at a Fortune 100 company to better understand and manage their ability to achieve a desired price position in the marketplace. Figure 1 illustrates the major factor that links the prices that can be charged to different elements of the marketing mix and external situational influences.

The nature and generalizability of this model are demonstrated using information obtained from 1,315 strategic business units in the PIMS data base. While the PIMS data base suffers from a number of weaknesses, it is adequate and widely used for research of this nature (Anderson and Paine 1978; Lubatkin and Pitts 1983; Buzzell and Gale 1987; Jacobson and Aaker 1987; Hagerty, Carman, and Russell 1988).

Price and a Business's Reputation for Quality

Studies of the relationship between price and quality have typically focused on how price is

FIGURE 1
 PRICE - QUALITY MODEL



influenced by perceived product quality. The price-quality model presented in Figure 1 is somewhat different in that it positions a business's overall reputation for quality as the major force driving prices with product quality as one of several factors influencing a firm's reputation for quality. Because a business's reputation or image plays a critical role in the price-quality model presented in Figure 1, we will first examine the linkage between price and a firm's overall reputation for quality.

In the PIMS data base, price is a relative measure defined as the percentage a business unit's prices are above or below the average prices of its three largest competitors. A relative price of 115 indicates that a business has priced its products 15 percent above the average prices charged by its three largest competitors; a relative price of 88 means that the business is selling its products at 12 percent below the average prices of its three largest competitors.

A business's reputation for quality is an estimate of end users' perceptions of product image and company reputation for quality and dependability on a five-point scale ranging from 1, "much worse" than its three largest competitors, to 5, "much better" than its three largest competitors. To examine the relationship between these two variables, the

PIMS data were partitioned into five product area clusters (consumer nondurables, consumer durables, capital equipment, raw materials, and component products) and a separate regression analysis was performed for each product area. Business units described as primarily services, retailing, or wholesaling were not evaluated separately due to their limited numbers.

Table 1 summarizes the coefficients of the equations derived for each of the product areas studied. Each relationship between a business's relative price and reputation for quality is positive and fairly similar to the relationship estimated for the other types of businesses. The partial exception is consumer nondurables, which has a greater rate of change and thus, a greater price sensitivity to changes in a firm's reputation for quality.

TABLE 1
REGRESSION EQUATIONS FOR PRICE-QUALITY
RELATIONSHIP*

PRODUCT AREA CLUSTER	SAMPLE SIZE	CONSTANT	COEFFICIENT	CORRELATION
Consumer Nondurables	241	89.30	4.26	.439
Consumer Durables	158	93.87	2.79	.370
Capital Equipment	324	93.39	3.20	.424
Raw Materials	184	94.76	2.01	.291
Component Products	408	95.31	2.32	.308

*All coefficients were significant at .001

Though a great many other factors affect the actual relative prices a firm will charge for its products, the relationship between a firm's relative prices and reputation for quality is strong and consistent. Thus, managing the controllable factors and monitoring the uncontrollable factors that contribute to a firm's reputation for quality is important.

Building a Firm's Reputation for Quality

As shown in Figure 1, a business's reputation for quality is hypothesized to be influenced by controllable aspects of the firm's marketing mix as well as uncontrollable factors that exist in the environment. The nature of these influences is discussed in this section. The results of a multiple regression analysis of a firm's reputation for quality in terms of the predictive influences shown in Figure 1 are discussed in the following section.

Marketing Mix Influences

Three aspects of the firm's marketing mix are hypothesized to influence the firm's overall reputation for quality: product quality, customer services, and marketing communications. The relationship between product quality and price has been examined extensively over the

past 35 years (Koenigsberg 1980; Lambert 1980; Forbis and Mehta 1981; Phillips, Chang, and Buzzell 1983; Gale and Klavens 1985; Jacobson and Aaker 1987). The results have consistently shown a positive relationship between perceived product quality and price. However, it is our hypothesis that product quality influences overall reputation for quality which in turn influences relative price level.

In the PIMS data base, perceived product quality is measured as relative product quality, the percentage of products rated superior to competitors' products minus the percentage of products rated inferior to competitors' products.

Customer service is also hypothesized to influence a firm's reputation for quality. The better the quality of customer service provided to end users, the greater end user's opinion of the firm's quality. Though not extensive, there are some studies to support this hypothesis (Abe and Brush 1976; Dunham 1980; Peters and Waterman 1982; Takevchi and Quelch 1983). In the PIMS data base, customer service is measured on a five-point scale as the quality of customer services to end users' from 1, "much worse" than the services provided by the firm's three largest competitors, to 5, "much better" than the quality of customer services provided by its three largest competitors.

Marketing communications, and in particular, advertising, have been shown to contribute to the price-quality position of a business (Kotowitz and Mathewson 1979; Rotfeld and Rotzoll 1980). Using the PIMS data base, Farris and Reibstein (1980) have shown that firms that advertise more than their competition command higher prices. Recognizing this linkage and the relationship between price and reputation for quality presented in Table 1, it is reasonable to hypothesize that a firm's efforts in marketing communications would also influence its overall reputation for quality. The greater the firm's communications effort relative to competition, the greater the impact these communications would have on the firm's reputation for quality.

While it would be ideal to break down the communications mix into its component areas of media advertising, sales promotion, and sales force expenditures, collinearity among these three variables is high and could cause misleading inferences when evaluating the relative impact of each communications variable. To overcome this problem, a single variable labeled marketing communications was created from the product of media advertising, sales promotion and sales force expenditures. In the PIMS data base each of these variables are measured on a five point rating scale that ranges from 1, "much less" than its three largest competitors, to 5, "much more" than its three largest competitors.

Situational Influences

The market environment can also influence a firm's reputation for quality and in turn the relative prices it can charge for its products. In **Figure 1**, we have hypothesized three aspects of the environment that are thought to be potential contributors to a business's reputation or image for quality. They are the firm's relative market share, timing of the firm's market entry, and the number of customers they serve.

Relative market share was selected as a potential situational factor that could contribute to a firm's reputation for quality based on findings reported by Farris and Reibstein (1980). They show that high share businesses command greater price premiums than low share businesses. Based on the relationship between relative price and reputation for quality reported earlier in this study, it would seem reasonable that high share firms would have an advantage in terms of reputation for quality. Subjectively, the "bandwagon effect" (everyone is using this company's products, they must be good) also supports the hypothesis that market share is positively related to image. To minimize the natural market share differences likely to occur in different business environments, relative market share was used in this study. The relative market share of a business is measured as its market share divided by the market shares of its three largest competitors.

An obvious weakness of treating relative market share as a "cause" of reputation for quality is the fact that reputation for quality undoubtedly influences relative market share. While we believe that share does indeed influence reputation, using regression to test this will overstate the magnitude of this influence.

The timing of a firm's entry into a market is hypothesized to influence a firm's reputation for quality. A firm viewed as pioneer in developing a product area should retain some long-run benefits for this effort that would increase the firm's reputation for quality. A firm's market entry in the PIMS data base is measured using a three interval scale: 1, a pioneer in developing a new product area; 2, an early follower in a growing market; 3, a late entrant into a more established market. Using this measurement scale, the relationship between a firm's reputation for quality and market entry should be inverse.

A firm's customer base is also hypothesized to influence how the firm is viewed in terms of its reputation for quality. The more customers a firm has relative to the number served by its major competitors, the more apt they are to be viewed as a major firm in the market. This in turn may have a positive impact on their reputation for quality. This variable in the PIMS data base measures the firm's customer base relative to its major competitors as narrower than competitors, same as competitors, or broader than competitors. We hypothesize that a broad customer breadth will have a positive

influence on a firm's reputation for quality. However, inferring cause based on this variable is subject to the same serious weakness described for relative market share.

While there are many other variables in the PIMS data base that have the potential to impact on a firm's reputation for quality, the six shown in **Figure 1** were selected as predictors in a regression analysis because they were logically relevant, statistically meaningful, and relatively independent of each other. The next section provides a discussion of the analysis performed using these variables.

Results

Table 2 summarizes the regression coefficients estimated for each of the variables found to be statistically significant at the .10 level. Variables in the marketing mix had a consistent impact on a firm's reputation for quality across five distinct types of industries. Given this degree of consistency, a high level of confidence can be placed in these variables as useful predictors of a firm's reputation for quality.

TABLE 2
REGRESSION COEFFICIENTS FOR PREDICTORS OF A
FIRM'S REPUTATION FOR QUALITY

PREDICTOR VARIABLE	CONSUMER NONDURABLES	CONSUMER DURABLES	CAPITAL EQUIPMENT	RAW MATERIALS	COMPONENT PRODUCTS
<u>Marketing Mix Influences</u>					
1. Product Quality	.001	.014	.013	.010	.010
2. Customer Service	.339	.341	.290	.349	.376
3. Marketing Communications	.0078	.0070	.0024	.0029	.0054
<u>Situational Influences</u>					
1. Relative Market Share	.0013	.0023	.0015	.0026	
2. Market Entry	-.092	-.143			
3. Rel. # of Customers	.125			.114	.078
Constant	1.69	1.94	1.98	1.66	1.71
Explained Variance	52%	56%	45%	50%	46%

The situational influences on a firm's reputation for quality varied by product area. The effect of relative market share was statistically significant in all the product areas except component products. Thus, except for component products, high relative market share is associated with a high reputation for quality. Relative number of customers served by a firm was a significant contributor to a firm's reputation for quality in consumer nondurables, raw materials, and component products. However, given the almost certain two-way flow of influence between these two variables and overall reputation for quality, these results are fairly weak and should be interpreted cautiously.

Market entry was only significant in consumer businesses. In the cases where market entry was found to be a significant predictor of a firm's

reputation, the sign of the relationship was in the hypothesized direction.

Collinearity among predictors is a concern in this type of analysis. Intercorrelations between predictor variables ranged from $-.37$ to a plus $.42$. The median negative correlation among predictors was $-.14$ while the median positive correlation was $.26$. This level of intercorrelation was not found to effect estimates of either the constant or variable coefficients when variables were systematically removed and added to each of the regression equations.

Because the variables used in this study were measured using different scales of measurement, it is difficult to interpret the relative impact created by the various coefficients shown in Table 2. For that reason, Figure 2 was created by summing the standardized coefficients of each variable and dividing the standardized coefficient of each variable by this sum to illustrate the relative influence of each predictor variable. This provides a useful mechanism with which to assess the relative impact of the predictors found to affect a firm's reputation for quality. In all five product areas, the marketing mix variables contributed substantially more to a firm's perceived overall quality than did situational influences. Given that relative market share and relative number of customers are at least partially caused by the firm's reputation for quality, the dominance of the controllable variables is even greater than indicated.

FIGURE 2
THE RELATIVE IMPACT OF FACTORS THAT CONTRIBUTE
TO A FIRM'S REPUTATION FOR QUALITY

CONSUMER NONDURABLES	CONSUMER DURABLES	CAPITAL EQUIPMENT	RAW MATERIALS	COMPONENT PRODUCTS
Product Quality	Product Quality	Product Quality	Product Quality	Product Quality
Customer Service	Customer Service	Customer Service	Customer Service	Customer Service
Marketing Communica- tions	Marketing Communica- tions	Customer Service	Mktg. Comm.	Customer Service
Rel. Market Share	Rel. Market Share	Mktg. Comm.	Rel. Market Share	Marketing Communica- tions
Mkt. Entry	Mkt. Entry	Rel. Market Share	Rel. Number Customers	Rel. Number Customers

Discussion and Implications

The PIMS data base was used in this study to examine a price-quality model developed at a Fortune 100 company. The results obtained show that the relative price a firm charges for its products is positively related to its reputation for quality in a consistent manner in each of five distinct types of industries. The degree of consistency in this relationship across diverse types of businesses adds confidence in the equations in Table 1.

The consistent, positive relationship between overall reputation for quality and relative price means that, to obtain a premium price, a business must know how to build a reputation for quality. Fortunately, as Figure 2 makes clear, the most important determinants of a firm's reputation for quality are at least partially under managerial control. This, in turn, provides at least indirect control over relative price.

Actual product quality relative to one's competition is of major importance in all five industries. Therefore, product and process research and development, effective employee motivation programs, and sound quality control are critical for a firm desiring to obtain or retain a premium price position in the market.

Customer service relative to competition also has a major impact on overall quality perceptions, particularly in industrial businesses. This suggests the need for adequate numbers of skilled sales and service personnel, thorough after-the-sale service, and an adequate distribution system for repair services and parts.

Marketing communications are somewhat more important in consumer goods industries than in industrial industries. This suggests that a business must effectively communicate with their market in order to build and maintain a reputation for quality.

The three marketing mix variables described above are the primary determinants of an overall reputation for quality. The three characteristics of the firm's operating environment exerted a lesser influence. Two characteristics - relative market share and relative number of customers - are probably caused as much or more by reputation for quality as they cause it. Market entry is more likely to be a causative variable. It appears to have limited importance in consumer industries. Thus, for practical purposes, focus on the three controllable variables seems justified.

It is important to note that using regression to "test" this model is a relatively weak methodology. While it provides evidence of the relationships we hypothesized, this evidence is only in the form of associations. Causation has not been demonstrated.

Finally, we should again point out that an overall reputation for quality is not the only determinant of relative price. However, it is a major determinant. Furthermore, over the long run, it may be a necessary if not sufficient condition for obtaining a premium price in the marketplace.

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AN EXPLORATORY INVESTIGATION OF DIFFERENT PATTERNS
OF CONSISTENCY FOR CUES USED IN CONSUMERS'
SUBJECTIVE EVALUATIONS OF PRODUCT QUALITY

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Abstract

This research effort explores the patterns of relationship between price, brand name, and store name as they combine to influence perceived quality. The flexibility of the research design allowed examination of the strength of the cues both individually and in combination with one another. Also, the incremental influence of price, brand name and store name was measured when one of these cues was added to one or both of the other cues. The results of the study provide 10 useful propositions for future theory building research in regard to the relationship of extrinsic product cues as they influence the perception of product quality.

Introduction

Over forty years ago, Scitovsky (1945) observed that buyers may use price as an indicator of product quality. He argued that such behavior was not irrational, but simply represented a belief that the forces of competitive supply and demand would lead to a "natural" ordering of products on a price scale, resulting in a strong positive relationship between price and product quality. One explanation for the persistence of these beliefs in a positive price-quality relationship¹ is that consumers do not have perfect information about product quality before purchase and use. Hence, it remains natural that consumers might use extrinsic cues such as price, brand name and/or store name as indicators of product quality.

The primary outcome of the additional cues of brand name and store name has been to enhance the effect of price on buyers' quality perceptions. Monroe and Krishnan (1985) observed that price-perceived quality effects were enhanced in the presence of other consistent extrinsic cues, particularly brand information. This finding suggests that the combination of price and brand information not only is strong, but the influence of price on quality perceptions is stronger in the presence of brand information than by itself. Dodds and Monroe (1985) found that price in the presence of brand name caused subjects to perceive the product to be higher in quality than when brand name was absent. Not only this, but the evidence is sufficient to argue that the strong brand effect did not dominate price but enhanced the price effect. It was shown in research by Dodds and Monroe (1989) that, if consistent, price and brand name, price and store name, and price, brand name, and store name will individually and collectively influence the perception of products' quality.

It might be expected that with additional

extrinsic information, buyers would rely less on price information. The extent of this effect depends on the degree to which the buyers are familiar or knowledgeable with the product category (Rao and Monroe 1988), and the degree to which the extrinsic cues provide similar or dissimilar information about the product (Monroe and Rao 1989). The magnitude of the effect of additional information provided by brand and store name on quality perceptions may vary depending on the amount and type of previous experience or knowledge buyers have available in their memories.

The purpose of this research is to explore the pattern of relationships between price, brand name, and store name as they combine to influence perceived quality. The flexibility of the research design allows the examination of the strength of the cues both individually and in combinations with one another. In addition, the incremental influence of price, brand name and store name can be measured when one of these cues is added to one or both of the other cues. The results of the study provide valuable substantive evidence toward theory building in regard to the relationship of extrinsic product cues as they influence the perception of product quality.

Research Method

Research Design

The exploratory study used an intricate 3 x 3 x 3 factorial between subjects design where price was crossed with brand name and store name. Each of the three independent variables had two levels of information as well as a level where no information was provided. The low and high price manipulations were a priori determined to be significantly different, but within the subject's acceptable price range. Pretest subjects were asked to indicate the lowest, expected, and the highest price they would pay for each of the two products. The means of these three estimates lead to the selection of a low price above the lower limit and a high price below the upper limit for each of the two products.

Two brand names were selected that the subjects viewed as being significantly different (low and high) in the perception of quality, along with familiarity and knowledge of the brand name. Similarly, two store names were chosen from a population of store names that were known to the subjects. In the pretest these store names met the criteria of being significantly different (high or low) in terms of quality of products carried in the store, store quality, and satisfaction with the store.

¹It is not the intent of this paper to focus solely on the price-quality relationship. However, there are many good reviews of this conceptualization in the literature: Shapiro 1968; Monroe 1973; Olson 1977; Monroe and Dodds 1988; Zeithaml 1988; and Monroe and Rao 1989.

Rao and Monroe (1989) uncovered 34 studies with 54 results, however none of the studies had examined all three extrinsic cues and with no information treatments. The methodological strategy of "no-information cues" allowed the examination of the three dependent measures with varying levels of extrinsic information, such

as:

1. price only,
2. price and brand,
3. price and store,
4. brand and store, and
5. price, brand, and store.

Research Procedures

Three hundred and fifty one undergraduate students enrolled in a major university were randomly assigned to one of twenty seven treatment groups. The subjects were asked to assume to be in a buying situation for a stereo headset player and a calculator. They were given product descriptions for each of the products along with price, brand, and/or store information and then were asked to evaluate the product quality.

Subjects were then asked to evaluate multi-item indicators of perceived product quality developed from previous research and pre-test procedures. The internal consistency of the indicators was assessed using correlation analysis and coefficient alpha. The values of coefficient alpha were .95 for both products. The indicators for the construct perceived quality was standardized and averaged into an index for perceived quality.

Research Methodology

The exploratory study examines how the differences between consistent and inconsistent information influences the perception of quality. Within the conceptualization of product perceptions discussed earlier, consistent information leading to the perception of quality would be a situation where any combination of the price, brand, and store cues were all either high or low. Any differing combinations would be deemed inconsistent information.

As the basis for evaluating the effect of inconsistent and consistent extrinsic cues of information, the effect size between treatments was used. Effect size means the degree to which the phenomenon was present in the population or the degree to which the null hypotheses is false (Cohen 1977). The need for a numerical index for the degree of departure from no effect, where population means are equal, is satisfied for two means when the difference in means is standardized by dividing it by the within-population standard deviation. In analysis of variance where there are typically more than two means, the spread of the means is represented not by their range as in a two mean case, but by a quantity formally like a standard deviation, again dividing by the common standard deviations of the populations involved (Cohen 1977). This value for effect size, f , can take on values between zero, when the population means are all equal, and an indefinitely large number when the population means are very different. According to Cohen (1977), a medium effect, $f=.25$, and a large effect, $f=.40$, are often found through measurement methods that minimize irrelevant variance and leads to substantive differences. Since all the cells are standard normal, the analysis was shortened where a comparison of mean differences would arrive at the same conclusions.

1. The standardized mean differences of the price information, store name information and brand

name information were computed and compared. Interest focused on the source of information which had the greatest individual effect.

2. The standardized mean difference between the combinations of price, brand name, and store name was compared. Interest focused on (a) strength of individual cues, (b) strength of combinations of cues, (c) marginal effects of cues, and (d) the overall influence of having inconsistent cues, such as low price, high quality brand name, and low quality store name.

TABLE 1
TEST OF OVERALL SIGNIFICANCE

Source	Calculator		
	df	F-test	P value
Price	2	15.838	.0001
Brand	2	33.561	.0001
Store	2	5.361	.0051
Price $\times$ Brand	4	.142	.9664
Price $\times$ Store	4	.052	.9949
Brand $\times$ Store	4	1.184	.3177
Price $\times$ Brand $\times$ Store	8	.712	.6812
Error	324	Mean Square error: .661	

Source	Stereo Headset Player		
	df	F-test	P value
Price	2	5.983	.0028
Brand	2	55.319	.0001
Store	2	3.914	.0209
Price $\times$ Brand	4	2.199	.0689
Price $\times$ Store	4	.532	.7126
Brand $\times$ Store	4	1.100	.3565
Price $\times$ Brand $\times$ Store	8	.652	.7335
Error	324	Mean Square error: .622	

Analysis and Results

A test of statistical significance was carried out for the overall design. The main effects were statistically significant for both products although there was a price-brand interaction in the stereo headset player study (Table 1)². However, the intent of this research was to explore the changing pattern of effects as the cues are combined rather than to rely on statistical techniques to give significant results. Future research can examine the propositions drawn from this analysis using rigorous statistical methods.

The Absolute Effect of Combined Cues on Perceived Quality

For each product experiment, situations were analyzed where only one, two, or three extrinsic cues were given (Table 2). For the single cue situation, brand name had a substantively stronger influence on perceived quality than either the price or store name cues. When

²A complete statistical analysis of the data in this study is found in Dodds, William B., and Kent B. Monroe (1989), "The Effects of Price, Brand and Store Information on Buyers' Product Evaluations," Boston College Working Paper, Department of Marketing, Boston College, Chestnut Hill, MA 02167

TABLE 2
ABSOLUTE EFFECTS OF EXTERNAL CUES ON
PERCEPTION OF QUALITY

SINGLE CUE SITUATIONS			
STEREO HEADSET PLAYER		CALCULATOR	
HBN	.508	HBN	.605
HSN	.151	LBN	.159
HP	.007	HSN	.108
LBN	-.244	HP	-.025
LSN	-.460	LSN	-.273
LP	-.762	LP	-.837
MULTIPLE CUE SITUATIONS			
CONSISTENT:			
HBN-HSN-HP	.851	HBN-HSN	.842
HBN-HSN	.837	HBN-HSN-HP	.765
HBN-HP	.507	HBN-HP	.395
HSN-HP	.166	HSN-HP	.159
LBN-LP	-.640	LBN-LSN	-.403
LBN-LSN-LP	-.654	LBN-LP	-.653
LBN-LSN	-.692	LSN-LP	-.798
LSN-LP	-.827	LBN-LSN-LP	-.930
INCONSISTENT:			
HBN-LSN-LP	.654	HBN-LSN	.685
HBN-LSN-HP	.484	HBN-LSN-HP	.540
HBN-HSN-LP	.365	HBN-LP	.396
HBN-LP	.363	HBN-HSN-LP	.119
HBN-LSN	.233	HSN-LBN	.067
LSN-HP	-.127	HP-LBN	-.015
LBN-HSN-LP	-.164	HBN-LSN-LP	-.024
LBN-HP	-.187	HSN-LP	-.141
LBN-HSN-HP	-.335	LBN-HSN-HP	-.207
LBN-HSN	-.414	LBN-LSN-HP	-.394
HSN-LP	-.506	HP-LSN	-.487
LBN-LSN-HP	-.745	LBN-HSN-LP	-.601

Where:

HBN and LBN - high and low quality brand names
HSN and LSN - high and low quality store names
HP and LP - high and low prices

TABLE 3
INCREMENTAL EFFECTS OF EXTERNAL CUES ON
PERCEPTIONS OF QUALITY
-FROM ONE TO TWO CUES

STEREO HEADSET PLAYER						
GIVEN EFFECT (SINGLE CUE)						
	HBN	LBN	HSN	LSN	HP	LP
INCREMENTAL EFFECT						
HBN	*	*	.686	.693	.500	1.125
LBN	*	*	-.565	-.232	-.194	-.180
HSN	.329	-.170	*	*	.159	-.046
LSN	-.275	-.488	*	*	-.134	-.367
HP	-.001	.057	.015	.333	*	*
LP	-.145	-.396	-.657	-.367	*	*
CALCULATOR						
GIVEN EFFECT (SINGLE CUE)						
	HBN	LBN	HSN	LSN	HP	LP
INCREMENTAL EFFECT						
HBN	*	*	.734	.958	.420	1.233
LBN	*	*	-.041	-.130	.010	.184
HSN	.237	-.092	*	*	.184	.696
LSN	.080	-.562	*	*	-.462	.039
HP	-.210	-.174	.051	-.214	*	*
LP	-.209	-.812	-.249	-.525	*	*

multiple cues were used, the strength of the brand name was again evident. In situations where consistent information was present, high brand name along with other cues clearly provided the highest perceptions of quality. This combination was substantively higher than when only high store name and high price information were given. Although high price and high store combined to be marginally above the mean, these cues were substantively strong only in the presence of high brand name. In inconsistent situations, higher measures of perceived quality occur in the presence of high brand name and inconsistent combinations of price and store name information. The combined strength of high price and high store was not sufficient to overcome the strength of a low brand name, resulting in a less than average perception of quality for both products.

The range of quality perceptions was widest when three cues were given. The range was smaller when only two of the same cues were present. The quality perception range was smallest when only different levels of one cue were present. Situations where cues are consistently high or low produce the extreme measures of perceived quality while measures of inconsistent cues fall between these extremes. The strength of the brand name continues to be the key determinant of high product quality. In both product experiments, the high brand name combined with various levels of the other two cues to produce higher measures of product quality.

The Relative Effects of Combined Cues on Perceived Quality

Given one cue of information, the incremental influence of adding information in the form of price, brand name, or store name clearly appeared to be strongest for adding brand name (Table 3). The incremental effect of adding high brand name information was strong for both consistent and inconsistent combinations. However, brand name increased the perception of quality more when it was added to an inconsistent information cue. The influence of the store name was weak and more erratic when added to one of the other two cues. A high quality store name enhanced the quality perception when added to a consistent brand name or price information cue but showed mixed results when added to an inconsistent set of cues. The incremental influence of price information on perceived quality was weak and erratic in its pattern.

Given two cues of information, the incremental effect of brand name information was consistently strong in all situations (Table 4). Brand name enhanced the perception of quality when the store and price information was already strong. The brand information reversed the situation when brand information reversed the situation when store and price information was weak, as well as strengthening the situation when the price and store cues were inconsistent. The addition of a strong store name cue lead to incremental gains in quality perception only when added to consistent brand-price combinations (either strong or weak). The ability of the price cue to enhance quality perception when store and brand name information was already high was inconsistent and weak for the two products. The incremental effect of the high price cue ranged from minimal impact to a

TABLE 4
INCREMENTAL EFFECTS OF EXTERNAL CUES ON PERCEPTIONS OF QUALITY-FROM TWO
TO THREE CUES

STEREO HEADSET PLAYER												
	GIVEN EFFECT (TWO CUES)											
	HSN /HP	LSN /HP	HSN /LP	LSN /LP	HBN /HP	LBN /HP	HBN /LP	LBN /LP	HBN /HSN	LBN /HSN	HBN /LSN	LBN /LSN
HBN	.685	.611	.871	1.481	*	*	*	*	*	*	*	*
LBN	-.501	-.618	.342	.038	*	*	*	*	*	*	*	*
HSN	*	*	*	*	.344	-.148	.002	.476	*	*	*	*
LSN	*	*	*	*	-.023	-.558	.291	-.014	*	*	*	*
HP	*	*	*	*	*	*	*	*	.014	.079	.251	-.053
LP	*	*	*	*	*	*	*	*	-.472	.250	.421	.038

CALCULATOR												
	GIVEN EFFECT (TWO CUES)											
	HSN /HP	LSN /HP	HSN /LP	LSN /LP	HBN /HP	LBN /HP	HBN /LP	LBN /LP	HBN /HSN	LBN /HSN	HBN /LSN	LBN /LSN
HBN	.606	1.027	.260	.774	*	*	*	*	*	*	*	*
LBN	-.366	.093	-.460	-.132	*	*	*	*	*	*	*	*
HSN	*	*	*	*	.370	-.192	-.277	.052	*	*	*	*
LSN	*	*	*	*	.145	-.379	-.420	-.277	*	*	*	*
HP	*	*	*	*	*	*	*	*	-.077	-.274	-.145	.009
LP	*	*	*	*	*	*	*	*	-.723	-.668	-.709	-.527

negative impact.

The incremental effect of changing one of the cues from a low to high treatment level was examined in situations where the other two cues were held constant (Table 5). For both products, the effect of changing brand name from low to high had the greatest impact. Store name appeared to be the next strongest, while the results for the price effects were mixed. For the stereo headset player, the increase in price decreased the perception of quality for three of the four situations, while substantial increases on perceived product quality were shown in the calculator study.

Discussion

Academic researchers often plunge into data analysis with the intention of using sophisticated statistical tools in search of significant relationships. This approach is certainly expected by editors and reviewers of academic journals. While cell means and variances are often reported, little time is spent in examining the relationships. This paper takes time to study these relationships. The use of an intricate design where a no information treatment is used for each independent variable permits the exploration of the absolute and incremental effects of price, brand, and store information on the perception of quality. The analysis of the data suggests the following propositions for future research initiatives.

1. Brand name information is the dominating external cue in determining the perception of quality (Table 2)
2. From strongest to weakest, the order of external information cues in determining the perception of quality is brand name, store name, and price (Table 2).
3. A wider range of quality perception is realized as more cues of information are

given. (Table 2)

4. Strong brand name information will increase the perception of quality when added to other single external cues of information, regardless of whether those cues are consistent or inconsistent with the strength of the brand name information. (Table 3)
5. Strong store name information will increase the perception of quality when added to other single external cues of information when those cues are consistent with the store name information. (Table 3)
6. Strong price information adds little to the perception of quality when added to other single external cues of information, regardless of whether those cues are consistent or inconsistent with the strength of the price cue. (Table 3)
7. Strong brand name information will increase the perception of quality when added to consistent or inconsistent combinations of price and store cues (Table 4).
8. Strong store name information will increase the perception of quality when added to consistent brand-price combinations (Table 4).
9. High price information will have minimal to negative impact on the perception of quality when added to brand-store combinations (Table 4).
10. Changing brand information will produce greater changes in perceived quality, *ceteris paribus*, than changing store or price information (Table 5).

This paper is exploratory and the findings are tentative. Consideration must be given to the limits due to product types, price levels, brand names, store names, and subjects used. The ten propositions offer researchers important issues to consider in evaluating how three relevant external cues of quality individually and collectively impact upon the evaluation of quality. If any of the findings fail to replicate, there is evidence of a limit to the generalizability of the relation. But when a finding does replicate, then the scope of the

relation has been extended. In any event, uncertainty about the relation will be reduced when either the scope of the relation has been extended or the relation has been shown to be limited.

TABLE 5
INCREMENTAL EFFECT OF CHANGING PERCEPTIONS OF
PERCEIVED QUALITY

STEREO HEADSET PLAYER			
CHANGES FROM LOW TO HIGH QUALITY			
	BRAND	STORE	PRICE
IN SITUATION			
WITH:			
HSN-HP	1.186		
HSN-LP	.529		
LSN-HP	1.229		
LSN-LP	1.308		
HBN-HP		.367	
HBN-LP		-.289	
LBN-HP		.410	
LBN-LP		.490	
HBN-HSN			.486
HBN-LSN			-.170
LBN-HSN			-.171
LBN-LSN			-.091
CALCULATOR			
CHANGES FROM LOW TO HIGH QUALITY			
	BRAND	STORE	PRICE
IN SITUATION			
WITH:			
HSN-HP	.972		
HSN-LP	.577		
LSN-HP	.934		
LSN-LP	.906		
HBN-HP		.225	
HBN-LP		.143	
LBN-HP		.187	
LBN-LP		.329	
HBN-HSN			.646
HBN-LSN			.564
LBN-HSN			.394
LBN-LSN			.536

The findings from the analysis of the combined effects have to be examined within the constraint that the brand names, store names, and prices were categorized as high or low in a pretest. The pretest made no attempt to calibrate the relative strength of the three cues. Calibration does not appear possible, hence the three cues are actually seen as being high or low but not necessarily in equal strengths.

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CONSUMER LEARNING STYLES: IMPLICATIONS FOR PROMOTIONAL STRATEGY

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Abstract

Literature from education suggests that the student learning process is a function of three factors--the environment, teaching style, and learning style. This process is analogous to the consumer learning process in which the environment, marketing stimuli, and consumer learning play a role. Of these factors, consumer learning has received the least attention in marketing literature. This paper provides a review of relevant literature and a framework for the development and application of learning constructs in marketing literature.

Introduction

The concept of learning has become an integral component of many theoretical and managerial aspects of the marketing discipline. For example, Howard and Sheth's (1969) theory of buyer behavior explicitly includes hypothetical learning constructs which "serve the function of concept formation." Similarly, advertisers base creative strategy decisions on processing models which include learning as a potential processing response (Rossiter and Percy 1987). These examples reflect the belief by researchers and practitioners that individual differences in human behavior may be better explained by understanding the impact of learning. The study of individual differences in human beings has intrigued scholars in disciplines such as psychology and education for years. Much of consumer behavior research in the areas of attitude, lifestyle, motivation, and information processing also focuses on individual differences. For example, Gutman (1987) discussed individual differences in consumer response to marketing stimuli as a function of imagery processing. The problem that remains with all researchers once individual differences are found is determining what practical response can result from this finding (Guild and Garger 1985). Studies of consumer behavior attempt to understand individual consumer differences while at the same time discover commonalities or "general laws" of consumer behavior. While this apparent contradiction in inquiry of individual differences remains, the development of an expanded view of the learning process offers potential to improve our understanding. The purpose of this paper is to propose a framework for conceptual and empirical development of learning constructs in marketing literature and research. Specifically, the paper presents: (a) a simple model of the learning process, (b) a summary of relevant literature on learning style, (c) a framework of potential learning style applications in marketing, and (d) directions for future research efforts.

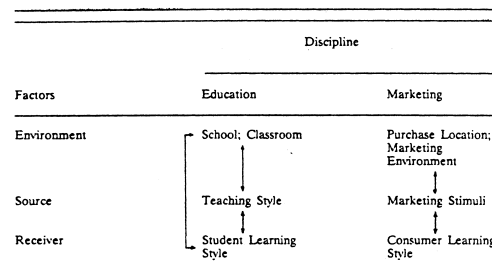
The Learning Process

Scholars in education have concluded that a student's learning process is a function of three factors--the learning environment, teaching style, and student learning style. The learning environment has been the focus of many investigations of various physical alternatives such as sound, light, temperature, and design in the classroom (Dunn and Dunn 1975). Teaching style refers to the wide range of options a teacher may adopt for particular situations (Bloom 1976; Joyce and Weil 1972). Finally, learning style is described as individual orientations toward learning.

Figure 1 illustrates how the factors described in education literature are analogous to factors in the marketing discipline. Marketing researchers have given considerable attention to the impact of alternative purchasing environments (Belk 1974; Sternthal and Zaltman 1975; Foxall 1983). Similarly, many marketing management studies have investigated the influence of marketing stimuli. Unfortunately, our understanding of the role of consumer learning styles is much less advanced.

FIGURE 1

THE LEARNING PROCESS



Marketing literature has acknowledged differences in consumers' decision processes. However, these differences are typically attributed to the influence of product type, information sources, or purchase environment. For example, Sirgy (1987) has presented a social cognition model of consumer problem recognition. In addition, Bruner (1985, 1987) has developed a concept of problem recognition style and described its effect on information seeking. Thus, our models of consumer behavior may be further advanced by applying learning style concepts from education literature.

Although the concept of learning styles has not been used extensively in the field of marketing, learning theory is basic to the understanding of consumers (Nord and Peter

1980; Peter and Nord 1982; McSweeney and Bierley 1984; Gresham and Shimp 1985; Macklin 1986). The marketing implications of both classical and operant conditioning are well documented (Rothchild and Gaidis 1981), although few studies incorporating cognitive approaches to learning are found in the consumer behavior literature. In fact, one researcher observed that, "with the emergence of the information processing metaphor in cognitive psychology, discussion of learning has almost reached extinction in favor of memory processes and structure" (Hoch 1984, p. 478). Thus, a learning style approach to consumer behavior may provide additional understanding of how and why consumers react to stimuli.

History of Learning Styles

The concept of learning styles has a long, well-researched background in the fields of psychology and, more importantly, in education. To present a historical perspective, the work of five researchers, Jung, Gregorc, Dunn and Dunn, and Kolb is discussed.

Jung's Psychological Types

Literature reviews on individual differences in learning styles most often cite the original work of Carl G. Jung (1921). His research on "psychological types" suggests that an individual's approach to decision-making is influenced by the "thinking function" and the "feeling function." The thinking function uses logic and reason to analyze data and information in an objective, careful and thorough manner where all alternatives are considered and weighed. The feeling function uses perception and personal insight to approach a decision in a subjective, empathetic and emotional manner. All people use both functions; however, we tend to be more comfortable with one of these. Jung also discussed two types of perception: the "sensation function" where people observe and experience the world through their five senses (they see what is actually happening), and the "intuition function" where people react to images created in their mind based on intuitive "reading between the lines." A practical application of Jung's theory is the well-known Myers-Briggs Type Indicator.

Gregorc Style Delineator

Anthony F. Gregorc (1982) is another well-known author in the field of learning styles. He developed "The Gregorc Style Delineator" based on his concept of four patterns of styles within individuals. In his theory, he suggests that people have a preference for either "abstract" (symbolic, intuitive, and emotional) perception or "concrete" (realistic, direct, and physical) perception. He also suggests that we have a preference in the way we order information. We either prefer "sequential" (linear, step-by-step, methodical) ordering or "random"

(non-linear, tangential, leaping) ordering. In combining these two dimensions of perception and ordering, Gregorc identifies four patterns of style. In addition, he argues that everyone exhibits all four patterns to some extent, yet one pattern tends to be predominant.

Dunn and Dunn's Learning Style Elements

Rita Dunn and Kenneth Dunn have also published extensively in the field of education (Dunn and Dunn 1975, 1978). They define learning styles as "the manner in which at least 18 different elements of four basic stimuli affect a person's ability to absorb and to retain information, values, facts, or concepts" (Dunn and Dunn 1975). The four basic elements of learning style suggested by Dunn and Dunn are:

Environmental Elements: Sound, light, temperature, and design (e.g., "Sound or external noise may positively or negatively influence learning style").

Emotional Elements: Motivation, persistence, responsibility, and structure (e.g., "Motivated, persistent, responsible students usually require little structure and supervision").

Sociological Elements: People "can learn in a variety of sociological patterns that include working alone, with one or two friends, in a small group, or as a part of a team... or some variation of these."

Physical Elements: People learn through different senses such as auditory, visual or tactile senses or a combination of senses.

Based on these concepts, Dunn and Dunn (1975) argue that knowing a student's learning style preference can make a teacher more sensitive to that individual.

Kolb's Learning Style Inventory

Finally, David A. Kolb developed a Learning Style Inventory (1984) which represents a significant development in learning style research. Kolb identified two dimensions of learning style:

Perception: People perceive through Concrete Experience ("feeling") or through Abstract Conceptualization ("thinking").

Processing: People process through Active Experimentation ("doing") or through Reflective Observation ("watching").

Therefore, learning results from the way people perceive and then process what has been perceived. In putting together these two dimensions, a four-quadrant model of learning styles is formed (see Figure 2).

The Learning Style Inventory measures a person on each of the four dimensions using a self-description format based on 12 questions with four alternative responses (Kolb 1976). Respondents are asked to rank the alternatives

FIGURE 2
LEARNING STYLE DIMENSIONS

		Perception	
		Concrete Experience "Feeling"	Abstract Conceptualization "Thinking"
Processing	Active Experimentation "Doing"	Accommodator	Converger
	Reflective Observation "Watching"	Diverger	Assimilator

according to how well they think each fits with how they would go about learning something. Based on the results of this LSI, a "Learning-Style Grid" can be formed for each person. The four basic learning styles developed by Kolb are:

Diverger: This learning style emphasizes concrete experience ("feeling") and reflective observation ("watching"). This orientation stresses adaptation by observation rather than action. These individuals tend to be feeling-oriented, interested in people, tend to desire harmony, avoid conflict and process information based on their past and present experiences.

Assimilator: This person's dominant learning abilities are abstract conceptualization ("thinking") and reflective observation ("watching"). This orientation is less focused on people and more concerned with ideas and abstract concepts. Logical, sound theory, concrete, sequential ordering, attention to detail, facts and figures are important to this person. They process information concretely.

Converger: The convergent learning style relies on abstract conceptualization ("thinking") and active experimentation ("doing"). This person likes problem solving, decision making, and the practical application of ideas and theories. Convergers would prefer to deal with technical problems and "figure things out" rather than social, interpersonal skills. They process information by kinesthetic and tactile "doing."

Accommodator: The fourth learning style emphasizes concrete experience ("feeling") and active experimentation ("doing"). These individuals like doing things and getting involved in new experiences. They seek opportunities, take risks, and learn more by intuitive trial and error. These individuals are at ease with other people.

Kolb proposes that every person has a dominant learning style which influences all aspects of their life. However, all people also possess aspects of all four learning styles.

Based on Kolb's work, Bernice McCarthy (1980) developed the 4MAT System. Type One learners (Divergers, according to Kolb) often ask the question, "Why?" in order to find a reason for learning. Type Two learners (Assimilators) ask the question, "What?" in an attempt to get accurate information. Type Three learners (Convergers) ask the question, "How does it work?" when applying knowledge. Type Four learners (Accommodators) ask the question, "If?" They enjoy creating new experiences for themselves and others.

The 4MAT System suggests first that all learning experiences should move through all four quadrants and second, educators might begin planning with Quadrant Two and move through the remaining quadrants. The purpose of using the 4MAT System is to bring depth to any learning experience and to have learners process information based on their predominant style.

Studies based on Kolb's Learning Style Inventory have found implications regarding the selection of academic fields in higher education and career choice (Weisner 1971; Kolb 1984). For example, social work, counseling, and teaching professionals are often Divergers; scientists and mathematicians are frequently Assimilators; engineers and accountants who integrate theory and practice are primarily Convergers; and, finally, individuals in fields such as marketing and architecture are often Accommodators. Criticisms of Kolb's LSI have been found in the management literature (Freedman and Stumpf 1978), although Kolb argues that the critique is seriously flawed (Kolb 1981). Kolb refers to the almost 100 studies which have used the LSI, indicating its widespread use in the literature.

Learning Style Applications

The previous discussion suggests that researchers in education have made significant theoretical advances in learning style concepts and that tests of learning style instruments have demonstrated many useful applications. Kolb's (1976, 1984) efforts, which integrate much of the previous learning style research and represent the most recent and most rigorously tested research, provide a logical framework to expand current marketing literature.

Including the learning construct in marketing modeling efforts is based on a general desire to develop means for explaining individual differences. More specifically, marketing managers are interested in differentiating masses of buyers. They want to understand individual differences so that segments or classifications can be identified. This classification process may help explain divergent reactions to marketing stimuli, particularly promotional or communication efforts. Table 1 provides likely promotional strategy implications for each of the four consumer learning styles. Although the examples in this table are not comprehensive, they do suggest logically different marketing

strategy considerations. A discussion of implications for each of the four types of people will help explain Table 1.

Since Divergers are feeling-oriented, interested in people, and seek harmony and trust with others, they would enjoy a personal approach to selling. A highly interactive approach to communication between the consumer and salesperson could build the trust desired. In terms of media preference, both major broadcast media would influence the Diverger. Television, known for "sight, sound, motion and emotion," stimulates feelings, which are important to this person. Television, also called "the best substitute for a personal sales call" (Patti and Frazier 1988) is appropriate here. Given that Divergers often learn by listening, radio would also be an effective medium. Since the Diverger likes personal interactions, retailers which emphasize personal service, such as specialty stores and department stores, would be appealing. Finally, Divergers, often called loyalists, are likely to be brand loyal consumers once they have built up the needed trust.

The Assimilators, concrete sequential thinkers, would respond favorably to expert testimony in advertising because they highly value what experts think. With their need for details, facts, and figures, informational or comparative advertising would be effective for Type 2 learners. Since more information can be presented in print media, newspapers, magazines, and sources such as Consumer Reports could fit the Assimilator's learning style. In terms of shopping preference, the Type 2 learner may enjoy direct response marketing, such as the use of catalogs. The quantity of information and detail provided by many catalogs would allow them to tackle a purchase rationally and logically. Finally, a Type 2 learner likely engages in extensive purchase decision making because of their thorough and industrious nature of learning. The Converger, often called the "hands-on" learner, would be drawn to all types of sales promotion tactics. They would enjoy an in-store demonstration in order to figure out how a product works or a free sample to try out a product at home. Since television is a perfect medium for demonstration, Type 3 learners would be drawn to this type of advertising. Also, print advertising offering a chance "to try" the product, such as scented perfumes, would appeal to this consumer. In terms of shopping preference, Convergents do not need personal service, just opportunity to try out the product in the store. Type 3 learners enjoy problem-solving, but they also like to get right to the point, which means their decision processing would be planned, non-impulsive, yet not lengthy and extensive.

Finally, as a risk-taker who likes new experiences, the Accommodator would tend to like any promotional approach that is creative and unusual in concept or execution. For example, the Isuzu "liar campaign" could clearly be labeled as unusual. "New and

improved" product advertisements might also appeal to these consumers. Since Accommodators are at ease with people, word-of-mouth advertising may be effective with this group.

TABLE 1

LEARNING STYLE IMPLICATIONS FOR PROMOTIONAL STRATEGY

Learning Style	Promotional Strategy Considerations			
	Promotional Approach	Media Preference	Shopping Preference	Decision Process
DIVERGER (Type 1)	Personal selling; highly interactive approach	Broadcast	Specialty and department stores	Brand loyal
ASSIMILATOR (Type 2)	Expert testimony; informational or comparative advertising	Print	Direct response marketing; catalogs	Extensive purchase decision making
CONVERGER (Type 3)	Sales promotion; demonstrations, point-of-purchase advertising, samples, coupons	Television; print with "hands-on" features	Low personal service; displays	Planned; non-impulse
ACCOMMODATOR (Type 4)	Creative, unusual execution in advertising; new, improved appeals	Word-of-mouth; unusual, new media	Specialty stores	Innovators; impulse

Type 4 learners would most likely find new media, such as theater advertising, intriguing. Unusual specialty stores, such as The Sharper Image, would appeal to Accommodators. Finally, Type 4 learners may very well be impulsive in their purchase behavior and frequently would be innovators. The framework provided in Table 1 could be expanded to include other relevant marketing implications. It provides a starting point for understanding how consumer learning style may be related to marketing strategy.

Summary and Future Research

This paper presents a simple model of the learning process and suggests analogous concepts in the marketing discipline. Since past research on learning is limited, this proposed framework offers a new approach to understanding the role of learning in marketing. A review of the literature on learning styles from other disciplines, primarily education, provides a foundation for this framework and suggests that the consumer learning process is influenced by the consumer's learning style, marketing stimuli, and the environment. Using this basic framework, tentative implications for marketing managers have been suggested. Although the implications have not been tested, logical inferences are offered based on the extensive research on learning styles.

Future research must address several issues. First, the relationships between the three basic factors of the learning model must be described. Second, the application of specific "learning style" inventories must be tested with consumers in purchasing environments. And

finally, future research must test the empirical relationships between consumer learning styles and response to various marketing stimuli.

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ATTITUDES OF THE ELECTORATE TOWARD POLITICAL ADVERTISING

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Abstract

Spending on political advertising has increased dramatically in recent years. The purpose of this study was to investigate public opinion toward such communication. Data obtained during the month of the 1988 Presidential election indicate that, basically, political advertising is a desirable phenomenon, yet is not perceived to be an influence on voting behavior. Political advertising was felt to be more deceptive than other types of advertising. Overall, Republicans reported that advertising is more undesirable than did Democrats or independents.

Introduction

The 1988 election year has prompted many questions regarding the credibility and effect of advertising produced by political candidates. Many of the political advertisements contained negative accusations directed toward opponents, while opponents often stated that advertisements misrepresented their actions or views on issues. The American public is being exposed to a seemingly higher level of political advertising each decade, yet questions remain regarding public opinion toward such communication. The purpose of this study was to determine attitudes of the electorate toward political advertising.

Background

During the 1952 Eisenhower campaign, advertising strategist Rosser Reeves introduced the concept of "electorate penetration" through television spot advertising techniques (Atkin et al. 1973): through television spots, a large proportion of the electorate (including uncommitted and opposition factions) can be efficiently reached at numerous times. Since that time, spending on political advertising has escalated dramatically. In 1956, Dwight Eisenhower spent about \$8 million for re-election to the presidency; in 1972, Richard Nixon spent more than \$60 million to achieve the same goal (Rothschild 1978). The amount politicians spent trying to get elected doubled from \$200 million in 1964 to \$400 million in 1972, a substantial portion of which was spent for broadcast advertising (Weiss 1973). In 1982, \$60 million was spent on advertising in Congressional and Senatorial campaigns, while as recently as 1972 that figure was the total outlay for all expenses involved in such campaigns (Rust, Bajaj, and Haley 1984). The Republican National Committee estimates that George Bush spent \$24 million on broadcast advertising in his 1988 campaign for the Presidency.

Legal factors appear to encourage increased use of political advertising, particularly that which is negative. Section 315 of the Communications Act of 1934 permits broadcasters to refuse product or service advertisements which they feel are deceptive or misleading, but denies them the right to do so with political advertisements (Szybillo and Hartenbaum 1976). A Supreme Court ruling in *New York Times v. Sullivan* made it difficult for public figures to recover damages for defamatory statements, and the 1976 Amendment to the Federal Election Campaign Act permits unlimited expenditures for candidates by private individuals and political action committees. Political contributions by individuals are limited, while the amounts which they can spend for advertising on a candidate's behalf are unlimited (Merritt 1984). Consequently, vast resources have been devoted to political advertising (Sabato 1981).

By virtue of the resources being spent on political advertising, candidates must believe it is generally necessary and effective. It is unclear that the public agrees, and little research has investigated public attitudes toward political advertising.

The Influence of Political Advertising

Research evidence suggests that political advertising enhances awareness, and knowledge levels of its audience members. Patterson and McClure (1974) report that voters in the 1972 presidential campaign received more information from political advertising than they did from television news. In addition, political advertising sometimes influences the attitudes and voting behaviors of its audience members, consistent with the hierarchy of effects of advertising in general. The extent of influence in each of these areas seems to depend upon the campaign and voter characteristics.

Studies conducted before television advertising became popular found that political advertising was not an important determinant of vote decisions (Berelson, Lazarsfeld, and McPhee 1954; Campbell et al. 1960; Lazarsfeld, Berelson, and Gaudet 1948). More recently, a number of authors have studied the influence of campaign expenditures on voting behavior (Blydenburgh 1971; Chapman and Palda 1980, 1984; Deegan 1979; Grush 1980; Johnston 1978; Nakanishi, Cooper and Kassarian 1974; Palda 1973). The results of these studies indicate that there appears to be a significant and measurable relationship between campaign expenditures and voting. Chapman and Palda (1984), using an econometric system to control for the availability of advertising funds and other factors, such as incumbency, found that advertising expenditures affect both the share

of votes which a candidate receives, as well as total number of voters.

Rothschild (1978) has suggested that earlier studies reporting weak advertising effects on voting behavior may have consistent with more recent reports of stronger effects, since the efficacy of political advertising, like that of other forms of advertising depends upon the involvement levels of audience members. In high-involvement (e.g., presidential) campaigns, where issues are more important and attitudes are more firmly fixed, the impact of political advertising ought to be greatest in the generation of awareness, but weak in its effect on attitude change and voting behavior. Conversely, in low-involvement elections, greater impacts on voting behavior ought to be observed. Rothschild (1978) cites prior studies of high involvement campaigns (Kline 1972; McClure and Patterson 1974; Patterson and McClure 1976; Rothschild and Ray 1974) in which advertising was shown to affect awareness, but not voting behavior and contrasts those with prior studies of low-involvement elections (Kline 1972; Palda 1973, 1975; Rothschild and Ray 1974) where voting behaviors were influenced by advertising expenditures. Rothschild further presents evidence from a laboratory experiment to support this distinction between low-involvement and high-involvement campaigns, which is replicated by Swinyard and Coney (1978) in a field study.

Meadow and Sigelman (1982) performed an experimental study to determine the effect of campaign commercials on building support for a candidate. The results indicated that evaluation of the candidate differed little among experimental groups. The authors conclude that the extent to which voters can be manipulated by manufactured images is severely limited.

The Content of Political Advertisements

Content of political advertising messages has been identified as being generally issue-oriented or image-oriented. Some authors have criticized political advertising as usually being image-oriented. (Burnkrant and Sawyer 1983; McGinniss 1969; Wyckoff 1968). However, a content analysis found that approximately 77% of televised political advertisements contain at least some issue information (Patterson and McClure 1973). Joslyn (1980) examined the content of political spot advertisements. The results showed that half of the advertisements contained information about the characteristics of a candidate, while twenty percent contained information about position issues.

The Effect of Exposure to Political Advertising

Exposure to political advertising has been shown to be moderately correlated with political knowledge and interest (Atkin and Heald 1976). Highly exposed voters were somewhat more likely to attach higher agenda priorities to issues and

candidate attributes emphasized in advertisements. Surlin and Gordon (1976) examined the exposure to and retention of political information presented in advertisements. They found that individuals in higher education and socio-economic groups are more likely to specifically recall a political advertising message than those in lower education and socio-economic groups. Further, the high television viewer and general media user is more likely to be exposed to political advertising. However, due to selective exposure and retention, the authors conclude that political advertising may only be effective in reinforcing political beliefs rather than conversion of voters.

Ghorpade (1986) tested the agenda-setting function of political advertising based on a two-stage model; first, from advertising salience to salience in the public mind, and second, from salience in the public mind to behavioral outcome. The results indicated that advertising can focus consumers' attention on what issues of a campaign to think about (agenda-setting), and this can lead to intended behavioral outcomes. However, the author concludes that advertising may be most effective in agenda-setting rather than persuasion.

The Effect of Negative Political Advertising

Merritt (1984) conducted a study to examine the effects of negative political advertising---advertising which seeks to degrade perceptions of an opponent. The results indicated that negative political advertising produced negative attitudes toward both the targeted opponent and the sponsor. Negative advertising reinforced predispositions but did not attract voters to the advertiser, particularly if the advertiser was a minority party candidate.

Voter Recall of Political Advertising

Kaid (1976) conducted a study to determine voter recall of advertisements, perceived effectiveness of the ads, and the effect of advertising on voting decisions. The results indicated that self-claimed exposure to advertising apparently had little influence on voters' choices. Faber and Storey (1984) performed a study to determine what people recall from political advertisements. They found higher recall of information from preferred candidates than from opponents, though one-third of the respondents were unable to recall anything from either candidate's commercials.

Media Usage and Political Advertising

Weaver-Lariscy and Tinkham (1987) studied congressional candidates and found that advertising media expenditure and allocation strategies vary significantly among types of campaigns: incumbent, challenger, and open-race. They maintain these are different competitive situations, and media strategy differences are found to be important predictors of election outcomes. For all candidates, the most frequently used medium was printed literature, followed by newspaper, radio, outdoor, and

television, respectively. Incumbent candidates, however, spent more than average on television and newspaper advertising. The authors conclude that incumbents spend more than their share of vote (perhaps unnecessarily), while challengers often do not spend enough to be competitive and should strive to match their opponents' levels of spending.

In a nationwide Roper survey, respondents were asked: "Which of these media give you the clearest understanding of candidates and issues in national elections?" In order, the responses were: television (59%), newspaper (21%), magazines (8%), radio (3%), and none or don't know (9%) (Bower 1973). In terms of media selected for political advertising, Weaver-Lariscy and Tinkham (1987) found the following: printed literature (92%), newspaper (85%), radio (81%), and outdoor advertising (72%).

From this body of literature devoted to study of the impact of advertising expenditures on voting behaviors, one concludes that political advertising affects voters in much the same way as advertising generally affects consumers. In cases where voters are interested and involved, political advertising provides information, but has little effect on voting behavior; in cases where voters are less interested and weakly involved, political advertising is more influential.

Research Objectives

Based on the previous research review above, a relative void was observed regarding electorate attitudes toward political advertising. Therefore, the objectives of this study were to determine the following:

- 1.) Electorate attitudes toward political advertising.
- 2.) If political advertising had a perceived effect on voting behavior.
- 3.) If significant differences existed in attitudes toward political advertising based on demographics.
- 4.) The perceived appropriateness of advertising media for political candidates who advertise.

Methodology

The Sample

To assess public opinion concerning political advertising, a national mail survey was conducted during the month of the 1988 presidential election. The electorate sample of 500 was drawn at random from a mailing list of 5000. The nationwide mailing list was purchased from one of the largest list brokers in the country and was drawn at random from a much larger population that is maintained by the company. A cover letter and self-administered questionnaire were mailed to the sample, generating 218 usable responses (a 44% response rate).

The Instrument

The questionnaire contained seventeen five-point Likert-type items which were designed to capture agreement/disagreement concerning the appropriateness and effectiveness of political advertising. An additional seven items tapped agreement/disagreement concerning the appropriateness of various media for political advertising.

In order to assess associations between background and attitudes, additional covariate measures were included in the survey instrument. Three attitudinal measures were included to assess (i) reliance on word-of-mouth as a political information source, (ii) beliefs that advertising generally lowers the image of advertisers, and (iii) beliefs that advertising generally lacks dignity. Demographic measures of sex, age, income, and education were included, as well as items measuring political party affiliation and voting regularity.

Analysis

The 24 items reflecting attitudes toward political advertising were first factor analyzed via principal components analysis (with Varimax rotation) to identify underlying dimensions which were represented. Unstandardized principal component factor scores were then utilized in regression analyses to identify demographics and attitudinal characteristics which were associated with differences in attitudes concerning political advertising.

Results

Six dimensions emerged from analysis, including (1) the undesirability of political advertising, (2) the appropriateness of traditional media vehicles, (3) the impact of political advertising on voting behavior, (4) the appropriateness of solicitation media (e.g., direct mail and telephone), (5) the deceptive nature of political advertising, and (6) the appropriateness of magazines as a vehicle for political advertising. Unstandardized factor loadings are presented in Table 1.

TABLE 1
ITEM LOADING ALONG PRINCIPAL COMPONENTS OF
ATTITUDES CONCERNING POLITICAL ADVERTISING

Item	Principal Component					
	1	2	3	4	5	6
I would like to see more political candidates adv	-.81					
In general, I have a higher image of political candidates who do not adv	.77					
Public confidence in political candidates is lowered by adv	.74					
Adv is okay for toothpaste, but it should not be used by political candidates	.72					

TABLE 1 (cont.)
ITEM LOADING ALONG PRINCIPAL COMPONENTS OF
ATTITUDES CONCERNING POLITICAL ADVERTISING

Item	Principal Component					
	1	2	3	4	5	6
Political adv tends to lower the dignity of a candidate	.71					
I am suspicious of candidates who adv	.71					
It is proper for political candidates in adv	-.68					
The public is provided useful information through political adv	-.65					
Adv by political candidates is more confusing than enlightening	.63					
Political adv tends to help consumers make more intelligent choices between candidates	-.61		.56			
Political adv tends to benefit incompetent candidates	.55					
I presently have a high image of political candidates who adv.	-.51					
Radio is an appropriate medium for political candidates who adv		.85				
Television is an appropriate medium for political candidates who adv		.72				
Newspapers are appropriate media for political candidates who adv		.65				
Billboards are appropriate media for political candidates who adv		.56				
In general, political adv effects my voting behavior			.79			
Political adv tends to raise the credibility of the candidate			.62			
Adv makes the public more aware of the qualifications of candidates	-.54		.56			
I like political advertising from my party better than from the opposition			.53			
Telephone is an appropriate medium for political candidates who adv				.87		
Direct mail is an appropriate medium for political candidates who adv				.59		
Political adv is more deceptive than other forms of adv				.66		
I anticipate an increase in political advertising in the future				.50		

TABLE 1 (cont.)
ITEM LOADING ALONG PRINCIPAL COMPONENTS
OF ATTITUDES CONCERNING POLITICAL ADVERTISING

Item	Principal Component					
	1	2	3	4	5	6
Magazines are appropriate media for political candidates who adv					.74	
Mean	-.20	1.21	-.17	-.77	.59	-.08
Variance accounted for:	29%	11%	11%	8%	6%	6%
Note: Only loadings greater than .50 are presented						

The means in Table 1 suggest that sample mildly disagreed that political advertising is undesirable (1), that it influenced their voting behaviors (3), and that magazines are appropriate vehicles (6). The sample disagreed that media used for solicitation (telephone and direct mail) are appropriate vehicles for political advertising (4). The sample agreed that traditional media are appropriate vehicles for political advertising (2) and that political advertising is more deceptive than other forms of advertising (5).

Regression coefficient estimates are presented in Table 2. All six models are highly significant, suggesting that differences in attitudes concerning political advertising exist within the sample. Mean component scores by factor level are presented in Table 3.

Differences in Attitudes Concerning Political Advertising

The sample tended to regard political advertising as desirable (component 1). This approval increased with years of education. In contrast to Democrats and independents, however, Republicans tended to agree that political advertising is undesirable.

The sample in aggregate disagreed (-.17) that political advertising influences their voting behaviors (component 3). While men mildly disagreed that their votes are influenced by advertising, female respondents strongly disagreed that they are influenced by advertising. Also, respondents who agreed that advertising is generally undesirable view political advertising as particularly ineffective in influencing their votes.

Most agreed that political advertising is more deceptive than other forms of advertising (component 5), and this sentiment increased with years of education. In addition, those who agreed that advertising is generally undesirable agreed most strongly that political advertising is relatively deceptive.

Differences in Attitudes Concerning Media Vehicles

The sample in aggregate, and particularly those with more education, agreed that popular media vehicles are appropriate for political

TABLE 2
MULTIVARIATE REGRESSION ON COMPONENTS OF ATTITUDES CONCERNING POLITICAL ADVERTISING

Factor	Principal component										Multi-variate	
	1	2	3	4	5	6	7	8	9	10	F	p
Intercept	.46	ns	-.23	ns	-.82	ns	-2.06	.003	-.83	ns	.44	ns
Affil											1.9	.04
Democrat	-.23	.008	.01	ns	-.04	ns	-.16	ns	-.13	ns	-.09	ns
Other	-.18	ns	-.17	ns	-.01	ns	-.20	ns	.02	ns	-.01	ns
Education	-.04	.03	.10	.005	.01	ns	.09	.05	.02	ns	-.04	ns
Male	-.03	ns	-.25	ns	.47	.0007	-.20	ns	.18	ns	.14	ns
Adv desirability	.45	ns	-.05	ns	-.36	.0001	-.10	ns	.22	.02	.12	ns
Model F	9.9	.0001	3.1	.01	5.2	.0002	1.9	.10	3.9	.003	1.1	ns

TABLE 3
UNSTANDARDIZED PRINCIPAL COMPONENT
SCORE BY FACTOR LEVEL

Mean unstandardized principal component 1 score
"Political adv is undesirable"

Education		Affiliation	
12 years or less	-.10	Republican	.17
13-15 years	-.08	Other	-.24
16-17 years	-.24	Democrat	-.42
18-19 years	-.43		
20 years or more	-.40		

Mean unstandardized principal component 2 score
"Media vehicles are appropriate for political adv"

Education	
12 years or less	.83
13-15 years	1.13
16-17 years	1.31
18-19 years	1.33
20 years or more	1.70

Mean unstandardized principal component 3 score
"Political advertising affects my voting behavior"

Sex	"Advertising is undesirable"	
Male	Agree	-.75
Female	Neutral	-.02
	Disagree	.02

Mean unstandardized principal component 4 score
"Telephone and mail are appropriate vehicles for political adv"

Education	
12 years or less	-1.15
13-15 years	-.71
16-17 years	-.90
18-19 years	-.31
20 years or more	-.31

TABLE 3 (cont.)
UNSTANDARDIZED PRINCIPAL COMPONENT
SCORE BY FACTOR LEVEL

Mean unstandardized principal component 5 score
"Political adv is more deceptive than other adv"

Education		"Advertising is undesirable"	
12 years or less	.07	Agree	.81
13-15 years	.47	Neutral	.72
16-17 years	.92	Disagree	.38
18-19 years	.46		
20 years or more	.77		

advertising (component 2). Media utilized for solicitation were considered inappropriate for political advertising by the same in aggregate (component 4). Those with more years of education were less critical of direct mail and telephone advertising, however.

Discussion

The electorate who participated in this study reported that, basically, political advertising is a desirable phenomenon, yet is not perceived to be an influence on voting behavior. Females, and those who believe that advertising, in general, is undesirable were strongest in feeling that political advertising has no effect on voting behavior. Further, political advertising was felt to be more deceptive than other types of advertising, and this was particularly felt to be the case by those with more years of education and those who believe that advertising is undesirable in general.

Traditional media vehicles (radio, television, newspapers, and billboards) were rated as appropriate media for political advertising, particularly by those with more years of education. The direct solicitation vehicles of telephone and direct mail, as well as magazines, were viewed as not being appropriate for political advertising. Individuals with more years of education were less critical of direct mail and telephone solicitation, however.

Interestingly, Republicans report that political advertising is more undesirable than did

Democrats or Independents. Perhaps Republicans perceive that they have been hurt more (as a political party) by opponent's advertising in the past. Additionally, more educated individuals find political advertising more desirable than did those with fewer years of education.

While no previous studies were found which specifically investigated electorate attitudes toward political advertising, this study (which was done during the Presidential election month of 1988) provides some comforting results. Since political advertising was found to be basically a desirable phenomenon, support is provided for the information function of such advertising. Previous research has shown that such information involves the personalities of candidates and preferences (stands) on issues. The hope is that such information enables voters to make more informed decisions, yet the results of this study (which confirms recent previous research) are that political advertising is not perceived to influence voting behavior in high involvement (Presidential) elections.

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TOP ADVERTISERS BUDGETING METHODS IN CANADA

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Abstract

The results of a questionnaire survey on top advertisers in Canada indicate that whereas the advertising budget appropriation methods bear some relations to company characteristics they do not appear to be associated to the budgetary process.

Introduction

Advertisers' budgeting strategies have received substantial academic and practitioner attention since Walter Taplin's pioneering work in 1959. The high degree of attention received is evidenced by the large number of papers published on the subject, which totals well over 2,000 in the last 30 years. Over these years the diligent analysis of the theory and practice of appropriation methods has significantly improved our understanding of the problems and issues involved. In these studies, there are three main focuses: on how to set the advertising budget, on the methods used and on the budgetary process. The purposes of this paper are to show (i) what are the most popular methods now being used by top advertisers in Canada, (ii) what factors within and outside these companies affect the methods chosen and (iii) the budgetary process employed by these companies. It forms one part of a wider study which attempts to compare the advertising budgeting methods and processes in Canada, the U.K. and the U.S.

Research on companies' budgetary methods up to the early 1980s conclusively found that the methods used were prevalently unsophisticated. Studies of advertisers in the US (Printers Ink 1960; Hurwood 1960; San Augustine and Foley 1975), the U.K. (Gilligan 1976 and 1977) and Europe (Permut 1977) all submitted that budgeting for advertising was more often an 'art' rather than a 'science'. Their findings were that some variation of the percentage of sales method or the affordable method were the most popular. More recent studies (Patti and Blasco 1981; Hooley and Lynch 1985; Synodinos, Keown and Jacobs 1989) have indicated that the gap between theory and practice has narrowed. Together they give a broad measure of support to the increasing use of more complex methods such as the objective and task method particularly amongst larger companies. However, the results are inconclusive. Piercy (1986) has set the tone for further studies of the advertising budget. His work on the political environment of the budgetary process recognized the value of the descriptive survey, but argued that research that simply portrayed budgetary techniques would do little to advance our understanding of the budgetary decision. As Piercy notes:

"Setting aside the questions of what managers actually use the recognized techniques for...the fundamental weakness in the accepted frame of reference for advertising and marketing budgeting...is the lack of attention to the role of process and structure in decision-making."

Propositions

This study aims to find out what are the most popular budgeting methods now being used by top advertisers in Canada and the association between the methods used, company characteristics and the budgetary process. This is the starting point in placing the methods chosen within an environmental framework and, hopefully, will add to our understanding of the nature of the process and the factors affecting the decisions made. Several propositions will be examined.

In the first place, top advertisers are almost always large companies, and should lead the field in budgetary techniques and processes; hence, they would use more often the objective and task method either alone or in combination with other methods (P1). Next, given the nature and competitive requirements of the industry, companies in the fast moving consumer goods industry are expected to be the most advanced in their choice of methods (P2). Since the objective and task method is generally recognized as conceptually the best and the most sophisticated, it is also proposed that companies using it would be above average performers in their respective industries, and that the more simplistic methods such as the affordable method and the percentage of sales method would be more commonly employed by the average to below average performers (P3).

In terms of process, it is not unreasonable to assume that marketing and advertising people will be the most cognizant of best practice. Thus, the greater the involvement of marketing and advertising personnel in the budgetary process, the more likely the company will be employing the objective and task method (P4). Furthermore, having formalized their plans more thoroughly, companies using more complex budgetary methods would tend to have a greater confidence in the effectiveness of advertising (P5). Finally, since the effects of promotion expenditures can be more easily judged than advertising and more precise objectives can be measured relatively cheaply, the more sophisticated budgetary methods will be employed more often by companies which spend a higher proportion of their promotion budget on advertising activities (P6).

Exhibit 1 gives a summary of the propositions to be examined.

EXHIBIT 1 Propositions on Methods Used

The objective and task method is employed more often by companies

- (P1) which are relatively large in their respective industries,
- (P2) in the fast moving consumer goods industry,
- (P3) with above average performance in their respective industries,
- (P4) in which there is a greater involvement from marketing and advertising executives in the budgeting process,
- (P5) which have a higher opinion of the effectiveness of advertising, and
- (P6) which spend a higher proportion of their promotion budget on advertising.

Data Collection

The data used in this study were collected in a questionnaire survey conducted in April-August, 1989. The questionnaire contained 12 questions on budgeting methods, the process, responsibility of internal departments, participation of external parties, promotion activities, media employed and some company background information. It was first pilot-tested by interviews with six companies, and then sent in early April 1989 to the marketing and advertising senior executives, addressed by name, at each of the top 100 advertisers in Canada (in terms of money spent on advertising in 1987). A second mailing was made in late June to those companies which had not yet responded.

After a waiting period of 2 months following the second mailing, 36 completed and usable questionnaires were returned. In addition, three non-response courtesy replies were received, saying that the company was not able to respond because some of the information sought were proprietary and confidential. The 36% effective response rate was slightly better than the expected 25-30% rate of return and must be considered as very satisfactory.

The 36 responding companies, all being among the top 100 advertisers in Canada, spent a total of close to C\$400 million on advertising in 1987. The great majority of them (22 out of 36) are manufacturers of fast moving consumer goods. This high proportion is consistent with the fact that advertising, as a marketing function, is relatively more important for the fast moving consumer goods industry than for other industries. The remaining 14 responding companies are spread over the other industries (Table 1).

TABLE 1
Industry and Ownership Breakdown of Responding Companies

Industry	Companies	
	Number	Percent
Manu., Fast Moving Cons. Goods	22	61.1%
Manu., Durable Consumer Goods	3	8.3%
Manufacturer, Industrial Goods	2	5.6%
Consumer Services	3	8.3%
Business Services	1	2.8%
Trading & Merchandising	2	5.6%
Banking, Finance & Insurance	1	2.8%
Others/Conglomerates	2	5.6%
Ownership		
Canadian	13	36.1%
U.S.	14	38.9%
Others	9	25.0%

Reflecting the importance of foreign ownership in corporate Canada, only around one-third (36.1%) of the responding companies are Canadian owned. In fact, the number of responding companies owned by the U.S. exceeds that of Canada (14 to 13), and 9 out of the 36 companies (or exactly one-quarter) are owned by foreigners other than the Americans.

Data Analysis

The most popular advertising budgeting method being used by more than 60% of the respondents is the objective and task method - conceptually the best and the most sophisticated (Table 2).

TABLE 2
Advertising Budgeting Methods Used

Method	No. of Companies	% of Total
Objective and Task	22	61.1%
Affordable	17	47.2%
%age of Anticipated Sales	11	30.6%
Comparative Relative Parity	9	25.0%
%age of Last Year's Sales	5	13.9%
Competitive Absolute Parity	3	8.3%
Unit Sales	3	8.3%
Combination of Methods Used	19	52.8%

The other more popular methods which are used by at least one-quarter of the companies are the affordable method (47.2%), the percentage of anticipated sales method (30.6%) and the comparative relative parity method (25%). However, slightly more than half of the respondents use more than a single method in setting the advertising budget. The average number of methods used by the companies is 2.0, and for the 19 companies which use more than one method, 2.8. In some companies different methods are used for different products or brands. In other instances, different methods are integrated in setting the budget; for example, the objective and task is used for planning with affordability acting as the constraint. Some companies, when using the percentage methods, set the percentages at what the company can afford or what they believe are the percentages used by their competitors.

The results also indicate that some budgeting methods are not used in isolation. Of the 17 companies using a single method, not a single one uses the percentage of last year's sales method, the competitive absolute parity method or the competitive relative parity method alone by themselves. When only one method is used, the methods employed are: objective and task (9), affordable (5), percentage of anticipated sales (2), and unit sales (1).

With regard to the association between industry type and the methods used, the across-industry pattern generally follows the overall pattern, with the objective and task method being the most popular, and the affordable method the next most popular (Table 3). There is no indication that the objective and task method is used more often by the fast moving consumer goods industry than by other industries. The methods which appear to have some association with the industry are those related to competition and market share. The comparative relative parity method which is being used by more than one-third (8 out of 22) of the manufacturers of fast moving consumer goods, is not used at all by any one of the 9 companies in durable consumer and industrial goods or consumer and business services. Also, the 3 companies which use the competitive absolute parity method are all manufacturers of fast moving consumer goods. Apparently, apart from companies in the fast moving consumer goods industry, other companies do not find the market share or competition based methods appropriate for allocating their advertising budgets.

TABLE 3
Methods Used and Company Characteristics

Industry	Comb.	A	B	Methods		E	F	G
				C	D			
M.F.M.C.G. (22)	14	12	3	6	2	3	8	15
D.C.I.G. (5)	1	2	0	1	1	0	0	3
C.B.S.	2	1	1	2	0	0	0	2
Others	2	2	1	2	0	0	1	2
Ownership								
Canadian (13)	8	6	2	6	1	1	4	6
U.S. (14)	5	6	0	1	1	0	3	11
Other Foreign (9)	6	5	3	4	1	2	2	5
Performance: Sales Growth								
Above Average (24)	12	10	4	7	2	2	4	14
Average (15)	6	6	1	3	1	1	5	7
Below Average (1)	1	1	0	1	0	0	0	1
Performance: Profit Margin								
Above Average (19)	9	10	3	3	1	1	3	12
Average (15)	9	6	2	8	2	2	6	8
Below Average (2)	1	1	0	0	0	0	0	2
Performance: Return on Investment								
Above Average (14)	6	6	2	2	1	1	1	9
Average (18)	10	9	3	8	1	2	6	9
Below Average (4)	3	2	0	1	1	0	2	4

- Notes: 1. Comb. - combination of methods used
A - affordable
B - percentage of last year's sale
C - percentage of anticipated sales
D - unit sales
E - competitive absolute parity
F - comparative relative parity
G - objective and task
2. The numbers in brackets represent the numbers of companies
3. M.F.M.C.G. - manufactured fast moving consumer goods
D.C. & I.G. - durable consumer and industrial goods
C.B.S. - consumer and business services

Looking at the association between the advertising budget methods used and ownership, there are some notable differences between locally owned companies and U.S. subsidiaries in Canada. For example, the proportion of U.S. owned subsidiaries using the objective and task method (11 out of 14) is significantly higher than the proportion of locally owned companies (6 out of 13). On the other hand, locally owned companies appear to use the percentage of anticipated sales method more often (6 out of 13) than U.S. subsidiaries (1 out of 14). Furthermore, there is a relatively smaller proportion of U.S. owned companies using a combination of methods (5 out of 14) compared to Canadian owned companies (8 out of 13) and other foreign owned companies (6 out of 9). The differences are again statistically significant (at 0.05 level) and indicate that U.S. subsidiary companies in Canada tend to use just one single method more often than Canadian owned and other foreign owned companies. Of the 9 U.S. owned companies which use a single method, 6 use the objective and task method and the remaining 3 use the affordable method. For Canadian owned companies, it is 2 each for the objective and task method and the percentage of anticipated sales method and 1 for the affordable method. The three other foreign owned companies which use a single method employ methods different from one another - 1 each for the objective and task method, affordable method and unit sales method.

Turning to company performance, there is no clear relationship between it and the methods used. However, a couple of interesting observations can be made. One noticeable difference is the significantly higher proportion of companies with average performance in profit margin using the percentage of anticipated sales method and the comparative relative parity method compared to companies with above average performance. The proportion of companies with average performance in sales growth using the comparative relative parity method is also significantly higher than that for the above average performers. It may also be seen in Table 4 that all companies with below average performance in all performance criteria use the objective and task method. However, this somewhat unexpected result cannot suggest anything conclusive because of the small number of companies in this category (four).

In the questionnaire five budgetary phases are identified for the respondents to check whether or not these phases are participated in by the major internal departments and external parties. The returns indicate that there is no significant difference between the pattern of budgetary phases and appropriation methods chosen (Table 4). As would be expected, the marketing/sales department is responsible for the bulk of advertising budget responsibilities except for approval of the final budget. The involvement of the other internal departments varies from one phase to another, but is evidently related to their traditional

TABLE 4
Participation of Internal Departments and External Parties

	No. of Companies Participating in Phase				
	"A"	"B"	"C"	"D"	"E"
Internal Departments					
Finance	8	15	9	22	11
Marketing/Sales	31	32	15	32	24
Production	3	4	2	3	1
Research & Development	1	0	0	1	0
Top Management	4	13	34	1	0
External Parties					
Advertising Agencies	17	9	4	16	22
Affiliated Companies	0	1	2	1	1
Distributors	0	0	0	0	0
Retailers	0	1	0	0	0

Notes: A - drafting the preliminary budget
B - scrutiny of the preliminary budget
C - approval of the final budget
D - allocation and control of the budgeted expenditure
E - submitting the report on advertising expenditure

functions; for example, the finance department in allocation and control of the budgeted expenditure and top management in giving the final approval. Production and research and development departments have minimal involvement in all phases of the advertising budgetary process.

Of the four external parties, the advertising agency plays a conspicuously active role in three of the five phases - drafting the preliminary budget, allocating and controlling the budgeted expenditures and submitting the report. Again, however, there is no clear association between methods chosen and the involvement of the company's agency. The other three external parties - affiliated companies, distributors and retailers play a limited role. Unexpectedly, the influence of government regulation is perceived to be moderate to strong by 12 companies even though there are no government regulations restricting the use of advertising budget appropriation methods in Canada. If any at all, the influence would only be indirect - through restrictions on the use of certain advertising media or messages.

The overwhelming majority of the responding companies have a high opinion of the effectiveness of advertising, perhaps because they are the top advertisers in Canada (Table 5). On a scale of 1 (= 'not effective') to 10 (= 'very effective'), the average is a 8.1. Eight companies give a rating value in excess of 8, fourteen companies an 8 and nine companies below eight. Five companies have not passed any judgment. Somewhat strangely, whereas the other methods do not have any apparent association with the perceived effectiveness of advertising, the most popular method - the objective and task method, appears to be much more commonly used by companies which give the effectiveness of advertising a lower rating! Whereas only three out of eight companies which give a rating above 8 use the objective and task method, eight out of nine companies which give a rating below 8 use this method. The proportions are significantly different, and may suggest that the less

TABLE 5
Methods Used and Perceived Effectiveness of Advertising and Percent of Promotion Budget on Advertising

	Methods						
	Comb.	A	B	C	D	E	F
Effectiveness*							
Above 8 (8)	3	4	1	1	1	1	3
Eight (14)	9	7	4	6	1	2	5
Below 8 (9)	5	4	0	3	1	0	2
No answer (5)	2	2	0	1	0	0	1
% of Promotion on Adv.							
70% or more (10)	4	4	2	3	1	1	0
40%-69% (15)	10	9	3	5	2	2	7
Below 40% (10)	4	3	0	3	0	0	2
No answer (1)	1	1	0	0	0	0	1

Notes: 1. Comb. - combination of methods used
A - affordable
B - percentage of last year's sale
C - percentage of anticipated sales
D - unit sales
E - competitive absolute parity
F - comparative relative parity
G - objective and task
2. The numbers in brackets represent the numbers of companies.
3. * - within a scale ranging from 1 (very ineffective) to 10 (very effective).

confidence a company has on the effectiveness of advertising, the greater the tendency for it to carefully lay down its objectives and list the required tasks in budgeting for its advertising expenditure.

On average, the responding companies spend more than one-half of their promotion budget on advertising. Ten companies spend 70% or more, fifteen companies 40-69% and ten companies less than 40%. Somewhat surprisingly, the percentage of promotion budget spent on advertising does not seem to be positively correlated with the number of budget methods employed. Of the 10 companies which spent 70% or more of their promotion budget on advertising, only 4 use a combination of methods, and all these four use exactly two methods. In contrast, 10 out of the 15 companies which spend 40-69% of their promotion budget on advertising employ a combination of methods, and these 10 companies, on average, use 3.3 methods ((38-5)/10). Another notable difference between these two groups of companies is that the latter group uses the objective and task method much more often than the former group (10/15 versus 3/10). Furthermore, not a single one of the companies which spend 70% or more of their promotion budget on advertising uses the comparative relative parity method, whereas close to one half of those spending between 40% and 69% of their promotion budget on advertising use this method. The differences in these proportions are all statistically significant.

As a group, the companies which spend less than 40% of the promotion budget on advertising behave more similar to the 70% or above group than the 40-69% group. There is also 4 out of 10 companies in this group which employ a combination of methods, and these 4 companies on average use 2.5 methods.

Concluding Remarks

This study sought to investigate the budgetary methods used by top Canadian advertisers and their budgetary process. In common with Patti and Blasco (1981) and Hooley and Lynch (1985) the findings indicate that the more sophisticated budgeting methods are more often used by the large companies. Thus, there is good support to the first proposition (P1). There is also some support to the second proposition (P2) that companies in fast moving consumer goods industries tend to use more sophisticated methods than companies in other sectors, as noted by Hooley and Lynch. However, as companies in the fast moving consumer goods industries make up the bulk of the sample in this survey, this empirical support must be accepted with some caution. In contrast, support for P3 is lacking in the survey results. There is no statistically significant difference between company performance and methods chosen; but again, some discretion must be applied since the judgement of performance is made by the companies themselves and few have admitted to a below average performance.

None of the propositions relating the methods used with the budgetary process receive convincing support from the survey results. There is no conclusive evidence for P4 since the marketing/sales personnel are involved throughout in most companies, notwithstanding the methods used. And surprisingly, rather than the objective and task being positively associated with a better opinion on the effectiveness of advertising, it is linked to lower ratings! A plausible explanation for this apparent anomaly is that the less confidence a company has in the effectiveness of advertising, the more likely it will be more careful and will use a more sophisticated method to decide how much to spend. Finally, P6 is neither entirely validated or invalidated. Companies spending more than 70% of their promotion budget on advertising tend to use less sophisticated methods, but so are companies which spend less than 40% of their promotion budget on advertising. It is the companies in the middle range - companies spending 40-69% of their promotion budget on advertising that employ the objective and task method most often. Most likely, companies balancing media and promotion expenditures may be less certain of the effects of each and, therefore, objectives are applied to monitor performance between them.

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DEFINING AND MEASURING COMPANY IMAGE

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Abstract

Some terms are so basic to a discipline that it is difficult to define them using only other terminology from within a discipline. The concept of corporate image is one such foundational term. The purpose of this paper is to review the various definitions of corporate image which have been proposed over the years and to attempt to develop a synthesis. A model is developed to differentiate among the concepts of corporate personality, corporate identity and company image. A special emphasis is placed on identifying the dimensions which underlie corporate image. Recommendations are made for measuring this important concept, depending upon the stakeholder group of interest to the researcher.

Introduction

Images play an important role in influencing the way the public responds to promotional information about an organization. With respect to product information, the influence of image on consumer response to the product has been likened to the "placebo effect" in testing for drug effectiveness (Dichter 1985). Just as a drug's effectiveness may be enhanced when the patient has a picture of the medication's benefits, the consumer's acceptance of product information may also be influenced by a general image of the product, the product category or the product's manufacturer.

A variety of images have been identified in marketing; store image, brand image, ad image and company image represent a few examples. This paper reviews how one of these images, company image, has been defined and measured in the marketing literature. A particular emphasis is placed on determining whether or not the term has been consistently defined over time. The paper distinguishes company image from the related concepts of corporate personality and corporate identity. A model is proposed showing the relationship among the three related terms: corporate personality, corporate identity and corporate image. (The terms "corporate image" and "company image" are treated as synonyms in this paper.) Having positioned company image in this model, a definition of company image is proposed and discussed. Finally, the implications of this definition for measuring company image are explored.

Corporate Personality, Corporate Identity and Company Image

Companies, like individuals, have identifiable characteristics. These characteristics comprise a company's personality. The characteristics can be quantitative or qualitative in nature. Some quantitative characteristics are the size of operation, the number of outlets, the number of employees and the volume of sales. Some qualitative characteristics are the company's

involvement in the community, the quality of its services and products, the friendliness of its personnel, and its reputation for innovation. These quantitative and qualitative characteristics collectively form the corporate personality. The term, corporate personality, refers to who and what the company is rather than how the company is perceived by the public. In contrast, corporate image (or company image) focuses on public perceptions of the company. Corporate personality captures an objective reality whereas corporate image captures subjective perceptions of reality.

Closely related to the concept of corporate personality is the term, corporate identity (see Figure 1). Corporate identity is analogous to ideal social self-image. Ideal social self-image is that image which the corporation would like the public to hold (Sirgy 1982). In an attempt to influence the public's perception, an organization chooses from its personality those characteristics it wishes to emphasize to a particular group. This carefully selected subset of characteristics is the corporate identity. The company articulates through its words, symbols and actions, what it is, what it stands for, and what it does (Topalian 1984).

The company by selecting and projecting a corporate identity seeks to influence the image of the company held by the public or some segment of the public. The corporate identity provides cues and physical manifestations (e.g., brand symbols, corporate reports, corporate sponsorship) that direct the public toward personality characteristics which the company has chosen to emphasize (Pharoah 1982). Corporate identity is not company image but corporate identity influences corporate image. Corporate identity represents the organization's ideal company image. However, the corporate identity projected by the company is only one of many sensory perceptions related to or associated with a company that the public encounters. Therefore, it is unlikely that the public's image of the company will mirror the corporate identity (Baker 1962).

Company image refers to the impression of a particular company held by some segment of the public (c.f. Spector 1961, Little 1968, Margulies 1977, Topalian 1984). Company image is ultimately decided by the public. In contrast corporate personality and corporate identity are more directly controllable by the organization. Although company image is, by definition, outside the direct control of the corporation, the corporation can influence and shape company image by the corporate identity it chooses to project. Therefore, company image is derived partially from corporate characteristics.

The relationship among corporate personality, corporate identity and corporate image is depicted in Figure 1. As the figure illustrates, promotion managers choose a subset of the corporation's characteristics to represent the identity of the corporation. The individual consumer or

investor interprets the corporate identity, in light of all other information that the individual has about the company, and forms an image of the corporation. Under this conceptualization, corporate image captures the expectations, attitudes and feelings which the public has about the nature and characteristics of the company (Pharoah 1982).

Definition of Company Image

After reviewing 29 articles over a 30 year period relating to company image, we concluded that the definition of company image has remained stable and consistent over time (see Table 1). Company image has been defined generally as (1) an overall (2) perception of the company (3) held by different segments of the public. An analysis of the definition of company image indicates that a company does not have a single image but instead has several images (Dowling 1976). Furthermore, a careful review of the literature reveals that company image is inherently multidimensional. Both of these factors have significant implications for measuring corporate image.

Fundamental to understanding the definition of company image is an understanding of the concept, perception (c.f. Baker 1962, Little 1968, Dowling 1988). A corporate image is an impression or perception. The impression includes both known facts and inferences. An individual interprets information based on external and internal sensory experiences (MacInnis and Price 1987). An image, like a painting, is not an exact reproduction of the object (company) because images include the individual's feelings and beliefs. An image is also a perception including intangible reactions to the visual, symbolic, auditory and tonal compositions associated with words or actions (Martineau 1958). Perception suggests that company image is not reality but a distorted mirror of the corporate personality.

Another aspect of the definition of corporate image is that the perception being created is an overall or total impression. The image to be reflected is one that encompasses all of the company functions and roles, and therefore company image is multidimensional. Company image includes information and inferences about the company as an employer, as a seller, as an investment and as a corporate citizen. Information about a company's products, management, financial structure, employees and position within an industry can be communicated to various groups through advertisements, press releases, news stories, the demeanor of its employees and other forms of communication.

A third aspect of the definition of corporate image is that the image is held by different segments of the public. The definition anticipates the probability of multiple company images by acknowledging that the public consists of a variety of stakeholder groups. The different segments include customers, stockholders, employees, distributors, suppliers, competitors, government and the local community (Martineau 1958, Britt 1971a, Margulies 1977). Each of these publics will base its image of the company on information and inferences relevant to its particular interest. For example, a customer's image of the company will be affected significantly by the customer's personal experience with the company's

products, and in contrast, an employee's image of the company will be influenced by wages, opportunities for advancement and other work-related criteria. The various publics that form images of the company will have access to different sources of information and will process the information with different frames of reference.

Table 1 lists chronologically the definitions of company image explicitly or implicitly used in the 29 articles reviewed. Although the definition of company image as an overall perception of a company held by different segments of the public is consistent over time, the above analysis suggests some problems in measuring company image. By definition company image is multidimensional because it seeks to capture an overall or total impression of the company. Therefore, a measure of company image would include a sample of questions drawn from each corporate function and interaction. An instrument that fails to address all dimensions may not be measuring company image but rather some portion of company image. Another difficulty that arises from the definition is that the image may vary among groups. An employee group may hold a different image of the company than would a consumer group. These issues are explored below.

Measuring Company Image

One issue in measuring company image is whether the method or instrument captures an overall impression of the company. Since company image is an overall impression, it should include dimensions of the company as an employer, as a corporate citizen, as a seller and as an investment. A measure of corporate image that is based on only one or two of these dimensions is not measuring an overall impression of the company. An overall perception of a company is derived from its operating performance, the quality of its products, services, facilities and people, its earnings ratio, its material, financial, and human resources, its wage and salaries levels, its employee benefits, and its social performance (Little 1968).

There have been attempts to create an instrument that elicits from respondents a broad based rating of corporate image. Spector (1961) developed a list of 45 statements pertaining to all aspects of the company. Included in Spector's listing were statements inquiring into whether the corporation was pioneering, ethical, financially sound, shrewd, well-organized, friendly, and flexible. Tucker (1961) asked respondents to rate company image using a bipolar scale that included opposite terms such as "friendly/distant," "easy to deal with/hard to deal with," "progressive/set in their ways," and "interested in community/interested in profits only." MacLeod (1967) developed a list of several dozen phrases that could describe a company with respect to its products, customer relations, reputation as an employer and civic responsibility. More recently, Dowling (1986) identified that corporate image included ratings of the company with respect to its employment practices, its reputation for product quality and innovation, the soundness of its financial condition, and its interest in the community.

The question arises whether measuring company image as an overall perception of the company provides strategic insights for management. To what extent will a particular segment have information about a company as an

employer, a seller, an investment and a corporate citizen? A consumer group's image of the company will be based primarily on its opinion of the company's products and services. Even if asked about the company's reputation as an employer or a corporate citizen or an investment, it is likely that those responses will be influenced significantly by the consumer's opinion regarding the company's products and services. There exists the possibility that a measure of "company image" in that situation may more accurately be a measure of "brand image." It is possible that a consumer when asked about a company's reputation as an employer simply infers from good product quality that a company is also a good employer. The possibility of a halo effect in the responses represents another threat to the validity of the measurement. Therefore, it is important to design instruments that measure company image with respect to factors of interest to a particular segment of the public.

Several authors have taken this approach in designing questions to measure company image. With a focus on consumers' image of a company, Britt (1971) suggested that corporate image be viewed as a mix of eight primary factors: (1) national origin of the corporation and its products; (2) the container in which the product was placed; (3) the name of the company and its brands; (4) the design and graphics of the company stationary and product packaging; (5) where the products are sold; (6) the relationship between employees and customers; (7) advertising, and (8) promotion. These eight factors reflect a decidedly product-oriented base to formation of company image appropriate for a consumer audience. Gronroos (1985) suggests that the image of a service firm held by customers is based on the technical and functional quality of the service. Technical quality refers to whether the customer received the expected service, and functional quality refers to the manner in which the service was provided. Elbeck (1988) identified variables of interest to users and potential users of psychiatric hospitals. He measured this group's image of psychiatric hospitals on such factors as staff empathy, gardening facilities, patient privacy, and patient physical activity. In an article focusing on the image of accounting firms held by clients, Cottle (1988) identified the following factors as important to the client's formation of company image: appearance of reports, and other tangible products, office facilities, combined impressions of the firm's personnel, and the interaction between the firm personnel and clients.

Although these measures are appealing and may provide marketing insights for a firm, it is inappropriate to label these as measures of company image if only one dimension of company image is covered in the questions. For example, Cottle's measure of company image considered only product or service attributes, it did not measure the investment or employee attributes of the firm. This type of one-dimensional approach to measuring corporate image fails to recognize that consumer impressions of a company can be influenced by more than just product or service factors. For these reasons, a measure of company image that preserves the multidimensionality of the term and focuses on matters of interest to a particular group would generate a more accurate reading of company image. This approach was taken by Winters (1986, 1988) in two studies of the image of a major oil company among consumers. Winters divided the attributes of a company into three factors:

business conduct, social conduct and contributions. Business conduct included respondent ratings on quality of products, good stock investment and good employer. Social conduct was measured by ratings on concern for the environment, cares about the public good and makes too much profit. Contributions were based on the respondent's perception of the extent of a company's donations to charities and cultural events. These three factors were then used to estimate the overall favorability of the company. This approach captures the multidimensionality of company image but also allows for the separate analysis of the different dimensions. By partitioning company image into its various dimensions, the relative importance and influence of each dimension on the group's overall perception of the company can be determined. Management will have information that can help it identify weaknesses in the company image held by a particular audience.

Summary

Corporate image is defined consistently as an overall impression of a company held by segments of the public. This consensus regarding the definition of company image is important, since it has been reported that other related concepts, (e.g., brand image) have not been consistently defined and operationalized across time (see Dobni and Zinkhan 1989). There is also widespread agreement that a company will have more than one image and that these images are determined by factors of interest to a group, information available to the group and their frame of reference.

An analysis of the definition of company image reveals two factors to be considered in measuring company image. First, the measure should reflect the multiple dimensions of the definition. Second, the measure should be oriented toward gathering information on factors of interest to a particular group. If the particular group consists of consumers, company image would be measured by inquiries that emphasized product or service attributes but also included questions relating to the attributes of the firm as an investment, an employer and a corporate citizen.

The term corporate image is distinguishable from the terms, corporate personality and corporate identity. As argued here, corporate image is an impression that is derived partially from corporate personality and corporate identity. To date, corporate image has been an intuitively useful concept for aiding in the development of promotional strategy. One area of research that warrants further analysis is whether the concept, retail image, differs significantly from the concept of company image. By comparing and contrasting these two concepts it may be possible to improve the measurement of both concepts.

FIGURE 1
TRANSFORMING CORPORATE PERSONALITY
INTO CORPORATE IMAGE

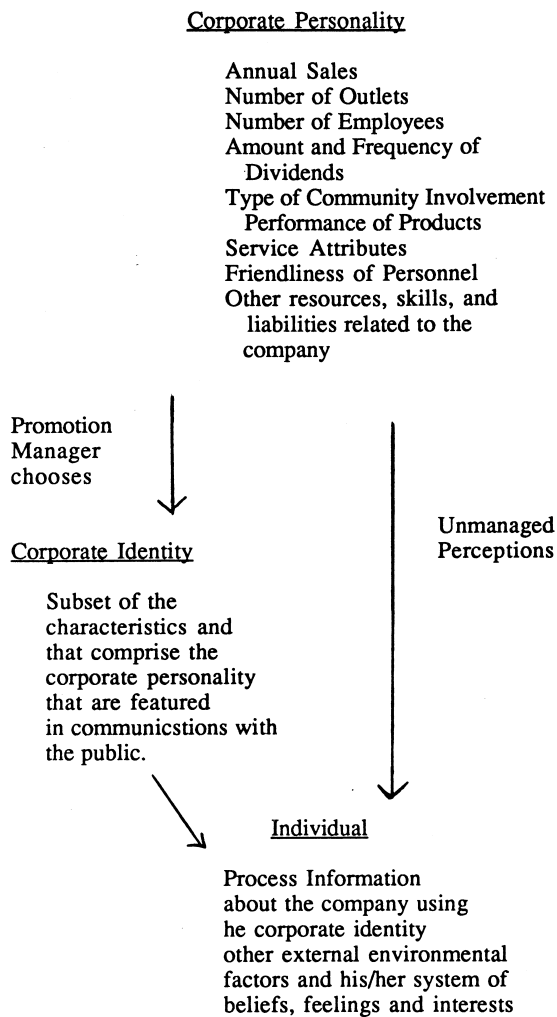


TABLE 1: DEFINITIONS OF CORPORATE IMAGE

YEAR	AUTHOR(S)	DEFINITION
1958	Martineau	This article deals exclusively with corporate image without explicitly defining it. The sense of the article suggests that corporate image is a stereotype held by the public based upon both functional meanings (quality, service, price) and emotive meanings.
1959		This article does not explicitly define corporate image. However, it does identify various groups who hold images of the company. These groups are customers, stockholders, employees, trade, community, government, and financial.
1961	Tucker	Corporate image is the public attitude toward it.
1961	Spector	The sum total of the public perceptions of the corporation's personality is what we refer to as the corporate image.
1962	Hill	An abstraction about a company based upon sensory impressions received by an individual. Company images vary widely from public to public.
1962	Baker	Corporate image is a person's spontaneous image of a company. It is a composite of all the things associated with the organization and its products.
1962	Cox	This article does not explicitly define company image. The sense of the article suggests that it is a visual representation of the company built upon a company's character. It is the company's reputation.
1967	MacLeod	Company image is company reputation. A company image has three levels which build upon and influence one another. The levels are familiarity, favorability, and specific ideas or attributes associated with the company.

1968	Little	Images are composites of impressions. A company has many images held by different people for different reasons. Public images are intangible.	1984	Gurol and Kaynak	Corporate image is its reputation and credibility among consumers.
1971	Britt	This article does not explicitly define company image. It states that a company has several publics holding images.	1984	Gronroos	The corporate image is the result of how consumers perceive the firm.
1971	Britt	Images are mental pictures people form concerning companies. Images are public stereotypes.	1985	Gray and Smeltzer	Corporate image is the impression of the overall corporation held by its various publics.
1972	Furse and Steilen	Corporate image is not explicitly defined in the article. Generally, it is referred to as public perception of the company.	1986	Dowling	An image is the set of meanings by which a company is known and through which people describe, remember and relate to it. It is the net result of the interaction of a person's beliefs, ideas, feelings and impressions about the company. A company will not have an image-- people hold images of the company.
1977	Margulies	Image is the perception of the company by its various publics. The publics include the community, customers, employees, the press, present and potential stockholders, security analysts, and investment bankers.	1986	Kilbourne and Mowen	Image refers to the public's general perception or feelings about the company.
1977	Davi	Corporate image is essentially the total impression given by a company to those with whom it comes in contact.	1986 1988	Winters	The article does not contain an explicit definition of corporate image. Generally, described as public attitudes toward the company.
1978	Marton and Boddewyn	Corporate image has a qualitative nature. It refers to the total impression, perception or reputation of the company.	1987	Abratt, Clayton, Pitt	The article does not explicitly define corporate image. Generally, it is referred to as the public perception of the company.
1979	Sethi	The image of the corporate personality held in the minds of various publics: stockholders, employees, consumers, suppliers, and potential investors.	1988	Dowling	Corporate image is the total impression an entity makes on the minds of people. It is linked to the corporate personality.
1982	Pharoah	Corporate image refers to the expectations, attitudes and feelings which consumers have about the nature and underlying reality of the company as represented by its corporate identity.	1988	Cottle	Company image is the mental picture people have of the company.
1984	Topalian	Corporate image of an organization is the profile -- or sum of impressions and expectations of the organization -- built up in the minds of individuals who comprise its publics.	1988	Elbeck	Image concerns the attitudes of people toward an organization, how well they understand it and what they like and dislike about it.

References Available Upon Request

Abstract

The extent of gender role stereotyping in French and English television advertising in Canada is compared to that previously found in the U.S. and in Mexico. Even after removing advertisements for clothing and personal and beauty products, the extent of role bias in Canada in 1989 is no better than that in the U.S. and in Mexico in 1984, although it is manifested in different ways.

Literature Review

Does advertising create prejudicial sex role stereotypes, or does it merely reflect men's and women's roles in society? In their landmark 1971 study, Courtney and Lockertz examined print advertisements in the U.S. and found that only 12% of the paid workers shown were women, but that 33% of the full-time labour force was female. Furthermore, women were much more likely than men to be used in decorative rather than functional roles. Courtney and Whipple (1983) reviewed the considerable body of research done on this question during the intervening decade. The original study had been replicated, not only in the print media, but also in the broadcast media (Schneider and Schneider 1979). The consensus at that time, was that advertising still encouraged sex role stereotyping, although Lysonski (1983) showed that there was some improvement in the portrayal of female employment. Gilly (1988) in an analysis of 1984 television advertising in the U.S., Mexico and Australia, found that: "Male voices are much more likely than female voices to be used in voiceovers, women are portrayed as young more often than men, and men are more likely to be portrayed in independent roles whereas women are portrayed in roles relative to others." This is in spite of evidence that reducing the amount of gender role bias in advertising may increase its effectiveness. (Heslop, Newman and Gauthier, 1989; and Kilbourne, 1986.)

A question that has not attracted a great deal of attention, is whether some of this "bias" is due to actual purchasing behaviour rather than unfair sex role stereotypes. Is advertising creating unfair social stereotypes, or merely reflecting actual behaviour? Does the nature of the product advertised affect role stereotyping? Belkaoui and Belkaoui (1976) showed that advertisements for various items such as clothing, personal and beauty products use more women than men as models. This is not unexpected if women spend more than men on these product categories, but it will have an effect on the relative portrayal of characters as being functional rather than decorative. For example, Pasold (1976), in an analysis of print ads from the U.S., England, France, and Canada showed that much of the difference between the proportion of men and women shown working disappeared when advertisements for clothing and beauty aids were eliminated.

The object of this study is to compare male versus female roles in English and French Canadian

television advertising, and to see how they differ from those found by Gilly (1988) in the U.S. and Mexico. English Canadian television is dominated by U.S. programming and so our initial hypothesis is that there will be little difference between English Canadian ads and U.S. ones. A second hypothesis is that French Canadian ads should show less gender stereotyping. In the past 40 years, and particularly in the past 20, with the separatist movement strongly in support of women's equality, French Quebec has changed from a traditional stronghold of the Catholic Church, to a region with one of the lowest birth rates in the world. Quebec women, more than others in North America, are abandoning their traditional roles as housewives and mothers. This should be reflected in the advertising.

Another objective is to examine whether controlling for the number of clothing, personal and beauty advertisements reduces gender bias. If this is the case, accepted findings about sex stereotyping would have to be re-evaluated.

Research Methodology

The research design is a replication of the methodology used by Gilly (1988) who taped U.S. and Mexican advertising in September 1984, and Australian advertising in May 1985. The English and French television stations in Montreal with the largest numbers of viewers were simultaneously video-taped from 7:00 p.m. to 11:00 p.m. on a Tuesday night and then from 8:00 a.m. to 4:00 p.m. on Wednesday, during May 1989. To facilitate content analysis, the tapes were edited to remove programs, commercials for television programs, and station breaks. As in the Silverstein and Silverstein (1974) and Gilly (1988) studies, duplicates of commercials were not removed. The resulting sample consisted of 239 English and 313 French commercials.

All of the advertisements were coded by a twenty-five-year-old male student, with help from a female acquaintance of similar age, using the categories shown in [Tables I and III](#). (Derived from Gilly 1988.) No further guidance was given. During the post-coding debriefing, the coder indicated that the most salient actors had been chosen based on dialogue, movement, and how much attention they attracted. Wherever possible, coding had been done based on actual evidence rather than inferred clues. In ambiguous situations such as marital status, couples were assumed to be married (or living together) if they were shown in a domestic setting, or with children. It was noted that considerable judgement was called for in deciding what levels of some variables qualified for each category.

Reliability

Coding was checked by having a second individual (the author) recode a sample of 200 of the

advertisements. Because of concern that the independence of this recoding might have been contaminated by its proximity in time to the author's debriefing of the other coder, a second sub-sample of 100 advertisements was re-coded seven months after the initial coding. Only data from the second recoding is used in the reliability analysis.

TABLE 1
VARIABLES USED IN CONTENT ANALYSIS

VARIABLES CODED FOR EACH COMMERCIAL	
Product Type	What type of product is being advertised? (See Table 3 for product categories.)
Product User	Who is the product generally used by: 1. females, 2. males, or 3. either?
Voiceover	The off-camera voice is: 1. female, 2. male, 3. a chorus, or 4. not used.
Setting	Where is the commercial located: 1. home, 2. store or restaurant, 3. occupational setting, 4. outdoors, or 5. at some other location?
VARIABLES CODED FOR EACH CHARACTER	
Sex	What is the character's sex?
Age	What is the character's age?
Marital Status	The character's marital status is portrayed as: 1. married or living together, 2. single, or 3. not identified.
Employment	1. The character is shown in a work situation. 2. The character is shown in a non-work situation, but is probably employed. 3. No indication of employment is given.
Occupation	If the person is employed, it is as a: 1. professional or high level business executive, 2. entertainer or professional athlete, 3. middle-level business, or semi-professional, 4. nonprofessional or white collar, 5. blue collar, or 6. other.
Spokesperson	Does the character serve as the off-camera spokesperson for the product?
Credibility	If the character is a spokesperson, is his or her credibility based on: 1. experience as a normal user, or 2. expert knowledge?
Help	The character: 1. receives help, 2. provides help, or 3. neither?
Advice	The character: 1. receives advice, 2. gives advice, or 3. neither?
Role	The character primarily portrayed in the role of a: 1. spouse, boyfriend or girlfriend, 2. parent, 3. homemaker, 4. worker, 5. real life celebrity, 6. other.
Activity	Is the character portrayed as physically: 1. active, or 2. inactive?
Frustration	Is the character portrayed as: 1. frustrated, or 2. not frustrated?

These definitions are replicated from Gilly (1988).

Table II shows the degree of inter-coder agreement ranging from 80% for the setting of the advertisement to 100% for credibility source. Some of this agreement is due to the small number of categories, or the irregular distribution of data within those categories. A better way to measure reliability is by a test such as the symmetric lambda statistic, which indicates the proportional reduction in error that occurs when one uses a nominal variable to predict a second. In our case, the two nominal variables are different coders' categorizations of the same variables, arranged in cross-classification tables. For the variables "product user" and "credibility", the two coders are completely in agreement, and the symmetric lambda statistic equals 1.000. At the other extreme, for the variable "advice", the lambda statistic equals 0.000. This is very

surprising since the degree of inter-coder agreement for "advice" is 94%.

The explanation for this apparent paradox is that there are only 10 cases where either coder sees evidence of advice being given or received, compared to 155 cases where it is not. Of these 10 cases, the coders are only in agreement for one of them, hence the incredibly low lambda statistic. On the other hand, the percentage agreement ratio of 94% (156/166) is high because of the many cases where neither coder saw any evidence of advice.

There are no commonly accepted guidelines for acceptable levels of the symmetric lambda statistic, but if one interprets it as a nominal equivalent of the coefficient of determination, one could reject any variables where less than 50% of the variation in coding results is explained by the second coder's data. This suggests that we should ignore our findings relating to the variables: help, advice and frustration, and that we should be very cautious before accepting findings relating to the variable "activity".

Pairwise analysis of the reliability sample vs. the original sample shows that the correlation between the two coders was .879 for age. Similar differences in the means of male and female characters' ages appeared, but due to the smaller sample sizes, neither the recoded sample nor the pairwise selected subset of the original sample showed significant differences in these means.

TABLE II
INTER-CODER AGREEMENT FOR 100 COMMERCIALS

Variable	agree %	Symmetric Lambda
Product type	88%	.882
Spokesperson	97%	.684
Product user	100%	1.000
Credibility	100%	1.000
Voiceover	86%	.611
Help	95%	.333
Setting	80%	.695
Advice	94%	.000
Marital Status	93%	.627
Role	84%	.686
Employment	93%	.784
Activity	90%	.543
Occupation	82%	.714
Frustration	96%	.440

Differences in coding were subsequently analyzed and found to be the result of coding errors, of ambiguities in the advertisements, and of ambiguities in the original definitions. For example, is a diet formula a food or a medicine? What about a diet pill? When several categories for a variable appear, how does one select the dominant one? It is difficult to single out any one cause for the coding errors. The low lambda measure of reliability for "advice" appears to be due to all three factors, accentuated by the heavily skewed distribution.

Results

Our tables include results from the Gilly (1988) study for the U.S. and Mexico as a basis for comparison. Her percentages have been converted to frequency data for comparison with our current samples. Table III gives the distribution of product categories in the commercials studied. As shown, there is no significant difference between the English and French Canadian distributions. This is not surprising, and is advantageous because any differences in role stereotyping that might be found between English and French Canadian commercials cannot be ascribed to different distributions of product categories. There are significant differences between the Canadian, the U.S. and the Mexican product distributions. The obvious one is the lack of alcohol advertising in the U.S. advertisements. This might introduce product bias due to the preponderance of young people portrayed at leisure activities in the life style advertising commonly used for Canadian beer.

TABLE III
DISTRIBUTION OF COMMERCIALS

Product Category	Eng Cdn	French Cdn	USA	Mexico
Food, snack, soda	56	51	85	28
Personal and beauty care	25	30	30	32
Automobile & accessories	23	27	7	7
Restaurants & retail	32	63	24	10
Drugs and medicine	9	23	36	1
Appliances/furnishings	2	2	6	6
Institutional/pub. serv.	7	17	4	0
Alcoholic beverages	7	18	0	22
Pet food & related	2	4	7	0
Household cleaners	15	17	30	19
Clothing	4	4	11	12
Finance and real estate	13	8	3	7
Others	39	52	32	60

Chi Squared Value vs. Eng. Cdn: 18.4 53.4** 60.2**

Statistical Significance: * p<.05, ** p<.005.

The heavy emphasis on automotive advertising in Canada is primarily due, in this sample, to heavy advertising by one particular dealer in both languages. This too might cause sample selection bias. Fortunately, the distributions of commercials for personal, beauty care, and clothing are quite similar across countries, so our investigation into the impact of deleting these advertisements from the study will not be affected.

Comparison of General Attributes of Commercials

Table IV compares general attributes of commercials. The product user in all four countries is predominantly "either", indicating that most products can be used by either sex. The first row of chi square values indicates a significant difference between female and male representation in each country. Women tend to advertise products aimed at women, and men generally advertise products aimed at men. This does not indicate inappropriate role stereotyping. The second row of chi square values indicates that there is no significant difference among product usage for females in the four countries studied.

The setting in which the commercial is filmed is significantly correlated to the sex of the characters in the ads of all countries but Mexico. Home

settings are more likely to show women, and occupational settings are more likely to show men. English and French Canadian advertisements portray females in similar settings, but English Canadian ads differ from those of the U.S. and Mexico, primarily in the increased number of females shown in occupational settings. These results indicate that there is sex role stereotyping with respect to characters shown in various settings. This bias is lowest in Mexican advertising.

TABLE IV
COMPARISON OF GENERAL ATTRIBUTES OF COMMERCIALS

	English		French		U.S.A.		Mexico	
	Female	Male	Female	Male	Female	Male	Female	Male
Product User (frequency)								
Female	30	1	32	2	22	3	30	4
Male	3	8	2	10	1	4	8	12
Either	157	220	194	229	146	125	83	86
X ² F vs M	36.6		34.4		13.5		19.3*	
X ² F Eng vs F other			n.s.		n.s.		10.3	
Setting								
Home	49	46	75	57	57	30	31	21
Store	25	22	22	17	15	9	19	14
Occupational	20	48	24	63	6	20	1	3
Outdoors	71	76	65	56	19	10	15	19
Other	25	37	42	48	72	63	54	45
X ² F vs M	10.8		21.3		16.5**		n.s.**	
X ² F Eng vs F other			n.s.		62.4		56.2	
Voiceover								
Female	33		47		34		23	
Male	167		213		184		136	
Chorus	12		19		26		28	
None	27		33		30		17	
X ² F vs Male	50.6**		59.0**		58.5**		53.7**	
X ² F Eng vs F other			n.s.		n.s.		10.4	

Statistical Significance: * p<.05, ** p<.005.

The sex of the off-camera person doing the voice-over is predominantly male in all four cases, and all four are statistically significant. There is no difference between the degree of this bias exhibited between countries or languages. Voice-overs are the most consistent source of gender bias found in the study, and, because of their subtlety, are perhaps the most damaging.

Comparisons of Female vs. Male Roles: Demographic Variables

Table V compares the demographics of female vs. male roles in commercials. The unit of comparison is the character in the advertisement, rather than the advertisement itself. The first factor studied is the age of the characters portrayed. Our study estimates the age in years, whereas the Gilly study used three categories: less than 35, 35 to 55, and greater than 55. In her case, both the U.S. and the Mexican samples show males are older than females at a statistically significant level (p<.005). For the Canadian data, males are also older than females, but the difference is only significant for the English sample, (3.2 years; p<.005), not for the French (1.5 years). When clothing, beauty and personal items are removed from the analysis, (English #2), the difference is no longer significant. Thus it would appear that there is less role stereotyping with respect to age in Canadian advertising, particularly in the French sample.

Marital status shows no significant differences between female and male roles. In both cases,

only a small portion of the sample is evidently married or living together. The difference between English and French or U.S. female marital distributions is not large.

Whether someone is shown as being employed or not has been a major source of role discrimination between the sexes in the past. In our study, although the number of employed characters is small, we find there is again a significant difference in the direction one would expect. Men are shown as being employed more than women.

TABLE V
DEMOGRAPHICS OF FEMALE VS MALE ROLES

	English		French		U.S.A.		Mexico		Eng #2	
	Female	Male	F.	M.	F.	M.	F.	M.	F.	M.
Age										
Ave age	28.4	31.6	29.9	31.4					30.7	
32.0										
t-test	2.93**		n.s.						n.s.	
X ² F vs M					X ² =16.6**	X ² =56.9**				
					(Gilly 1988)					
Marital Status										
Married	24	24	12	12	35	27	14	12	22	22
Not married	8	16	7	4	1	0	7	5	7	15
Unknown	158	189	209	226	133	105	99	85	118	172
X ² F vs M	n.s.		n.s.		n.s.		n.s.		n.s.	
X ² F Eng vs F other			7.8		8.5		n.s.		n.s.	
Employed										
At work	22	53	37	73	27	44	18	36	21	51
Probably	4	15	5	12	15	25	4	8	4	15
Not clear	164	161	186	157	127	63	98	58	122	143
X ² F vs M	15.7*		16.7*		23.9*		16.2		9.5	
X ² F Eng vs F other			n.s.		10.4		n.s.		n.s.	
Occupation										
Executive	2	21	5	14	0	6	0	1	2	19
Entertainer	1	12	18	11	11	14	7	12	1	12
Mid-manager	10	19	7	33	15	20	2	10	10	19
White colla	10	2	4	9	2	5	9	2	10	02
Blue collar	0	11	2	12	6	17	1	6	0	11
Other	3	3	6	6	8	7	3	13	2	03
X ² F vs M	28.6*		19.6*		n.s.		16.1		27.0*	
X ² F Eng vs F other			19.2*		18.9		11.2*		n.s.	

Statistical Significance: * p<.05, ** p<.005.

There is no significant difference between females portrayed in our study, and those studied by Gilly in 1984. In each case, women are portrayed as making up a much smaller proportion of the workforce than is actually the case.

In all four countries, women are less likely than men to be shown as employed, however, in English Canada at least, this effect is reduced by eliminating personal product ads. (English #2) Gilly shows no significant difference between occupational level for the two sexes in the U.S., and only a small difference in the Mexican data (p<.05). In the Canadian data, there are differences. (p<.005)

Comparison Between Female and Male Roles: Advertisement Approach

Table VI continues the comparison of female vs. male roles, but this time for each character's attributes that are derived from the advertisement itself. The first issue is whether the on-screen character is also used as the spokesperson. In this case, there is no significant difference between men and women in the English, U.S. and Mexican samples. Only the French sample shows male characters as spokespersons significantly

more frequently. Considering the great imbalance towards males when the spokesperson is off-camera shown in Table 2, little of this bias appears to affect the role of spokesperson when that person is also an actor in the advertisement. There is a very significant difference between the ratio of female (and male) spokespersons in the English sample and that found in the earlier U.S. and Mexican studies. In Canada on-screen actors of either sex are much less likely to be spokespersons, but this does not affect sex-role bias.

TABLE VI
AD APPROACHES: FEMALE VS MALE ROLES

	English		French		U.S.A.		Mexico		Eng #2	
	Female	Male	F	M	F	M	F	M	F	M
Spokesperson										
Yes	21	32	36	65	102	74	43	41	19	29
No	169	197	192	177	67	58	77	61	128	180
X ² F vs M	n.s.		8.5		n.s.		n.s.		n.s.	
X ² F Eng vs F other			n.s.		96.6*		27.6*		n.s.	
Credibility Source										
User	20	12	20	13	87	50	36	21	18	10
Authority	1	20	16	52	15	24	7	20	1	19
X ² F vs M	17.7*		13.3**		7.8		10.2		17.1*	
X ² F Eng vs F other			10.0		n.s.		n.s.		n.s.	
Help										
Recipient	5	6	8	5	13	13	11	3	5	05
Provider	6	10	3	8	22	16	4	10	5	10
Neither	179	213	217	229	134	103	105	89	137	194
X ² F vs M	n.s.		n.s.		n.s.		7.0		n.s.	
X ² F Eng vs F other			n.s.		18.0		6.5		n.s.	
Advice										
Recipient	1	2	5	2	20	12	14	4	0	01
Provider	1	1	4	2	12	21	11	9	1	00
Neither	188	226	219	238	137	99	95	89	146	208
X ² F vs M	n.s.		n.s.		6.1		n.s.		n.s.	
X ² F Eng vs F other			n.s.		33.4*		36.2*		n.s.	
Role										
1 Spouse etc.	29	31	29	27	63	28	56	31	27	29
1 Parent	28	28	16	9					23	23
1 Homemaker	1	0	10	1					1	00
2 Worker	18	23	9	20	51	77	28	52	18	23
2 Celebrity	0	6	27	13					0	06
2 Narrator	9	23	24	51					8	22
3 Other	105	118	113	121	55	27	36	19	70	106
X ² F vs M	n.s.		n.s.		28.1**		18.3**		n.s.	
X ² F Eng vs F other			32.4*		22.1*		19.0*		n.s.	
Activity										
Active	31	58	38	34	21	10	3	4	23	52
Not active	159	171	190	208	148	122	117	98	124	137
X ² F vs M	5.0		n.s.		n.s.		n.s.		4.4	
X ² F Eng vs F other			n.s.		n.s.		14.1*		n.s.	
Frustration										
Frustrated	8	18	7	8	19	13	12	2	6	15
Not frus.	182	211	221	234	150	119	108	100	141	194
X ² F vs M	n.s.		n.s.		n.s.		4.7*		n.s.	
X ² F Eng vs F other			n.s.		6.4		4.1		n.s.	

Statistical Significance: * p<.05, ** p<.005.

If a female character is used as a spokesperson, there is a significantly greater probability that her credibility will be based on her experience using the product, rather than as an expert authority. The opposite is true for men. There is no significant difference between the English, French, U.S., and Mexican advertisements in this regard. All show a woman's credibility as coming from her experience as a user rather than from her position of authority in an organization.

Help, advice, and frustration are variables in our

study with very low symmetric lambda statistics, so we shall not attempt to interpret them. Gilly groups actors' roles in terms of relationships to others (spouse, parent, or homemaker) or as an independent individual (worker, celebrity, or narrator). There is no significant difference between men's and women's roles in the English Canadian or Mexican samples, but in the French and U.S. data, females are more likely to be in dependent roles than are males. In English Canada, both females and males are shown predominantly in dependent roles.

There is a slight bias towards females being less active than men in the English Canadian data ($p < .05$), but not in any of the other samples. The other difference is that females in Mexican advertisements are less active than those in English Canada ($p < .005$).

Discussion

To sum up, there is role stereotyping due to sex in commercials from English and French Canada in 1989, and although it differs slightly in how it is portrayed, the overall amount is very similar to that shown in the U.S. and Mexico in 1984. Eliminating advertisements for clothing, beauty and personal products reduces the significance of gender differences for age and employment level (Table V), but not for voiceover, occupation or credibility source. The most extreme area of discrimination, the sex of the off-camera spokesperson, has not improved at all. More than eighty percent of the time it is a male rather than a female telling the viewer what to do. Advertisers act as if they believe that men are much more credible authority figures than women.

Is this really true? Heslop, Newman and Gauthier, (1989) find that advertisements without gender-based role stereotyping are more effective with women. Further study is needed to determine whether female voice-overs are as effective as male ones, for female and for male audiences. Advertisers and broadcasters have been very slow to eliminate sex bias, but perhaps evidence that this bias has a financial as well as a social cost, might speed progress.

The study brings to light an interesting question about the conventional measure of inter-coder reliability. Kassarian (1977), in his landmark review of content analysis methodology, defines interjudge reliability as the percentage of agreement between two independent coders applying the same set of categories to the same content. He acknowledges that one would expect better agreement by chance alone on a two-category variable than on a five-category variable, but he supports the conventional measure saying that an agreement of 85% or over is satisfactory. Our data provides evidence that the 85% criteria may be inadequate, not only when there are few categories, but also if the distribution is heavily skewed. This distortion in the simple measure of percentage inter-coder agreement also raised by Scott (1955), calls into question the coding reliability of current content analysis studies such as those by Schneider & Schneider (1986), Gilly (1988), Gross & Sheth (1989), and others,

which test coding reliability by the percentage of inter-coder agreement.

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TOWARD CONCEPTUALIZING A MODEL OF DIRECT MARKETING RESPONSIVENESS IN CONSUMER ENVIRONMENTS

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Abstract

This paper proposes a conceptual model of consumer direct marketing response behavior. Divided into three major components, the suggested framework links the importance of the direct marketing firm and the consumer to the final outcome of a direct marketing program. Both response and non-response feedback behavior of consumers are shown as key ingredients to the management process. Specific research propositions are offered for each of the major stages in the model to give direction to future efforts.

Introduction

Unlike conventional channels of distribution, direct marketing accomplishes the flow of goods from producer to consumer without channel intermediaries, and emphasis is placed on media directed toward targeted individuals. Succinctly, it represents "an interactive system that uses one or more advertising media to affect a measurable response and/or transaction at any location" (Stone 1988, p. 3). More formally, direct marketing is a three-step process that involves promoting products to a target market, receiving orders, and delivering the desired goods (Akhter 1988). In short, direct marketers seek to elicit consumer responses without the intervention of traditional store-centered retailing. It is this dimension that stirs additional conceptual work. The purpose of this paper is to offer an initial attempt at conceptualizing direct marketing in the context of traditional marketing theory.

Background

Direct marketing has been referred to as direct mail, mail order, telemarketing, and direct response (Bauer 1987; Burdinski and Shanklin 1987; Friedman and Friedman 1980; Smallwood and Wiener 1987). More correctly, these terms reflect separate vehicles within direct marketing rather than direct marketing itself. For example, direct mail is promotional communications that is sent to consumers via the postal service and may be in the form of letters, postcards, or coupons. Mail order promotes via television, magazines, catalogs, brochures, or newspapers with orders placed through the mail, arranged over the telephone, or transmitted over FAX systems.

Some of the key characteristics of direct marketing that demonstrate its uniqueness include the combination of advertising and selling as a single function, the emphasis on programs to perpetuate repetitive buying and customer loyalty, the emphasis on specificity, and the benefits of direct feedback. Although direct marketing tools fulfil an advertising function, the fact that such tools can elicit a purchase response demonstrates the combination of advertising and selling as a single function.

Among the non-personal selling methods, the effective use of feedback is unique to direct marketing. Information such as "who are their buyers, what they buy, how often they buy, whether they buy by phone or by mail, how much they spend, and by what methods they pay" can readily be obtained by direct marketers (Stone 1988, p. 27).

To this point, much of direct marketing research has involved the application of various methodological techniques to solving management-oriented issues. This type of research has proved most beneficial to the discipline by providing the foundation for theoretical development. A conceptual model is essential as a means of analyzing approaches to the study of a field, the nature of a field, and bringing about congruency and direction among scientists. In addition, a conceptual model creates a foundation for the metamorphosis of a field to a science (Hunt 1976). Attempts at theory development should strive to be inclusive of the relevant components of the theory, be exclusive of the phenomenon it chooses to represent, and give direction to any hypothesized relationships and possess predictive ability (Alderson and Cox 1948; Farley and Ring 1970; Underwood 1975).

A Model For Direct Marketing

To date, attempts to conceptualize direct marketing process have been incomplete. A direct marketing response model is proposed in [Figure 1](#). The framework includes the organization, the prospective customer, and the outcome. It first examines the underlying nature of the organization. Next, the process focuses on the consumer as being a vital component to understanding response behavior via direct marketing. The final step is to determine the outcome of the effort and account for the feedback linkage to the organization. A detailed review of this process begins by examining the organizational typologies.

Organizational Typology

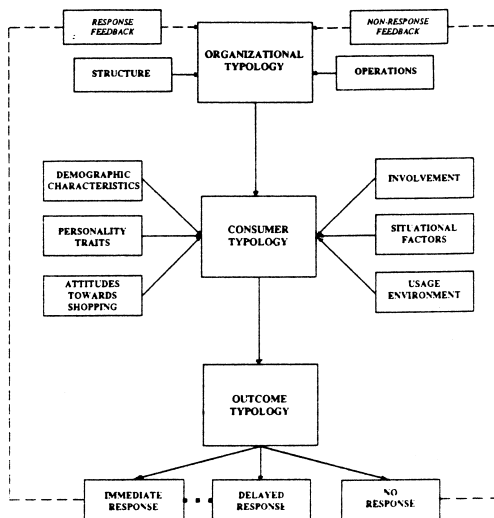
The nature of firms can generally be described based upon their organizational structure and operational format. Structurally, firms may be classified as being profit or nonprofit and professional or nonprofessional. Furthermore, Gardner et al. (1987) suggested that service organizations should be divided according to their degree of professionalism. Pettit (1987), for example, provides insights on applications in professional services settings.

Operational factors are critical for organizations developing direct marketing strategies, as well. These factors include level of managerial expertise, level of technology, product/service offering, number of years in business, organizational image, size of the organization and previous experience with direct marketing strategies. Level of expertise, level of technology,

and previous experience with direct marketing serve to influence directly the likelihood that organizations will implement or expand direct marketing programs.

FIGURE 1

A CONSUMER MODEL OF DIRECT MARKETING RESPONSE



According to Muldoon (1984) knowledgeable personnel with expertise in direct marketing form the foundation for a successful program. As well, product/service line, organizational image, number of years in business, and firm size can also influence the degree of involvement in direct marketing programs. For example, a well-known company name, a thorough understanding of merchandising, volume buying power, an existing fulfillment center to handle mailing, and an in-depth statistical knowledge of each customer's buying patterns combine to contribute greatly to the success of a direct marketing program. Specifically, we propose that:

- PQ1: Organizations composed of personnel with direct marketing expertise and computerized networks are more likely to implement a direct marketing program than an organizations lacking such expertise and technology.
- PQ2: Organizations with well-established reputations and company names are more likely to implement a direct marketing program than an organizations that are less well known.
- PQ3: Organizations having experience using direct marketing methods are more likely to implement direct marketing programs than are organizations that have not.
- PQ4: Organizations with greater resources and fewer budgetary constraints are more likely to implement a direct marketing program than are organizations with fewer resources and greater budgetary constraints.

PQ5: Organizations that market goods are likely to implement different direct marketing programs than are organizations marketing services.

PQ6: Organizations that have had positive responses to specific media in previous direct marketing programs will likely utilize this media in future programs.

Consumer Typology

Studies have suggested several factors contributing to consumer responsiveness for direct marketing strategies. These include demographic characteristics, personality traits, attitudes toward shopping, product/task involvement, and situational variable.

Demographic Characteristics. Numerous studies have shown that in-home shoppers ranked significantly higher than other shoppers in family income, education, and occupation of household head (Berkowitz, Walton, and Walker 1979; Gillett 1970; Stone 1983; Thompson 1971). Gillett (1970) suggested that the more affluent, highly educated shopper was likely to seek the shopping flexibility and convenience that mail and telephone shopping could provide. The Direct Marketing Association (Stone 1983) found that parents made more mail-order purchases of clothing than did singles or married couples without children. Furthermore, Lumpkin and Hawes (1985) found that catalog users tended to be married, home owners, primarily women, more affluent, and have children living in the home.

Personality Traits. Studies have shown that in-home shoppers tend to be information seekers, more innovative, and self confident than are traditional store shoppers (Berkowitz, Walton, and Walker 1979; Cox and Rich 1964; DeKorte 1977; Reynolds 1974; Riecken, Yavas, and Samli 1980; Schiffman, Schus, and Winer 1976; Spence, Engel, and Blackwell 1970).

To illustrate, Greenberg and Lumpkin (1981) found that mail order catalog shoppers of apparel were likely to seek more information and to be more socially minded than were traditional shoppers. Urbany and Talarzyk (1983) examined the implications of video-tex retailing and noted that in-home shoppers were more likely to be innovators as opposed to traditional shoppers. Furthermore, DeKorte (1977) found that in-home shoppers tended to be more self confident and considered this method of purchasing goods less of a risk than did traditional shoppers.

Involvement. Bloch and Richins (1983) suggested that involvement may be separated into product and task. Product involvement is the level of interest in the object or the relative parallel structure of the product to the individual's ego structure. Task involvement is closely related to the perceived risk regarding the nature of the task. If the purchase is needed immediately or the purchase is a means to completing a highly involved goal then greater involvement will be acknowledged in the purchase decision.

Houston and Rothschild (1978) suggested three types of involvement: situational, enduring, and response. Situational involvement reflects involvement with a particular situation and is influenced by product attributes such as brand, and product cost. Enduring involvement demonstrates the ongoing interest with the product. This may be the result of the close tie between the product and the individual's value system. Response involvement demonstrates the response an individual has regarding the extensiveness of the decision making processes.

Assael's (1983) model of involvement suggested that low and high levels of product involvement affected brand loyalty. In the case where there is high product involvement and significant difference between brands then individuals are likely to implement complex decision making processes or express brand loyalty. Where there is low involvement and significant differences between brands, experimentation in different brands or variety seeking is likely to occur. In the case where there are few differences between brands and high involvement then dissonance reduction of brands available or attribution will likely occur. And finally, where there are few differences between brands and low involvement, inertia or "spurious" brand loyalty will likely occur. DeBruicker (1979, p. 240) stated that "involvement levels increase according to the existence of perceived product differentiation along one or more relatively salient product attributes."

Given the above, limited research has been conducted regarding the impact of product/service involvement in consumer-oriented direct marketing use. Seitz (1989) found that a negative correlation existed between clothing involvement and catalog preference for apparel purchases. These findings did not support previous studies regarding clothing involvement and catalog patronage behavior. For example, Seitz (1987) found that heavy catalog shoppers tended to have a greater interest in clothing than did light shoppers. In a further study, Smallwood and Wiener (1987) found that fashion opinion leaders tended to be heavy catalog shoppers.

Situational Factors. This is a relatively new area of research proposed by Gehrt (1986) regarding prediction of in-home shopping behavior. Sheth (1983) also noted the influence of situational factors in his theory of patronage behavior. Belk (1975) states that situational factors include physical, social, temporal, and task definition dimensions. According to Gehrt (1986) situational factors include household time and financial resources. Sheth (1983) includes time and financial constraints but also includes the effort involved, brand availability, relative prices, sales promotion, friends, sales effort, and new brands. According to Gehrt (1986, p. 173) situational factors "intervene and influence individual perceptions before their manifestation in behavior..." Furthermore, Gehrt argues that families that place a high value on time will utilize time efficient search methods resulting in higher levels of shopping skill than families that do not place a high value on time.

Number and age of children also influence the amount of time devoted to a purchase resulting in varying information seeking behaviors. In the time poor environment experienced by many dual-income families, availability of household time is a situational factor that influences direct marketing use. Individuals that have more time available may enjoy shopping at stores as opposed to using direct marketing alternatives. For example, Korgaonkar (1981) found that recreational shoppers had more time to shop and therefore did not utilize catalog showrooms as a means to purchase goods.

Gehrt (1986) also pointed to financial resources as a situational factor worthy of study regarding direct marketing use. Research shows that in-home shoppers have more positive attitudes toward credit than store shoppers (Berkowitz, Walton, and Walker 1979; Cox and Rich 1964; Cunningham and Cunningham 1973; Greenberg and Lumpkin 1981; Lumpkin and Hawes 1985; Seitz and Sisler 1988). The use of credit for product or service purchases, the availability of credit, and the availability of the right credit offered by the organization may influence the likelihood of in-home purchasing. Companies today offer various methods of paying for purchases through the use of bank cards, store credit cards and payment plans with or without interest charges. One of these methods may or may not be suitable to the individual depending on existing financial conditions.

Usage Environment. This is also a relatively new area regarding patronage behavior. According to Sheth (1983, p. 24) usage typology reflects "situational and social settings in which a particular product class is to be used or consumed." Consumers may wish to purchase a good for themselves, or as a gift, or for personal or home use. These criteria may influence the likelihood of purchases made via direct marketing vehicles. Limited research in this area has suggested the inclusion of this variable into a conceptualization of direct marketing theory. To this issue, some marketers believe that direct marketing use is greater when consumers are buying for others as opposed to buying for themselves. This behavioral tendency is reflected in the large increase of direct marketing related sales during holiday periods. Specific research hypotheses offered include:

PQ7: Consumers that have higher education, occupation and income levels will likely utilize direct marketing vehicles to purchase goods than will other groups.

PQ8: Self confident, information seeking innovators will use direct marketing vehicles to a greater extent than other individuals to purchase goods.

PQ9: Individuals that are convenience oriented shoppers will use direct marketing vehicles to purchase goods and services.

PQ10: Situational factors that limit an individual's time for shopping will increase the likelihood of purchasing goods and services via direct methods.

PQ11: Product/service involvement will influence the likelihood of direct marketing channel use.

Outcome Typology

Upon receiving a direct marketing message an individual may choose not to respond, to delay a response, or to respond immediately to the product/service offering. Even if the individual decides not to respond to an offer this outcome provides important feedback to the organization that will result in either withdrawal of the individuals name from the database or the sending of additional information with the hopes of altering the initial non-response.

A second possible outcome is a delayed response. If there exists a high level of product or task involvement, an individual may choose to delay the purchase decision and seek additional information. Perhaps the individual's current financial or household situation is not conducive to a purchase currently but may change in the future and the purchase is likely to occur then. Gould and Voelkel (1988) examined consumers who did not respond to direct marketing efforts immediately and found that these individuals did respond to the product/service offering at a later point in time. Gould found that after five promotional offers were sent to these individuals a purchase of the offer was made.

The third decision possible is an immediate response in which the consumer purchases the product/service offering. This may be due to situational factors as time constraints regarding the needed product/service. Consumers with previous direct marketing shopping experience may be more likely to respond immediately to a favorable product/service offering then would be individuals who have not utilize such opportunities. The order provides immediate feedback to the organization regarding order fulfillment as well as modification of the database. At this point a relationship with the customer is established and continued correspondence is likely from the organization. Correspondence may include additional mailings of similar or different product offerings.

Bauer (1987, p. 38) examined direct response advertising and found that "the cumulative proportion of responses over time from direct response advertising is shown to be a decaying exponential curve." Latter responses to direct response advertisements may be the result of delayed purchase decisions due to financial constraints or other factors. Direct marketers must be aware of this decaying response over time and design product and service strategies that offer novelty to consumers. Specifically,

PQ12: Multiple direct marketing efforts will increase the likelihood of immediate response via this channel.

PQ13: Direct marketing vehicles that continually offer novelty in presentation and product offerings will increase the likelihood of an immediate response.

Feedback

A consumer's decision results in a response that provides feedback to the organization. As mentioned in previous sections, consumers may decide to purchase the product/service immediately, wait and purchase at a later time or decide not to purchase. The organization responds to this feedback by either fulfilling the order, sending further correspondence, or withdrawing individuals' names from the database. Once an order has been received for a product or service, the individual's name and address becomes part of a house list of customers. Direct marketers will likely continue to correspond with these customers since the probability of future orders from such customers is greater than the probability from those that do not. Gould and Voelkel's (1988) findings suggest that although potential customers do not respond initially that direct marketers should continue to send further correspondence to this group. Specifically,

PQ14: Organizations that continue to correspond with consumers will likely receive more positive feedback, such as orders, from these customers over time than organizations which do not.

Conclusion

The nature of model building is to provide a framework regarding the phenomenon of interest and to provide the direction and impact of the variables involved. In addition, the framework provides a foundation for the testing of hypothesized relationships presented as well as the generation of hypotheses. Development and validation of scales is also a vital part of testing hypothesized relationships and must be given precedence. Future research needs to examine the predictability of the proposed model.

In addition, research regarding the impact of media choice on consumer direct marketing purchase decisions is needed. The choice of the medium or media is critical to the success of direct marketing of goods. Furthermore, the use of integrative programs of direct marketing vehicles and traditional marketing methods in media selection decisions is worthy of investigation. For example, Roman (1986) introduced Integrated Direct Marketing which suggests the coordination of several media in direct marketing programs. Overall, many exciting vistas are available for researching this relatively new area of marketing.

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RESEARCH METHODOLOGY

RANK ORDER DATA AND THE CHOICE OF A CORRELATION INPUT
TO CONFIRMATORY FACTOR ANALYSIS

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Abstract

The consequences of factoring alternative correlation matrices are investigated assuming ordinal scale data. LISREL maximum likelihood solution algorithm is used for estimation. A single-factor model with a priori assigned loading values is studied via a simulation design. The performances of four selected correlation procedures, product-moment, polychoric, Spearman's rho, and Kendall's tau-b are compared under various design conditions. Implications of the study results are discussed.

Introduction

Social science researchers often use rating scales to measure theoretical variables such as job satisfaction, brand loyalty, and attitudes toward a product or service. Rank order data, generated by these measurement scales, are frequently analyzed by sophisticated statistical tools. One such methodology is operationalized in the LISREL (Linear Structural Relations) program (Jöreskog and Sörbom 1981). The LISREL program is an implementation of Jöreskog's (1970) model for the analysis of covariance structures. The program provides a systematic framework of testing factor analytic and structural equation models.

The LISREL program contains several solution algorithms. However, the maximum likelihood (ML) estimation procedure is preferred in most applications because it produces several goodness-of-fit statistics for model assessment. Two of the major assumptions required by the ML solution procedure are multivariate normality of the measures and a sample covariance matrix as input. Even a cursory survey of the literature indicates that sample correlation matrices are more commonly used as input than covariance matrices (Anderson and Gerbing 1984; Jöreskog and Sörbom 1981), and the measurement scale and distributional properties of data collected by various rating scales are in doubt at best.

A number of studies have investigated the effects of sampling fluctuations and identification restrictions on various aspects of the ML solution algorithm in LISREL (e.g., Anderson and Gerbing 1984; Bearden, Sharma and Teel 1982; Boomsma 1982). However, only one recent study specifically focused on the consequences of using alternative correlation estimates computed from rank order data as input to the ML estimation procedure (Babakus, Ferguson and Jöreskog 1987). The purpose of the present paper is to provide additional insight into the consequences of analyzing alternative correlation estimates via the LISREL ML procedure when data are rank order or ordinal in nature. Specifically, the effects of the magnitudes of model parameters (factor loadings) on various LISREL estimates are investigated via a

Monte Carlo simulation.

Study Design

Simulation Setup

A single-factor model with four indicators was assumed. Two levels of factor loadings, (.8, .8, .18, .8) and (.4, .6, .6, .8) constituted the first design variable. The second design variable was the correlation type which had four levels: Product-moment (r), polychoric (r_p), Spearman's rho (r_s) and Kendall's tau-b (t_b). Two levels of sample size (100, 500) was the third design variable. Finally, five levels of data categorization was assumed to create rank order data.

The last design variable "categorization type" was derived from an extensive literature review in applied social science research. The review indicated that most rating scale instruments contained a five-step response format. Hence, the number of response categories was fixed to five. The review also revealed some common shapes of the frequency distributions of rating scale items. On the basis of these findings, a combination of frequency distributions were selected to form each level of the "categorization type": 1) all four variables categorized to follow bell-shaped distributions, 2) all four variables with U-shaped distributions, 3) all four variables extremely skewed, 4) two variables moderately skewed and the other two extremely skewed, 5) two variables moderately skewed, one bell-shaped and one extremely skewed. With the four design variables described above, the overall study could be considered as a $2 \times 4 \times 2 \times 5$ factorial experiment. A total of 80 cells of equal size were studied (300 independent replications in each cell).

Data Generation and Analysis

Each parameter vector (factor loadings) lends itself to a population covariance (correlation) matrix. Independent random samples were generated for a given sample size and population covariance matrix. Each set of sample data were then used twice to estimate the parameters of the single-factor model with four indicators via LISREL. The first estimation was based on product-moment correlations computed from the continuous data. The second estimation used ordinal data produced by transforming the continuous data into one of the specified categorization types. This discrete data set was then used to compute one of the four types of correlations (r , r_p , r_s , or t_b) to be input to LISREL for a second estimation. Thus, two sets of parameter estimates and all of the ML provided fit statistics were generated for each sample.

Results from the continuous data were used as

"standards" to assess the relative performances of alternative correlation types and the impact of other design variables on parameter estimates and fit statistics. Specifically, the dependent variables were categorization bias (CB) and squared errors (SE) in parameter estimates, estimated standard-errors of the factor loadings, chi-square statistic, goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI) and root mean squared residual (RMR).

Categorization bias and squared error criteria were used to determine the accuracy of the parameter estimates (factor loading estimates). The categorization bias was defined as the difference between the *j*th loading estimate produced by continuous data and the *j*th loading estimate produced by the corresponding discrete data. The squared error was defined in exact statistical terms as the squared difference between the *j*th parameter and the *j*th parameter estimate obtained by using discrete data.

The chi-square statistic is one of the overall fit statistics provided by the LISREL ML procedure. The sampling distributions of the other overall fit measures (i.e., GFI, AGFI, and RMR) are not yet known. These measures are used as descriptive measures of goodness-of-fit, complementing the chi-square statistic. Finally, estimated standard errors of factor loading estimates are examined as another set of dependent variables. These statistics are used to compute confidence intervals and to determine the importance or significance of an indicator in a model under investigation. Therefore, insights on the effects of various design variables on these values is necessary. Furthermore, a comparison between empirical and LISREL provided standard errors should be very informative.

Results

To avoid a confusing presentation of numbers, the results are condensed and summarized in a few tables. In this process the identity of design variable "categorization type" is eliminated. That is, results across five levels of "categorization type" are combined and averaged. Also combined are the results across four indicators. While the three design variables-correlation type, sample size, and parameter vector preserve their identities, special emphasis will be placed on the effects of the magnitudes of true factor loadings.

Accuracy of Loading Estimates

Table 1 presents mean categorization biases (MCB) and mean squared errors (MSE) of factor loading estimates. On both criteria, the polychoric correlation clearly outperformed the other three correlation types. As expected, mean squared errors decreased as sample size increased from 100 to 500. Overall, higher mean squared errors were obtained with the smaller sample size and with smaller true loading values.

As Table 1 indicates, mean categorization bias increased as the parameter vector assumed larger values. Sample size showed no effect on cate-

gorization biases on the average.

TABLE 1
MEAN CATEGORIZATION BIASES (MCB) AND MEAN SQUARED ERRORS (MSE) IN FACTOR LOADING ESTIMATES* (x 1000)

		$\Lambda = (.8, .8, .8, .8)$		$\Lambda = (.4, .6, .6, .8)$	
		n=100	n=500	n=100	n=500
MCB	r	73	71	63	63
	r _p	-1	0	-2	1
	r _s	81	80	70	70
	t _b	116	117	99	100
MSE	r	12	7	21	8
	r _p	5	1	21	3
	r _s	14	9	23	10
	t _b	20	16	27	13

*Negative signs indicate overestimation.

Empirical Versus LISREL Provided Standard Errors

Empirical estimates of standard errors of factor loadings are simply the standard deviations of factor loading estimates. Table 2 contains both empirical standard errors and the overall averages of estimated standard errors provided by the LISREL ML estimation procedure. Also included in Table 2 are the overall averages using continuous sample data.

TABLE 2
EMPIRICAL AND LISREL PROVIDED ESTIMATED STANDARD ERRORS OF FACTOR LOADINGS* (x 1000)

		$\Lambda = (.8, .8, .8, .8)$		$\Lambda = (.4, .6, .6, .8)$	
		n=100	n=500	n=100	n=500
Empirical	r	72	31	123	52
	r _p	72	30	130	56
	r _s	73	32	123	54
	t _b	72	31	122	50
Mean LISREL	r	96	43	126	56
	r _p	87	39	113	50
	r _s	97	42	129	56
	t _b	101	45	135	59

*Summary results for continuous cases were (x1000):

	$\Lambda = (.8, .8, .8, .8)$		$\Lambda = (.4, .6, .6, .8)$	
	n=100	n=500	n=100	n=500
Empirical	48	20	92	41
Mean LISREL	88	39	111	50

Sample size had the expected impact on both empirical and LISREL provided standard errors. As sample size increased from 100 to 500, there was a decrease ranging from 55% to 58% on both types of standard error estimates across the board. For the loading vector a similar situation was observed. That is, as the loading vector decreased from a uniformly high values (.8, .8, .8, .8) to a mixed but smaller values (.4, .6, .6, .8) both empirical and LISREL estimates of standard errors

increased in magnitude. The proportional increase for the empirical values far exceeded the proportional increase in LISREL provided results. This was true for both the continuous and discrete results.

An interesting result in Table 2 is the discrepancy between empirical and LISREL estimates of standard errors. The average LISREL provided values were consistently higher than their empirical counterparts. In the discrete cases mean LISREL estimates were 25% higher than the empirical estimates under the larger parameter vector. Under the smaller (.4,.6,.6,.8) parameter vector the discrepancy was very small. For the continuous results the discrepancy was even larger. Mean LISREL estimates of standard errors in this case were 45% to 48% larger than the empirical estimates under the larger parameter vector. For the mixed but smaller parameter vector the discrepancy was approximately 17%.

Chi-square Statistic

Percentages of chi-square statistics leading to the rejection of the four-indicator single-factor model are presented in Table 3. At a nominal significance level of 0.05 the theoretical chi-square value (with 2 df.) is 5.99. Hence any chi-square statistic exceeding 5.99 would lead to the rejection of the correctly specified model under investigation. For the continuous cases exactly 5% of the results exceeded the value 5.99 under both levels of sample size and parameter vector. These results from continuous sample data confirmed the statistical theory behind the estimation procedure as well as the soundness of the simulation process as a whole.

TABLE 3

PERCENTAGES OF CHI-SQUARED STATISTICS LEADING TO THE REJECTION OF THE MODEL*

	$\Lambda = (.8, .8, .8, .8)$		$\Lambda = (.4, .6, .6, .8)$	
	n=100	n=500	n=100	n=500
r	11	11	7	7
r _p	35	31	23	21
r _s	9	13	6	6
t _b	4	7	3	3

$\chi^2_{.05,2} = 5.99$. percentages of chi-squared values leading to the rejection of the model were 5 for both sample sizes under alternative parameter vectors.

An examination of Table 3 reveals that sample size did not appear to have any impact on the results. Given the simplicity of the model studied a sample size of 100 seemed to be sufficiently large. However, the parameter vector had a significant impact on the result. The percentages of chi-square statistics exceeding the cut-off value decreased under the smaller parameter vector.

Overall, the polychoric correlation procedure produced the worst results on the basis of this criterion. Kendall's tau-b produced the best results ranging from 3% to 7% rejection rates for a correctly specified model. These results create

a paradoxical situation in comparison with the bias and squared error criteria where the polychoric results were the best and the results based on Kendall's tau-b were the worst results.

Mean GFI, AGFI and RMR Statistics

Table 4 contains summary results on these three fit statistics. Results with continuous data are also provided as benchmark values. The GFI and AGFI were directly affected by sample size. The magnitudes of factor loadings did not have any impact on GFI and AGFI statistics. On the other hand, both the sample size and loading vector had an inverse effect on the magnitude of the RMR statistic. That is, as sample size and loading values increased the magnitude of RMR decreased indicating better results.

TABLE 4

MEAN GFI, AGFI, AND RMR VALUES (x1000)*

		$\Lambda = (.8, .8, .8, .8)$		$\Lambda = (.4, .6, .6, .8)$	
		n=100	n=500	n=100	n=500
GFI	r	987	997	989	998
	r _p	973	995	980	996
	r _s	988	996	993	998
	t _b	991	998	993	998
AGFI	r	936	986	955	989
	r _p	883	973	901	981
	r _s	941	986	950	990
	t _b	955	989	962	992
RMR	r	22	10	31	14
	r _p	25	11	39	17
	r _s	22	10	30	13
	t _b	21	10	27	12

*Mean values for continuous cases were (x1000):

	$\Lambda = (.8, .8, .8, .8)$		$\Lambda = (.4, .6, .6, .8)$	
	n=100	n=500	n=100	n=500
GFI	990	998	990	998
AGFI	950	990	950	990
RMR	15	6	27	12

The order of performance among the four correlation types were equivalent to the order based on chi-square statistic. The polychoric results were generally the worst results on the bases of GFI, AGFI and RMR statistics. In the case of RMR values the results did not appear drastically different.

Summary and Conclusions

The purpose of this study was to investigate the consequences of factoring alternative correlation matrices obtained from ordinal data. A confirmatory factor analytic model was simulated using LISREL. A focal design variable was the magnitudes of the factor loadings of the population model.

The accuracy of loading estimates (assessed by bias and squared error) were found to be affected by the magnitudes of true factor loadings. Squared errors in parameter estimates decreased as sample size increased. Sample size had no effect on categorization biases. Overall, results based on polychoric correlations produced the best estimators, while Kendall's tau-b results

were the worst.

Empirical and LISREL estimates of standard errors were both affected by sample size and the level of the parameter vector. The interesting result was the large discrepancy between empirical and LISREL provided standard errors. Given the data were from standard multivariate normal populations, in the long run LISREL provided and empirical standard errors were expected to be equal, at least for the continuous cases. This discrepancy may be due to the underlying covariance input assumption required by the maximum likelihood estimation procedure. On the basis of standard error criterion, the polychoric correlation results appear to be slightly better than the rest.

Results on chi-square statistic and all other fit statistics indicated that the polychoric correlation performed worst and Kendall's tau-b performed best, leaving users of LISREL in a contradictory situation. Sample size and parameter vector were found to have an inverse effect on root mean squared residuals. The goodness-of-fit index and adjusted goodness-of-fit index were found to be directly related to sample size. The parameter vector had no influence on these latter statistics. These results should provide helpful insights in the development of a distribution theory for these fit statistics.

Recent developments in LISREL (Jöreskog and Sörbom 1986; 1987) suggest that the polychoric correlation is a definite choice when rank ordered data are analyzed. The new capability of PRELIS and subsequently LISREL 7 in estimating the covariance matrix of the estimated correlations combined with the Weighted Least Squares (WLS) solution algorithm appears to have solved the major problems in handling rank ordered data. However, further investigations will be needed to substantiate the validity of these new features.

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PREDICTIVE ACCURACY OF CLASSIFICATION AND REGRESSION
TREES (CART) VERSUS CONJOINT ANALYSIS

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Abstract

Recently, statisticians have developed a search methodology called Classification and Regression Trees (CART) for classifying and/or predicting responses to a set of multivariate predictors. CART is a sophisticated and markedly expanded successor to Automatic Interaction Detection.

This paper compares CART-based tree structured models to conjoint and self-explicated part worth models. We find that the tree structured models do not cross-validate as well as the compensatory models of conjoint analysis.

Since the 1960s researchers in the behavioral sciences and marketing have been interested in models based on hierarchical or tree-structured approaches to consumer choice. (Clarkson 1962), (Alexis, Haines, and Simon 1968), (Bettman 1970), (Russ 1971), (Bettman and Jones 1972), (Tversky and Sattah 1979), (Lehmann and Moore 1986), and (Gensch 1987) are some of the scholars who have made contributions to this area. The market structure models of (Kalwani and Morrison 1977), (Urban, Johnson, and Hauser 1984), and (Grover and Dillon 1985) also reflect hierarchical choice mechanisms, even though they are not parameterized at the individual-choice level.

In contrast, the models of conjoint analysis (Green and Srinivasan 1978) and quantal choice (Currim 1982); (McFadden 1986) are compensatory. That is, rather than assuming that choices are made by the sequential processing of attributes (and the elimination of options whose levels are unsatisfactory on the attribute being processed), compensatory models permit poor performance on one attribute to be made up by good performance on another. Historically, compensatory models have been more tractable from a parameter estimation standpoint; also they often appear to approximate the outcomes of "true" models even when the process may be non compensatory.

Nonetheless, tree structured models of choice processes represent an intriguing area for research. Recently, (Currim, Meyer and Le 1988) have proposed a tree structure approach that appears to represent a serious competitor to conjoint modeling. We first describe briefly the Currim, Meyer and Le approach and its potential relevance to choice modeling. We then propose a related model, based on classification and regression trees (Breiman *et al.* 1984), and show how this approach can be used as a competitor to conventional conjoint analysis. Its predictive performance is contrasted with self-explicated and full profile conjoint modeling. We conclude the paper with a discussion of future research prospects in this area.

The Currim, Meyer and Le Approach

Currim, Meyer and Le apply an algorithm called CLS (Quinlan 1983) which they describe as a "... nonparametric classification procedure for inferring 'if-then' rules that relate a set of predictor variables (such as product attributes) to a discrete outcome variable (such as choice)." The CLS algorithm uses entropy as a measure of classificatory power. Cases are split according to minimizing the criterion (entropy) at any given level of splitting.

The dependent variable in CLS can be either dichotomous (e.g., purchase versus non purchase) or multichotomous (e.g., go, no-go, undecided). The original predictors can be either continuous measures or categorical. If continuous, the variables are recoded into a series of dichotomies.

Currim, Meyer and Le provide a detailed account of how the CLS algorithm works. The result of its application is a decision tree that (in their expository example) tries to discriminate known acceptable versus unacceptable apartment selections in terms of paths that are followed as one goes through those attributes and levels that best satisfy the entropy criterion that underlies CLS.

Currim, Meyer and Le applied CLS to revealed choice data of 200 households' purchases of coffee brands and found good predictive validities. However, they also found that CLS and a compensatory logit model applied to data pooled over respondents both led to similar substantive conclusions and resulted in similar predictive validities.

CLS Versus Conjoint Modeling

In conjoint applications there are decided limits to the amount of response data that can be obtained at the individual level. However, sparse data in CLS will generally lead to unstable trees. Hence, we need to employ a conjoint data collection method and analysis procedure that can lead to individual differences in conjoint parameters without requiring us to generate an individual tree for each respondent.

Second, in conjoint analysis we are usually interested in dependent measures that are not of the simple accept/reject type. For example, in many marketing applications of conjoint the respondent's likelihood of purchase (typically operationalized as a subjective rating on a 0-100 point scale) is a common response measure. In cases such as these we would like the model to be able to accommodate interval-scaled or ratio-scaled measures of preference.

Third, in conjoint analysis one often deals with attributes whose levels are "monotonic" —for example, the more of property X, the better. As in the Automatic Interaction Detector (Morgan and Sonquist 1963) we would like to have an algorithm that could force binary cuts of selected predictor variables to respect monotonicity on selected (or all) predictor variables.

Fortunately, (Breiman *et al.* 1984) Classification and Regression Trees methodology, CART, allows the researcher to consider interval or ratio scaled dependent variables (regression trees) as well as categorical dependent variables. CART also allows the user to specify whether any specified predictor is to be treated as ordered (i.e., spaced along an underlying continuum) or (unordered) categorical.

A full account of CART appears in the book by Breiman *et al.* CART is a later and more sophisticated version of its predecessor: Automatic Interaction Detector. Like AID, CART also constructs binary trees in which the dependent variable can be either measured or dichotomous. Dependent variables in CART can also be multichotomous, similar in spirit to CHAID

(Perreault and Barksdale 1980). The main contributions of Breiman *et al.* have been to put tree structure research methods, such as AID, on a much sounder basis statistically through the ingenious idea of first fitting extremely large trees and then pruning them back in such a way as to obtain high cross validity across holdout samples.

The Empirical Study

The stimulus context of this study consisted of descriptions of privately offered, unfurnished student apartments, located in the vicinity of a large Eastern university. Subjects for the experiment were business students, most of whom were already living in a student apartment or were considering renting one during the next school year.

Design of the Calibration Set

Table 1 shows the attributes and levels used in the conjoint designs. An orthogonal main effects design of 18 combinations was selected for experimental condition I. Condition II was identical to condition I except for price. Price was modified in condition II to reflect the "quality" of the nonprice part of each profile, subject to maintaining the same range of price and an equal number (six) of cases for each price level. In condition II high quality apartments tend to cost more to rent. Subjects were randomly assigned to the profile sets of either condition I or condition II.

TABLE 1
ATTRIBUTES AND LEVELS USED IN
CALIBRATION PHASE OF CONJOINT STUDY

- | |
|--------------------------------------|
| A. Walking Time to Classes |
| 1. 10 minutes |
| 2. 20 minutes |
| 3. 30 minutes |
| B. Noise Level of Apartment House |
| 1. Very quiet |
| 2. Average noise level |
| 3. Extremely noisy |
| C. Safety of Apartment Location |
| 1. Very safe location |
| 2. Average safety |
| 3. Very unsafe location |
| D. Condition of Apartment |
| 1. Newly renovated throughout |
| 2. Renovated kitchen only |
| 3. Poor condition |
| E. Size of Living/Dining Area |
| 1. 24 by 30 feet |
| 2. 15 by 20 feet |
| 3. 9 by 12 feet |
| F. Monthly Rent (Utilities Included) |
| 1. \$540 |
| 2. \$360 |
| 3. \$225 |

Respondent Tasks

In phase I all respondents first responded to the self-explicated tasks, typically employed in hybrid conjoint analysis. For each attribute of Table 1 the respondent was asked to rate its acceptability on a 0-10, equal-interval rating scale. Following this, each respondent was asked to allocate 100 points across the six attributes, so as to reflect their relative importance (constant sum scale).

In phase II, each respondent received (in randomized order) 18 calibration, full-profile cards (with random assignment of respondents to condition I or II). In each case the respondent was asked to indicate the likelihood (on a 0-100 scale) of renting an apartment of that description, assuming he or she were in need of an apartment in close proximity to the university. In phase III, each respondent received (in randomized order) 16 validation profiles, also selected from an orthogonal, main effects design. Each respondent rated each profile in the validation set on the same 0-100 scale used in phase II.

Model Fitting

A sample of complete responses was obtained for 99 respondents, 45 of whom received condition I and 54 of whom received the condition II profile cards.

Compensatory Model Fitting

Three compensatory models were individually fit to each respondent's data. The first (and simplest) model, called the partial self-explicated model, simply estimated each respondent's part worth by his/her acceptability score (0-10) on that attribute's level.

The second compensatory model, called the full self-explicated model, estimated each respondent's part worth by the product of his or her

acceptability score and the attribute's importance score, as obtained from the constant sum task. Hence, the partial self-explicated model is a special case of the full self-explicated model in which the importances are unit weights.¹

The third compensatory model was estimated by OLS dummy variable regression applied to the 18 calibration sample responses. Only main effects were fit. In general the fits were quite good at the individual level; the average adjusted (for degrees of freedom) R^2 was 0.43.

Tree Structure Fitting

The CART methodology was used to fit separate trees to conditions I and II, respectively, of the calibration response data. In fitting each tree, the self-explicated acceptabilities data (0-10 responses) were set up as (ordered) predictor variables. The dependent variable was the respondent's likelihood of renting, as obtained from the calibration profile responses.

To illustrate, the first calibration profile consisted of level 1 on each attribute: 10 minutes; very quiet; very safe; newly renovated throughout; 24 by 30 feet; and \$540. Suppose that in the self-explicated phase the respondent had given the numerical responses: 9; 10; 8; 9; 8; and 1 to each of these respective levels. If so, that respondent's predictor-variable values would be 9, 10, 8, 9, 8, 1 for X_1 through X_6 , respectively. The dependent variable would be the respondent's subjective likelihood of renting that specific apartment.

The same type of coding was repeated for each of the 17 other profiles in the calibration set. The process was then repeated for the next respondent, and so on. Hence, the data bank consisted of $45 \times 18 = 810$ respondent-trial cases for condition I and $54 \times 18 = 972$ cases for condition II. Both tree fits were implemented using CART's cross validation feature.

Response Measures

Two commonly used cross validation measures were used to compare the compensatory and tree structure models. (In all cases the cross validation sample consisted of each subject's responses to the 16 profiles comprising the validation sample.) The first validation measure was the product moment correlation between actual and predicted evaluations for each respondent in turn. In the case of the tree models, predictions were based on the mean criterion-variable score obtained from each tree's terminal nodes. A respondent's predictor-variable vector (based on the validation set profile) was dropped through the tree until it reached a terminal node. The conditional mean (likelihood of renting) assigned to that node was taken as that subject's prediction for the specified validation profile.

¹ Both the original (0-10) acceptability scores and importance scores (0-100) were normalized, to range between 0 and 1.

We also examined first-choice hits as a validation measure. Ties were broken randomly. Again, all validations were conducted at the individual level and then summarized.

Study Results

Figures 1 and 2 show the CART regression trees for conditions I and II, respectively, based on the original 0-10 acceptability scores. Illustratively, we examine Figure 1 for the condition I (orthogonal design) case. As noted, the total-sample average likelihood-of-renting score is 34.2%. The first data split is on the attribute: safety; acceptability scores of 0, 1, 2, 3 go left and scores of 4 or higher go right; the split entails 270 versus 540 responses of the 810 total. Responses involving acceptability scores of 0-3 on safety do not split again. This terminal node has a mean likelihood-of-renting score of only 16.4%, the lowest of the terminal nodes.

In contrast, those with acceptability scores of 4 or higher are split again on the attribute: apartment condition. The split is 0-4 versus 5-10. The first group is further split by safety on the basis of an acceptability score of 0-9 versus 10. The first group reaches a terminal node while the second group of responses is further split on noise into acceptability scores of 0-2 versus 3-10.

Figure 1 shows that the terminal nodes' likelihood-of-renting scores range from 16.4% up to 72.3%. In the last case, the response entails a score of 4-10 on safety, 5-10 on apartment condition, and 8-10 on rental price. We note that the overall tree is complex enough to include all six attributes at some decision point in the structure.

In contrast, Figure 2 shows nine terminal nodes, ranging from a rental likelihood of 20.3% to a high of 80.4%. We note that an acceptability score of 0 or 1 on safety is sufficient to place responses in the lowest likelihood terminal node. On the other hand, the path leading to the highest likelihood node traverses five out of the six attributes (the only omission being apartment size).

Validation Comparisons

Table 2 shows a summary of the cross validation performance of the tree structure models versus OLS (traditional) conjoint, the full self-explicated model, and the partial self-explicated model. Results are shown for both the product moment correlations and first-choice hits, each computed on an individual-respondent basis. Given the related nature of the predictions, the correlation measures were analyzed by a series of Friedman's non-parametric ANOVA's. The first-choice hits were analyzed by a series of Cochran's tests for K related samples.

Figure 1
Regression Tree Based on 0-10 Acceptability Scale
(Condition I)

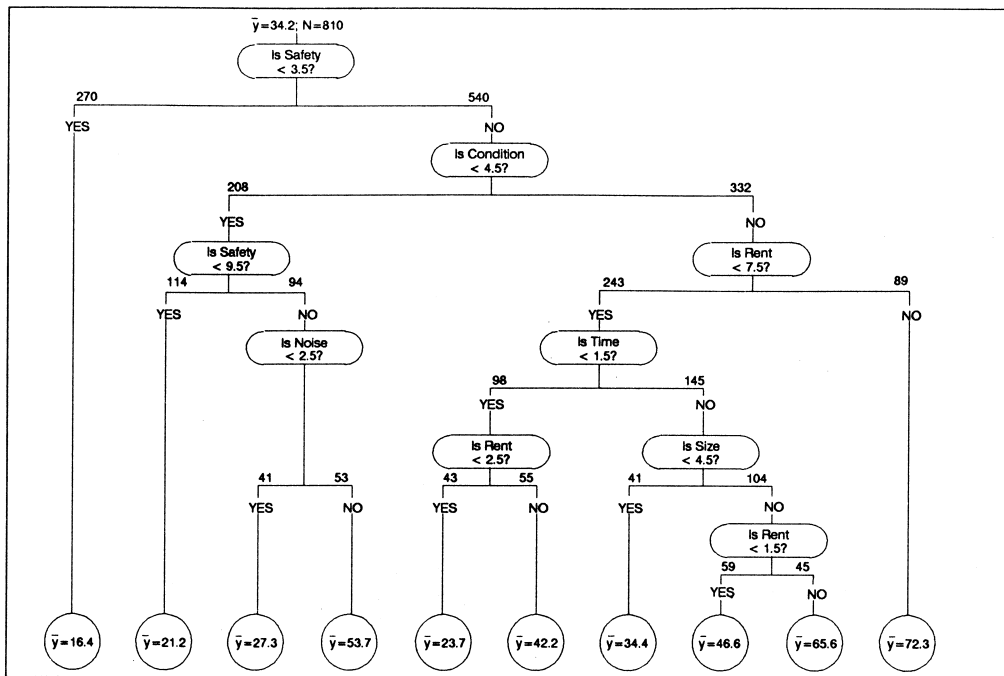


Figure 2
Regression Tree Based on 0-10 Acceptability Scale
(Condition II)

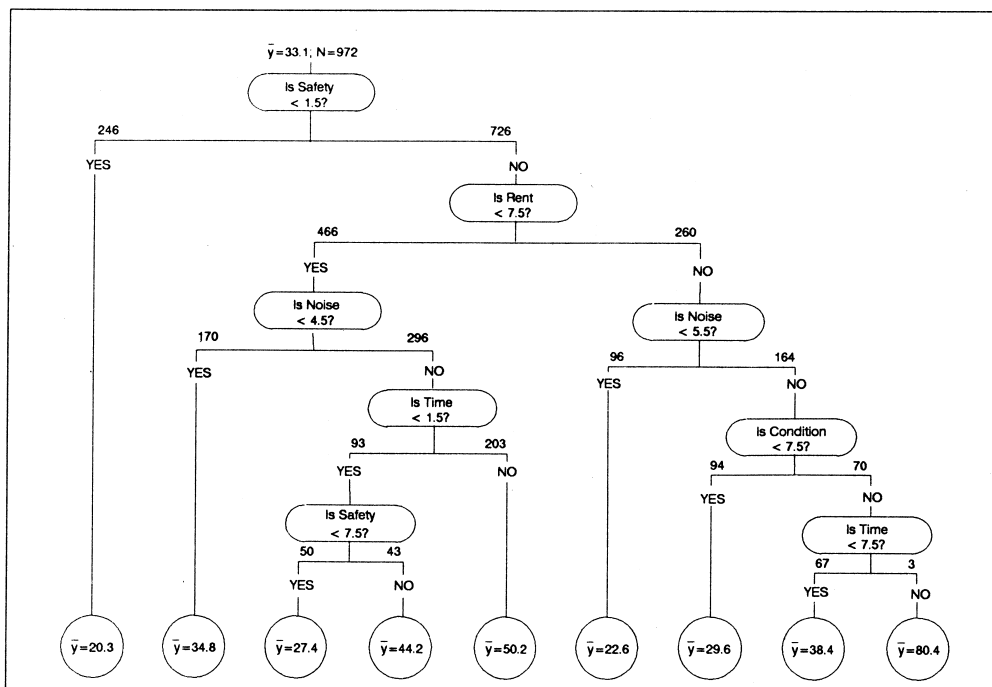


TABLE 2
CROSS VALIDATION RESULTS, BY MODEL,
CONDITION, AND VALIDATION MEASURE

	Condition I (N=45)		Condition II (N=54)	
	Product Moment Correlation ^a	First- Choice Hits ^b	Product Moment Correlation ^a	First- Choice Hits ^b
OLS Regression	0.750	62.3%	0.723	54.7%
Full Self-Explicated	0.745	62.2%	0.732	63.9%
Partial Self-Explicated	0.669	63.3%	0.683	63.0%
CART	0.617	32.2%	0.481	35.2%

a Bracketed items are similar within but significantly different across models at the $\alpha \leq 0.05$ level (Friedman's ANOVA).

b Bracketed items are similar within but significantly different across models at the $\alpha \leq 0.05$ level (Cochran's Test).

We note from Table 2 that in condition I, CART results in lower cross validations than any of the compensatory models insofar as the product moment correlation is concerned. In particular, its performance vis-a-vis the OLS regression and full self-explicated model is poor. In condition II, CART's cross-validated performance is even poorer, as compared to the product moment correlations associated with the three compensatory models. Insofar as the three compensatory models are concerned, the OLS regression and full self-explicated models perform about equally and generally better than the partial self-explicated model (at least on a sample basis).

The performance of CART under the first-choice hits comparison is also poorer than that of the self-explicated models. We note from Table 2 that CART's percentages of first-choice hits are 32.2% and 35.2%, for conditions I and II, respectively. These are significantly lower than the hits for any of the three compensatory models.

Discussion

The purview of this paper has been limited. Our principal objective has been to compare tree structured choice models with the compensatory models of conjoint analysis and self-explicated, part worth models. We found that the compensatory models outperformed the tree structured models in terms of cross validation accuracy.

Why is this so? One could argue, of course, that we are fitting only one tree to each experimental condition and that the problem entails data aggregation. However, it should be noted that individual differences are still being maintained in the tree fitting since the input to CART consists of subjects' subjective evaluations (attribute level acceptability ratings), not the attribute levels themselves. In this sense, CART is using the same information as the partial self-explicated compensatory model. The only difference is that the latter model simply adds the acceptability scores together in order to make a prediction. (This simple additive rule entails no parameter estimation step.)

In contrast, CART develops a tree and estimates parameters by computing conditional means on the dependent variable, given each terminal node.

Still, only one CART tree was fit for each condition. The question arises as to what would happen if a pooled OLS regression were run across all subjects in conditions I and II, respectively. This step was implemented and the resulting 16 predictions (each based on the average subject) were used to predict individuals' hold-out sample responses. The product moment correlations were 0.661 and 0.698 for conditions I and II, respectively. Each of these is well above its CART counterpart. The first-choice hits were 54.7% and 59.3% for conditions I and II, respectively. Again, these are significantly higher than the CART counterparts.

We conclude that the data aggregation issue does not explain the relatively poor performance of the CART-based predictions for this data set. As Rorer (1971) and Green and DeVita (1975) have demonstrated, linear models are often good approximations to non-compensatory models, particularly in cases where the response function is monotonic in each argument (independent of the levels assumed by other attributes) and the data are noisy. The present study appears to provide conditions that tend to favor compensatory models.

Like CLS, conjoint analysis is typically concerned with models that maintain individual differences in part worths. In particular, the potential applicability of tree structure modeling to hybrid conjoint analysis (Green 1984) appears to be an interesting topic for future research. One possibility would be to fit "phased" models in which the first few stages of CART could be used, followed by a fitting of compensatory models, utilizing self-explicated data. In this case the respondent would first be asked to sort profiles into accept/ reject sets (Malhotra 1986). Then the respondent would be asked to evaluate items in the acceptable set on a likelihood-of-purchase scale.²

In any case, there are new and interesting research areas to be explored in assessing CART's potential applicability to conjoint analysis. Its less than dramatic performance in the current experiment should not be taken as a dismissal of its possible value in new kinds of conjoint modeling that could incorporate hybrid approaches.

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Available from authors upon request.

² If a common (core) set of profiles are rated by each respondent, subjects could be clustered, followed by segment-based CART tree fitting.

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ABSTRACT

An empirical test of two versions of Shimp and Sharma's (1987) CETSCALE was undertaken. The results indicate that changes to the original instrument are warranted to reduce polarized response bias and improve the interpretability of the scale.

Czinkota and Ronkainen (1988) observed that in the past two decades world trade has expanded from \$200 billion to over two trillion dollars. Marketing managers are now faced with increasing threats from foreign competitors. The increase in international trade has resulted in consumer exposure to products from countries with economic and political orientations that differ from those of the domestic market.

While imported products often represent a major share of a given industry's sales, they often do so in spite of consumer attitudes towards goods provided by foreigners. Although exceptions to this rule are easily found, consumers usually prefer to purchase domestically-made products. The general bias toward domestically produced goods has been labeled by researchers as a "made-in-foreign-origin bias" (Bilkey and Nes 1982).

Studies in this field tend to fall onto one of two major categories - national stereotyping and consumer ethnocentrism. Of secondary interest in this study is the issue of national stereotyping (or made-in images) -- the tendency for consumers to consider a variety of goods from a given country from a consistent positive or negative perspective. An example of this would be the notion that, in general, goods that are made in West Germany tend to be expensive, but well crafted. Stereotyping studies include consumer perceptions of quality and willingness to purchase goods from various nations. In addition to these topics, methodological issues regarding the isolation and measurement of foreign origin bias comprise a significant area of research conducted on national stereotyping.

Consumer sentiment regarding foreign products has for years been a topic of interest among researchers in both international business and consumer behavior (Schooler 1965; Bilkey and Nes 1982). This stream of research has revealed that, in general, consumers are ethnocentric in their evaluation of products. They tend to rate products made domestically as more desirable than imports when evaluating otherwise identical goods. A field of study known as "made-in-foreign-origin" research has

produced fairly consistent results. Consumers generally exhibit national stereotyping across a wide variety of products (Nagashima 1970; 1977; Schooler and Wildt 1968; Erickson, Johansson and Chao 1984; Bannister and Saunders 1982). These studies, which represent only a small subset of the research conducted on this topic, sampled consumers from Japan, the United Kingdom and the United States, and tested both industrial and consumer goods. All generally confirmed the hypothesis that domestic products would be viewed more favorably than would foreign products. The result of these predispositions from the perspective of a multinational marketer is an added barrier to enter into foreign markets. This product-origin bias represents a challenge for international marketers to overcome by using effective marketing strategy.

The phrase "consumer ethnocentric tendencies" was introduced by Shimp and Sharma (1987) "to represent beliefs held by American consumers about the appropriateness, indeed morality, of purchasing foreign-made products" (p. 280). They developed a 17-item scale to evaluate consumers' ethnocentric tendencies called CETSCALE (for Consumer Ethnocentric Tendencies SCALE). The scale was shown to be correlated to consumers' intent to purchase domestic products in four nationwide studies. However, the concept of consumer ethnocentrism has not been tested against consumers' actual purchase behavior. Although introduced in the context of American consumers, the concept (and its measure) is applicable to people from all countries.

The purpose of the present study is twofold, the first is to highlight the contribution of the concept of consumer ethnocentric tendencies to the understanding of consumer behavior in the global marketplace. The second objective is to present empirical research suggesting a revision of the CETSCALE.

CROSS-CULTURAL COMPARISONS OF STEREOTYPING

A brief review of made-in images measured simultaneously in different cultures provides a unique perspective on the issue of national stereotyping. Widely differing images could indicate that experience with goods is not the only factor involved in developing national stereotype images.

Nagashima (1970; 1977) conducted a pair of studies on national stereotyping that have received wide recognition. His first study involved a comparison of made-in perceptions between American and Japanese businessmen, based on a series of questions presented as

semantic differentials. The study included several categories of products from the United States, Japan, Germany, England and France. The author made the following conclusions:

Only three percent of Japanese businessmen gave the United States label first choice. Yet the Japanese market is more highly saturated with products from the United States than from any other foreign country. This would seem to indicate that aggressive marketing and advanced engineering overcomes many handicaps of a poor stereotype image (p. 74).

Lillis and Narayana (1974) applied a modification to Nagashima's first study in that they measured United States and Japanese consumers' attitudes toward the same foreign and national product images, using the same seven-point semantic differential scale. Japanese consumers did not share their United States counterparts' perceptions that American industry is a world leader in heavy industry and rated United States goods as being more concerned with appearance than performance.

The two groups viewed French products quite differently, Japanese consumers perceived the products as most exclusive, highly innovative, resulting in pride of ownership, produced for the upper class, and concerned with outward appearance rather than performance. These may be considered strong indicators of the prestige appeal. On the other hand, the United States consumers perceived these products as having poor workmanship, being highly imitative and having little advertising and brand recognition. If one assumes that the same products are being exported to each national market, these differences in stereotyping may be explained by each culture's basis of evaluation of the attributes the products possess. For example, a product considered to exemplify independence may be positively received in the United States where that characteristic is highly valued, but held in low esteem in Japan where (due to their view that) submission to authority is more honorable.

Nagashima's second study involved a longitudinal analysis of the same measures on similar subjects surveyed eight years after the initial study. The results highlight the overall decline in perceptions of American-made products and the improvement in the view of goods from Germany and Japan. The findings of the second study reinforce the notion that aggressive marketing can overcome a poor national stereotype image.

In another cross-cultural comparison of made-in concepts, Cattin et al. (1982) studied American and French Directors of Purchasing of major industrial firms regarding their national stereotypes. The research involved administration of the questionnaire developed by Nagashima (1970) through a mail survey. As

in the Nagashima studies, respondents were asked to evaluate fictitious products "made-in" England, France, West Germany, Japan and the United States on a seven-point semantic differential for twenty dimensions including price, performance, reliability and so on. Perceptions varied greatly between the American and French groups correlating with Nagashima's findings. American buyers preferred Japanese and West German products while the French viewed English goods more favorably. Since the experience each group has with the goods evaluated was probably similar, cultural differences may again provide an explanation of the different perceptions.

Yet another cross-cultural study employing Nagashima's semantic differential scaled was conducted by Narayana (1981). He studied differences between Japanese and United States "made-in" images through the use of factor analysis. While differences consistent with the Lillis and Narayana (1974) study were observed, the factors revealed that both groups were similar in the variables utilized in reaching their composite perceptions.

CONSUMER ETHNOCENTRISM

Research from Shimp and Sharma (1987) suggested that there is more to the issue of marketing imported products than simply overcoming an image of being the "outsider." They introduced the phrase "consumer ethnocentric tendencies" to identify the degree to which consumers are willing to make concessions simply to support domestic industry. The concept incorporates the emotional dimension of purchasing imported goods and the implication that the choice in some way threatens domestic industry or perhaps even national security. This concept is a separate issue from evaluations of quality or past experience with a certain product. One would expect ethnocentrism to be a trait that should not be nation-specific since one either supports domestic industry or buys imports, independent of their origin. In four independent studies, Shimp and Sharma (1987) found that consumers in different parts of the United States varied greatly in their ethnocentric tendencies, and proposed that perhaps those differences are due to the presence or absence of a local industry that is threatened by imports. Shimp and Sharma's studies were conducted to test a seventeen-item scale used to measure consumers' ethnocentric tendencies called CETSCALE. The scale is presented in Table 1.

Given the importance assigned to global marketing, the significance of the CETSCALE as a tool for measuring the acceptability of imports in a given market should not be overlooked. Investigation of the CETSCALE suggested that the wording of the questions could result in a statement polarity bias resulting from strong agreement or disagreement with every item on the scale (Falthzik and

Jolson 1974). It is expected that this bias could be eliminated by re-wording several questions on the scale to balance positive and negative statements.

TABLE 1

ORIGINAL 17-ITEM CETSCALE

1. American people should always buy American-made products instead of imports.
2. Only those products that are unavailable in the U.S. should be imported.
3. Buy American-made products. Keep America working.
4. American products, first, last, and foremost.
5. Purchasing foreign-made products is un-American.
6. It is not right to purchase foreign products, because it puts Americans out of jobs.
7. A real American should always buy American-made products.
8. We should purchase products manufactured in America instead of letting other countries get rich off us.
9. It is always best to purchase American products.
10. There should be very little trading or purchasing of goods from other countries unless out of necessity.
11. Americans should not buy foreign products, because this hurts American business and causes unemployment.
12. Curbs should be put on all imports.
13. It may cost me in the long run but I prefer to support American products.
14. Foreigners should not be allowed to put their products on our markets.
15. Foreign products should be taxed heavily to reduce their entry into the U.S.
16. We should buy from foreign countries only those products that we cannot obtain within our own country.
17. American consumers who purchase products made in other countries are responsible for putting their fellow Americans out of work.

METHODOLOGY

Two versions of CETSCALE were mailed out to 100 consumers in the Eugene/Springfield, Oregon metropolitan area. Budget constraints, as well as the exploratory nature of the study, suggested the small sample size. The seventeen questions in Shimp and Sharma's CETSCALE were asked, but the wording was changed for one-half of the respondents as shown in Table 2. One-half of the sample was sent the original CETSCALE, the other half received a version with the wording changes shown in Table 2.

Respondents were selected from a telephone directory using a systematic random sampling method. The listings were divided into 25 groups of approximately equal size. The first four names in each group with addresses listed were used.

TABLE 2

CHANGES IN THE QUESTION WORDING IN CETSCALE

Item	Original Wording
1.	American people should always buy American-made products.
5.	Purchasing foreign-made products is un-American.
7.	A real American should always buy American-made products.
9.	It is always best to purchase American products.
12.	Curbs should be put on all imports.
14.	Foreigners should not be allowed to put their products on our markets.
17.	American consumers who purchase foreign products are responsible for putting their fellow Americans out of work.
Item	Altered Wording
1.	American people should <u>not</u> always buy ...
5.	Purchasing foreign-made products is <u>not</u> un-American.
7.	A real American should <u>not</u> always buy American-made ...
9.	It is <u>not</u> always best to purchase ...
12.	Curbs should be taken off of all imports.
14.	Foreigners should be allowed to put their products on ...
17.	American consumers who purchase foreign products are <u>not</u> responsible ...

Note: To highlight the differences, only items changed from the original CETSCALE wording are listed.

FINDINGS

The response rate is summarized as follows:

Initial mailing	100
Undeliverable	<u>3</u>
Total Delivered	97
Number Not Returned	<u>40</u>
Returned Questionnaires	57
Unusable Responses	<u>6</u>
Usable Responses	51

Factor analyses were run on each version of the CETSCALE to determine if the factor loadings were impacted by the minor changes in the questions (see Table 3). Also, Chronback's Alpha was calculated for each question type to evaluate the internal consistency reliability of the respective scales as shown in Table 4.

TABLE 3

FACTOR ANALYSIS (a prespecified two-factor solution)		
Varimax Rotated Component Loadings		
Changed Wording		
Item	Factor 1	Factor 2
1	.758	-.189
2	.867	.036
3	.755	.065
4	.736	.128
5	.545	.645
6	.935	-.116
7	.702	.368
8	.878	.076
9	.682	.373
10	.911	.029
11	.914	.016
12	-.069	.815
13	.774	.130
14	-.054	.315
15	.874	-.120
16	.842	.088
17	.902	-.024
Eigenvalue:	9.927	1.573
Percent		
Explained	58.9	8.8
Original Wording		
Item	Factor 1	Factor 2
1	.795	.078
2	.755	-.144
3	.731	-.303
4	.650	-.320
5	.509	-.278
6	.677	-.189
7	.628	.627
8	.835	-.269
9	.665	.138
10	.771	.363
11	.677	.078
12	.533	.657
13	.783	-.255
14	.482	.606
15	.634	-.023
16	.818	.074
17	.675	-.501
Eigenvalue:	8.118	2.078
Percent		
Explained	47.7	12.2

TABLE 4

ALPHA COEFFICIENTS AND RELATED MEASURES
FOR PILOT STUDY

Changed Wording		
Item-Scale Alpha if Correlation Deleted	HR ^a if Deleted	
Item		
1	.682	.520
2	.836	.504
3	.746	.515
4	.712	.517
5	.600	.529
6	.872	.502
7	.718	.517
8	.857	.503
9	.704	.518
10	.861	.501
11	.873	.502
12	.016	.576
13	.750	.515
14	-.016	.571
15	.803	.509
16	.814	.507
17	.853	.504
Coefficient Alpha	.946	
Homogeneity Ratio	.518	
Original Wording		
Item-Scale Alpha if Correlation Deleted	HR ^a if Deleted	
Item		
1	.748	.436
2	.713	.440
3	.698	.441
4	.609	.450
5	.465	.460
6	.624	.448
7	.569	.451
8	.804	.429
9	.610	.449
10	.710	.441
11	.623	.448
12	.463	.461
13	.743	.436
14	.416	.460
15	.586	.451
16	.776	.447
17	.635	.447
Coefficient Alpha	.929	
Homogeneity Ratio	.446	

^a - Homogeneity Ratio: the degree to which the actual total score variance exceeds the variance that would be obtained from uncorrelated items, in ratio to the maximum difference that would be found if all items were perfectly correlated.

The factor loadings for the altered wording version in Table 3 suggest that the first factor could be labeled "consumer ethnocentric tendencies," while the second factor appears to be more oriented toward a willingness to allow foreigners to import their products. The second factor seems to be comprised of items 12 and 14. Item 5 loads almost equally on both factors, making its interpretation difficult. Almost 59% of the variance is explained by the first factor, making it close to the percentage of variance criterion of 60% which has been suggested as constituting a "satisfactory solution" for social science problems (Hair et al. 1987, p. 247). The second factor was considered relatively unimportant due to its low contribution (8.79%) to explained variance.

The component scores for the original wording version were not as easy to interpret. The first factor explained only 47% of the variance, while the second factor was still relatively unimportant. Items 7, 12, 14 and 17 appeared to load on both dimensions.

The Coefficient Alpha analysis reported in Table 4 does not identify any great differences between the two versions. The coefficients of .95 and .93 for the revised wording and the original respectively are both very high, suggesting that either version of the CETSCALE is a reliable measurement. As mentioned above, the main reason for testing a different version of the CETSCALE was to eliminate the potential for statement polarity bias. The analyses of the two versions suggest that the altered version may possess added benefits although any conclusions from a study with such a small sample size should be at best tentative. Further research on this topic is warranted, as the findings presented here are far from conclusive. The need remains for a nationwide survey of ethnocentric tendencies to allow for analysis of differences between demographic groups and geographic regions. A pattern of studies similar to what has been undertaken in the area of national stereotyping could prove most helpful in understanding consumer behavior in this area. This research would include cross-cultural comparisons of ethnocentric tendencies as well as the above topics.

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MEASURING NONREPRESENTATIVENESS IN A BANK CUSTOMER
SURVEY: A CASE STUDY

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Abstract

Nonrepresentativeness is a major issue in most survey research situations because of the total lack of hard information about nonrespondents. Advanced information systems available to financial institutions in the form of marketing customer information file systems (MCIF) make it possible for the researcher to identify, in advance, important customer financial variables which can later be used in a direct comparison of respondents and nonrespondents in a given customer survey.

Introduction

Whenever a marketing survey is conducted, the nagging question of nonrepresentativeness arises. While many are confident that random sampling coupled with response rates in excess of 30-40 percent will produce representative samples, the issue is usually resolved without "proof" by making the assumption the "respondents equal nonrespondents" on all important variables under consideration. However, as Hawkins notes:

It is one of the most significant problems faced by the survey researcher. Nonrespondents have been found to differ from respondents on a variety of demographic, socioeconomic, attitudinal, and behavioral dimensions (Tull and Hawkins 1988, p. 177).

The challenge associated with nonrepresentativeness falls into three categories: 1) how to reduce it to begin with, and 2) how to measure whether it has occurred after-the-fact, and 3) how to determine what effects, if any, nonrepresentativeness has on the variables of interest in a survey. While research design procedures, such as monetary incentives and second wave mailings, can be utilized to reduce nonresponse, the need to measure the extent of nonrepresentativeness after-the-fact and its effects remains a problem in most survey research studies. This paper presents a case study that focuses on the after-the-fact measurement of nonrepresentativeness. Obviously, the ideal approach is to compare survey respondents and nonrespondents on relevant variables measured a priori on both groups, and in the case at hand, such measurements were available. The application comes from the emerging area of financial services marketing and shows the practical research value of data bases known as marketing customer information file systems (MCIF). In addition, the case study also demonstrates the implications of the phenomenon known as the 80/20 principle in applied statistical analysis.

Study Background

A large southern bank purchased and implemented a customer information file system (MCIF) for use in marketing decision making at the retail (consumer banking) level. The fundamental purpose of a MCIF is to sort all the individual account relationships at an institution into relevant household units for further analysis and tracking (Fuller 1988c). This is accomplished by passing multiple financial accounting system source files (files of accounts by type such as checking, savings, loans, etc.) through a "householding" program which assigns each account to a given household based on name, address social security number, and other factors. The resulting unit of analysis becomes the "customer household" which can now be measured and profiled at any given time on a number of important internal product usage factors including number and type of accounts held and account balances. The "bundle" of services used by a household also provides a pervasive measure of that household's worth or importance to the institution as measured by actual product usage.

The MCIF has many marketing research uses including being able to efficiently and effectively provide accurate sampling frames for use in customer surveys (Fuller 1988a). In this study, the bank decided to conduct a customer satisfaction survey focusing on a given county. The first step was to generate a total list of households in the county (the sampling frame) from which to draw a computer generated random sample for a mail survey. The survey involved the measurement of quality of service, customer attitude and opinion, usage of financial services at other financial institutions, and demographic characteristics of its customer households.

Initial MCIF runs produced a sampling frame in excess of 100,000 households from which a computer generated random sample of 813 households was drawn. Data for each sampled household included total numbers of accounts and dollar balances. The survey was conducted using a two-wave mailing and a one dollar outbound cash incentive in an attempt to minimize nonresponse. Total response rate was 36.3 percent (295 responses out of 813 mailings).

Findings

As noted earlier, the study provides a unique opportunity to compare non-respondents and respondents using variables previously measured on both groups -- in this case the number and types of accounts and balances held at the institution under study. The specific null hypothesis to be tested is:

Ho: Respondents and nonrespondents do not differ on (in-house) product usage factors, that is, number of accounts and balances at this institution.

Ha: Respondents and nonrespondents do differ.

In more qualitative terms, bank management's question is: Is the more heavily involved customer (in terms of accounts and balances), as operationally measured by MCIF generated household product usage variables, equally represented in both respondent and nonrespondent groups?

Upon completion of the survey process, all households were sorted into respondent and non-respondent groups. This was accomplished by using a system of dual name/address, household identification number, and accounts data labels. For example, on the out-bound mailings, the name/address label for a given respondent was pulled and placed on the envelope and the corresponding household identification number label was affixed to the bottom of the questionnaire. Upon return of the survey, the household identification number label was used to identify the respondent's accounts data (a label showing the number and balances on all accounts) which was summarily pulled and affixed to the questionnaire. Obviously, those not responding were easily identified because their household's accounts data label remained on the master sample printout. Exceptions to the above were deceased respondents, returned mail (no forwarding address, etc.), and those respondents claiming their accounts with the bank in question had been closed in the recent past. These cases, which represented less than 4 percent of the total outbound mailing, were simply eliminated from the sample.

SPSSX was then used to conduct one-way analysis of variance in order to determine differences in mean scores across respondent and non-respondent groups. As shown in Table 1, the average number of relationships (number of different types of accounts as distinguished from balances) showed an extremely significant difference on deposit accounts in favor of respondents. Credit relationships showed no significant differences.

Table 2, which shows average account balances, revealed no significant differences in either the deposit or credit categories. One might argue that account balance data represent a more pervasive and important measure of institutional commitment or product usage/involvement by a customer. Thus, one might conclude that respondents and nonrespondents are equal on both deposit and credit measures, and therefore, the sample is representative in this sense. Still, the inconsistency of this finding with that in Table 1 is annoying.

However, examination of balance variances in Table 2, as shown through the calculation of coefficients of variation (CV), produced values in the range of 2.01-7.56, which point to the

presence of a small number of households with very high balance values in the database. Obviously, large variances tend to submerge, in terms of statistical sensitivity, even large differences in mean scores (Fuller 1988b).

TABLE 1
AVERAGE NUMBER OF RELATIONSHIPS
BY RESPONDENT CATEGORY

Relationship Category	TOTAL SAMPLE		TOTAL SAMPLE		TOTAL SAMPLE		F-ratio Prob
	Respondent	CV	Non-Respondent	CV	Totals	CV	
Total - All Deposit and Credit Relationships	2.39	0.86	1.86	0.77	2.05	0.83	0.000
Total Deposit Relationships	1.66	1.15	1.17	1.08	1.35	1.14	0.000
Total Credit Relationships	0.73	1.10	0.69	1.10	0.70	1.10	0.440
(n)	(295)		(518)		(813)		

CV = coefficient of variation

TABLE 2
AVERAGE RELATIONSHIP BALANCES
BY RESPONDENT CATEGORY:

Relationship Category	TOTAL SAMPLE		TOTAL SAMPLE		TOTAL SAMPLE		F-ratio Prob
	Respondent	CV	Non-Respondent	CV	Totals	CV	
Total - All Deposit and Credit Relationships	\$13,476	2.28	\$12,916	5.28	\$13,119	4.39	0.894
Total Deposit Relationships	\$8,230	2.59	\$8,990	7.56	\$8,714	6.39	0.852
Total Credit Relationships	\$5,246	3.69	\$3,962	2.54	\$4,405	3.19	0.198
(n)	(295)		(518)		(813)		

CV = coefficient of variation

Put another way, it was suspected that an important 80/20 factor was present in the data base. That is, a relatively small number of households (the 20 factor) was likely accounting for a disproportionate share of the relationship balance dollars (the 80 factor). This could possibly explain the lack of statistical significance obtained through the initial tests on mean deposit balances.

In line with a previous investigation by Fuller, the distribution of total deposit balances (the sum of each household's deposit accounts at the bank) was examined, and an arbitrary cutoff balance of \$33,000 was established to divide all sampled households into "high balance" and "other" groups (Fuller 1988b). The \$33,000 plus cutoff represented the top six percent of the total sample base of 813 and amounted to forty-nine (49) households. Removing these forty-nine (49) households and rerunning the data confirmed the presence of a very extreme 80/20 factor since

this top six percent group accounted for over 77 percent of total deposit balances.

The impact of removing the top six percent group shows up in Tables 3 and 4. Table 3 values show little change because the range of variable values was quite limited and a six percent reduction simply has no power to influence the outcome in a substantial way. Table 4, which reports average balances, shows the impact associated with removing 77 percent of the deposit balance base. The average deposit balance radically dropped from \$8,714 to \$2,717, and both the total balance and total deposit balance significance tests turned strongly positive (level = 0.01, and 0.00 respectively). Thus, when looking at the vast majority of the customer base (94 percent), one can only conclude that a strong positive difference exists between respondents and nonrespondents in the survey in terms of deposit balances. In short, respondents exhibit importantly higher average deposit balances (\$3,849) than nonrespondents (\$2,084).

TABLE 3
AVERAGE NUMBER OF RELATIONSHIP
BY RESPONDENT CATEGORY:
BOTTOM 94 PERCENT OF SAMPLE

Relationship Category	Respondent	CV	Non Respondent	CV	Totals	CV	F-ratio Prob
Total - All Deposit and Credit Relationships	2.15	0.71	1.76	0.74	1.90	0.74	0.000
Total deposit Relationships	1.42	0.94	1.06	1.05	1.19	1.02	0.000
Total Credit Relationships	0.73	1.08	0.70	1.10	0.71	1.10	0.654
(n)		(274)			(490)		(764)

CV = coefficient of variation

TABLE 4
AVERAGE RELATIONSHIP BALANCES
BY RESPONDENT CATEGORY:
BOTTOM 94 PERCENT OF SAMPLE

Relationship Category	Respondent	CV	Non Respondent	CV	Totals	CV	F-ratio Prob
Total - All Deposit and Credit Relationships	\$8,305	1.69	\$6,174	1.73	\$6,939	1.74	0.019
Total Deposit Relationships	\$3,849	1.56	\$2,084	2.09	\$2,717	1.87	0.000
Total Credit Relationships	\$4,456	2.97	\$4,091	2.45	\$4,222	2.67	0.668
(n)	(274)		(490)		(764)		

CV = coefficient of variation

In order to shed additional light on these balance differences, all households were recorded into three product user categories as follows: 1) funds generator--that is, households with deposit relationships only, 2) funds generators

and users--that, households with both deposit and credit relationships, and 3) funds users only--that is, households with credit relationships only. In addition, products were also placed in account groups as follows: 1) transaction--checking and money market accounts, 2) savings--investment--regular savings, certificates of deposit, IRA's, 3) credit card, and 4) loans.

The picture that emerges when respondents and nonrespondents are compared (bottom 94 percent sample) adds detail to the findings uncovered at the general level. The significant chi-square test in Table 5 points to a respondent profile that is more pronounced in the funds generator and funds user categories, and correspondingly less pronounced in the funds user only category. However, the picture remains incomplete until the balances in Table 6 are examined. Table 6 not only reinforces the point that the bias in balances occurs solely on the deposit side of the ledger but also shows that it occurs both in the day-to-day transaction account group and in the longer term savings-investment account group. In both of these deposit account groups very significant statistical tests reveal a near doubling of deposit balances in the respondent category when compared to the nonrespondent category.

TABLE 5
PRODUCT USER CATEGORY
BY RESPONDENT CATEGORY:
BOTTOM 94 PERCENT OF SAMPLE

Product User Category	Respondent	Non Respondent	Totals	Chi-Square Prob
Funds Generator (deposits only)	46%	45%	45%	0.0001
Funds Generator and user (deposits and credit)	34%	22%	26%	
Funds user only (credit only)	20%	33%	29%	
(n)	(274)	(490)	(813)	

TABLE 6
AVERAGE ACCOUNT GROUP BALANCE
BY RESPONDENT CATEGORY:
BOTTOM 94 PERCENT OF SAMPLE

Account Group	Respondent	CV	Non-Respondent	CV	Total	CV	F-ratio Prob
Transaction	\$2,077	1.75	\$1,179	2.32	\$1,501	2.08	0.000
Savings - Investment	\$1,772	2.32	\$ 905	3.17	\$1,216	2.79	0.001
Credit Card	\$ 358	2.06	\$ 333	2.56	\$ 342	2.38	0.684
Loans	\$4,099	3.20	\$3,759	2.65	\$3,880	2.89	0.687

CV = coefficient of variation

Implications

The case reported here demonstrates that it is possible for a financial institution with an operational MCIF to routinely measure nonrepresentativeness in survey samples, and to develop a basic understanding of the sources of nonrepre-

sentativeness. The 80/20 factor has also been shown to play an important role in the outcome when it comes to the analysis of average household balances. While the solution to dealing with the 80/20 factor in this case may be deemed by some as arbitrary and capricious (i.e., removing a small percentage from the "top" of the distribution), it does point out the need for bank marketers to carefully consider extreme relative importance of the high balance households and the need to allocate marketing dollars on some basis other than a purely proportionate (that is, all customer households are considered equal) basis. If only six percent of the customer base accounts for 77 percent of the deposit dollars, surely they should be considered a separate target market for marketing action!

The case reported here has not been used to demonstrate what effects, if any, the nonrepresentativeness of the sample may have on the variables of interest in the survey--in this case customer ratings and similar variables. However, the availability of the MCIF does make it possible to identify nonrespondents for future research undertakings such as additional contacts, mailings, etc. However, the findings to this point do show that the more involved customers, as defined by average balance, are responding at a higher rate. To a banker this means that the survey is giving extra weight to the more important customers, a factor which was not known before the measurement of nonrepresentativeness was undertaken.

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THE EFFECT OF TRANSFORMING THE DEPENDENT VARIABLE ON
PREDICTIVE VALIDITY IN OLS CONJOINT ESTIMATION PROCEDURE

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Abstract

This paper presents an empirical study which examines the effect of transforming respondent-generated integer rank order preferences in the metric OLS conjoint estimation procedure on predictive validity of the derived part-worths.

Introduction

Conjoint analysis has been used extensively in marketing research to model and estimate consumer preferences among multiattribute alternatives. The availability of several microcomputer based algorithms for conjoint design and analysis has, perhaps, further popularized commercial application of conjoint measurements in recent years. In the general conjoint methodology, based on a decomposition approach, a respondent's overall preference ratings to a set of total profile descriptions is used to derive part-worths for the individual attributes, given an additive computational rule (Green and Srinivasan 1978; Jain, Mahajan, and Malhotra 1978; Green and Wind 1973). Non-metric conjoint analysis techniques such as MONANOVA (Kruskal 1965) and LINMAP (Srinivasan and Shocker 1973), and more recent metric analysis of variance or OLS regression procedures (Carmone, Green, and Jain 1978; Jain, *et al.* 1979; Wittink and Cattin 1981) have been extensively used to estimate part-worths.

The ordinary least square (OLS) method of estimating part-worths has attained popularity in recent times. Recent research evidence suggests that OLS method is not only very robust, but also has the advantages of wider availability, lower costs, interpretation ease, and the capability of estimating models containing interaction terms. In addition, several microcomputer based algorithms available in the market utilize OLS regression procedures for estimating part-worths.

In OLS regression procedure, dummy variables represent the attribute-level combinations while the dependent variable is a respondent's preference rank order (or other rating scale) judgement. Since the dependent variable measure is on ordinal scale, prior to part-worth estimation, researchers attempt to normalize it by

means of a probit transformation (Blom 1958; Cohen and Cohen 1975) or by dominance value in which integer ranks are transformed through equivalent paired comparisons (Jain, *et al.* 1979). The probit transformation converts the rectangular rank order frequency distribution to a more bell-shaped frequency distribution, while in the paired comparisons, a value of one for the dependent variable represents dominance (between the attribute levels of the two pairs being compared), and zero otherwise.

Does the transformation of the dependent variable in the OLS regression procedure improve the predictive validity of the estimated part-worths? If it does, the additional effort in analysis is justifiable. On the other hand, if no appreciable improvement is achieved, why not just use the original preference judgement ranks as the dependent variable in the OLS procedure? Therefore, this study was undertaken to compare the predictive validity of part-worth estimates derived from OLS regression procedure in which the dependent variable utilizes: (1) respondent's original preference ranks of the conjoint profile descriptions; (2) ranks normalized by means of a probit transformation (Cohen and Cohen 1975); and (3) dominance data yielding a value of 1 or 0 based on paired-comparisons of respondent's preference ranking of the profile descriptions (Jain, *et al.* 1979).

The Study

To investigate the objectives set in the preceding paragraph, data from a recent conjoint measurement study conducted by the authors of the present paper is selected as a test case. In this study, conjoint procedures were utilized to predict individuals' preferences for multiattribute options of selected survey response facilitators that lead them to participate in mail surveys.

The full-profile method was used to generate preference data for conjoint analysis. From among the pool of facilitators that favor increase in mail survey response rates, the three facilitators chosen for the present study were monetary incentive (\$.00, \$.50, \$1), prenotification (no notice, letter, telephone), and delivery mode (mail, personal drop-off, personal drop-off with reminder).

The three facilitators with three levels each presented a Latin square design resulting in twenty-seven stimulus profiles. Rank ordering all the stimuli presents a task of unrealistic complexity and also increases the likelihood of information overload which could interfere in the respondents' rating process (Malhotra 1982). Therefore, a one-third fractional factorial Latin square design was utilized. The resulting parsimonious design reduces the number of profile description evaluations to nine without loss of estimatability of all main effects (Green 1974). A description of the selected response facilitators with their levels and the final nine stimulus profiles from the Latin square design is presented in Table 1.

The research instrument was a structured questionnaire. The questionnaire sought respondents' rankings for the array of nine stimulus profiles of survey response facilitators (Table 1) in order of the likelihood of their participation in a mail survey. The pretested questionnaires were mailed along with a cover letter and a stamped, return addressed envelope. One follow-up mailing was sent out three weeks after the original questionnaires were mailed.

Of the 900 questionnaires mailed, 154 (17.1%) questionnaires were returned. However, only 136 (15.1%) questionnaires in which the conjoint tasks were fully completed were utilized for further analysis.

TABLE 1
MAIL SURVEY RESPONSE RATE FACILITATORS: ATTRIBUTES,
LEVELS, AND STIMULUS PROFILE SET

ATTRIBUTES AND LEVELS:				
A. Monetary Incentive	B. Precontact		C. Delivery	
1. No incentive	1. No precontact		1. By mail	
2. \$0.50	2. Letter precontact		2. By personal drop-off	
3. \$1.00	3. Phone precontact		3. By personal drop-off with reminder	
STIMULUS PROFILE SET				
Profile Number	Combination			Description
	A	B	C	
1	1	1	1	No incentive - No precontact - Delivered by mail
2	1	2	2	No incentive - Letter precontact - Personal drop-off
3	1	3	3	No incentive - Phone precontact - Personal drop-off with reminder
4	2	1	2	\$.50 incentive - No precontact - Personal drop-off
5	2	2	3	\$.50 incentive - Letter precontact - Personal drop-off with reminder
6	2	3	1	\$.50 incentive - Phone precontact - Delivered by mail
7	3	1	3	\$1 incentive - No precontact - Personal drop-off with reminder
8	3	2	1	\$1 incentive - Letter precontact - Delivered by mail
9	3	3	2	\$1 incentive - Phone precontact - Personal drop-off

Data Collection Methodology

The data for conjoint analysis required individuals' rank order for the set of nine stimulus profiles of response facilitators that would most likely lead to their participation in the survey. The data were obtained by administering a mail survey. The sampling frame for the mail survey was a current telephone directory containing the listings of several suburban cities. A systematic random sample of 900 households was selected for mailing.

Data Analysis

Conjoint Analysis

In the study the focus of conjoint analysis is in the estimation procedure rather than the subject of conjoint measurement. OLS regression with effects coding (Kerlinger and Pedhazur 1973) is utilized to estimate the part-worths for each level of the three response facilitators utilized in the conjoint task. Three sets of OLS regressions are performed on each respondent's rank order preference for

the nine stimulus profiles. In the first run (OLS-Ranks), the dependent variable is the respondent's original rank order preference data. In the second run (OLS-Probit), the rank order data for the dependent variable is normalized by means of a probit transformation (SAS 1982). In the third run (OLS-Dominance), the rank order is converted to the equivalent $[9 \times (9-1)/2]$ or 36 paired comparisons for each respondent. A value of one for the dependent variable indicated dominance, and a value of zero, otherwise.

Predictive Validity

The predictive efficiency of the three OLS estimation procedures was compared by examining:

- (1) the equivalence of the relative attribute importance weights across the three estimation procedures;
- (2) the product moment correlations computed independently for each respondent's the conjoint-predicted preference ranking of the stimulus profiles and the respondent's original rank order; and
- (3) the frequency of correct predictions ("direct hits") of respondent's profile preference ranks by conjoint-predicted ranks based on part-worths derived from each estimation procedure.

Results

The primary study objective is to compare the effect of transforming the dependent variable in OLS regression procedures for estimating part-worth. As mentioned earlier, 136 respondents who fully completed the conjoint task (described in Table 1) were subject to analyses discussed in the preceding section.

Equivalence of Attribute Importance

To test the equivalence of the estimated relative attribute importance, normalized weights provided by the different OLS estimation procedures, the following hypothesis is tested:

$$H_0: W_i \text{ (OLS-RANKS)} = W_i \text{ (OLS-PROBIT)} = W_i \text{ (OLS-DOMINANCE)}$$

for each i , $i=1,2,3$.

The multivariate analysis of variance with one factor and a repeated measures design (across respondents) rejected the hypothesis of equality of relative attribute importance weights at $p < .01$ level. However, the rank order of the mean attribute importance weights across the three OLS estimation procedures is the same (Table 2).

Product Moment Correlation

Under each estimation procedure and from each respondent's estimated part-worths, predicted preference ranking of the nine stimulus profiles were computed. Product moment correlation coefficients were independently determined for each respondent's observed and predicted preferences. The mean product moment correlation coefficients for all respondents presented in Table 3, indicates no substantial differences across the three estimation procedures. An analysis of variance on the individual respondent's correlation coefficients across the three estimation procedures was nonsignificant ($p \leq .05$). Thus the predictive validity does not differ across the three OLS estimation procedures.

TABLE 2
RANKS OF ATTRIBUTE IMPORTANCE WEIGHTS
ACROSS OLS ESTIMATION PROCEDURES

Attribute	OLS-Ranks		OLS-Probit		OLS-Dominance	
	Mean Importance Weight	Rank	Mean Importance Weight	Rank	Mean Importance Weight	Rank
Cash Incentive	0.354	2	0.141	2	0.068	2
Precontact Mode	0.198	3	0.060	3	0.019	3
Delivery Method	1.350	1	0.480	1	0.147	1

TABLE 3
MEAN PRODUCT MOMENT CORRELATION COEFFICIENT
BETWEEN OBSERVED AND PREDICTED RANKINGS
ACROSS OLS ESTIMATION PROCEDURES

	Estimation Procedure		
	OLS-Ranks	OLS-Probit	OLS-Dominance
Mean Product Moment Correlation Coefficient	0.7868	0.7503	0.7638
Standard deviation	0.182	0.197	0.190
No. of cases	136	136	136

Direct Hits

Table 4 presents the number and percentage of direct hits, that is, correct predictions of respondents' profile preference ranks in each of the three OLS estimation procedures. Though the percentage of direct hits predictions were relatively low, they were consistent across the estimation procedures. In addition, the results of the Chi-square tests of independence for direct hits in each stimulus profile across the estimation procedures were all statistically non-significant (at $p \leq .05$). Thus, all three OLS estimation procedures provide similar predictive validity.

Conclusions

Conjoint analytic procedures have been increasingly popular in commercial marketing research studies. Given the popularity of OLS regression method for estimating part-worths, this study was designed to examine the effect of transforming the dependent variable on the predictive validity of derived part-worths. In the study, two commonly used transformations (OLS-Probit and OLS-Dominance) of the respondent-generated preference rank order (OLS-Ranks) were examined. The basic conclusions from this empirical study are:

1. Transformations of the dependent variable in the OLS estimation procedure does not effect the mean relative attribute importance ranking.
2. The predictive validity of the conjoint estimated preference ranking of the stimulus profiles, as measured by the product moment correlation coefficients, is consistent across estimation procedures.
3. The predictive validity of the conjoint estimated preference ranking, as measured by the number of "direct hits" of respondents' original preference ranking, is consistent for all stimulus profiles across estimation procedures.

In conclusion, based on the study observations it is apparent that the metric conjoint OLS estimation procedures are robust. The additional precaution of transforming the integer ranks of the dependent variable prior to estimation of part-worths maybe unnecessary.

TABLE 4
DIRECT HITS OF INDIVIDUAL REPORTED PROFILE RANKS BY
PART-WORTHS PREDICTED PROFILE RANKS

Profile Design	Direct Hits by						Chi-square
	OLS-Ranks		OLS-Probit		OLS-Dominance		
	No.	%	No.	%	No.	%	
1 1 1	29	21.3	31	22.8	28	20.6	0.23
1 2 2	47	34.6	41	30.2	50	36.8	1.38
1 3 3	36	26.5	28	20.6	39	28.7	2.52
2 1 2	38	27.9	38	27.9	41	30.2	0.22
2 2 3	45	33.1	46	33.8	49	36.0	0.28
2 3 1	47	34.6	50	36.8	54	39.7	0.78
3 1 3	42	30.9	38	27.9	39	28.7	0.31
3 2 1	44	32.4	42	30.9	42	30.9	0.09
3 3 2	34	25.0	44	32.4	40	29.4	1.81
Total							
Direct Hits	362	29.6	358	29.3	382	31.2	

Note: None of the Chi-square values are significant at $p \leq .05$

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Abstract

This paper examines two issues concerning the revision by marketing managers of quarterly sales forecasts initially produced by an extrapolative model. An analysis is undertaken of the extent to which the frequency of forecast revision is systematically related to the performance of the forecasting model employed. The second issue concerns the degree to which selection activity can be modelled in terms of factual and quantitative information readily available to the individuals involved in revision. A real life sales forecasting database is employed, constructed from the records of a multiproduct industrial firm. Results are discussed in the light of previous evidence on subjective revision and their managerial implications are highlighted.

Introduction

When a large number of sales forecasts are required on a regular basis, even relatively simple extrapolative models perform as well as human judgement (see, for example, Lawrence et al. 1985; Mahmoud 1984). However, sole reliance on an extrapolative model for forecast generation purposes runs contrary to the advice of the majority of Marketing texts which

emphasise the inter-relationship between forecasting and planning and further, that a forecast should result from a particular marketing mix and strategy. West and Harrison (1989, p33) point out that "a model is only a component of a forecasting system, which includes the forecaster as an integral component. Interaction between the forecaster and model is necessary to cater adequately for events and changes that go beyond the existing forum of the model". It is, therefore, highly desirable to combine the simplicity and speed of extrapolation with the knowledge, experience and expectations of marketing professionals.

In this context, recent empirical work has shown that ex-post managerial revision of quantitative forecasts can result in substantial improvements in forecast performance in terms of error reduction (Mathews and Diamantopoulos, 1989a). Furthermore, it has been established that managers are generally effective in identifying potentially poor (high error) forecasts as candidates for revision (Mathews and Diamantopoulos, 1990).

Despite this evidence, a number of questions are still left unanswered. Of particular relevance is the extent to which the **frequency** of forecast revision is associated in a systematic manner with the performance of the (quantitative) forecasting model in use i.e., are forecasts which are selected more frequently for revision relatively and consistently less accurate than those selected less often, or is that the process of selection triggered by intermittently occurring errors in the model based forecast? In the absence of a relationship, the complete forecasting system could be said to be effective insofar as the model is seen to perform consistently and selective managerial inputs, resulting from specific events, remedy the inherent deficiencies of extrapolation. On the other hand should a relationship be demonstrable then a variety of additional avenues may be suggested, which tend to fall into the categories of changing the forecasting model employed or revising the forecasting process.

A second question concerns the extent to which the process of forecast selection can be modelled, using indicators which discriminate between forecasts that are chosen for revision and those which are not. The potential importance of this phase of the study is that should it be possible to predict forecast selection then the revision process may be considerably simplified, possibly to the extent of automation. To be useful for practical purposes any indicators must be theoretically relevant as well as (a) readily available to managers on a regular basis, (b) easily quantifiable, and (c) able to discriminate effectively on an **ex-ante** basis between selected and non selected forecasts (i.e. they must be based only on information which exists at the time that the forecasts are revised).

These two issues constitute the focus of the present paper. The first may be stated as the hypothesis:

- H1 A monotonic relationship exists between the average forecast error of a quantitative model and the number of time periods in which a forecast is selected for revision.

With respect to the possibility of modelling forecast selection, since the two issues are not entirely independent, specific hypotheses concerning this area will be developed in subsequent sections, following the results for H1.

Empirical Setting

The data were obtained from the records of a U.K. manufacturing company operating in the health care industry and producing a large number of repeat purchase products sold to institutional buyers. The firm's product range has over 900 individual product items. Demand is forecasted on a quarterly basis using a single forecasting model, a version of Holt's exponential smoothing. Forecasts are prepared at about the middle of the period prior to the forecast one (i.e. two periods ahead).

Forecast selection and revision is undertaken by five product managers, each of whom is responsible for managing part of the product range. They are provided with certain factual information, principally, the demand history of the product for the preceding eight periods, the proposed forecast and an estimate of demand in the current period. There are no formal, systematic methodologies for selecting and revising forecasts employed by product managers who rely solely on their judgment and knowledge of the marketplace.

The total data set spans six consecutive forecasting periods and contains information on the 839 individual products which were present in the company's product range for all six periods. Products introduced or eliminated from the range during periods 1 - 6 were excluded to ensure comparability of information.

Revision Frequency

In order to examine the relationship between frequency of forecast revision and performance of the forecasting model, products in the data set were allocated into seven categories according to the number of times they were selected for revision during the six periods covered in the study (minimum 0, maximum 6). Subsequently, differences among categories in terms of forecast error were investigated, using the five error measures detailed in Table 1.

TABLE 1
FORECAST ERROR MEASURES

$AVEE = \sum e/n$	Mean Error
$AVEAE = \sum e /n$	Mean Absolute Error
$AVESE = \sum e^2/n$	Mean Squared Error
$AVEPE = \sum [e/(a+f)]/n$	Mean Adjusted Percentage Error
$AVEAPE = \sum e /(a+f)/n$	Mean Absolute Adjusted Percentage Error

Where: f = Forecast sales
a = Actual sales
e = a-f
n = Number of periods

Multiple measures were used to provide a comprehensive picture of the performance of the forecasting model since no single error metric provides an unambiguous picture of forecast accuracy (see, for example, Armstrong, 1985, Mahmoud, 1987). Simple percentage measures (such as MAPE) are not included because they grossly exaggerate the forecast errors of low volume products; moreover, if actual sales are zero such measures cannot be formally defined (i.e. they take a value of infinity).

Analysis of Variance (ANOVA) or Covariance (ANCOVA) was used to examine differences between the seven levels of revision frequency with respect to the five error measures defined above. An ANCOVA model incorporating the product's average sales volume over the six periods as a covariate was specified for the three non directional error measures (AVEAE, AVESE and AVEAPE), as it has been demonstrated that measures of these types are typically correlated with sales volume (Mathews and Diamantopoulos, 1989 b). For the remaining two measures (AVEE and AVEPE), indicating bias in forecasting, an ANOVA model was specified, since their directional nature makes them less susceptible to volume dependencies. In order to avoid violating the linearity assumption of the ANCOVA model it was necessary to perform a square root transformation on the AVESE measure because of the quadratic nature of this metric. This removes the possibility of the results being an artifact of the measuring and testing process. Table 2 shows the ANOVA/ANCOVA results.

TABLE 2
DIFFERENCES IN MODEL-BASED ACCURACY ACCORDING TO THE FREQUENCY OF SELECTION FOR REVISION.

Revision Frequency	N	Forecast Error Measure (Cell Means)				
		AVEE	AVEAE	AVESE*	AVEPE	AVEAPE
0	75	-2.59	31.6(108)	38.5(136)	-0.06	.201(.174)
1	166	-0.03	43.0(114)	52.8(144)	-0.02	.222(.198)
2	221	9.38	69.8(114)	86.6(143)	0.01	.224(.209)
3	180	10.11	83.1(119)	99.5(145)	0.09	.270(.257)
4	125	11.08	119.5(124)	146.3(153)	0.07	.220(.219)
5	58	12.83	281.0(174)	339.5(202)	0.15	.252(.290)
6	14	34.70	394.8(270)	479.5(320)	0.20	.470(.513)
F Ratio (Main)	2.3	6.6	6.3	20.4	9.8	
Significance	0.03	0.00	0.00	0.00	0.00	
F Ratio (cov)	n/a	2034	3030	n/a	67	
Significance	n/a	0.00	0.00	n/a	0.00	
r ²	0.02	0.74	0.79	0.13	0.13	

n=839

Parenthesised figures are adjusted means in ANCOVA model

* After square root transformation

For all five error measures reveal the existence of differences between revision frequency categories is indicated by the significant main effect F-ratios. In all cases where a covariate

was specified, the associated F-ratio also turned out to be significant, thus confirming the appropriateness of adjusting for volume influences.

With regards to the directional measures (AVEE and AVEPE) the ranking of all cell means is fairly consistent (an exception being category 4 on the AVEPE indicator), showing that the more the model underestimates, the greater the incidence of forecast revision.

Results for the non-directional measures (AVEAE, AVESE and AVEAPE) are also fairly clear cut. The rankings of the adjusted means for AVESE and AVEAPE, while on the whole in the expected direction (i.e. progressively increasing in size with increases in the frequency of revision) are characterised by certain reversals in magnitude (category 2 for the AVESE and category 4 for the AVEAPE measures respectively). The AVEAE measure displays no such reversal but two identical values do appear.

Taken collectively, the above findings are sufficiently convincing to warrant acceptance of the hypothesis that the frequency of forecast revision is systematically related to the performance of the forecasting model, with the caveat that the relationship is not demonstrated to be entirely monotonic.

Determinants of Forecast Selection for Revision

Several types of influences are relevant in evaluating whether forecast selection could be modelled. These consist of the majority of factual and quantifiable information which managers could routinely draw upon. The main area of investigation concerns how these might affect the decision to revise the model-based forecast for a particular product.

The most obvious influence, given the above results, concerns the past performance of the forecasting model. If the model is found to perform poorly for certain products, it is reasonable to expect that the forecasts for such products are more likely to be selected for revision. Thus it can be hypothesised that the larger the errors produced by the model in past periods, the more likely it is that the forecasts for the products concerned will be singled out for revision in future periods.

A second set of factors relate to the importance of the product in the product range. Forecasts for products which are of importance to the company and/or manager in terms of price, profitability, sales volume etc are more likely to receive attention. The implications of obtaining a poor forecast are much graver than is the case if less significant items are involved. Hence, managers are more likely to

concentrate on the more important products when selecting forecasts for revision.

The process may be conceptualised in terms of perceived risk, involving the manager's estimation of the likelihood of a forecast being incorrect and his evaluation of the severity of the consequences resulting from a poor forecast for a particular product.

Thus a further two hypotheses may be developed for this section of the investigation:

H2 Poor performance of a forecasting model will be positively related to forecast selection

H3 Product importance will be positively related to forecast selection

To examine the impact of the above influences, products which had their forecasts revised in period 6 (the last period in the data set) were compared against non-selected products in the same period. The past performance of the forecasting model was operationalised through the five error measures already defined in Table 1, averaged over the first four periods (since forecasts are prepared two periods ahead). Product importance, on the other hand, was operationalised in terms of five sales/profitability indicators shown in Table 3.

TABLE 3
MEASURES OF PRODUCT IMPORTANCE

Indicator	Units
P Price charged in period 6	£
UGP Unit gross profit in period 6	£
%GP Gross profit margin in period 6	%
TGP Total gross profit in period 4	£
SV Average volume in periods 1-4	Sales Units

With the exception of price, all indicators in Table 3 are expected to have a positive influence on the decision of whether or not to revise a forecast (eg the higher the profit earned in the past (TGP) the more likely the product concerned will be selected for revision). A-priori expectations on the influence of price are more difficult to establish; while it could be argued that a high price might itself reflect the relative importance of a product, low prices are often associated with the more popular, high volume, items. In short, while it may be expected that price will affect the forecast revision process, the specific nature of its influence cannot be readily specified in advance.

The first step in the identification of potential differences between selected and non-selected forecasts in terms of forecast performance and product importance, a series of t-tests were performed, the combined results are shown in Table 4.

TABLE 4
T-TEST RESULTS

Measure	Mean: non-selected	Mean: selected	t-ratio	Sig
AVE	4.09	-10.78	2.10	.04
AVEAE	62.9	144.8	-3.78	.00
AVSE	21186	230613	-2.03	.04
AVPE	.040	.027	0.90	.37
AVAPE	.237	.248	-0.85	.40
P	18.4	14.6	2.29	.02
UGP	8.29	7.91	0.57	.57
%GP	.535	.553	-2.05	.04
TGP	1444	3026	-3.94	.00
SV	313	646	-3.51	.00
n=	495	344		

Out of the ten tests conducted, seven provided significant results. In all instances where statistical significance was observed, the results were according to expectations. The findings relating to price indicate that lower-priced products are, on average, more likely to be selected for revision.

As the picture presented in Table 4 does not highlight the combined impact of product importance and forecast performance on forecast selection a discriminant analysis was subsequently performed.. All variables included in Table 4 were considered initially as discriminating variables since a linear combination of variables may discriminate as a set even if the individual variables do not do so independently (Cochran, 1964).

In formulating and testing the discriminant model, a split-sample approach was taken thus resulting in a data set of 420 cases for establishing and parameterising the model and 421 for classification purposes. In order to avoid potential problems of multicollinearity a tolerance analysis was performed on the ten discriminating variables. The threshold sought was a tolerance level of 0.4, or better, representing a multiple correlation coefficient of less than 0.75. Variables were removed from the analysis one by one until the tolerance criterion was attained, resulting in the removal of SV, AVEAE, UGP and AVESE. Final tolerance values were all better than 0.7. Variables remaining for investigation are thus P, %GP, TGP, AVEE, AVEPE, AVEAPE. These were entered in a stepwise multiple discriminant analysis, the results of which are given in Table 5.

Of the six variables entered into the discriminant analysis procedure only four were combined in the final function. The most important of these in terms of discrimination is the total gross profit, clearly a factor of great managerial importance. Forecast performance, in terms of absolute percentage error figures as an important discriminator, demonstrating apparent managerial cognisance of past model performance. Price turns out to have

TABLE 5
DISCRIMINANT ANALYSIS RESULTS

Variable	Standardised Coefficient
P	-0.431
%GP	0.410
TGP	0.747
AVAPE	0.586
Eigenvalue	0.070
Cannonical correlation	0.256
Wilks Lambda	0.934
Chi-square	28.2
Sig	0.000

a negative coefficient indicating that lower-priced items are more likely to be revised. Looking at the associated statistics, the level of significance obtained is entirely satisfactory. Nevertheless, the value of Wilk's Lambda is close to unity indicating that the group centroids are not well separated and hence placing doubt on the function's ability to discriminate effectively.

Although the content of the discriminant function is in itself important, the main interest in the present case lies in its ability to predict revision behaviour. This is indicated by the classification properties, which are displayed in Table 6.

TABLE 6
CLASSIFICATION ANALYSIS RESULTS

		Predicted	
		Nonselected	Selected
Actual	Nonselected	252 (245)	222 (225) 88.1% (91.8%)
	Selected	169 (175)	142 (129) 84.0% (78.6%)
% Correctly Classified		59.1% (64.5%)	

Parenthesised figures relate to the calibration sample

The classification results are consistent between the calibration and test samples, showing a reduction of only five percentage points. However, according to the proportional chance criterion, the overall classification of the test sample is only seven percentage points better than chance. Particularly disturbing in this context is the very low classification rate of the selected forecasts (16%), a finding which bestows hardly any confidence on the function's predictive ability. Thus, although the evidence warrants acceptance of H2 and H3 given the variety of significant results obtained the practical usefulness in the current empirical setting is, to say the least, limited.

Discussion and Conclusions

With respect to revision frequency, the results are, overall, supportive of the initial hypothesis that poorer forecasts are revised more often than those for which the forecasting model provides better results. The principal implication of this finding is that managers appear to be able to anticipate situations which may prove difficult for the model to respond to correctly. Further, this appears not to be a hit and miss process, since the most frequently revised forecasts are also the least accurate overall. Schnaars (1983) observes that the more erratic the time series the less accurate the forecast is likely to be. In this context, the managers concerned appear to be able to identify series with which the model cannot cope effectively and make modifications to the forecast value to remedy at least some of the inaccuracies (see Mathews and Diamantopoulos, 1989, for details of forecast improvement). From a managerial perspective the very fact that a relationship is present raises the question as to whether for those high error products the correct forecasting model was employed. In principal, each product could have a different forecasting model applied, optimised for the particular time horizon. Such an approach may possibly eliminate relationships as described above but, taking into account the observations of Schnaars (1983) this is by no means a foregone conclusion. On a more practical note, McHugh and Sparks (1983) reported that only some 12 percent of firms in their sample (U.K. based) used a computer to produce formal forecasts, it might therefore be somewhat problematic suggesting the use of multiple models for general application. Further practical problems are raised by Lawrence (1983) who noted that several large Australian corporations had abandoned extrapolative forecasting techniques in favour of judgmental ones for a variety of reasons including difficulties associated with data management.

In attempting to model the forecast selection process using indicators of product importance and forecast performance, the discriminant analysis results show that, at best, only a partial explanation of revision behaviour can be obtained through utilisation of quantifiable and routinely available managerial information. This seems to suggest that managers use additional informational inputs which are not of the "easily detectable", "patently obvious" and "readily quantifiable" variety. Such inputs are likely to be embedded in the manager's overall 'feel' for the forecasting situation and reflect (a) cumulative knowledge and experience of the product and market situation, and (b) prior knowledge about 'one-off' events (e.g. new competitor entry). Both these kinds of information cannot be reasonably expected to be satisfactorily incorporated in extrapolative models, which implies that 'automatic' selection of forecasts for revision may not be attainable. There is, however, the possibility that certain external influences could be modelled, for

instance price changes, competitive product entry/exit, changes in the marketing mix etc. For many types of forecast it is factors such as these which form the basis of the model, yet, as pointed out earlier such factors are usually not considered in extrapolative forecasting. In principal these areas could be incorporated in the form of dummy (0/1) variables which may assist in either forecast preparation or revision. Unfortunately, the record keeping and managerial effort involved for a large numbers of products may well lead to lack of maintenance and possibly cessation of use of the system in the way that Lawrence (1983) described.

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Abstract

This paper examines the issue of importance weight sensitivity in the hybrid conjoint model through empirical analysis of two real data sets. Specifically, the question of whether the retention of a subset of the total attributes is actually better from a prediction standpoint is addressed.

Introduction

Since the pioneering work of Meehl (1954) on clinical versus statistical prediction, researchers from the behavioral sciences have been interested in how individuals make decision among multiattribute alternatives. In the context of compositional-based attitudinal models (Wilkie and Pessemier 1973), this interest often focuses on the importance weights that an individual uses to arrive at an overall judgment among alternatives whose values vary across two or more attributes. Researchers in clinical judgment modeling (Hoffman 1960) and functional measurement (Anderson 1970) have also studied the role of importance weights in multiattribute preference analysis.

One of the most interesting findings of this type of research, reported by Shepard (1964), is that experimental subjects tend to give stated importance weights that are more evenly distributed over the attributes than those derived from subjects' actual choices. That is, self-explicated importances tend to ascribe too much weight to the lesser attributes and too little weight to the more important attributes.

Researchers in marketing are also interested in respondents' reported usage of importance measures in attitudinal and choice modeling. For example, in a study of respondents' self reports of attribute importances, Sampson and Harris (1970) have indicated that the rank correlation between stated attribute importances and derived attribute importances (as found by correlating individual attribute ratings with overall affect ratings) was approximately zero.

One of the main issues in attribute importance research entails the question of how salient the judged importances really are. In the case of derived attribute importances, Wilkie and Pessemier (1973) reported that the number of significant attributes ranged from only 2 out of the 9 original attributes to 8 out of 17. Hansen (1969) found that the 3 most important attributes provided predictions almost as strong as the full set of 24. Wilkie and Weinrich (1972) generally found only 3 or 4 significant attributes out of 7; inclusion of all 7 attributes actually yielded lower predictability. Moynour and Wiley (1972) have also reported findings suggesting that not all attributes were needed for the best predictions, particularly

when the retained attributes were chosen to be as free as possible from multicollinearity.

The weight of the research findings on how many attributes to include suggests that one might obtain as good (or sometimes even better) predictions by dropping respondents' judged "unimportant" attributes from the model. However, relatively little is known regarding how many attributes to drop and whether retaining only a subset of attributes is actually better from a predictive standpoint.

Importance Weights in Hybrid Conjoint Modeling

Hybrid conjoint models (Green, Goldberg and Montemayor 1981; Cattin, Hermet and Pioche 1982; Akaah and Korgaonkar 1983) are a fairly recent development in marketing research. These models utilize self-explicated importance weights in a part worth estimation model that incorporates aspects of both compositional models and the decompositional approach of traditional conjoint analysis.

To date, hybrid conjoint models have been primarily used in large commercial studies where the number of attributes may range from 8 to 12, or more. As the number of attributes increase, one would expect more serious problems with information overload, even with the relatively small number of portfolios evaluated by any single respondent. Accordingly, a pragmatic question concerns whether the self-explicated information on attribute importances should be used to simplify the full profile descriptions to include only those attributes judged important by the respondent in the self-explicated data collection phase. However, if there is some information contained in the "lesser" attributes, one might wish to present complete profiles.

We approach this problem through empirical analysis of real data sets. Essentially, we examine the implications of assuming that respondents behave as though they utilize only a subset of the attributes in making full-profile conjoint evaluations. The analyses are carried out on two databases, obtained from industrial hybrid conjoint studies of dietary food supplements and antihypertensive drugs, respectively. (To maintain product confidentiality, attribute names and levels are omitted from the discussion.)

We first review the design of the experiments, including a brief description of the specific hybrid model employed and the outcome measures used to assess the effect of varying the self-explicated importance weights. Results are then presented for each of the data sets, followed by a summary section.

Study Design

The hybrid conjoint model used in each of the analyses is a modification of a model described by Green (1984). The present model, however, incorporates an individual intercept term and is written as follows:

$$Y_{i_1, i_2, \dots, i_j, k} \approx a_k + b U_{i_1, i_2, \dots, i_j, k} = \sum_{j=1}^J V_{ij} \quad (1)$$

where $\approx$ denotes least squares approximation, a_k is an individual intercept term, and b is a group-level common slope. The $U_{i_1, i_2, \dots, i_j, k}$ is found from individual k 's self-explicated data:

$$U_{i_1, i_2, \dots, i_j, k} = \sum_{j=1}^J w_{jk} u_{ijk} \quad (2)$$

where w_{jk} is individual k 's self-explicated importance weight for attribute j and u_{ijk} is individual k 's acceptability rating for level i ($i=1, 2, \dots, I_j$) of attribute j . The v 's are group-level main effects estimated from a regression analysis of residuals obtained from a preliminary regression that estimates the a_k 's and b . The w_{jk} 's are typically obtained by constant sum point assignment (and, hence, are already normalized to vary between 0 and 1; the u_{ijk} acceptability ratings are also normalized to vary between 0 (completely unacceptable) and 1 (completely acceptable).

The estimation of a common slope in equation (1) is an illustration of the single b -weight hybrid model (Green 1984). Green has reported that in commercial-scale studies the single b -weight model performs about as well as the multiple b -weight model (in split-half samples) and is less vulnerable to noisy data. Estimation of the individuals a_k 's is motivated by the increasing use of dependent variables that reflect intentions-to-buy data on a subjective probability scale. Since respondents are expected to vary in their overall liking of new concepts (and different respondents receive different test profiles in hybrid designs), estimation of individual intercepts provides flexibility for predicting absolute levels of buying intentions, at the individual respondent level. It should be noted, however, that one's a_k has no effect on the ordering of a respondent's set of predicted profile evaluations.

Respondent Instructions

In both studies respondents were first asked to rate the level of each attribute on an equal-interval acceptability scale, ranging from completely unacceptable to completely acceptable. Following this, respondents were asked to assign 100 points across the attributes so as to reflect their relative importance in choosing among alternatives within the product class. Finally, each respondent rated a small and balanced subset of full conjoint profiles (drawn from an orthogonal main effects design) on a

likelihood-of-purchase scale, ranging from 0 (no likelihood at all) to 100 (certain to purchase).

The first part of Table 1 shows how the two studies are designed in terms of sample size, respondent type, number of conjoint attributes, and so on. As observed from the table, the studies differed mainly in sample size, respondent type, and the number of main-effects dummy variables (the v 's of equation (1)) used to analyze the first-stage residuals. It should also be mentioned that virtually all respondents assigned non-zero importances to all attributes on a self-report basis.

TABLE 1
DATA SET CHARACTERISTICS

Descriptions	Dietary Food Supplements	Antihypertensive Drugs
Sample Size	N=178	N=309
Respondent Type	Hospital Dieticians	Cardiologists
No. of Attributes in Full-Profile Conjoint Design	9	8
Range of Levels within Attribute	3-4	2-4
No. of Rating Points on Acceptability Scale	5	6
No. of Full Profiles Evaluated by Each Respondent	4	4
No. of Full Profiles in Master Orthogonal Design	32	32
No. of Candidate Dummy Variables In Regression Analysis of First-Stage Residuals	23	12
Percent of Respondents Reporting No Zero Importance Weights on the Self-Explicated Task	87%	80%

Control Variables and Response Measures

As noted earlier, the control variable of interest to the experiments is the respondent's set of self-explicated importance weights. In the usual application of hybrid conjoint, all such weights are used in the calculation of the utilities. Here, however, we shall make different assumptions about how the respondent actually uses the self-explicated importances when he/she evaluates the full conjoint profiles. For example, take the case of the first data set, dietary food supplements. In the base case, we assume that the respondent uses all 9 self-explicated importances.

In the second variation of the experimental variable we assume that the respondent uses only the 6 highest self-explicated weights in the profile evaluation task and behaves as though the smallest 3 are effectively zero. (His/her

top 6 are renormalized to sum to 1.) Then we assume that only the respondent's top 4 weights are used in the profile task and, finally, that only the top 2 weights are used.

Research Questions

The following research questions guided the first part of the analysis. As one reduces the number of self-explicated importances deemed to be "salient" in the full profile evaluation stage, what is the impact on:

1. The sample R^2 and b , the common slope parameter, estimated at the first-stage regression level?
2. The cross-validated (via jackknifing) correlations used to estimate hold-out samples of full-profile evaluations at the individual level?
3. The number of terms actually selected on the second-stage stepwise regression of residuals on dummy variables (underlying the v 's of equation (1))?
4. The sample R^2 associated with the second-stage regressions and the total R^2 across both stages?

In addition to evaluating the sensitivity of model parameters to variations in the number of retained importance weights, we shall also assess sensitivity in terms of computer choice simulations. In each case a matrix of individual part worths is prepared for each variation of the experimental variable. Each set of part worths is then entered into a computer choice simulator, along with a set of hypothetical test products. Each hypothetical test product is taken from the same orthogonal design used in constructing the full profiles. (Hence, as noted in Table 1, the number of separate simulations within each data set is 32.)

In the second phase of the analysis we were interested in the following research questions:

1. At the total sample level, how closely correlated are the average likelihoods of choosing the test products across experimental conditions?
2. How is the range of predictions affected by variations in the number of retained attributes?
3. How are derived attribute importances (from the simulator) affected by variations in the number of retained attributes?

Results

We first discuss the results of the analysis in terms of parameter estimation and goodness-of-fit of the hybrid model shown in equation (1). This is followed by a discussion of the simulation results.

Self-Explicated Importances

Average importance weights (the w 's of equation (2)) were calculated on each of the two data sets for each variation of the experimental variable. In the case of the dietary food supplements, attribute 5 increases in importance from 0.22 (when all 9 attributes are included) to 0.41 (when only the top 2 attributes are included), with commensurate reductions in the lesser attributes. Similarly, in the antihypertensive drug case, attribute 7 increases from 0.21 (with all 8 attributes) to 0.29 (with only the top 2 attributes). It should also be noted that intermediate-level importances remain relatively unchanged across levels of the experimental variable while the low-importance attributes tend to assume even smaller weights as one goes across experimental conditions.

Summary of Goodness-of-Fit and Slope Parameters

As discussed earlier, the model of equation (1) was applied to each data set, for each level of the experimental variable. With respect to the first-stage results, there is a fairly regular downward trend in slope, sample R^2 and cross-validated (via jackknifing) individual r 's, as fewer non-zero attribute importances are included. Both data sets show the same general trends, although the R^2 's are slightly higher for the antihypertensive drug case.

However, when one considers the second-stage analysis of residuals, more dummy variables enter the stepwise regressions (with larger associated R^2 's), as the number of non-zero attribute importances decrease. This is true of both data sets. The overall effect is that the total R^2 remains pretty much the same across levels of the experimental variable.

In sum, we have the following results:

1. In the first-stage analysis of self-explicated data, the goodness-of-fit measures showed higher values associated with greater numbers of non-zero attribute importances, suggesting that individuals are using the lesser attributes to some extent.
2. However, in the analysis of residuals, the impact of the lesser attributes is being picked up via group-level stepwise analyses with dummy variables.
3. Hence, the overall goodness-of-fit does not vary much across differences in the number of retained attributes.

Of course, from the standpoint of retained individual differences, it would appear that higher numbers of non-zero attribute importance weights are better from a goodness-of-fit standpoint.

Simulator Results

Each of the eight separate analyses provides a set of individual part worths (representing a

combination of individual and group-level utilities). These part worths were then entered into a computer choice simulator, along with a set of test product profiles. The original stimulus designs provide a useful set of orthogonal test profiles. Accordingly, for each data set, 32 simulated test products were run for each of the four experimental conditions. The response measure was average likelihood of purchase, for each test product, considered separately. Use of orthogonal designs has the main advantage that a "behavioral" measure of attribute importance can be found by finding simple averages across the dependent variable (for each level of each attribute) whose relative range of variation can then be summarized.

We also correlated the average-respondent predictions (across the 32 test products), by experimental condition. The simulator responses are highly correlated across experimental conditions. A comparison of the extreme conditions (9 vs. 2 or 8 vs. 2) still shows correlations of over 0.96. Clearly, the experimental conditions produce relatively little practical impact on the results of the simulator. High correspondence of the experimental conditions across the four levels of retained attributes were also stable: (a) 0.21, 0.20, 0.20, and 0.20 for the dietary food supplement data, and (b) 0.39, 0.39, 0.38, and 0.38 for the antihypertensive drug data.

The derived attribute importances also suggest this conclusion. In contrast to results reported earlier (where more important attributes received higher weight as the number of retained importance weights decreases), the patterns of derived attribute importances show relatively little variation across experimental conditions. Clearly, the second-stage conjoint analysis of individuals has "compensated" (at the group parameter estimation level) for the small numbers of non-zero importances contributing to the first-stage estimation of the U's.

How critical is the second-stage analysis of residuals? One way of measuring this is to run an analysis in which only the first stage parameters are fitted (i.e., the v's of equation (1) are not estimated). Illustratively, a comparison between 9 and 2 non-zero attribute importances was made for the dietary food supplement data; no second-stage analysis of residuals was carried out.

As might be expected, this comparison produced different results. First, the difference between the highest and lowest forecasts decreased from a 0.21 probability range to only 0.15 for the 9 attribute case and from a 0.20 range to only 0.10 for the 2 attribute case. Thus, failure to include the second-stage regression analysis attenuated the range of forecast variation in both conditions, but much more severely so in the case of the 2 attribute case. However, the specific maximum and minimum test products remained the same across the two conditions.

The implications of this result are interesting in light of renewed interest (Leigh, MacKay and

Summers 1984) in the use of simple compositional models based on self-explicated weights only. Insofar as the two data sets analyzed here are concerned, it would not be prudent to omit the second-stage regression analysis. Not only are overall fits poorer by omitting the second-stage analysis, but there is also an attenuation of the range in forecasts between best and worst test products, particularly so under the 2-attribute importance weight condition.

Summary

Given that the results of these experiments are replicated over other data sets, the following summary comments can be made:

1. There is some indication that information loss is associated with the elimination of less important attributes, if only the first stage of a hybrid conjoint model is fit to the data.
2. However, if the second stage fit to first-stage residuals is retained, the initial information loss—as long as the respondents' judgments are reasonably homogeneous—is regained in the fitting of group-level parameters (the v_{ijs}).
3. Simulator results are not highly affected by the first-stage information loss, assuming that the second-stage fits are implemented.

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AN INVESTIGATION OF THE PREDICTIVE VALIDITY OF BIPOLAR
ADJECTIVE AND GRAPHIC POSITION SCALES

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Abstract

This study reports the results of an experiment that compared the predictive validity of the graphic position scale with the traditional bi-polar adjective scale. The effect of number of objects compared was also investigated. The results indicate that the graphic position scale provided an appreciable increase in predictive validity over the bi-polar adjective scale.

Introduction

Since its introduction by Narayana in 1977, the graphic positioning scale (GPS) has received relatively little attention among academic researchers and practitioners. Narayana's study compared the continuous GPS to more traditional bi-polar adjective scale (BPS) as a measure of attitude toward brands of toothpaste and behavioral intention. He concluded that the GPS saves time and effort for both the respondent and the researcher, and provides data and information that is as good or better than the BPS.

The graphic position scale has a scale format which is similar to the traditional bi-polar adjective scale (Lehmann 1985, p. 192), except that all objects are evaluated for an attribute on the same scale. This is accomplished by placing symbols representing each object at a location which reflects their relative perceptual position on a scale between two bi-polar adjectives (Narayana 1977).

The advantage of the GPS is that it substantially shortens the physical length of a questionnaire. Since the GPS only uses one scale per attribute for all objects being measured, total questionnaire length is reduced. Shorter questionnaires are thought to result in less fatigue effects among respondents and are expected to yield more reliable measures. Although the evidence on questionnaire length is mixed (Yu and Cooper 1983) no one argues that longer questionnaires are an advantage. Also, significant savings in printing and postage result where multiple objects are being investigated.

An additional advantage for some studies is the comparative nature of the graphic position scale (Narayana 1977). The use of a GPS forces an attribute ordered questionnaire structure, which can be an advantage for some types of research.

In spite of the practical considerations of expense and fatigue and any advantage of a comparative structure, a researcher can advocate the use of the GPS format only if there is no corresponding loss of reliability or validity.

Stem and Naozin (1985) compared the test-retest reliability of the GPS and the BPS and did not

find any statistically significant differences. In addition, Golden, Albaum and Zimmer (1987) found the GPS to be high in reliability as measured by internal consistency. They also found a significantly lower item omission rate than for a numerical comparative scale. This research provides strong evidence for the argument that the GPS is a reliable scale. In addition, it provides a more realistic format for respondents to compare across alternatives for each attribute.

Because the scale is more realistic, i.e. it mimics the comparative process found in the consumer decision process, the GPS should enable the consumer to construct a more realistic cognitive structure. This should result in better prediction of respondents' behavior than with the BPS. The process of using GPS might, perhaps, guide the respondents into expressing preference that is more consistent with their "true" preference than when using the BPS. The expressed preference for a brand can be compared with the brand purchased in the store across respondents who have used GPS and BPS, respectively. However, to date there has been no published research which tests this proposition of superior predictive validity of purchase intent for respondents who have used the GPS scale.

Aim

The principal purpose of this study is to compare the predictive validity of the purchase intent measures of respondents who have used the graphic position scale (GPS) and those who have used the bipolar adjective scale (BPS). A log-linear model is used to further investigate the effect of the following factors on preference prediction: (a) number of objects presented to the respondent for evaluation, and (b) type of measurement scale.

Background

An integral part of developing better measures of consumer behavior or marketing constructs is to test their validity (Churchill 1979). Researchers have concerned themselves with face, content, predictive, concurrent, pragmatic, construct, convergent, discriminant and nomological validity (Churchill 1979; Nunnally 1978). However, there is considerable confusion about the domain of these terms. Some are either subsets of others or are used interchangeably (Campbell 1960; Churchill 1987; Cronbach and Meehl 1955; Lehmann 1985; Tull and Hawkins 1987). Hence, it is necessary to select a specific definition of predictive validity for use in this study.

Tull and Hawkins (1987, p. 226) define predictive validity as "... the extent to which an individual's future level on some variable can be predicted by his (her) performance on a current measurement of the same or a different variable." A number of marketing researchers and psychometricians have defined the concept similarly (Churchill 1987, p.382; Lehmann 1985, p. 205; Nunnally 1978). Consequently, this is the definition we abide by in this study. In the case of consumer behavior, the relation between behavioral intention and actual purchase behavior is an accepted measure of this type of validity (Kalwani and Silk 1982).

For the applied marketer, the predictive validity of a scale has special value because, among other things, it holds the key to forecasting sales from purchase intention measures. Further, the predictive validity of the behavior intention measure has been widely investigated (Best 1978; Fishbein and Ajzen 1975; Ryan and Bonfield 1975). These studies have used the traditional semantic differential scales. The predictive validity of the GPS has not been investigated. Given the importance of knowing the predictive validity of a scale, there is a need to investigate the predictive validity of the GPS.

Purchase intention is a specific subset of the class of behavior intention measures (Kalwani and Silk 1982). The measures of purchase investigated in the past have been either actual choice (e.g., Bass, Pessemier, and Lehmann 1972) or stated intention -- sometimes referred to as expressed preference (e.g., Wilson, Mathews and Harvey 1975). The current study was designed to collect both an actual measure of purchase along with a stated intention. The measure of predictive validity was based on comparing the stated intention with actual purchase made.

There is some evidence that choice depends on the amount of information presented to the respondent (cf., Best and Ursic 1987; Jacoby, Speller and Berning 1974; Jacoby, Speller and Kohn 1974; Malhotra, Jain and Lagakos 1982). For the current study, the amount of information was manipulated by varying the number of brands.

Based on the factors discussed above, one would expect the GPS to have higher predictive validity than the BPS. Since the variables used in the study are categorical, a log-linear modeling approach will be used to analyze the data. This is the preferred and the recommended analysis method for such data when there is a need to study their relationships (Green, Carmone and Wachspress 1977; Magidson 1982; Malhotra 1984).

Method

Study Design

The log-linear analysis was conducted using a three-way table. The three factors were type of scale (GPS and BPS), number of objects (four and twelve), and choice prediction (correct and incorrect). To avoid position or "anchor" bias, the order of presentation of the objects was reversed for half of the questionnaires.

Questionnaires

The GPS questionnaires were three pages long, irrespective of the design condition. The BPS questionnaires were much longer: 5 and 12 pages for the 4 and 12 object design configurations, respectively. These lengths do not include the title page which contains the instructions. An example of a question in both scale formats is shown below:

GPS: Rate the following soft drinks, by placing the appropriate letters in locations that match your personal preference: New Coke (C), 7-Up(7), Diet Pepsi (DP) and Sunkist (SK).

most	---	---	---	---	---	least
preferred	1	2	3	4	5	preferred

BPS: Rate the following soft drinks in terms of your personal preference.

New Coke

most	---	---	---	---	---	least
preferred	1	2	3	4	5	preferred

7-Up

most	---	---	---	---	---	least
preferred	1	2	3	4	5	preferred

Diet Pepsi

most	---	---	---	---	---	least
preferred	1	2	3	4	5	preferred

Sunkist

most	---	---	---	---	---	least
preferred	1	2	3	4	5	preferred

Coupon

Respondents were offered a coupon good for 50 cents off their next purchase of soft drinks. This was about 25-40% of the retail price of either a six pack or a two liter bottle of most soft drinks. The coupon value was not made higher to keep the price-quality factor relevant (Riesz 1978). This discount is at the upper end of the range of coupon discounts normally offered for consumer package goods (Reibstein and Traver 1982).

The grocery store teller identified the study respondent and noted the brand purchased and the date of redemption. A six week cut-off time was given for the coupon redemption. Given that the product is frequently purchased, this time interval was deemed sufficient for the respondents to make use of the coupons. (Some of the respondents did not collect their coupons after turning in their responses).

Sample

A total of 713 questionnaires were distributed to students enrolled in business courses at Washington State University. The objects measured were perceptions of product attributes for carbonated soft drinks. The use of a

convenience sample of students was considered justified due to the experimental nature of the investigation and because college students are a major segment of soft drink consumers. The study belongs in the domain of theory testing and theory building, hence the use of a homogeneous student population is preferred (Calder, Phillips and Tybout 1981). Each respondent was randomly assigned a specific color coded questionnaire version. Individual respondents were assigned to only one treatment cell.

Measures

Measures of purchase intent, behavior and prediction were operationalized as follows:

Purchase Intent. Purchase intent was measured by the following question: "For your cooperation in this survey, we will give you a coupon for 'cents-off' your next soft drink purchase. For which brand would you like your coupon?"

However, the coupon could be redeemed for any brand of soft drink available in the store. The respondents checked off the brand of their choice. Thus, "brand-coupon-requested-for" was the purchase intent measure.

Behavior. The actual brand purchased, as noted by the store teller, was used as the measure of behavior. This is a direct measure, hence it avoids some of the problems associated with preference measures, as suggested by Best (1978).

Prediction. This variable was defined as the number of correct choices made, i.e., the respondent purchased the brand for which the coupon was requested. Prediction was calculated by comparing purchase intent with behavior. A correct choice was coded 1 (one), while an incorrect choice was 0 (zero). Predictive validity was measured in terms of the proportion of correct responses.

Results

Coupon Redemption

Of the 527 respondents who accepted the coupon, 139 used it for a soft-drink purchase. Ten of these coupon redemptions could not be used due to failure of the cash register checker to note the purchased brand. Thus, the usable coupon redemption rate was 24.5% (129/527). This compares favorably with the redemption rates cited by Reibstein and Traver (1982, p. 105).

Table 1 reports the associated 2 X 2 cross tabulations of prediction with scale type and number of brands.

These results show that an appreciably higher number of correct choices is predicted using the GPS compared to the BPS (65.6 % vs. 41.5%). It is also shown that increasing the number of objects from 4 to 12 decreases the chances of correct prediction from 58.1% to 49.3%. These results are further analyzed using log-linear modeling.

TABLE 1
PREDICTION OUTCOME (CORRECT OR INCORRECT CHOICE)
BY SCALE TYPE (GPS AND BPS) AND NUMBER OF OBJECTS
(4 AND 12)

Scale Type (S)	Correct	Incorrect	% Correct
GPS	42	22	65.6
BPS	27	38	41.5
	69	60	53.5

# of Objects (N)	Correct	Incorrect	% Correct
Four	36	26	58.1
Twelve	33	34	49.3
	69	60	53.5

Model

Log linear modeling was used to investigate the effects of the study design factors on prediction. This approach has been recommended as a suitable method for modeling of categorical data (Green, Carmone and Wachspress 1977; Magidson 1982) and is widely used (Danaher 1988; Ratneshwar, Shocker and Stewart 1987).

The log-linear model is described using the framework of a three-way classification using the variables: scale type, number of objects and preference prediction. Let us denote the categories of prediction by P_i ($i=1,2$), those of scale type by S_j ($j=1,2$), and those of number of objects by N_k ($k=1,2$).

In the system of variables, we can consider the prediction variable as the dependent or the endogenous variable. Based on the review of literature, we expect both S and N to affect P, i.e., the probability of a correct prediction depends on the type of scale being used and on the number of objects presented for evaluation. Therefore, the PS and the PN interaction terms are included in the log-linear model. Scale type and the number of objects presented for rating can be thought of as the independent variables in the regression context. Since these are the exogenous variables in the system, the log-linear model we investigate necessarily incorporates the SN interaction term (Goodman 1970).

Following Goodman (1972), we can then specify the expected frequencies, F_{ijk} , in the three-way classification of P by S by N by the multiplicative model,

$$F_{ijk} = E T_i^P T_j^S T_k^N T_{ij}^{PS} T_{ik}^{PN} T_{jk}^{SN} \quad (1)$$

Here E is the geometric mean of F_{ijk} . The T-parameters pertain to the probability that an observation appears in the subscripted cell (i.e., i, j, and k) of the superscripted univariate or joint distribution (i.e., P, S and N). Thus, T_i^P , T_j^S , T_k^N pertain to the respective probabilities that an observation appears in the i^{th} , j^{th} , or k^{th} cell of the marginal distributions of prediction, scale type or the number of objects relative to the grand mean, respectively. Similar explanations can be offered for the higher order terms. For instance, T_{ij}^{PS} pertains to the probability that

an observation occurs in the i, j cell of the P and S marginal distributions, respectively.

The underlying hypothesis for this model is that the two factors--type of scale and the number of objects--determine the number of correct predictions. A likelihood ratio (LR) X^2 can test the extent of the departure of the expected frequencies, F_{ijk} , from the observed frequencies, f_{ijk} . A large value of X^2_{LR} indicates that the data does not fit the hypothesized model as represented by equation 1. Conversely, a low value would signify that the observed data was generated by the process defined by the hypothesized model.

Estimation

Maximum likelihood estimates of the expected frequencies, F_{ijk} , in equation 1 are obtained using the LOGLINEAR routine (SPSS-X 1988). The X^2_{LR} for this model suggested a very good fit with the data ($X^2_{LR} = 0.180$, 1 degree of freedom, $p = 0.671$). The probability value of 0.671 can be interpreted as the chance that the data were generated based on the hypothesized model. If the model did not fit the data well, the X^2_{LR} would be large with $p < 0.05$.

The third order interaction term, T_{ijk}^{PSN} , has not been used in the model. The X^2 from equation 1 was compared to the X^2 value obtained by estimating a model that was defined by adding the third order interaction term to equation 1. The X^2 value for the extended model is zero because it is a saturated model. The difference in the two X^2 s was used to test for the significance of the third order interaction term. The improvement in X^2 from including the interaction term was not significant ($p > 0.10$). These results justify our choice of equation 1 as the substantive model.

Results of the model, i.e., the expected frequency of correct (C) and incorrect (NC) prediction and the odds of a correct choice are presented in Table 2. The basic building block in log-linear analysis is odds rather than percentages (cf., Magidson 1982). Odds is a multiplicative concept. The odds of a correct choice is the ratio of the frequencies of correct to incorrect prediction. As an example, for GPS with four objects, the odds expected are 2.44 (20.58/8.42). Using the odds concept, the conclusion is that the likelihood of correct prediction is 2.44 times that of an incorrect prediction, when GPS is used with four objects.

The numbers suggest that the odds ratio (the ratio of the two odds) of GPS to BPS for a correct choice for four objects is 2.77 (2.44/0.88). This means that the odds are 2.77 to 1.00 of making a correct prediction using GPS over BPS for four objects. The deviation of the odds ratio from unity, in any direction, is suggestive of an association between choice and number of objects (Kennedy 1983, p. 99). For 12 objects, this odds ratio is 2.77. This clearly establishes the superiority, in this specific situation, of the GPS over the BPS, with respect to predictive validity. The odds ratio for 4 vs. 12 objects is 1.55 for both the GPS and the BPS.

TABLE 2
CLASSIFICATION OF PREDICTION OF CORRECT CHOICE
ACCORDING TO SCALE TYPE AND NUMBER OF OBJECTS
($n=129$)

Observed Scale Type	Number of Objects	Observed		% and Odds of Correct Choice	
		C	NC	%	Odds
GPS	4	20	9	69.0	2.22
GPS	12	22	13	62.9	1.69
BPS	4	16	17	48.5	0.94
BPS	12	11	21	34.4	0.52

Predicted Scale Type	Number of Objects	Predicted		% and Odds of Correct Choice	
		C	NC	%	Odds
GPS	4	20.58	8.42	71.0	2.44
GPS	12	21.42	13.58	61.2	1.58
BPS	4	15.42	17.58	46.7	0.88
BPS	12	11.58	20.42	36.2	0.57

This suggests that, for either scale type, when using four objects as compared to twelve, the chances of making a correct prediction are improved over 50%. Thus, there appears to be an erosion of validity at 12 objects. There is the possibility that this occurred due to a limited degree of information overload. One should realize that the pattern of observed correct predictions is somewhat stable for the GPS over the number of objects (0.69 for four objects vs. 0.63 for twelve objects), whereas there is a relatively larger decline for the BPS (0.48 vs. 0.33).

Summary and Conclusions

The results suggest that GPS is superior to BPS in terms of providing the respondents with information which results in better predictive validity. This result holds true for both the four object and twelve object conditions. The chances of obtaining a correct prediction using GPS are nearly three times higher than when using BPS. This result suggests that GPS warrants closer scrutiny by survey researchers.

The results of this study suggest that there might be some dysfunctional consequences of providing too much information. When the number of objects rated is increased from four to twelve, the odds of a correct prediction fall from 2.44 to 1.58 for GPS. Similarly, when using BPS, the odds decreased from 0.88 to 0.57. These results suggest that information overload occurs in the commonly used range of objects evaluated with these scales. Researchers should, therefore, be wary of this problem. Previous research on information overload--effect of number of brands on choice is mixed (cf., Best and Ursic 1987; Jacoby 1984; Malhotra, Jain and Lagakos 1982). These studies report the results of surveys using bipolar adjective scales, BPS. Replication of the current study of GPS versus BPS with a larger sample size may clarify this confusion.

In this study, a range of scale points was used to obtain evaluations. To conform to the range that is commonly used by researchers in marketing

(cf., Churchill and Peter 1984; Givon and Shapira 1984), scales with five, nine, or twelve scale points were used. By choosing a range, it would insure that the results were not idiosyncratic to a particular level of scale points used in the study. In retrospect, this precaution was unnecessary. A X^2 test of the cross-tabulation between preference prediction and number of scale points was found to be insignificant ($p < 0.05$). Number of scale points were not found to interfere with any of the reported results.

Fishbein (1973, p. 15) suggests that the size of the behavior intent and the behavior relationship depends on the time elapsed between the measure of intention and the behavioral observation. To investigate this association, a time variable was defined as the number of days elapsed between handing out the coupon and its redemption. This was reclassified into class intervals of seven days or less, more than seven to fourteen days, more than fourteen to twenty-eight days, and over twenty-eight days. A X^2 test revealed no statistically significant association between prediction result and the time to coupon redemption ($X^2 = 3.128$, d.f. = 3, $p = 0.37$).

The effects of the time elapsed between the measure of intention and actual behavior was insignificant for the product category studied. Some factors which could have affected these results but were not controlled in the study are brand loyalty, situations, and external promotions in the product category.

Although further research is obviously required, these results and previous studies indicate that there are significant advantages to using the graphic position scale. A survey researcher should prefer a scale with lower printing costs, lower postage if no compromises need be made in reliability or validity. Questionnaires using GPS are much shorter than those using the BPS format. This will result in lower printing and postage costs. Preliminary research has shown that the reliability of data is not significantly lower with the use of the GPS (Golden, Albaum and Zimmer 1987; Stem and Naozin 1985) and according to the results reported above the predictive validity is significantly higher. However, more research, with different product categories, populations, and scale variables needs to be done before an unqualified recommendation can be made for the adoption of this scale.

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RETAILING

EVENT HISTORY ANALYSIS OF A WATERFRONT REDEVELOPMENT
PROJECT ON EXISTING RETAILERS

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Abstract

Event history analysis was utilized to determine the survival/failure experience of 93 retail establishments subsequent to the redevelopment of a downtown riverfront business district in a small urban area. Results indicate that nearly a third of previously existing businesses failed within five years from completion of the construction project. Research and policy implications for the marketing strategy of existing retailer establishments are discussed.

Introduction

A recent trend in urban development is the revitalization of business districts in many cities throughout the United States. An increasing number of developers in partnership with public and private enterprise are renovating existing downtowns for the purpose of attracting business and developing the retail mix in these areas. However, the success of redevelopment projects depends upon the cooperative efforts of developers and retailers within the central business district (Chain Store Age Executive, 1986).

Many redevelopment projects are unique in consideration of the requirements and desires of the marketplace. Careful planning on behalf of the city is a requisite to the implementation of retail development programs and some developers now insist that data regarding area demographics, competition, transportation, and other renovation be provided before committing to a project. As an incentive to the contractor, financing arrangements normally involve public/private subsidies to the developer before initiating a project. (Chain Store Age Executive, 1984).

Background and Literature Review

One popular type of renovation project that has received enormous success is the development of waterfront marketplaces in large urban areas such as Boston or Baltimore. While similar projects in small and medium size cities may succeed provided enough time, the limited success of these projects has been attributed to poor retail mixes, thin market areas, a lack of tourist appeal, and dwindling local economies (Weber, 1988). At fruition, project designers anticipate that these marketplaces will create more traffic than the average retail mall (Business Week, 1984).

Several waterfront development projects including: Rivercity in Evansville, Indiana; La Plaza Del Rio in San Antonio, Texas; the Galleria in Cleveland, Ohio; Portside in Toledo, Ohio; and other projects in Richmond, Virginia, Columbus, Ohio, Flint, Michigan and Cedar Rapids, Iowa are examples of smaller cities where public and private sectors have cooperated to attract business and develop the retail mix in their downtown marketplaces (e.g. Business Week, 1984; Chain Store Age

Executive, 1986; Lundberg and Aller, 1984; Trager, 1984; Weber, 1988). The implementation of these projects has required substantial planning to overcome problems of store selection, tenant mix, and faltering promotional campaigns.

One important aspect often overlooked in evaluating the overall success of a project is the continued welfare of businesses which existed prior to the project's initiation. It may be necessary for these businesses to revise previous retail strategies to accommodate changing target markets after a project is intact. Even with new tenants, unless a developer has a direct financial stake in retail operations, the retailer may not be the prime objective (Hazel, 1989). The purpose of this study is to examine the subsequent effects of a waterfront redevelopment project on the survival/failure experience of existing retailers in a small size city in the Southeast.

Event History Analysis

Event history analysis has been used extensively in several other disciplines (e.g. biostatistics, criminology, and demography). It is mainly concerned with the study of survival/failure data. In a generic sense, "failure" may be defined as "the inability to function in a specified role" (Elandt-Johnson and Johnson, 1980, p.3). Of substantive interest is the relationship between failure and such primary variables as age or elapsed time subsequent to the occurrence of some initial event. In addition, concomitant variables (or covariates) which may influence the relationship may be incorporated into the analysis (e.g. geographical location, characteristics of interest, etc.). The distinction between concomitant and primary variables depends largely on the focus of the study.

One frequent problem encountered in event history analysis results from attempts to utilize all information collected in event histories (see Tuma and Hannon, 1978). If certain observations are eliminated from the study for reasons other than failure, or if the failure event does not occur over the timeframe of the study, these types of observations are considered to be "censored". Although the survival time for surviving observations cannot be exactly determined, there is a specific duration (i.e. the time frame of the analysis). Since ignoring all censored observations of this type would not yield valuable study results, it is desirable to include them in estimating the resulting survival/failure functions.

Many fields in business are characterized by the occurrence of various types of events: The introduction and termination of products, the recruitment and dismissal of employees, the initiation and conclusion of programs and projects, and the opening and closing of institutions at different business activity levels, among others. From an analytical perspective, event history analysis is well suited for the study of survival/

failure experiences in a business context (Oakes, 1983; Aldag and Sterns, 1988).

However, applications of survival analysis procedures in the business research literature have been limited to the examination of: the cumulative proportion of income earners to the total income received (Riese, 1987), employee turnover in convenience stores (Darden et al., 1987), escalation and deescalation of commitment in investments (McCain, 1986), forms of external legitimacy versus internal factors in the liability of new organizations (Singh et al., 1986), and determining factors of turnover in aid to families with dependent children (Plotnick, 1983).

The Study

The following study applies event history analysis to examine the survival/failure experience of local retailers subsequent to the construction of a major waterfront redevelopment project. The purpose of the construction project was to revitalize the central business district of a small Southeast city adjoining a riverfront area. Over the time period of the study, an economic boom was created by local military bases, resort and retirement community development, and increased tourism. The program was tailored to the city's needs based on four interrelated objectives:

1. Organization - Establishing partnerships for revitalization between public and private groups in the community.
2. Promotion - Creating a business district image to attract investors and customers.
3. Design - Enhancing the visual quality of the district by the structural design and merchandising techniques.
4. Economic Restructuring - Strengthening existing economic assets of the district while diversifying the economic base (Downtown Newsletter, 1988).

The situation posed an opportunity to investigate the effects of an uncontrolled natural experiment regarding the welfare of retail businesses surrounding the project. The objective of the study was to collect experimental-type data on the resulting histories of existing retail businesses following this important construction event to the business community.

Methodology

Sample

A preliminary analysis was conducted to examine recent retail performance in the surrounding vicinity of the redevelopment project previously described. Based upon eight (8) years of sales data on those businesses in operation before the construction occurred, an average expansion rate estimated to be 6% was apparent. Expansion rates ranging from 1 to 16% were noted for seven of the eight year periods with only a 3% failure rate noted in the sixth year - two years before the project.

The actual number of businesses operating in the geographic area of interest increased from 56 to 93 during the 8 year period. To be included for further analysis, local businesses were required to be in operation on or before the time the project was completed and operational. Data were available for the sample of 93 ongoing retail businesses located on five streets adjacent to the waterfront redevelopment project.

Analysis

A survival analysis was performed to estimate three survival functions (Berleson and Gage, 1950), for those retail businesses included in the study. The dependent variable was defined as annual gross sales collected on individual retailers over a period of seven (7) consecutive years. The independent variable was specified to be the time interval (i.e. yearly increments) between the initial time the redevelopment project was completed and failure of any of the local businesses during that period. The overall survival experience for the selected businesses is summarized by interval for a period of 7 years in Table 1.

Results

Examination of column 7 of Table 1 reveals an overall downward trend in the survival rate of existing businesses subsequent to the date the project was intact. A plot of the survival function is provided in Figure 1. The cumulative proportion of retail businesses surviving over the seven-year period decreases until approximately 66% of the total number of businesses which entered the study remain. The majority of retail failures occurs within the first five years from the start of the project with the highest number of failures (10) observed during the fourth year.

In column 8, the probability density, or estimated annual probability of failure for all remaining retail businesses in the study also reflects this trend. The risk of failure associated with those businesses entering the next time interval for the first 5 years averages nearly 7%. However, approximately 13% of the businesses surviving the third year fail during the fourth year with an almost 11% probability of failure indicated.

In addition, corresponding hazard rates, or estimates of the annual probability that those businesses entering into a given time interval will fail, reported in column 9 of Table 1, follow a similar pattern. The hazard rates (plotted in Figure 2) increase noticeably from 6 to nearly 14% from year 3 to year 4, and remain relatively high at 9% until surviving businesses enter the next interval at year 6 when the hazard rate decreases considerably to about 1.5%.

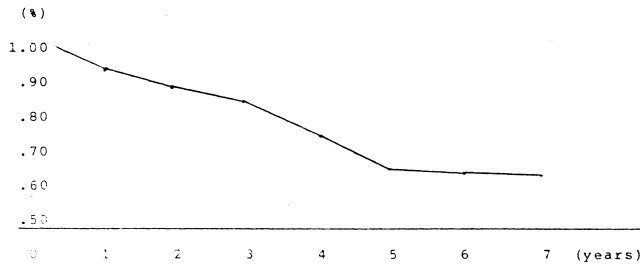
Standard errors for each of the estimated survival functions are also provided in Table 1. Approximate standard errors may considerably underestimate the associated variance if many busi-

Table 1.: Survival Experience of Retail Businesses Surrounding Waterfront Redevelopment Project

INTVL START TIME	NUMBER ENTRNG THIS INTVL	NUMBER WDRAWN DURING INTVL	NUMBER EXPOS TO RISK	NUMBER OF TERMIN EVENTS	PROP TERMI- NATING	PROP SURVI- VING	CUMUL PROP SURV AT END	PROBA- BILITY DENSITY	HAZARD RATE	SE OF CUMUL SURV- IVING	SE OF PROB- ABILITY DENS	SE OF HAZRD RATE
0.0	93.0	0.0	93.0	0.0	0.0000	1.0000	1.0000	0.0000	0.0000	0.000	0.000	0.000
1.0	93.0	0.0	93.0	6.0	0.0645	0.9355	0.9355	0.0645	0.0667	0.025	0.025	0.027
2.0	87.0	0.0	87.0	4.0	0.0460	0.9540	0.8925	0.0430	0.0471	0.032	0.021	0.024
3.0	83.0	0.0	83.0	5.0	0.0602	0.9398	0.8387	0.0538	0.0621	0.038	0.023	0.028
4.0	78.0	0.0	78.0	10.0	0.1282	0.8718	0.7312	0.1075	0.1370	0.046	0.032	0.043
5.0	68.0	0.0	68.0	6.0	0.0882	0.9118	0.6667	0.0645	0.0923	0.049	0.025	0.038
6.0	62.0	0.0	62.0	1.0	0.0161	0.9839	0.6559	0.0108	0.0163	0.049	0.011	0.018
7.0+	61.0	61.0	30.5	0.0	0.0000	1.0000	0.6559	**	**	0.049	**	**

** (Calculations are Meaningless for Last Interval)

Figure 1. A Graph of the Survival Rates of Existing Businesses



nesses in the study are censored (i.e. lost to follow-up or withdrawn for reasons other than failure) (Gross and Clark, 1975). However, none of the 93 retail businesses in the study were lost or withdrawn from the analysis. Consequently, the standard errors presented indicate a relatively accurate measure of the variance in the three functions estimated.

A second survival analysis was performed to determine whether retail businesses in closer proximity to the waterfront project differed in survival experience from those businesses more distant. Using street location as a concomitant variable, the retailers were divided into five groups based upon the actual distance of their street locations from the waterfront project.

However, based on the Lee-Desu (1972) statistic, an overall comparison of businesses grouped by street location resulted in no significant differences ($w=.57$, $p=.27$, $d.f.=4$). One alternative explanation may be that the streets were arranged more or less contiguously in the area surrounding the project so that no differential effect on the survival experience of the local businesses was evident.

Discussion

Results of the study suggest that the local retailer who is supposed to be the beneficiary in many if not most redevelopment projects may not survive the duration of the project. A seven-stage model is offered to identify distinct stages of a Retail Trade Area Life-Cycle (RTALC). The proposed model is insightful in explaining the effects of redevelopment projects on the retail mix of designated trade areas. At certain stages of the model, strategies may even be used to forestall the early decline of retail trade areas before redevelopment becomes necessary.

A Proposed Model of a Retail Trade Area Life-Cycle

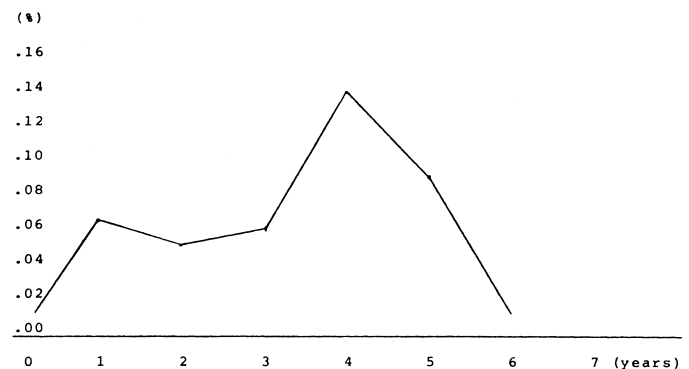
The first stage of the Retail Trade Area Life-Cycle (RTALC) may be characterized by a period of growth which is dominated by healthy and progressive retailers. Next, the trade area and supporting neighborhoods mature and/or other environmental factors (such as the suburban movement after World War II) form to influence shopping patterns.

In the third stage, a type of a dialectic process is suggested where progressive retailers actually encourage the shift in the shopping trend as they expand (or over-expand) to accommodate "new" growth areas. As a consequence, existing retailers who have much to lose may actually hasten the decline of the older trade areas.

The fourth stage of the model involves the economic decline of the older retail center and the emergence of a different type of retailer. Thus a "low cycle" retailer, often very successfully, tends to replace the progressive retailer usually at substantial cost to the former. This "low cycle" retailer can survive and profit in declining economic environments but the retail mix (both merchandise and services) may be substantially different. Further, as property values continue to erode these retailers do not necessarily suffer, but the business community tax base does.

Interestingly, in the fifth stage speculators are attracted to the low property values and begin to

Figure 2. A Graph of the Hazard Rates of Surviving Businesses



buy in anticipation of redevelopment. As the trade area life-cycle progresses there are calls for master planning and major projects which act as catalysts to retail redevelopment.

During the sixth stage local retailers are "sold" on the idea of upgrading their market and the possibility of property appreciation. At this stage many existing retailers invest in redevelopment projects so that implementation moves forward, but project profitability is not immediate. To complete the life-cycle, the final stage involves a "shakeout" as the area's retail mix adjusts to the new customer mix brought about by implementation of the redevelopment project.

Implications

With today's dynamic market environment, retail recycling is a responsible and efficient use of a community's resources. Besides profitability, there are other intangible benefits such as community "pride" and "ownership" to be derived from redeveloping a declining retail trade area.

Although most would agree that successful redevelopment projects in vital retail trade areas are good community investments, serious deterioration does not have to occur in these areas before redevelopment becomes the only viable alternative. Perhaps it would be more effective to develop a preventative maintenance program which could forestall the "bust" stage of the Retail Trade Area Life-Cycle. More attention needs to be directed toward developing programs to assist public decision-makers in efforts to interdict in retail trade area decline in the early stages of the RTALC.

Previous studies indicate that the results of redevelopment projects are "mixed", while some projects have been successful, others have not. Similar to projects in other small urban areas, the success of the waterfront redevelopment project in this study resulted in a retail mix which differed substantially from that which existed before the project was initiated. Over the course of the study nearly one third of previously existing retailers who could have lended continued political and financial support to the project failed to remain in operation.

Conclusion

The research reported here has provoked more questions than it has provided answers. Further investigation of the proposed Retail Trade Area Life-Cycle seems warranted. Is this boom-bust-boom cycle becoming a typical retail pattern as our cities mature? Do the previously existing retailers typically lose profitability when the cycle shifts? Will replacement of the "slash and burn" practice of retail development with more efficient management practice become an economic reality in the near future?

Objective studies for the purpose of measuring the qualitative as well as quantitative benefits derived from these massive redevelopment projects

need to be conducted. Currently, there is no subsequent accountability to existing retail establishments which appears to be an area where academicians could perform a valuable service to practitioners.

Finally, the need for a stronger retail economy in redeveloped trade areas should consider the preservation of existing economic assets of the business community. Preventive maintenance programs or timely marketing programs to help existing businesses adapt to changes in the trade area redeveloped are indicated. Studies such as those suggested could be valuable in discovering the effects of redevelopment projects to make the implementation those programs both planned and currently underway more effective.

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RETAIL PRACTICES: ETHICAL PERCEPTIONS OF RETAIL STUDENTS

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Abstract

This study examines the ethical perceptions of retail students on a number of questionable retail situations and compares these perceptions with those of retail salespeople. The results suggest that retail students are less likely to perceive ethical ramifications in questionable retail situations than those employed in retailing.

INTRODUCTION

The ethical environment and the behaviors of business personnel and organizational entities have come under increasing scrutiny in the past decade, due in no small part to the high visibility of a number of questionable business practices. Such attention is not unwarranted, for 94 percent of the respondents in a recent survey indicated a belief that the business community today is troubled by ethical problems (Touche Ross and Co. 1987). In spite of the ongoing examination of ethical issues, however, Herman and Cullen (1986) suggest that ethical standards in business have continued to decline over the last decade.

The retail sales environment is particularly susceptible to the development of troublesome ethical situations (Dubinsky and Levy 1985). Retail salespersons play a critical "front-line" or "boundary-spanning" role, through which the satisfaction of both customer and management are sought (Donnelly and Ivancevich 1975). Furthermore, in spite of this "dual-role" requirement and the fact that retail salespeople are responsible for a wide variety of tasks (Crissy, Cunningham and Cunningham 1977), they are likely to receive little formalized training for any of these (Burstiner 1975-76). Finally, management pressure to produce consistent results tends to create an atmosphere which often fosters questionable activity (Young and Mondy 1978).

Relatively little research to date has focused on undergraduate retail students, who reasonably can be expected to fill such front-line positions and/or interact with those who do as they begin a career in retail management. The objective of this study was to investigate the attitudes of college students who have taken an introductory course in retail management. It focused on these students' perceptions of the ethical considerations of a number of potentially troublesome retailing situations. Their perceptions are reported here and compared to those of individuals employed in retailing. The effect of selected exogenous variables on those perceptions is also explored.

RETAIL ETHICS

Practitioners

The ethical considerations of retail practices have been investigated, but few of these studies have been reported until relatively recently (Gifford and Norris 1987). Ethical perceptual differences between specialty, discount, and department 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 specialty, discount and department store managers are more "consumer-oriented" or "ethically-minded" today than were their counterparts a decade ago. Dubinsky and Levy (1985), investigating a number of potentially troublesome retail situations, found that retail salespeople did not consider a large portion of the situations to reflect problems of ethical concern. They did, however, believe that most of the ethical issues raised by the situations should be covered by company policies.

Students

Even fewer studies have been reported on the ethical perceptions of students, and those studies which do have dealt primarily with marketing practices concerning businesses other than retailers (e.g., Dubinsky and Rudelius 1980; Goodman and Crawford 1974; Hawkins and Cocanougher 1972; Shuptine 1979). One exception is a longitudinal study by Norris and Gifford (1988) of senior-level retail students, using the retail ethical vignettes of Dornoff and Tankersley (1975-76). Their results suggest that students' perceptions of ethical issues have changed little over the past decade unlike those of retail managers. Since today's retail management students are likely tomorrow's retail personnel, they should be an important focus of study.

METHODOLOGY

Sample

The sample consisted of 109 students, primarily sophomores, who were enrolled in an introductory retailing course at a major midwest university. Because the course is the first in the required sequence for a retail management major, it is reasonable to expect that most of the students enrolled in it will eventually be employed in some aspect of retailing. The 101 usable surveys represented a 92.5% response rate. Responses indicated that 73 percent of the

subjects were female, 74 percent have retailing experience, and 82 percent have non-retail work experience.

Questionnaire

The questionnaire used for the current study included an instrument currently used to measure responses to questions relating to retail ethics. It is comprised of a list of situations or practices which are viewed as potentially ethically troubling for retail salespeople. The list was developed by Levy and Dubinsky (1983) and Dubinsky and Levy (1985) via the Nominal Group Technique (NGT) (Delbecq, Van De Ven and Gustafson 1975). For each of the situations and practices, respondents were asked to answer the following question:

- 1) 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 with the instrument development studies, each question was scored on a seven-point scale on which 1 represented "definitely no" and 7 represented "definitely yes."

FINDINGS

A summary of students' ethical perceptions of the items in the Levy-Dubinsky scale are presented in Table 1; results of the Dubinsky and Levy (1985) study are presented for comparison.

Since the Dubinsky and Levy study provides only percentages of respondents who strongly believed that the specific situations included in the instrument are of ethical concern, (that is, selected "definitely yes"), comparison of the results of that study with those from the present one are limited. In only two of 38 situations, however, did a greater percentage of students than retail salespeople (as reported in the Dubinsky and Levy study) strongly regard the situation as presenting ethical issues; those situations included trying to get an employee to quit, and dating or socializing with fellow non-management employees.

When the average percentage of students who responded "definitely yes" to the situations was compared to the average percentage of retail salespersons who so responded, a (substantial difference was observed: on average, 24.7 percent of the students responded "definitely yes" to any one of the situations, while more than 41 percent of the retail salespeople responded "definitely yes."

DISCUSSION

The students appear to be substantially less "ethically-oriented" than the practicing retail salespeople based on a number of retailing situations. These results are consistent with those of Miesing and Preble (1985), who found that prospective managers appear to be "less ethical" than practicing managers.

The cause of the difference in ethical perceptions observed, however, cannot be determined conclusively from the present study. One possible source of this differential may be attributable to inexperience, in which case one's decision making and ethical orientation is likely to change once exposed to the actual working environment. Yet, another explanation for the differential may be, as Miesing and Preble (1985) suggest "these managers-to-be may be reflecting future business philosophies" (p. 474). Lantos (1986) agrees noting that today's student body is generally "less ethically-minded" than those of previous generations.

Limitations

Sampling and methodology limitations of this study may result in biased results. The sample was composed of students taking a single introductory course in retailing at a major midwest university. Furthermore, the majority of the students were from a single geographic area. Therefore, results of this study should not be generalized to a larger retail student population.

The methodology suffered from several limitations. Since the scale which comprised the survey contained items concerning normative issues, the presence of a social desirability response set is of particular concern. Since the same problem existed in previous applications of the scales, however, this response set may not materially hamper interstudy comparisons. A more critical problem is the fact that the instrument used in the study has not been clearly validated.

Implications

It appears that the ethical perceptions of retail students varies from that of retail practitioners and that the difference may be the result of a difference in philosophy. If corroborated by further research, this suggests that the "less ethically-minded" perceptions of retail students may have a negative impact upon retailing as they enter the industry. Under such a situation, retailers may have difficulty in maintaining their ethical standards, especially since retail students also perceive less of a need for the existence of policies addressing this area.

TABLE 1
ETHICAL PERCEPTIONS

Situation or Practice	Response Pct.							% Responding Def. Yes D&L (1985)
	1=Definitely No	2	3	4	5	6	7=Definitely Yes	
1. Don't offer information about an upcoming sale that will include merchandise the customer is planning to buy.	21	15	5	18	19	11	11	38
	Mean Response = 3.8							
2. Have to sell nonsale items at full price when the items were accidentally placed with the sale merchandise.	14	14	11	24	13	8	17	26
	Mean Response = 4.0							
3. Don't assist customers you believe are less likely to buy	21	15	12	15	6	18	14	42
	Mean Response = 3.8							

4. Make excuses to customers about unavailable merchandise that is not yet in stock or is sold out.	16 22 8 16 16 11 10	40
Mean Response = 3.7		
5. Sell a more expensive product when a less expensive one would be better for the customer.	10 15 6 10 17 18 25	38
Mean Response = 4.6		
6. Ignore a prospective customer for one you believe will be a better one.	18 10 15 14 14 15 15	44
Mean Response = 4.0		
7. Use of a sales contest for sales associates in order to generate sales to customers.	36 19 7 6 3 11 19	31
Mean Response = 3.3		
8. Hide merchandise that you want and are waiting for the store to mark down.	19 14 11 19 10 15 14	36
Mean Response = 3.9		
9. Charge markdown price to customers for similar full-price merchandise.	15 8 8 18 24 10 17	**
Mean Response = 4.2		
10. Make a promise you cannot keep regarding the time when something will be ready.	22 8 3 7 13 15 32	47
Mean Response = 4.5		
11. Give preferential treatment to certain customers.	12 15 12 18 14 10 19	33
Mean Response = 4.1		
12. Sign time sheet incorrectly for time worked.	19 6 3 7 6 1 47	57
Mean Response = 5.0		
13. Customer damages a product in the store and wants a markdown.	22 11 4 4 3 16 41	54
Mean Response = 4.7		
14. Make excuses when merchandise is not ready for customer pickup.	14 7 5 16 23 19 16	36
Mean Response = 4.5		
15. Buy merchandise before it is available to the customer.	29 19 12 16 8 8 7	25
Mean Response = 3.1		
16. Perform your job with inadequate job information or training.	20 5 11 11 8 20 24	40
Mean Response = 4.4		
17. Sell a product as an exclusive, when it is in fact available in other stores.	15 7 11 7 16 12 32	41
Mean Response = 4.7		
18. Pressure from fellow sales associates not to report theft.	10 11 4 4 4 12 55	63
Mean Response = 5.4		
19. Hoard free samples that are meant for customers.	16 8 12 12 15 16 19	45
Mean Response = 4.3		
20. Give incorrect change to customers on purchases.	24 5 3 4 4 4 55	62
Mean Response = 4.9		
21. Peer pressure not to say anything to management about other sales associates' personal problems.	23 7 5 20 22 8 15	28
Mean Response = 3.9		
22. Don't sell the last unit because you want to purchase it yourself.	27 5 11 19 14 10 15	35
Mean Response = 3.7		
23. Refuse return by customer when you think the item should be accepted.	21 9 6 11 10 14 30	43
Mean Response = 4.4		
24. Take return from customer when you think the item should not be accepted.	15 7 7 16 16 14 26	34
Mean Response = 4.6		
25. Pressure from a friend or family member not entitled to a discount to give him or her your employee discount.	16 16 5 14 14 11 24	55
Mean Response = 4.2		
26. Don't tell the complete truth to a customer about the characteristics of a product.	15 5 10 7 14 20 30	59
Mean Response = 4.8		
27. Charge full price for a sale item without the customer's knowledge.	19 8 3 3 5 10 53	62
Mean Response = 5.1		
28. Offer to give a friend (or family member) not entitled to a discount your employee discount.	19 14 7 21 15 12 12	38
Mean Response = 3.8		
29. Take away sales from a fellow sales associate.	16 5 5 11 12 15 35	49
Mean Response = 4.8		
30. Pressure customers into making a sale.	18 7 7 10 23 18 19	44
Mean Response = 4.4		
31. Don't get a check authorization when required.	21 8 8 11 15 15 22	35
Mean Response = 4.2		
32. Telephone customer wants help, but you decide not to assist him/her.	16 7 10 11 16 16 23	40
Mean Response = 4.5		

33. Try to get an employee to quit.	13 7 5 8 8 19 40	39
Mean Response = 5.0		
34. Salesperson not working or selling up to his/her potential so as not to offend another employee.	16 8 12 11 12 15 25	38
Mean Response = 4.4		
35. Date or socialize with the management.	31 14 10 12 10 10 14	16
Mean Response = 3.4		
36. Date or socialize with fellow employees who are not in management.	40 18 7 4 10 10 14	9
Mean Response = 3.1		
37. Inexperienced salesperson receives an unfair workload.	10 7 14 14 12 23 22	50
Mean Response = 4.7		
38. Sell merchandise that is not of good quality.	15 7 4 7 16 20 31	47
Mean Response = 4.9		
** Item not included in the version of the instrument used by Dubinsky & Levy (1985).		

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SERVICE ORIENTATION AND ANCILLARY SERVICE PERCEPTIONS

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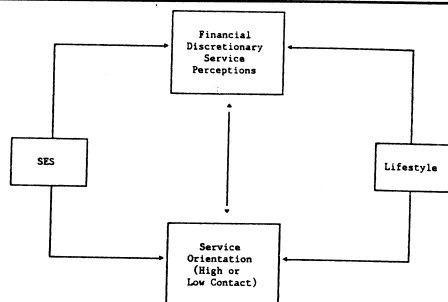
Abstract

A fairly recent retail phenomena is a widening of discretionary services offered as part of some major chain's product assortment. However, a failure to offer services consistent with characteristics of target markets is likely to lead to a widening of a service quality gap. This paper analyzes the relationships between an important segmentation variable, retail service orientation, and amounts of benefits perceived from selected financial discretionary services. The results indicate that further pursuit of a "personal interaction" variable may help in understanding and closing an important service quality gap, and provide some insight into types of service offerings consistent with certain types of retail chains.

Introduction

Recently, several major retail chains have added ancillary, or 'discretionary,' services to their product mix with varying degrees of success (Mason and Mayer 1987). Retailers providing discretionary service offerings most consistent with the motivations and benefits sought by their present patrons are likely to obtain a substantial competitive advantage (Stern, Bush, and Hair 1977). It is reasoned that shoppers preferring the service provided by high contact retail outlets will also be more likely to use service providers to perform discretionary services. More precisely, if their problem-solving mode favors negotiating with sales personnel at high contact retail stores, we suggest these shoppers are more likely to negotiate with service providers to perform in-home activities, such as tax preparation, protection from hazards, protection of valuables, and payment of bills (see the Figure).

FIGURE
PROBLEM SOLVING REFERENCE FOR
FINANCIAL DISCRETIONARY SERVICE AND
IN-STORE SERVICE EXPERTISE



Service orientation is a common retail segmentation variable. Discount chains such as K-mart and Wal-Mart appeal most to consumers desiring low levels of interaction with service personnel. In contrast, major department stores such as Macy's, Dillard's, or even Sears are more service oriented and thus appeal to a different market segment (Martineau 1958). This paper hypothesizes that consumers preferring to shop at high service contact retail outlets, as opposed to self-service outlets, use a similar orientation in determining whether to use service providers for ancillary services in their homes. By 'ancillary,' or 'discretionary,' services we refer to various household chores that can be accomplished either by members of a household, or, by an outside service provider (Good 1987). The purpose of this paper is to explore relationships between various consumer orientations and their perceptions of benefits from several financial discretionary services. By doing so, it is hoped some insight will be gained as to which types of retailers should offer which types of discretionary services.

Background

Consumer Orientations

Shopper orientations have been shown to be a major determinant of retail choice behavior (c.f. Langrehr 1989; Darden and Howell 1987; Westbrook and Black 1985; Donovan and Rossiter 1982; Lumpkin and Greenberg 1982). These studies document varying behaviors across different consumer orientations. One orientation of particular relevance to this study is that pertaining to interaction with service personnel. Stone (1959) characterized consumers with high degrees of interaction with retail service personnel as "personalizing" shoppers. In contrast, consumers desiring low degrees of service interaction have been referred to as "apathetic" shoppers. These two shopper types are found to be empirically ubiquitous (Westbrook and Black 1985). Further, it has been suggested that this type of orientation is a result of socialization of the consumer. Darden and Howell (1987) suggest that consumers are sometimes socialized to become "clerk haters." When given the choice, consumers with this orientation avoid contact with service personnel. One result of this personal interaction dichotomy is segmentation of retail markets by service orientation (Mason and Mayer 1987).

Determinants of Service Quality

In addition, personalization has been mentioned as a key attribute in determining consumer satisfaction with a service encounter (Suprenant and Solomon 1987). Thus, retailers need an understanding of their market segments to best personalize service offerings in a manner consistent with customer desires (Zeithaml, Berry, and Parasuraman 1988). Disconfirmation theory suggests that discretionary service providers should be concerned with the "gap" between household client expectations and actual provider perceptions of service quality (Swartz and Brown 1989). We believe that this recommendation includes not only retail store services (independent and firm-owned ancillary service units), but the quality and kind of retail contact sales personnel. In either event, a failure to understand, or to offer products consistent with, consumer expectations will only widen this gap.

The remainder of this paper is composed of three sections: first, we describe the approach used to examine some of the ideas presented above. Second, an analysis of a study to test these ideas is presented. Finally, the conclusions and implications of these ideas are discussed.

Research Methods

Sample

A mail survey was used to gather the information analyzed in this study. The sampling frame consisted of all members of a regional household consumer panel operating in a southwestern state; households comprising the sampling frame have been shown to be representative of the state as a whole. The panel uses a proportionate randomized stratified sampling plan to select potential survey respondents. In all, 182 out of 250 surveys mailed out were returned and usable for a survey response rate of 73 percent. This response rate and sample profile was considered consistent to those of past studies utilizing this household panel.

Measures

To analyze the research questions presented above, a measure of respondent retail service orientation was collected. Respondents were asked to rate their preferences for the retail sales persons for each of six major retail chains. All respondents had ready access to at least one retail outlet representing each of the chains. Most store modes were represented, including two mass merchandisers, two discount chains, one specialty chain, and one major high contact department chain. The preference rating scale ranged from "1" (most preferred) to "6" (least preferred). These were factor analyzed, yielding the principal component loadings contained in Table 1. The loadings suggest that the principal component

represents a scale indicative of evaluations of retail chain contact sales service. Since all but one of the chains had either high negative or positive loadings, the store designations were reduced to (1) Service Retailers (Dillard's, Sears and Penney's) and (2) Self-Service Merchandisers (Wal-Mart and K mart). Respondents with negative component scores were classed as Service Retail Oriented. Those with positive component scores were designated as Self-Service Retail Oriented. Preferences toward Kinney's sales persons apparently form a specialty goods factor that is uncorrelated with the principal component and thus were not utilized in this study.

TABLE 1
PRINCIPAL COMPONENTS ANALYSIS OF
RETAIL SALESPERSON RATINGS

Item	Loading
Walmart	.78
Dillard's	-.60
Kinney's	.05
Penney's	-.56
Sears	-.41
K-Mart	.73

Ten financial services were selected to be analyzed for relation with retail service orientations (see Table 2). These were selected from an inventory of Discretionary Services analyzed by previous researchers (see Good 1987). Each respondent rated the benefits perceived from each discretionary service on a scale ranging from "1" (No Benefits) to "4" (Substantial Benefits). Multivariate Analysis of Variance (MANOVA) was used to analyze the variables for relationship between Retail Service Orientation and Perceived Benefits in using Discretionary Household Financial Service Providers.

TABLE 2
MULTIVARIATE ANALYSIS OF PERCEIVED
DISCRETIONARY SERVICE BENEFITS AND
RETAIL SERVICE ORIENTATION

	F-Ratio	d.f.	p-value	Discriminant Loadings
Manova Results	2.63	10;171	.005	
Univariate Statistics:				
Investment Planning	.11	1;180	.74	-.07
Estate Planning	.60	1;180	.44	-.17
Tax Preparation	3.17	1;180	.07	.40
Tax Planning	.02	1;180	.89	.03
Protection from Hazard	2.68	1;180	.10	.33
Protection of Valuables	13.47	1;180	.00	.72
Payment of Bills	.07	1;180	.79	-.05
Automatic Deposits	.03	1;180	.86	-.04
Bookkeeping	.44	1;180	.43	-.14
Overdraft Insurance	1.40	1;180	.19	.23

Results of the Study

Table 2 contains the results from applying MANOVA to the data collected to test the ideas above. The overall MANOVA F-Ratio is significant ($p \leq 0.005$), providing support for the idea that shopper preferences for retail chain sales personnel are related to the benefits they perceive in the ten household discretionary services examined in this study. However, examination of the partial F-Ratios by variable indicates that the benefits of only three Discretionary Services are related to the Retail Service Orientation of the respondent. These include (1) Tax Preparation, (2) Protection from Hazard and (3) Protection of Valuables.

TABLE 3
CLASS MEANS OF
DISCRETIONARY SERVICE BENEFITS

Variable	Retail Orientation:	
	Service Retailer	Mass Merchandiser
Family Investment Planning	1.87	1.92
Estate Planning	1.92	2.03
Tax Preparation	2.82	2.52
Tax Planning	2.23	2.21
Protection from Hazard	3.28	3.12
Protection of Valuables	3.00	2.48
Payment of Bills	1.77	1.80
Automatic Deposits	2.16	2.19
Bookkeeping	2.27	2.37
Overdraft Insurance	1.98	1.82

Table 3 contains the means of (1) subjects who prefer sales personnel at high contact retail modes and (2) others that prefer sales personnel at modes that do not emphasize personal interaction. Focusing in on the three discretionary services that are significantly different between these two groups shows that benefits perceived for each service is higher for those who prefer the sales personnel at high contact retail chains (Dillard's, Sears, and Penney's) as opposed to those who prefer mass merchandisers. The common denominator of these three discretionary services is the financial and/or physical risk that is associated with making mistakes when performing them. The most significantly different discretionary service is Protection of Valuables, followed by Protection from Hazards, and then Tax Preparation.

Thus, as suggested in the introduction, Service Orientated Shoppers use this orientation not only in the purchase of goods, but may tend to also seek advice from, and interact with contact employees when purchasing select discretionary services. In sum, it seems that people who prefer a service orientation offered by stores such as Dillard's perceive certain ancillary services as more beneficial than do people who prefer a service (or nonservice) orientation offered by stores like K-mart.

Implications

Discretionary Service Providers should consider several factors from this study when designing marketing programs. First, there exists a market segment that prefers personal interaction in high contact retail stores. These consumers also see greater levels of benefits in the use of some discretionary services. This finding suggests a common motivation that pervades the life styles of the **personal interaction shopper**; that is, a concern with acquiring and protecting property that they, and others, consider to be valuable. For example, personal interaction is required for this type of shopper in acquiring possessions, and personal interaction with service providers are required to protect them.

We believe that a knowledge of this **personal interaction** predisposition can help the discretionary service provider to eliminate the "gap" between expectations of the user, and also these expectations as perceived by the supplier (Swartz and Brown 1989). It seems likely that the expectations of this service shopper can only be met through personal interaction with the supplier. Skilled interaction on the part of the discretionary service provider could well help determine the level and quality of expectations held by the **personal interaction** user (Zeithaml et al. 1988). In addition, this could help to reduce unmet expectations, or disconfirmation, on the part of the user of discretionary services.

In an applied sense, the results indicate that retailers would be wise to carefully consider their market segments before adding discretionary services to their product mix. For example, these findings indicate that consumers oriented towards high contact retail outlets may well take advantage of "risk avoidance" types of services. In contrast, this segment would seem to be unreceptive towards a discretionary service offering pertaining to financial planning. As for self-service, or discount chain oriented consumers, they would seem to be unlikely targets for any of the discretionary services studied here. Inconsistent product offerings are indicative of the service quality gap mentioned above.

Future research should examine a fuller range and width of services which would better define needs of consumers with differing consumer orientations. In addition, future research should address other individual difference characteristics in an effort to better define discretionary service segments and to lead toward a more thorough specification of the model shown in the Figure. In an effort to better understand orientations toward personal interaction in consumer activity, researchers may uncover answers which help to close an important consumer satisfaction gap.

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INCREMENTAL ANALYSIS: FOR RETAIL DECISION MAKING

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Abstract

All business students should have been exposed to the decision rule--proceed to the point where incremental benefits equal incremental costs. This rule is discussed in the context of decision making in retailing. Varied incremental perspectives are offered. Diverse merchandising applications are derived from the following--how much extra profit do we make or less do we lose by selling one additional unit. Several decision tools are derived from the integration of incremental analysis into a retail decision framework. These include various measures of productivity, the principle of relative loss and the negotiation ratio. The shortcomings of incremental analysis are delineated.

Introduction

This paper discusses elements of an oft-quoted decision tool of economics, marketing and retailing. The decision rule is to continue any activity up until the incremental benefits equal the incremental costs. This has been called marginal analysis (Dickinson 1966b). The decision rule is discussed from the point of view of retail decision making.

The Decision Rule

A general decision rule is to continue any activity so long as the incremental benefits exceed the incremental costs given that there is no change in risk (or that the changes in risk are handled appropriately) and that opportunity costs are appropriately considered. This rule has been prominent in the teaching of business decision making at least since Joel Dean (1951). Indeed, incremental analysis along with the related break-even analysis could have been considered the key business school decision tools of the 1950s.

While the decision rule that one should proceed to the point where incremental benefits equal incremental costs is theoretically appropriate for any time framework, practicalities restrict most incremental analysis to the non-long-term. However, there may be time periods that may be designated as short-term. For example, in supermarkets, immediate, three months, and one year might be used depending on the decision to be made. In the long-term, necessary approximations of cost and revenue inputs are not possible with the required precision. Thus, incremental analysis has particular relevance when short-term optimization and/or the short-term is a key goal of the firm. The short-term is likely to be a key consideration of the firm in the following situations:

1. There will not be a long-term unless the short-term is well handled.

2. The firm believes that the best way to "optimize" the long-term is to optimize a sequence of short-terms. In these cases, short-term profit is seen as the prime goal of the firm. The reader should note that expenditures that relate to the long-term may decrease short-term profits. For example, store opening costs will often decrease short-term profits, depending on the accounting procedures. Large research expenditures will usually decrease short-term profitability. Thus, short-term profits do compete with other goals and the primary goal of short-term profitability has been seen as flawed by many (Hayes and Abernathy 1980).

3. Short-term profitability tends to be critical when a retailer believes strongly in decentralization and the often related profit center concept. Short-term profitability is often an important element of the control of these profit centers. Top managements can constrain or temper the thrust of profit center managers for profitability by policies, a mix of incentives and/or a counterbalancing corporate culture.

4. When all the other important factors (including the long-term) are seen by the decision maker as being approximately the same, "maximizing" short-term profitability is effectively "maximizing" long-term profitability. For example, in choosing between similar ads A and B, a decision maker may be willing to assume that the long-term impacts of both are the same and therefore base the decision on perceived short-term differences. One should note, however, that this type of thinking cannot be used for the budgeting of advertising, except in unusual situations such as mail order.

Two Obvious Inferences

Two obvious general decision making inferences can be made directly from the incremental decision rule. First, since proceeding to the point where marginal cost equals marginal revenue produces a "theoretical optimum," it is easily demonstrated that fixed and sunk costs are not relevant. (No effort is here made to distinguish between the terms marginal and incremental.) Indeed, any element that is the same over all decision options should not be considered. For example, many studies in the supermarket industry ask customers to rank the key reasons for selecting the supermarkets in which they shop. The studies typically reflect an ordering by customers of such as location, cleanliness of store, appropriate brand names, appropriate selection, and price. In general, price is deemed of lower importance and appropriately so in the context of the question. But if leading supermarkets are: in the "same" location; keep clean stores; have key brands; and offer an appropriate selection, i.e., these options among the competitors are perceived by consumers to be the same, then price becomes a key variable in

differentiating a firm's offerings. Relatedly, if the prices and price policies of retailers in the same area are perceived by the consumer to be the same, then these should not be relevant to consumers in selecting stores. Thus the results of such surveys will be strongly influenced by retailer behavior in a given area.

The second obvious inference is that in making most decisions both cost and revenue factors are relevant. In pricing this is easily seen by the "optimizing" equation that one should proceed to the point where marginal cost equal marginal revenue. Thus cost plus pricing--fixed dollar or fixed percentage pricing procedures (often seen by economists as a key method by which businesses do make decisions) is not likely to be "optimal." An effective retail price, if the retailer has price latitude, must consider both costs and revenues but this consideration need not be direct (see Dickinson 1988a, re differential pricing). In another context the decision as to whether or not a retailer should buy directly from a manufacturer must weigh both the revenue and cost ramifications of the decision.

Marginal Revenue

The demand curve is the average revenue curve. Marginal revenue is the extra revenue derived from going from q to q plus one. If one is only choosing one point on the demand curve, the marginal revenue is derived from the interaction of two factors: 1) the loss of revenue to the firm from the consumers that would have bought at the higher price (Alfred Marshall called this consumer surplus; Whitaker 1986), and 2) the additional revenue attained by attracting "new" consumers. A little reflection suggests that marginal revenue can be negative.

While one must consider both costs and revenues in making effective decisions, there is an important group of special cases where revenue is particularly important in and of itself, that is where $MC = 0$. Thus, if one has rented a football stadium or a plane is going to take off half filled, the marginal cost may be usefully considered 0 and therefore MR should be equal to 0. We can further generalize that given some assumptions the point where $MR = 0$ is where total revenue is maximized. Thus the job of a flight manager for an airline given certain assumptions can be seen as seeing to it that a specific flight maximizes total revenue (Wade 1989).

An important merchandising concept is introduced by the above. If a demand curve suggests that we will sell 100 at a price of \$10 and 110 at a price of \$9--the decision maker may try to sell 100 at a price of \$10 and 10 at a price of \$9, i.e., skim the demand curve. The essence of skimming the demand curve is "permitting" (or seducing) consumers to pay what they are willing to pay, i.e., minimize the consumer surplus alluded to earlier. Adaptations of skimming the demand curve are also relevant to fashion merchandising. Indeed, fashion markdowns over the life of a style can be seen from this perspective. In addition we can ask how can we alter the

style, fabric, color, whatever so that we can gain higher prices from customers who are willing to pay more, perhaps for psychological and sociological considerations (the careful reader will note that technically the demand curve assumes that all other factors remain the same, e.g., product, promotion, etc.).

General Decision Making

Before we discuss selected retail decision areas, we note what will not be discussed here with respect to incremental analysis. First, incremental analysis can be used in one of its forms for each element of the retailing or merchandising mix to the consumer. Thus, in marketing or retail theory one can be seen as continuing to advertise (and with each other controllable) up to the point where the incremental benefits equal the incremental costs. In such situations, at the margin each should be equal to one. Second, any change in procedure, cost, or allocation of resources in the store can be evaluated at least theoretically by evaluating the incremental costs against the incremental revenues, e.g., should we pipe music into the store at \$60 per month? Third, incremental thinking can be integral to the planning process (Rajagopalan and Rasheed 1988).

Before discussing the implications of incremental analysis for merchandise decisions directly, we now consider two types of decisions in which incremental analysis can easily be used--compensation programs and substantial complex changes.

Compensation Systems

Compensation related systems can be seen from the following perspective. If a decision maker should proceed to point where incremental costs equal incremental revenues, then it seems necessary to distinguish between fixed and variable costs. Further, if fixed costs are not relevant for decisions, then we would not want our decision makers to consider these. Thus, why not hold heads of profit centers, e.g., stores or departments, responsible for contribution to overhead, i.e., withdraw overhead from their consideration--and perhaps pay such as bonuses based on this contribution (Gifford 1988)?

Thus after the information systems have been created, we need only train our managers on how to use incremental analysis. These managers will in their own best interests implement incremental thinking to maximize the firm's contribution and in some systems their personal "income." This has been called the reservoir technique (Clark 1933).

This method of compensation is subject to substantial limitations including the following:

(1) Costs are not easy to calculate. They are difficult to divide into fixed and variable costs. Further, for some retail units, many costs are joint. And in many instances the additional costs necessary to "accurately" allocate costs are not seen as worth it, perhaps the cost of marking merchandise for some retailers.

(2) Cross elasticity, (e.g., the impact of a drop of the price of butter on the sale of other SKUs, perhaps in butter and/or in bread) is difficult to estimate (Bultez et al 1989; Bolton 1989), i.e., the revenue side of management considerations is difficult to estimate.

(3) There is a difference between controllable and incremental costs. Thus the chief executive officer might be paid on a percentage of sales, profits, whatever of the lower departments. Such "costs" might be incremental but are certainly not controllable by the lower manager.

(4) Many firms want managers to think long-term, e.g., customer satisfaction, image, or vendor relations. For example, short-term profitability can be improved at the expense of long-term factors such as image.

(5) A fundamental understanding of incremental analysis is not easy. Many retail managers do not understand the complexities of using incremental analysis. And top management may not think such understanding is critical. For example, for many store managers the ability to create displays that talk to customers--or the ability to see fashion from the perspective of the customer may be more important to the success of the store than analytical ability. And fashion brilliance and analytical ability may not often be found in one person--at least at an acceptable compensation level.

Particular Important Decisions

Complex Problems

For some key complex decisions in retailing it makes sense or is necessary to divide costs into fixed and variable costs. Indeed there may be no other way. Thus, in deciding whether or not to close a store, a key factor is deciding on what contribution the store is making, perhaps reflected by a cash analysis (Touche-Ross 1989). The key to the analysis is how would operations look with and without the poorly performing store over the relevant time frames with the time frames appropriately integrated. The discontinuance of a department, e.g., furniture, would require a similar analysis (Kahn 1989). A change in distribution channels would be analyzed in approximately the same manner.

Three Levels of Merchandise Analysis

Before examining efforts at implementing incremental analysis at the item level, a word should be said about the degree of precision necessary for many merchandise decisions. In general there are three levels of merchandise analysis in retail. Much analysis is considered only in relationship to sales. Sales are most frequently used for analysis for the same reason that demographics are most frequently used in marketing research. They are low cost and easy to obtain. Thus, if there are no strong reasons to bring the analysis past sales, a decision maker should generally stop at sales. For example, a fashion

retailer may have over a 60 percent initial mark-up on each item in the store. Under most conditions, the expenses in this kind of store do not differ substantially with the sale of item "X" as opposed to item "Y". Thus, in this instance, the introduction of gross margin or contribution considerations will seldom be conducive to better decisions. The level of accuracy offered by sales only is sufficient.

In some organizations or types of firm, e.g., food stores, gross margins of items do vary substantially, but cost differences other than invoice and stocking costs between the items are not large. Therefore, few supermarkets will go beyond gross margin and the attendant stocking costs (see Bultez et al 1989).

In other instances it may be seen as desirable to make contribution estimates as precise as possible. Some mail order operations may be of this type. Department stores in the 1950s apparently saw themselves in this light. Further, for certain purposes precision may be necessary. Thus, if making an operation more efficient is a key goal--understanding the nuances of cost may be important. Further, in using contribution as a negotiating instrument with suppliers (Dickinson 1988b), knowing the contribution of suppliers per unit of space or per dollar of inventory may be useful and/or necessary.

Contribution Analysis - The Item

The most precise level for merchandise analysis is that of "measuring" the contribution to overhead of the sale of an additional item. The key question is how much more do we make or less do we lose by selling an additional unit? This can be implemented informally into decision making as in the compensation system outlined earlier. It can be used as a general decision tool, i.e., to implement as new occasions present themselves, or as a specific decision tool. In the case of merchandise management account (MMA) for discount and department stores (MMA), the focus was on price (McNair and May 1958), but this focus was one of choice (*Journal of Retailing* 1958), given the historical situation at the time (May 1986; Dickinson 1988c).

Almost Universal Tool

Contribution per unit of sale can be used for almost any kind of decision in which it pays to go down to the contribution level. Numerous combinations of contribution can be created. Thus, by multiplying the contribution per unit times the numbers sold, one has total contribution per item, per brand, per classification and so forth. The total contribution of the items sold in a specified time frame divided by the relevant space gives contribution per unit of space (facing, square foot, linear foot, cubic foot, whatever). Total contribution, divided by dollars invested in inventory, gives contribution per dollar invested in inventory. Contributions per unit of space and per dollar invested in inventory have had substantial histories in retailing (Curhan and Dickinson 1986). We now consider some key areas of applicability to

merchandising in retailing.

A most ready application for merchandise information is the contribution per "item" in a particular space, i.e., per linear foot, per cubic foot, facing, whatever, if the decision maker feels it desirable to go past sales and gross margin. In considering the reallocation of space it is important to recognize that the average contribution of an item is often not the key element. If say six feet of space is under consideration, the question may be what happens when I decrease the space to five feet and put something else in that foot, i.e., the key is at the margin. Recognize that one can "test" merchandise in different kinds of space to try to improve the allocation of space, display, etc. The same calculations made for space in general can be made for dollars invested in inventory.

A ready and easy use of incremental analysis for pricing of an item is available. For any item presently in stock one can ask the simple question, what would happen to the number sold if I raised the price to the next highest price point (Oxenfeldt 1961)? What would happen to the number sold if I lowered the price point to the next lower price point? Given the estimated unit sales, the contribution at each price point can be easily computed. The quantity estimates for two prices can be developed more easily than the inputs necessary for the use of concepts such as elasticity. If the item is new, one might consider three price points--the present likely choice of price--that immediately above--that immediately below.

Supplier Interaction

As implied in the previous section a decision maker can calculate the contribution generated by a supplier by unit of space and/or per dollar invested in inventory. And various retail decisions, i.e., space, can be improved with this information. But negotiation with suppliers can also be undertaken. For example, if General Electric in the refrigerator section only contributes \$1000 per unit of space and Whirlpool contributes \$2000 per the same unit of space, a decreased price to the retailer by General Electric or increased advertising dollars to the retailer from General Electric may be sought, perhaps prior to the retailer changing the space allocation. Indeed both lower prices from General Electric and changed space may be appropriate.

The Negotiation Ratio

Incremental analysis can be used on another level with suppliers. A key to negotiation is to increase the joint profits of the retailer and the supplier (Dickinson 1988b). This can be done in a short term context by developing negotiation ratios for each of the relevant concessions from an assumed point, e.g., from the present dollar levels of advertising monies given by the supplier (Dickinson 1988b). A negotiation ratio for a specific concession is the benefits to the retailer divided by the costs to the supplier, from assumed terms of trade. Recognize that if the ratio is more than one, then joint profitability

can be increased by an appropriate alteration of the terms of trade. The division of the rewards of increased profitability between the supplier and the retailer is another problem. Thus the negotiation ratio can be a key to increased channel efficiency. Further, even if there is a jungle (war) relationship between the supplier and the retailer, one would expect the retailer to be more likely to attain concessions that cost the supplier less "to offer" than those that cost the supplier more. Also note that the logic of the negotiation ratio will maintain even if nothing is quantified. In general, one should look for elements in the negotiation process that cost one party little and benefits the other a great deal.

Principle of Relative Loss

A second negotiation instrument, the principle of relative loss, can be devised by the use of incremental analysis. This principle can be used to assess the relative overall power between seller and buyer. This principle suggests that by estimating which party has most to lose by discontinuing or not entering into a relationship (assumes specific terms of trade, perhaps the present terms if a current supplier) that a retailer can "measure" the relative power of the two entities (from Ross 1920).

Shortcomings of Decision Oriented Marginal Analysis

As suggested, there are many decisions to which incremental thinking is relevant. But there are problems other than it relates primarily to the short-term and in addition to those discussed as shortcomings of the reservoir type of incremental analysis. These include the following:

1. If one is calculating contributions per unit of space, by-and-large the different value of space is not considered. A rent factor is relevant, but the accuracy of any estimate would be open to question. How is one to develop such a figure (Kovak and Troy 1989)?
2. For different values of inventory one has the problem of establishing an imputed interest, i.e., a discount rate that should be applied to reflect the time value of money for inventory purposes. Recognize that there is no accepted way to do this (Dickinson 1966a; Dickinson and Herbst 1983).
3. Comparisons between decision units, e.g., stores, is difficult. Thus, a decision maker might increase the number of sales people until the incremental benefits equal the incremental costs. But this makes comparison of store A to store B highly difficult. Retailers are more likely to compare sales costs as a percentage of sales. This latter statistic is by-and-large easily compared. Indeed, percentage of sale comparisons may be safer because factors such as image erosion as a result of too little sales help are difficult to factor into marginal analysis.

Additional Caveats

In order for incremental analysis to be useful, two key elements must be present. First, all important factors must be considered, e.g., image attrition as a result of not having enough sales people. Second, the decision maker must have confidence that the values imputed to such variables bear a reasonably close resemblance to reality, e.g., one must have confidence in the dollar incidence imputed to such as image attrition.

A key caveat is also suggested in the distinction between fixed and variable costs. For example, let us assume that in an appliance store that we have five sales people, each earning \$150 a week on commission. We decide to do away with commissions and pay the sales people \$150 a week salary. Marginal costs have been decreased and under most interpretations the price at which MC = MR is appropriately lower. But if sales increase sufficiently so that we need a sixth sales person, we could find ourselves in the peculiar position of increasing contribution but decreasing profitability.

Managerial Implications

We have suggested in this paper that retail decision making will often require incremental analysis. Incremental analysis must be used for a variety of decisions, e.g., store and department closings. But it can be a general decision rule or philosophy that guides many retail decisions.

But given that incremental analysis is the most sophisticated level of merchandising decision making, the obvious is highlighted. Optimization or maximization is an illusion and not a viable management alternative. Relatedly, goals must be multiple, i.e., managements are going to have to articulate their goals and their critical success factors (CSFs) in attaining these goals. In general, proxy variables for the critical success factors must be established and measured to the extent feasible.

Teaching Implications

This paper suggests that the teaching of retail management should rely heavily on incremental analysis, despite its shortcomings. Indeed, most retail decision making can be taught from this perspective. And many decisions cannot be effectively addressed without it.

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Part-Time Employment of Older Workers in the Service Industry

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Abstract

The social phenomena of the "greying" of America is just beginning to impact the business community and the marketplace. Demographic shifts are influencing employee profiles and personnel resources. The purpose of this study is to survey personnel directors in the service industry regarding attitudes toward and experience with part-time older employees (over 55). People who are responsible for employment decisions in the retailing, food chain, and fast food industries were questioned concerning older employee compatibility with the target market, competence, dependability, flexibility, image, and special needs.

Introduction

Rapidly expanding numbers of older people represent a social phenomena without historical precedent. The U.S. Bureau of the Census in a recent report, An Aging World (An Advance Report, 1987) projects that in the years 2005-2015 the world's population of persons age 55 and over will rapidly surpass the younger population and will make up one half of the world-wide population by 2025. While the total U.S. population multiplied five times in the past 100 years, the over-65 population multiplied by 15. Compounding the demographic shift, the low

birthrates of the 1960's to present manifest too few people in the traditional working ages to carry all the oldsters. Extending the work life of the post World War II "baby boomers" will be as critical to the health of the economy as to the enhancement of the quality of life for individuals. The challenge facing human resource planners and managers in the near term will be the shortage of seasoned employees rather than a glut of managerial surplus impeding the advancement of young trainees.

The basic manufacturing industries, formerly the mainstay of the economy, are shifting downward while the service industries are moving up and the impact of the senior boom on the service industries is multi-faceted. The social phenomena of the "greying" of America is just beginning to impact the marketplace. Who will produce the goods to be sold?; How will we meet the changing consumer's wants and expectations?; and Where is the human resource pool to fill the ranks of these emerging industries?

The extended hours of operations, multiple shift staffing of service operations, and preponderance of near minimum-wage workers present specific work force challenges that are particularly pertinent to the fast-food, food chain, and apparel retail industries. Traditionally, these organizations have found adolescents to be a good source of inexpensive, part-time labor. Marginal training requirements, flexible schedules that could be coordinated with school hours, training-level wages, and work experience opportunities have

attracted young people to entry level jobs in these companies. The youth bank is drying up and in the wings is a larger, more experienced group of mature workers that are also in search of flexible work schedules and opportunities to stay in the work force for personal and economic reasons; and often, their financial requirements are lower. In addition to labor shortages, corporate investment in the older worker may also be affected by the changing legal environment and recognition of the contribution potential of the largely untapped grey labor market.

The 1987 Age Discrimination in Employment Act prohibits employment discrimination on the basis of age, and as amended by 1978 legislation, extends the earliest mandatory retirement age to 70. Mandatory retirement age was eliminated altogether for federal employees. Still, promotion rates, mandatory layoffs, forced early retirements, and discriminatory discharge remain the most frequent sources of age-related litigation in the United States.

Evaluation of workforce potential does not begin nor end, however, with demographic or legal descriptions. Contribution potential, measured in the ability to meet the needs of the individual and the organization, is often the bottom line and those needs, real and perceived, are in transition.

Although almost one third of all males age 55-64 (3.4 million) have left the workforce due to retirement, a 1979 Harris poll indicates that up to 45 per cent of all retirees regret having retired. A more recent poll conducted by the American Association of Retired Persons confirms that in their research as many as thirty-three percent of recent retirees regret their retired status. The corporate environment, however, has failed to nurture mature employees who want to stay on the job making few alternatives or options to early retirement available. Is this an example of human planned obsolescence or an opportunity loss we can no longer afford? If early retirement does represent a personnel concept we can no longer support, how valid are existing stereotypes about the older worker and the development potential of this segment of the work force?

Proclivity to health problems and senility are perhaps the two most pervasive myths affecting employment of the 55-80 age group. Research indicates nearly ninety per cent of all people over 65 are still living independent lives and this statistic drops only to eighty per cent for people over 80. Changes in the general health, energy, and diet of people over 50 show significant improvement over the last twenty-five years. Although sensory level decline does increase with age, it is moderate in severity and rarely does it fall below the threshold level of general job requirements. Medical research has dispelled the inevitability of senility as a symptom of advancing age, rather diagnosing age-vulnerability to specific

diseases, such as Alzheimer's, which affects only one individual in four after age 80. The National Institute of Aging (NIA) has completed research of the brain metabolism of healthy individuals between 21 and 83 and found no change with age. Other age stereotypes include loss of energy and morale, increased absenteeism rate, declining degrees of social involvement, and loss of interest and ability to learn.

These traditional assumptions about the older population, however, are crumbling under the weight of current research findings. A Gallup Poll (1975) indicated much higher levels of life satisfaction rates for employees over 65. Involvement in the social process as evidenced by participation in charitable groups and voter registration (83 per cent) supports the thesis that older individuals are more involved than all other age groups. Over 1.7 million students in institutions of higher learning last year were over the age of 55. Yet despite all the contemporary contradictions, employment opportunities of the "dynamic" elderly remain slight. Consideration of the changing nature of the consumer, as well as the human resource pool, and the nature of contemporary work in general are instigating a reassessment of the contribution potential of the older worker in the service industries.

The very basis of the service industry, the consumer, is changing rapidly. The myth of the reduced purchasing power of the older person stuck on a fixed income in the light of wildly accelerating consumer prices is fading. David Wolf (1987) illustrated that per capita purchasing for mature households exceeds the national average by ten per cent. Households headed by individuals age 55 and over account for eighty per cent of all the money in savings and loan institutions in this country. This segment also spends 28 per cent of all discretionary income in the marketplace, almost twice the rate of households headed by people 34 years old and younger. The increasing incomes and rising educational levels of mature customers will bring their consumption patterns in line with those of younger consumers. A realistic picture of the older consumer is a necessity for success and perhaps survival in the service industries of the Twenty-first Century.

Purpose

The purpose of this study was to investigate the perceptions of personnel directors in the service industry in regard to attitudes toward and experience with part-time (20 hours or less), older (55 and older) employees. People who are responsible for employment in the apparel retailing, fast-food, and food chain industries were queried concerning older employee compatibility with the target market, competence, dependability, flexibility, image and special needs.

Methodology

A random sample was selected from the combined membership rosters of the Texas Restaurant Association and the Texas Retail Merchants

Association. A survey instrument was constructed based on a review of literature in the field and interviews with corporate personnel directors. A panel of personnel directors in the apparel retail industry participated in a pilot study to pre-test the survey instrument. The questionnaire was edited and revised based upon feedback from the pilot study. The questionnaire was then mailed to the survey sample group consisting of 200 food chain, fast-food, and apparel retailers. A 19 per cent return rate was obtained with 80 per cent of the completed questionnaires representing the apparel retail segment. The format of the research instrument was focused upon the evaluation of three age categories, individually, to reduce bias and perceptions of age discrimination that might influence the results of the study. The age categories were defined as 25 or less, 26 to 54, and 55 and over.

Findings

The retailers reported heavy reliance on part-time workers with nearly one half indicating 40 per cent part-time employees. Eighteen per cent of the stores had over 60 per cent of their sales staff employed on a part-time basis working less than twenty hours per week. The turnover rate of these part-time workers was quite high with approximately one fourth of the companies reporting a turnover rate of part-time employees in excess of 31 per cent. Current employment census data of the firms indicated 31 percent were 25 years or less, 50 percent were aged 26-54, and only 10 per cent were 55 or older.

Sales training time requirements and training effectiveness for employees in the three age brackets were assessed, compared and contrasted using one-way analysis of variance and Duncan's statistical comparison method and Newman-Keuls test. Although somewhat shorter training time requirements were found for the 26-54 age group, these differences were only significant for the Duncan's test and showed that the 25 years old and less needed more training than employees 26 to 54. The differences between the employees 26 to 54 and those ages 55 or over were not significant at the .05 level.

Using the Duncan's and Newman-Keuls tests, there were no significant differences between the 26 to 54 age group and the over 55 group, but there were significant differences between the 25 or less group and the 26 to 54 age group in training effectiveness. Table 1 shows that the groups differ significantly with the younger employees (25 and less) having lower mean scores in all training areas (general company rules, dress requirements, public relations, customer relations, customer service, and floor maintenance/housekeeping) except register training and computer assisted sales training where the 55 and over category workers rated lower. The middle group (26 to 54) was ranked highest in job competence after training and was closely followed by the 55 and over group. The younger group (25 and less) was rated significantly lower.

TABLE 1
AVERAGE TRAINING EFFECTIVENESS

Trait	Age of Employee		
	25 or less	26 to 54	55 or over
General company rules	2.26a	1.66	1.4
Dress requirements	2.26a	1.50	1.33
Register training	1.94	1.76	2.26a
Computer assisted sales training	1.78	2.05	2.83a
Public relations	2.27a	1.53	1.54
Customer Service	2.18a	1.45	1.41
Floor maintenance/housekeeping	2.30a	1.81	1.78

a. Significant at alpha of .05 for both Duncan's and Newman-Keuls post-hoc test of ANOVA

Averages based upon a three-point rating scale with 1 being Better than average and 3 being Worse than average

The dependability of employees as rated by the personnel directors significantly favored the 55 and over age group. Perceptions of the executives, however, did indicate an inverse relationship between age and the ability to grasp new concepts and responsibilities.

Store image was ranked as important to the overall company philosophy of the service firms with most ranking image as very important to critical. The relationship of the age categories to image was examined with the 26 to 54 and the 55 and over age brackets both identified as somewhat positive (image enhancing). A significant difference, however, was found in the relationship of the younger worker category (25 and less) to image.

Respondents evaluated each age category independently as to job performance characteristics including: scheduling requirements, absenteeism, shift change requests, technical skills, special diets, sales ability, physical limitations, transportation availability, benefit requirements, experience, maturity, attitude, responsibility, dependability, and competence. On every category except physical limitations, the younger workers were rated lower than the other two age groups, significantly lower in ten of the fifteen characteristics surveyed, as can be seen in Table 2.

Conclusions

Personnel directors in the service industries, particularly the apparel retail sector, perceive older workers as superior in terms of employee attributes, image, performance traits, dependability, and general job competence. Physical limitations and the ability to grasp new concepts especially related to register and computer sales training were identified as the only general weaknesses of older workers. Conversely, part-time workers in the age 25 and less segment (currently representing 31.4 percent of the workforce in these companies surveyed) were negatively rated by the personnel directors in almost every area of competence.

TABLE 2
AVERAGE EVALUATION OF EMPLOYEES

Trait	Age of Employee		
	25 or less	26 to 54	55 or over
Scheduling requirement	3.30a	2.65	2.76
Absenteeism	3.74a	2.32	1.86
Shift change requests	3.15	2.50	2.64
Technical skills	3.09	2.48	2.71
Special diets	2.79	2.77	3.06
Sales ability	3.31a	1.91	2.00
Physical limitation	2.29	2.73	3.52a
Transportation	3.17a	2.38	2.36
Benefit requirements	2.79	2.61	2.57
Experience	3.73a	2.09	1.76
Maturity	3.79a	2.06	1.83
Attitude	3.23a	2.15	1.93
Responsibility	3.57a	2.00	1.72
Dependability	3.49a	2.06	1.86
Competence	3.24a	2.09	2.24

a. Significant at alpha of .05 for both Duncan's and Newman-Keuls post-hoc test of ANOVA

Averages based upon a three-point rating scale with 1 being Better than average and 3 being Worse than average

Generalizations from this study include the following conclusions: 1) the older part-time employee is an under utilized human resource in the service industry; 2) competency levels of older workers are superior in most categories of job performance; and 3) training needs of the older employee must focus on technical skill development such as register training and computer-based learning skills.

Recommendations for Further Study

Research of part-time employment practices specific to age category designations can extend the body of knowledge in the human resource management and planning fields through further investigations in the following areas: 1) recruitment practices targeted at the part-time worker age 55 and over; 2) training technique development focused on the needs of the mature individual and learner; 3) revision of training practices used to enhance general and competency development of the part-time worker age 25 and less; 4) development and expansion of retention programs designed to provide continued professional development for the aging worker; and 5) job assessment and position description revision to eliminate physical barriers to worker performance competency.

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The Sun Also Rises in the West - Emerging Alternatives to
Pacific Rim Sourcing in the Western Hemisphere

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Abstract

International competition and the realities of global retailing have sharpened the focus on cost-effective sourcing. The Pacific Rim has afforded low-cost assembly production but is increasingly challenged in the arena of international production potential by emerging assembly and manufacturing plants in Mexico. Lower labor costs combined with high technology and proximity to markets in the United States lure stateside suppliers and management to use 806-807 legislative advantages in the Western Hemisphere.

At the conclusion of World War II, Europe was in shambles, Japan was almost annihilated, and the United States enjoyed undisputed global economic leadership. As competition re-emerged in the early 60's competitive pressures resulted in the shifting of production activities abroad that were labor intensive and thus represented a loss in comparative advantage in international competition.

Labor costs in the far East, particularly the Pacific Rim, were extremely low and despite the logistical problems incurred, assembly in the East translated into worthwhile economies of production. The structure and pattern of development of Pacific Rim production has benefitted Asian investors and firms and given only limited opportunities to U.S. suppliers or firms.

The realities of global retailing, international competition and vertical integration in the distribution chain have sharpened the focus and pencil on sourcing. The increasing vertical integration of retailing firms and the extensive use of private label off-shore sourcing have broadened the goal of manufacturing cost shaving to a competitive strategy that promotes and protects the domestic wholesale marketplace. This approach emphasizes the development of a North American Free Market incorporating 806 - 807 legislative advantage to stateside suppliers and management.

For example, the textile and apparel industry was one of the first tiers of labor-intensive assembly manufacturing to use the maquila concept. Maquila (twin-plant) manufacturing agreements in Mexico began in earnest a decade ago in the apparel industry. The abbreviated life cycle of fashion goods, lack of capital intensity, and heavy requirements for semi-skilled labor were well suited to Mexican resources. The continuing peso devaluation and proximity to the American marketplace set Mexico in the position of being a "Taiwan" in the U.S. backyard. Thirty percent of all twin-plant manufacturing has been in the apparel industry until recently. Now, although outnumbered and tarnished when compared to the rapidly growing high-tech electronics and auto plants, textile and apparel plants account for about 10% of the current maquila production. Mexican assembly operations afford American

textile and apparel manufacturers economically competitive and logistically advantageous sourcing which is superior to that offered by the Pacific Rim.

The Bracero Program, dating to the Second World War, was phased out during the Kennedy Administration because it was felt the program adversely affected wages, working conditions, and employment of U.S. citizens - mainly Mexican-American farm workers. In 1965 Mexico's Border Industrialization Program (BIP) was established, but it is only in recent years that BIP and the maquila (twin-plant) industry it spawned has begun to attain its potential. Originally designed to lure U.S. corporations to locate in Northern Mexico and employ Mexican nationals displaced by the end of the Bracero Program, the BIP has been extended to include all of Mexico. The long range goals of the program are to bring jobs, new technology, and modern industrial training to Mexico. As incentive, the Mexican Government waives duties and restrictions on raw materials and capitol investments, and the U.S. Government, under Sections 807.00 and 806.30 of the U.S. Tariff Schedule allows assembly of U.S. components abroad, with duty to be paid only on the value added to the product by foreign assembly. The continued success and future of the maquiladora industry relies on the national interests and policies of the two governments involved. Undisputed is the reality that the U.S./Mexican border is the longest border on earth between a developed nation and a developing nation, and that mutual interdependence is critical.

Maquila production operations can be established in one of three ways. First, total ownership and control in the setting up and operation of a Mexican corporation is allowed. Mexican industry and legal expertise is required. Secondly, a manufacturer may work with a "shelter" which provides services pertaining to the management of the operations in Mexico: industrial relations, personnel management, transportation into Mexico from the border, and, in some cases, customs paperwork. The U.S. corporation has responsibility for the production and quality control and must send a production manager and line supervisors to control the manufacturing and assembly process. Technology transfer is minimized with a shelter arrangement. The contract approach is the third method used for maquila production. Under this concept, the maquila contractor has the same responsibilities assumed in the shelter concept with additional responsibilities for quality control of the product, with technical assistance from the U.S. corporation. The basic difference between the contract approach and the shelter approach is the degree of responsibility or involvement of the Mexican maquila. In both cases, there is no corporate "link" between the U.S. corporation and the Mexican maquila other than a contract. The maquila is not a Mexican subsidiary of the U.S. corporation. Variations of the contract or shelter concept can be negotiated. In both

situations the U.S. company pays a piece rate price or hourly rate to the contract/ shelter maquila. Presently, 95% of all Mexican Maquila operations are American owned and 83% are located along the U.S./Mexican border interfacing Texas, New Mexico, Arizona, and California. Infrastructure and labor supply advantages have recently shifted maquila concentrations from California to Texas. Historically, financing has been almost completely dominated by U.S. owned lending institutions, however, recent bids by major Mexican banking interests to buy out ailing Texas banks may alter the financing picture.

The maquila program has been controversial since its inception. Labor leaders blame the loss of U.S. jobs on the maquiladora, while the U.S. Department of Commerce sees use of the plants as the salvation of U.S. manufacturers whose only other alternative would be to close down all U.S. operations. Controversial questions related to supplier location, technology transfer (or lack of it) and employee training and development persist.

A recent study of the experiences of Texas apparel manufacturers in maquila production showed that the experiences of these firms have been about evenly divided between positive and negative. The major advantage of Mexican production has been lower labor costs. Also mentioned were short lead times and good quality. Major disadvantages of Mexican production have been poor quality and problems dealing with customs quotas and related paper work. The major reasons for retaining total domestic production, given in their order of importance, were; 1. fewer risks, 2. managerial control, 3. scale of production, 4. domestic capital investment, 5. quality control, 6. lack of start-up information, and 7. company policy. These responses indicate that perceived risks and loss of control are much more important factors than any company policy about domestic production in limiting the use of maquila production.

Greater economies of scale through the incorporation of more capital intensive production methods have stimulated a trend toward more sophisticated production processes and techniques. These more technologically complex maquilas are generically labeled the "second tier" or "second generation" and include the electronics, automotive and plastics injection industries. Recent projections by an economic consulting firm predict Mexican employment in the maquila industry to reach 1 million workers by 1990 with an accompanying growth of value added of 1.59 billion dollars and a foreign exchange surplus of 2.3 billion dollars.

Ironically, the Pacific Rim investors have joined the south of the border move. In the first half of 1988 it is estimated that of the 1300 maquiladoras in operation, 3.5% are Japanese in ownership. Although most Japanese in-bond operations were originally established to penetrate foreign markets, the Japanese companies are re-importing a growing volume of their foreign assembled products.

Geographically and culturally better aligned to the U.S. markets, the emerging Mexican manufacturing industries, which combine lower labor costs with higher technology, challenge the East Asian countries in the arena of international production potential. Economically, if the North American Common Market becomes a reality in the 1990's, there could be an assembly industry "show-down" as the old "Gang of Four" (South Korea, Taiwan, Singapore and Hong Kong) meets the "Three Amigos" (Canada, Mexico and the United States).

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Abstract

A descriptive model is developed of the franchisor selection decision process. It depicts real processes used by businessmen and women in making decisions. Actual criteria rather than normative criteria in the decision are obtained. Also, this approach enables one to view the criteria and decision rules used at each stage of the process. Implications for franchisees and franchisors are offered. It is proposed that further models similar to the one outlined be developed to better understand the franchise selection process.

Introduction

Franchising is a contractual arrangement between a franchisor and a retail franchisee, which allows the franchisee to conduct a certain form of business under an established name and according to a specific set of rules (Evans and Berman 1989). A review of the promises (to society, to franchisees, and to franchisors), the problems, and the prospects of franchising is found in Hunt's (1977) work. Hunt observed that the economy had steadily become more service-oriented, and since franchise systems typically deal with services, the outlook for franchising was optimistic. This is still true today. Franchising has been the fastest growing retail form in recent years and accounts for one-third of all retail sales in the U.S. (Kotler and Armstrong 1989). Nearly 500,000 franchise operations generate close to \$600 billion in sales annually (U.S. Bureau of the Census 1988). Sales from restaurant franchise operations, in particular, represent slightly over ten percent of total franchise sales (Evans and Berman 1989).

Turning to decision-making, Hulbert (1981) notes the lack of formal descriptive research on marketing decision-making. Most decision process studies are of routine operating decisions that are repetitive in nature and characteristically focus on one element of the marketing mix. The majority of investigations deal with decisions at the individual rather than the organizational level (Capon and Hulbert 1975). The emphasis in decision systems analysis is on the process of decision-making rather than on prediction. Accurate descriptions of decision-making provide a basis for recommending improvements in the process. Problems, biases, and oversights may be detected (Hulbert 1981).

Several authors (Simon and Trow 1956; Cyert, Hulbert, Farley, and Howard 1972) have advocated descriptive analysis of decision processes as a way to gain insight into the functioning of business firms. March and Simon (1958) proposed that the rational choice process models described in economics and statistics do not accurately describe how human beings make choices in the real world and offered the notion of bounded rationality as a more realistic portrayal of the decision-making process. Individuals engage in limited information search, they look for information sequentially, have short memories, and make satisficing decisions (ones that they can live with) as op-

posed to optimal decisions (Simon 1959). Hence, the need arises for descriptive decision-process models in addition to normative models.

The decision process studied in this article was a fast-food franchise selection decision. No one has developed descriptive decision-process models for franchise selection decisions, although normative models have been proposed. Tatham, Douglass, and Bush (1972) analyzed the criteria in the franchisor selection process. A rank ordering of six criteria by eleven franchisees in one market indicated that the franchisor's capital requirement was the most important factor, followed by the fairness of the franchise agreement, the franchisor's demonstrated profitability, the franchisor's reputation, the franchisor's training program, and a recognized demand for the franchisor's product.

This study is an investigation of an "unstructured" (Mintzberg, Raisinghani and Theoret 1976) or "nonprogrammed" (Cyert, Simon and Trow 1956) decision process. Such a process is one that has not been encountered in the same form previously. The decision studied resembles extensive problem solving behavior (Howard, Hulbert and Farley 1975). The process is analogous to high involvement decision processes in that the act of purchase is viewed by the decision-maker as having high personal relevance. The situation presented in this paper represents an attempt to develop a decision-process model and is presented solely for illustrative purposes. In future, one would want to investigate and develop models for a variety (franchisor is a manufacturer, wholesaler, service sponsor) of franchise selection decisions or at least for several examples of a particular type of franchise selection.

Methodology

The research methodology was similar to that developed by Hulbert, Farley, and Howard (1972) with the exception that one person conducted the interviews. Unstructured interviews were conducted initially with the major participants in the franchise decision. They were questioned on an individual basis about their background and experience, their involvement in the decision, and their perceptions of the decision process stages. A series of flowcharts were developed to model the decision elements and subsequently were verified and modified by reinterviewing each of the key participants. An integrated flowchart was developed from the individual flowcharts and tested for internal validity by an interview in the presence of all concerned individuals. An individual not interviewed previously, but involved in the decision process was interviewed to externally validate the decision process depicted in the integrated flowchart.

This approach was based on the work of Mintzberg, Raisinghani and Theoret (1976) who studied unstructured strategic decision processes in organizations. They propose that the best way to study these decision types is by interviewing participants after or near completion of the decision process. Reasons given for this procedure

are: 1) strategic decision processes seldom have reliable traces in organizational records, 2) the difficulty that exists in observing direct effects of such decisions, and 3) strategic decision processes typically span periods of years. They conclude "the best trace of the completed process remains in the minds of those people who carried it out". Due to the strategic unstructured nature of franchise decisions, the decision participants were interviewed after the decision had been completed.

Decision Participants

Persons A and B both had experience in the restaurant business from the operation of a fast-food franchise. They entrusted their fast-food business to Persons C and D while they went on an extended vacation. Things went smoothly and Persons A and B decided to enter into a partnership with Persons C and D in the operation of a new franchise. The new franchise selection decision was to be decided jointly by the four partners (each of whom has a twenty-five percent interest in the new franchise). Person E, a friend of Person C was also a participant in the decision process, although Person E is not a partner in the business.

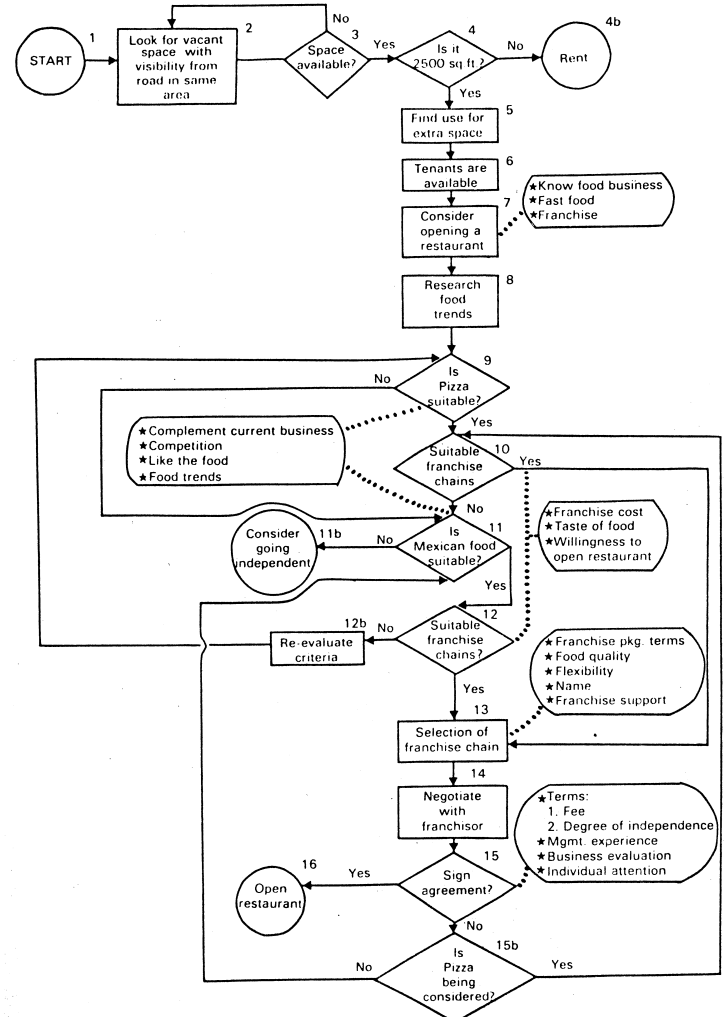
The Franchise Selection Decision Process

The composite franchise selection decision process as modelled in this study is presented in Figure 1. At the outset (Box 1), Person A owned a fast-food franchise in a shopping center, but the establishment could not be seen from the road (Box 2). Person A felt the need either to advertise or to obtain frontage on the main thoroughfare to keep the name in front of customers. The establishment was well located. About 40,000 cars per day pass the shopping center. A military base is situated less than a mile away and employs some 26,000 workers. A Veterans Administration Hospital and several schools are all in close proximity. Person A patiently waited for vacant space to become available (Box 3).

An import business vacated its space in the shopping center (Box 4), but the available space (6,000 sq. ft.) far exceeded the fast-food franchise's leased space of 2,400 sq. ft. If the vacated space had met the size requirement, it would have been rented (Box 4b). Person A was extremely interested in the vacated space even though it was larger than required, because it afforded greater visibility from the road (Box 5). Person A didn't want to hesitate too long before renting in case he would lose out on this excellent opportunity. The rental space could always be subdivided and rented out (Box 6). Person A knew of other people who might be interested in renting the space. Then the idea struck him of the possibility of opening another restaurant (Box 7), because of his experience in the food business. A full-scale restaurant was too much of a hassle because of the need for dishes, cooking everyday, and the complexity of operations. In addition, Persons A and B were firm believers in franchising (already operated a franchise). They realized the benefits of being associated with a na-

tional chain, gaining its reputation, using established recipes, and trying something that others had successfully tried.

FIGURE 1
INTEGRATED DECISION PROCESS MODEL
OF A FRANCHISE SELECTION PROCESS



As time permitted, Persons A and C went to the library and read restaurant industry journals, books on franchising, and newspaper articles (Box 8). They wanted a food that could complement the menu of Persons A and B's current fast-food outlet. There was good traffic at lunch, but fewer people visited at night. Pizza was the first food that came to mind (Box 9) when considering setting up a fast food restaurant, since all the partners liked pizza. Persons A and C talked with local franchises (Villa, Godfathers, Pizza

Factory, Showtime, LaBrasca, Jesudi's) about setting up a franchise. They noted that there were many pizza restaurants in the area and thus competition would be stiff. They requested information from Pizza Hut, Pizza Inn, Godfathers, and Showbiz (Box 10). Cost was the determining factor (most franchises required a capital investment in excess of \$750,000) in their decision not to join a pizza franchise chain. (They were only willing to consider an investment of below \$100,000.)

Mexican food (Box 11) was the next food type that was considered. The food trends indicated its popularity was on the rise and the decision participants felt it would do well, because of their close proximity to the military base and the continual turnover of employees there. Employees from the southwestern states in particular, would miss Mexican food in their diet. Food industry research also showed that the hamburger, deli, and pizza fast food markets were saturated. Person C discovered through research that American food tastes were changing. People used to eat bland foods, but were shifting to spicy fare. Pizza is more tasty (spicy) than hamburgers, but the basic taste is that of tomato and its derivatives. The next most spicy food over Italian is Mexican. Person B mentioned the trend toward diet foods or foods with fewer calories. Pizza is a very heavy food, but Mexican food could cater to the light lunch eater, thus complementing the "fill yourself up" slogan of their current fast-food operation. Mexican food is also within the range of the average family budget. There was little competition from other Mexican restaurants in the vicinity. A final consideration was that both Persons A and C liked Mexican food.

As for the suitability of franchise chains (Box 12), the willingness of a franchisor to open a restaurant was necessary; many did not want to expand because of the bad economy. Taco Tiko was unwilling to expand. Taco Cid, one of the few Mexican fast food chains represented in the city, was reluctant to franchise, because they wanted the city exclusively for themselves. (Taco Cid is currently putting up another restaurant in the vicinity of Burrito Mexicana - the chain selected by the partners.)

The cost of the franchise and the taste of the food were the primary considerations in deciding which franchise chains were relevant choices. Information was obtained from Taco John, Taco Viva, Taco Time, Taco Bell, and Chi-Chi's. Persons A, C, and D served as food taste specialists when visiting potential franchise chains. Seven or eight different chains were visited. The selection of a particular franchise chain from among those chains perceived as suitable was based (Box 13) on the franchise package terms, the quality of the food, the amount of flexibility available to the franchisee, the franchisor's reputation, and franchisor support. After selection of a franchise chain negotiations were made with the franchisor (Box 14) regarding finances and the agreement terms.

Whether an agreement was to be signed depended on the terms: 1) the immediate capital outlay and subsequent royalties, and 2) the degree of inde-

pendence afforded by the franchisor to the franchisee (Box 15). Because of their business background and previous restaurant experience, the partners desired as much independence as possible. They desired the flexibility to arrange the equipment as they pleased and to decorate the interior as they wished. Other criteria were the type and experience of the franchisor management, whether or not individual attention was paid to the prospective franchisee, and a favorable business evaluation of the franchisor. In the business evaluation, average sales per unit, the number of franchisees that had gone out of business in the previous years in operation, the length of time in business, the market share, and total sales were investigated.

Person C noted that many individuals who enter the fast food business have only a high school education and go to the franchisor for financial guidance, advertising assistance, etc. Others have so much money to invest that they just want a tax shelter. The franchisor literally runs the business for them, and the franchisee just wants an adequate return. The owner of Burrito Mexicana looked into the background of the prospective franchisees when drawing up the agreement and took their personal needs into consideration.

The franchise chain selected was Burrito Mexicana. A percentage of gross sales per month and a national advertising allocation (also a percentage of sales) are paid to the franchisor over and above the initial fee. Persons A and C must pay for their own local advertising. The franchisor, Burrito Mexicana, is allowed to open up other fast food outlets in the same territory. Persons D and E went for management training as part of the agreement. The franchisor came and spent two weeks to help set up operations and to make sure things were running smoothly.

Looking again at the integrated flowchart (Figure 1), one can observe that if no suitable franchise chains were available the decision-makers would have re-evaluated their criteria (Box 12b). If the criteria were re-evaluated and the resulting decision was that Pizza and Mexican food both were not suitable, the franchise constraint in Box 7 would be relaxed and the partners would have considered going independent (Box 11b). The criterion that the restaurant be a fast food business was more central to the concern of the decision-makers than the requirement for the restaurant to be a franchise operation.

Regarding the time span of the decision process, the excess office space became available at the start of a year, the import company vacated office space that was visible from the road six months later. Person A signed a lease agreement for the vacated space at the end of the year. The initial fast-food franchise was moved to the new location four months after the lease was signed. After the establishment of the initial fast-food franchise in its new location a wholehearted investigation into Mexican restaurants as a plausible and feasible alternative was made. The Burrito Mexicana franchise opened for business six months after the relocation. Interviewing of decision participants commenced a week after the opening.

The decision process flowcharts for each of the individual decision participants (with the exception of Person D) appear in [Figures 2, 3, 4, and 5](#). Person D was interviewed after the integrated flowchart had been verified by all other decision participants for the purpose of validating the decision process as pictorially displayed in [Figure 1](#). The limited participation by Persons B and E

```

graph TD
    START((START)) --> Look[Look for vacant space with visibility from road]
    Look --> Space{Space available?}
    Space -- No --> Look
    Space -- Yes --> Size{Is it 2500 sq. ft.}
    Size -- No --> Rent((Rent))
    Size -- Yes --> Find[Find use for extra space]
    Find --> Tenants[Tenants are available]
    Tenants --> Consider[Consider opening a restaurant]
    Consider --> Food[Food category]
    Food --> Obtain1[Obtain information on Mexican food franchises]
    Obtain1 --> Visit1[Visit nearest franchise]
    Visit1 --> Franchise1{Franchise selection}
    Franchise1 -- No --> Obtain1
    Franchise1 -- Yes --> Negotiate1[Negotiate with franchisor]
    Negotiate1 --> Sign1{Sign agreement?}
    Sign1 -- No --> Obtain1
    Sign1 -- Yes --> Open1((Open restaurant))
    Obtain1 --> Obtain2[Obtain information on Pizza franchises]
    Obtain2 --> Visit2[Visit nearest franchises]
    Visit2 --> Franchise2{Franchise selection}
    Franchise2 -- No --> Obtain2
    Franchise2 -- Yes --> Negotiate2[Negotiate with franchisor]
    Negotiate2 --> Sign2{Sign agreement?}
    Sign2 -- No --> Obtain2
    Sign2 -- Yes --> Open2((Open restaurant))
    Open1 --> Merge(( ))
    Open2 --> Merge
    Merge --> Re-eval[Re-evaluate criteria]
    Re-eval --> Space
    
```

Initial start-up fee

- *Complements present business
- *Fast food
- *Franchise

Eating trends

- *Number of similar restaurants in area
- *Like the food

Initial start-up fee

- *Flexibility
- *Taste of food

Mgmt. experience

- *Business evaluation
- *Willingness to license

```

graph TD
    Start([START]) --> Investigate[Investigate Pizza and Mexican food]
    Investigate -.-> I1([★ Complement current business  
★ Food trends])
    Investigate --> Franchise{Franchise selection}
    Franchise -.-> F1([★ Name  
★ Food quality])
    Franchise -- No --> ReEvaluate[Re-evaluate criteria]
    ReEvaluate --> Investigate
    Franchise -- Yes --> Negotiate[Negotiate with franchisor]
    Negotiate --> Sign{Sign agreement}
    Sign -.-> S1([★ Willingness to open restaurant in area  
★ Management  
★ Business eval])
    Sign -- No --> ReEvaluate
    Sign -- Yes --> Open([Open restaurant])
  
```

The flowchart illustrates the process of opening a restaurant. It begins with a 'START' terminal, leading to the 'Investigate Pizza and Mexican food' process. This process is linked to a list of considerations: '★ Complement current business' and '★ Food trends'. The next step is the 'Franchise selection' decision point, which is linked to '★ Name' and '★ Food quality'. If the selection is 'No', the process moves to 'Re-evaluate criteria' and loops back to 'Investigate'. If 'Yes', it proceeds to 'Negotiate with franchisor'. This leads to the 'Sign agreement' decision point, linked to '★ Willingness to open restaurant in area', '★ Management', and '★ Business eval'. If the answer is 'No', it loops back to 'Re-evaluate criteria'. If 'Yes', the final step is 'Open restaurant'.

```

graph TD
    Start([Start]) --> Consider[Consider opening a restaurant]
    Consider --> ResearchTrends1[Research food trends]
    ResearchTrends1 --> IsPizzaSuitable1{Is Pizza suitable?}
    IsPizzaSuitable1 -- No --> ResearchTrends1
    IsPizzaSuitable1 -- Yes --> SuitableFranchise1{Suitable Franchise chains?}
    SuitableFranchise1 -- No --> ResearchTrends1
    SuitableFranchise1 -- Yes --> FranchiseCost[Franchise cost  
Package terms]
    FranchiseCost --> SelectionChain[Selection of franchise chain]
    SelectionChain --> Negotiate[Negotiate with franchisor]
    Negotiate --> SignAgreement{Sign Agreement}
    SignAgreement -- No --> IsPizzaSuitable2{Is Pizza being Considered?}
    SignAgreement -- Yes --> OpenRestaurant([Open restaurant])
    IsPizzaSuitable2 -- No --> ResearchTrends1
    IsPizzaSuitable2 -- Yes --> OpenRestaurant
    ResearchTrends1 --> Competition[Competition  
Taste preferences  
Mkt. potential in area  
Projected sales growth  
Changing food tastes]
    Competition -.-> IsPizzaSuitable1
    Competition -.-> SuitableFranchise1
    Competition -.-> SuitableFranchise2{Suitable franchise chains?}
    SuitableFranchise2 -- No --> StartMexican([Start independent Mexican food restaurant])
    StartMexican --> OpenRestaurant
    StartMexican -.-> ResearchTrends1
    StartMexican -.-> ResearchTrends2[Research food trends]
    ResearchTrends2 --> IsPizzaSuitable1
    ResearchTrends2 --> SuitableFranchise1
    ResearchTrends2 --> SuitableFranchise2
    ResearchTrends2 --> SignAgreement
    ResearchTrends2 --> IsPizzaSuitable2
    ResearchTrends2 --> OpenRestaurant
  
```

```

graph TD
    Start([START]) --> ConsiderSameArea[Consider starting business in same area]
    ConsiderSameArea --> ConsiderFoodBusiness[Consider food business]
    ConsiderFoodBusiness -.-> Note1([*Know food business])
    ConsiderFoodBusiness --> ChoiceOfFood{Choice of food}
    ChoiceOfFood --> InvestigateMexicanFood[Investigate Mexican food]
    ChoiceOfFood --> ExpandPresentBusiness[Expand present business]
    ChoiceOfFood --> InvestigatePizza[Investigate Pizza]
    InvestigateMexicanFood --> ChoiceOfFood
    InvestigatePizza -.-> Note2([*Competition in area  
*Capital required])
    InvestigatePizza --> RestaurantType{Restaurant Type}
    RestaurantType --> Conventional[Conventional]
    RestaurantType --> FastFood[Fast Food]
    Conventional --> DegreeOfControl{Degree of Control}
    FastFood --> DegreeOfControl
    DegreeOfControl -.-> Note3([*Capital required  
*Clientele])
    DegreeOfControl --> Franchise[Franchise]
    Franchise --> VisitPossibleFranchisors[Visit possible franchisors]
    VisitPossibleFranchisors --> FranchiseSelection{Franchise selection}
    FranchiseSelection -.-> Note4([*Franchisor support  
*Agreement terms])
    FranchiseSelection -- No --> Reconsider([Reconsider])
    FranchiseSelection -- Yes --> NegotiateWithFranchisor[Negotiate with franchisor]
    NegotiateWithFranchisor --> SignAgreement[Sign agreement]
    SignAgreement --> OpenRestaurant([Open restaurant])
    OpenRestaurant --> Start
    DegreeOfControl -.-> Ownership[Ownership]
    Ownership --> Start
  
```

in the decision is evidenced by the lack of detail in the decision processes of these two individuals. The major difference between Person A's and Person C's decision process is that Person C appeared more anxious to go into business without outside help, while Person A desired to go the franchise route and was more willing to relax constraints to ensure the selection of a franchise. Person C also voiced the opinion that Burrito Mexicana did not meet all the criteria, but that it came the closest. Person C would have liked to make additions to the menu offering suggested by Burrito Mexicana, but is restrained from doing so. Neither Person A nor Person B expressed any dissatisfaction with their choice.

EVALUATION OF THE DECISION PROCESS

Decision systems analysis has been used to analyze a franchise selection decision. It is useful in isolating the nature of the decision processes and in identifying the key individuals involved in the decisions and the criteria utilized. It may aid participants in decision processes in making better decisions once the current decision processes are known. Looking at the integrated decision process flowchart in this study several improvements might have been made. First, no analysis was made of the increase in sales to be expected from being closer to the road. Would the increase in sales offset the increased rental cost? Second, no feasibility study was conducted to estimate demand for Mexican food. Person B simply asked customers at the first fast-food chain if they were favorable toward the idea. Bush, Tatham, and Hair (1976) in a study conducted on community location decisions by franchisors cautioned that fast-food franchisees should be wary in making community location decisions based on the availability of business property, rather than on the knowledge of demand for a particular product. Third, consideration was not given, it seems, to the loss in revenues to the first establishment by the subsequent opening of Burrito Mexicana. Fourth, in future decisions, legal counsel should be sought before signing an agreement. Fifth, Person A seemed scared of losing the location near the main thoroughfare, yet no one else rented the vacated space in the year waiting period which ensued before Person A signed the agreement. Perhaps the property should have been investigated further.

FRANCHISING IMPLICATIONS

This study, because of the subjective nature and the fact that the decision participants were well-educated and had prior business experience may be difficult to generalize across franchise selection decisions. Yet, from a practical standpoint, this decision systems analysis approach is useful to potential franchisees who have not participated in such a decision before, as it gives insight into the process to be followed, considerations that could be made, and criteria that could be used to evaluate alternative franchises. All the criteria mentioned by Tatham, Douglass, and Bush (1972) were included, with the exception of the franchisor's training program. In addition, the taste of the food, the amount of competition,

food trends, willingness of the franchisor to expand into a state where it had no outlets, degree of flexibility available to the franchisee, degree of support, experience of the franchisor management, and the individual attention paid to the franchisee were criteria used in this decision process.

The analysis is also of benefit to franchisors in attracting prospective franchisees. A knowledge of criteria used in a franchise decision can be of importance in preparing sales presentations, printed promotional material, etc. Franchisors need to be responsive to the varying needs and/or desires of franchisees and take their background into account. A franchisor may wish to segment potential franchisees into 1) high school graduates with little business experience, but with a knowledge of how to manage food operations, 2) investors who desire a return on funds, and 3) businessmen/women who want a business that can give them a sense of self-fulfillment, the knowledge of a "proven" and "tried" product (decrease in risk), yet the potential for profit.

LIMITATIONS AND CONCLUSIONS

The decision processes of only a single franchise selection decision have been described. The possibility of investigator bias and hold-out of relevant thoughts and behaviors by key participants exists. The decision processes described are after the fact. Further research is needed into the decision processes of several franchise selection processes. Although self-reports are obtained, participants were interviewed individually. Points of divergence in the steps of the decision process are clarified when the individuals as a group are presented the integrated framework and given the opportunity to review the decision jointly. In addition, steps omitted by one individual may be included by another.

The descriptive model developed in this study represents an initial research report; no other descriptive model of a franchise selection decision has been found from a search of published literature. This specific model has the following characteristics: 1) several elements of the marketing mix are included, 2) the decision modelled is strategic in nature, 3) its development entailed obtaining information from more than one decision maker, and 4) the synthesis of individual decision models was made explicitly to afford comparison of different decision makers (cf. Hulbert 1981).

In summary, the descriptive model developed in this study describes the criteria and decision rules used in making an actual franchise selection decision. Perhaps emphasis should not be placed on the importance of a particular criterion as in Tatham, Douglass, and Bush's (1972) study, but on the sequential nature of the decision process and the criteria considered at each stage. Further descriptive research is necessary to develop a phenomenological theory of franchise selection, which is not just concerned with predicting the franchisor that will be selected, but incorporates the realism of actual franchise selection decisions. Systematic replication of the use of decision systems analysis is recommended.

PSYCHOLOGICAL AGE AND FASHION INNOVATIVENESS

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Abstract

Research on fashion innovativeness has consistently found both male and female fashion innovators to be younger than other clothing buyers. Although this is a potentially useful descriptive finding, further research should be devoted to greater understanding of the relationship between age and fashion innovativeness. An opportunity is afforded by the concept of psychological age or how consumers feel and look, their interests, and what they do. Data from a sample of 607 randomly selected middle-class adults from five states confirmed the weak negative correlation between chronological age and fashion innovativeness ($r = -.23$) and showed in addition that even when the effect of chronological age was statistically controlled, fashion innovators reported younger psychological age than others, that is, they said that they felt, looked, behaved, and had younger interests than non-innovators.

Introduction

Consumer researchers and retailers have frequently studied fashion innovativeness because of the importance of this consumption domain to both consumer theory and to the clothing marketer. Various characteristics have been adduced to account for fashion innovativeness, including demographics, personality, lifestyle, values, and attitudes (Blackwell and Talarzyk 1983; Darden and Reynolds 1974; Goldsmith, Stith, and White 1987; Gould and Barak 1988; Greenberg, Lumpkin, and Bruner 1982; Gutman and Mills 1982; Holman 1980; Mason and Bellenger 1973-1974; Tatzel 1982). One of the few demographic variables which seems to be universally associated with the relative early purchase of new fashions is chronological age. Several studies show fashion innovators to be younger than later purchasers (e.g., Gutman and Mills 1982; Hirschman and Adcock 1978). However suggestive for fashion theory and strategy, this finding has two features of note. First, although a solid empirical finding, review of the published studies shows the relationship between chronological age and fashion innovativeness is not very strong, accounting for little of the variance in fashion behavior. Second, it is purely descriptive rather than explanatory. Simply knowing that fashion innovators are somewhat younger than later buyers does not in itself account for why this should be the case. The present study was conceived as an examination of age and fashion innovativeness seeking to broaden our understanding of this relationship. The chief theoretical concept we use is that of psychological (cognitive) age (Barak and Schiffman 1981), a relatively new concept available to consumer researchers that adds a new and richer meaning to the concept of age.

Chronological Age and Fashion Innovativeness

Many studies of clothing and fashion consumption state that younger age is associated with fashion

innovativeness regardless of the consumers studied. For example, in a study of college women, Mason and Bellenger (1973-74) found single, younger women to have a high fashion interest. Scrugge (1977) studied employed, single women and also found fashion interest to be higher among women under age 30. Gutman and Mills (1982) also reported a lower median age for women fashion leaders than for other women clothing buyers. Similarly, Horridge and Richards (1984) found high fashion awareness among women in the 25 - 34 age category, while 35 - 44 year olds showed lower fashion awareness. Darden and Reynolds (1974) reported that fashion innovativeness was negatively related to age among suburban men. Hirschman and Adcock (1978) reported lower age to be the only demographic variable which distinguished male fashion innovators in two cities. Greenberg et al. (1982) found that fashion innovativeness was greater for a sample of adults among those under 25 years. Only one of the reviewed studies (Goldsmith et al. 1987) provided a correlation coefficient (from a sample of men and women) estimating the size of the relationship between age and fashion innovativeness. This value ($r = -.18$, $n = 308$, $p < .001$) suggests that the relationship may be very weak.

Although the negative association between age and fashion innovativeness is consistent for both men and women, its apparent size and the distributions reported by both Gutman and Mills (1982) and by Hirschman and Adcock (1978) suggest that it is principally due to a decrease in fashion innovativeness for older (60+) consumers of both sexes. Hence, the first goal of this study is to replicate the weak, negative association between age and fashion innovativeness and to confirm whether the latter trait is relatively evenly distributed across the age range. Chronological age, however, is a purely descriptive variable, offering little insight into the motivation for fashion leadership. Because clothing is an important way for consumers to communicate with others (Holman 1980), another view of age may give this insight.

Psychological Age

Barak and Schiffman (1981) introduced the concept and measurement of non-chronological, self-perceived age to consumer research. The underlying rationale for this concept is that people often view themselves as younger than their chronological age, and this perception influences purchasing behavior. Barak and Schiffman (1981) describe a measure (see Figure 1) of non-chronological, self-perceived age based on four dimensions of personal age suggested by Kastenbaum, Derbin, Sabatini, and Artt (1972): feel-age, look-age, do-age, and interest-age. The measure asks consumers to indicate the age decade that best represents how they feel and look, what they do, and their interests.

Retailers and the fashion industry tend to view the market for new fashions as a chronologically young segment. This study sought to use the concept of psychological age to further understand the nature of fashion innovativeness, even when the effects of chronological age are held constant. Thus, the second goal of the present study is to examine the possibility that being "psychologically young" is associated with new fashion innovativeness.

Method

Data Collection

To enhance the validity and generalizability of the findings we purchased a mailing list from a commercial mailing-list company. We selected five states to survey (California, Georgia, Massachusetts, Ohio, and Washington, DC.) to give geographical dispersion to our sample. Our list contained a random sample of adults with gross household incomes between \$20,000 and \$70,000 annually, representing the middle-class market segment. This was done because the interest of this study was in the middle-class market and because of the well known non-response of lower income and education groups to mail surveys (Kanuk and Berenson 1975). The initial list contained 2500 white households and 2645 black households. We oversampled blacks in order to obtain sufficient responses from black households for an additional analysis unrelated to the present study.

To obtain the best response to the questionnaire, we followed the Total Design Method of Dillman (1978). The first mailing consisted of the questionnaire, a cover letter, and a postage prepaid return envelope. Approximately 10 days later a reminder post card was mailed to households who had not yet returned the questionnaire. Responses were solicited in the cover letter from the male head of household in half the questionnaires and from female head of household in the other half. If the specified head of household was not available, the questionnaire was to be completed by the other household head.

Questionnaire

Three graduate students personally distributed 180 copies of a preliminary version of the questionnaire to neighborhoods with socioeconomic characteristics similar to the sample. One-hundred and two (57%) completed pretest questionnaires were recovered. We revised the questionnaire together with the students who had received comments from several of the pretest respondents to ensure that the questions were understandable and non-objectionable to respondents. In addition, this data was analyzed prior to revising and printing the final version of the questionnaire to ensure that all items performed as desired.

The questionnaire asked respondents to indicate their marital status, income, educational level, ethnic group, sex, and chronological age. Psychological age was measured using the scale shown in Figure 1 that was developed by Barak and Schiffman (1981) to yield separate scores ranging from 2 to 8 on four variables indicating how

respondents FEEL, how they LOOK, the things they DO, and what their INTERESTS are. As might be expected, chronological age and the four dimensions of psychological age were highly intercorrelated (see Table 1).

Fashion innovativeness was measured by two self-report items with a four-point response format used by Hirschman (1980): (1) Are you willing to try new ideas about clothing fashion? How often? and (2) Do you try something new in the next season's fashions? How often? The correlation between responses to these two items was .56 ($p < .001$) indicating convergent validity. The sum of the responses to these two items served as the variable operationalization; higher scores indicated greater fashion innovativeness. These scores ranged from 1 to 8, with a mean of 5.12 ($SD = 1.46$). Validity of the fashion innovativeness measure was supported by its positive correlation ($r = .46$, $p < .001$) with a three item measure of fashion opinion leadership borrowed from Hirschman (1980), as well as a significant correlation ($r = .38$, $p < .001$) with spending for new fashions operationalized by a single item asking "how much you spend on new fashions for yourself in a typical month." A nine-point response format ranging from "under \$25.00" to "\$200 and over" was used. Scores ranged from 1 to 9, with a mean score of 3.1 ($SD = 2.22$).

For the present analysis, the sample was divided into three groups based upon the distribution of the fashion innovativeness scores. The 70 respondents (11.5%) who scored either 7 or 8 were designated "Fashion Innovators." Respondents scoring either 4, 5, or 6 (452 or 74.6%) were classed as the "Middle Majority." Finally, the lowest scoring group (1, 2, or 3) were designated "Laggards" and consisted of 84 (13.9%) consumers. This tripartite division of consumers corresponds closely to the traditional distribution of innovativeness found in most texts.

Results

Sample Characteristics

Of the 5145 questionnaires mailed, 368 (7%) were returned as undeliverable. Six hundred twelve questionnaires were returned for a response rate of 12.8%, about par for a "cold" mail survey of this type (Dillon, Madden, and Firtle 1987, p. 139). Five of these were unusable for the present study, so that usable responses from 607 respondents provided the data.

There were 291 (48.2%) men and 313 (51.6%) women in the data set (3 were missing on this variable). The majority of the sample was white, 380 respondents or 62.6%, with 192 blacks (31.6%) and 35 or 5.8% missing values. The respondents ranged in age from 21 to 92. The mean age was 45.2 years ($SD = 16.0$) and the median was 42.3 years. Fifty-eight percent of the sample was married. Forty percent of the sample reported household incomes of \$50,000 or more, and 54% claimed to have earned a college degree or attempted or completed a graduate degree. Nearly 43% of the sample's occupations were classified as either professional or managerial. These figures indicate that the sample represented the upscale market segment of interest to fashion

retailers (Blackwell and Talarzyk 1983).

Non-Response Analysis

Although the overall response rates of men and women appeared to be about equal, whites responded proportionally more than blacks, and more black women responded than black men. To further evaluate non-response a "trend analysis" was performed (Tull and Hawkins 1984, p. 154). A variable representing the speed with which the questionnaire was returned was computed so that the characteristics of earlier respondents could be compared with those of later respondents on the assumption that the later respondents were more like non-respondents than were earlier respondents (Kanuk and Berenson 1975). Correlations with interval level variables indicated no relationships with the time the questionnaire was returned. The sample was also split into an earlier response group (58%) and a later response group (42%), and t-tests of mean differences and cross tabulations were computed for both interval level and categorical variables. None of these analyses showed systematic differences ($p < .05$) between earlier and later respondents. Thus, although proportionately fewer blacks responded than whites, there appeared to be little evidence for non-response bias in the data.

Age and Fashion Innovativeness

Chronological age was negatively correlated with the measure of fashion innovativeness in agreement with previous findings establishing this generalization, and the size of the correlation coefficient shown in Table 1 was not large ($r = -.23$, $p < .05$), confirming earlier studies. Moreover, the negative correlation seems to be due chiefly to the wide range of the age distribution. This is shown in Table 2. The respondents were classified into 6 groups by age decade, i.e., people in their 20's, 30's, etc. Mean fashion innovativeness scores are virtually identical for respondents in their 20's, through their 50's and only drop off significantly for respondents in their 60's and older. Fashion innovativeness seems to be relatively uniformly distributed across consumers from their 20's to their 50's.

Another perspective on this relationship is provided by classifying the respondents into the three fashion groups (Innovators, Majority, and Laggards) and comparing their mean chronological age. The mean age of the 68 Innovators was 40.0 years ($SD = 14.8$), the mean for the 446 Majority members was 44.6 years ($SD = 15.3$), and the mean age for 82 Laggards was 53.0 years ($SD = 17.5$). Oneway ANOVA revealed that these differences were significant ($F(2, 593) = 14.6$, $p < .001$, $\eta^2 = .21$), and a Scheffe follow-up test showed that each mean was significantly different from the other two.

The principal concern of this study, the relationship between fashion innovativeness and psychological age, can be seen in the correlations shown in Table 1. Fashion innovativeness was negatively correlated with all four measures of psychological age at about the same level as it was with chronological age. This suggests that self-perceived youthfulness may be associated with

fashion innovativeness. To examine the independent relationships between fashion innovativeness and the four dimensions of psychological age, an analysis of covariance was performed using the SPSS MANOVA program with the three fashion groups as the independent variable, chronological age as a covariate, and scores on the four measures of psychological age, FEEL, LOOK, DO, INTEREST, as dependent variables. The univariate findings are shown in Table 3.

For these analyses three points must be made. First, although the null hypothesis of homogeneity of variance across the three groups had to be rejected ($p < .05$), the analysis is fairly robust to this assumption. Second, because the covariate, chronological age, was significantly associated with the independent variable, the appropriate method of analysis is the "regression" approach to ANOVA in which each term in the analysis is corrected for every other term in the model (Wildt and Ahtola 1978, pp. 50-56) and the sums of squares of the various components do not add up to the total sums of squares. Finally, the appropriate statistical tests showed that the assumption of homogeneous slopes was met for all four analyses (Wildt and Ahtola 1978, p. 27).

The findings shown in Table 3 indicate that, even when the effects of chronological age are removed from the analysis, fashion innovators report that they FEEL, LOOK, DO, and have younger INTERESTS than non-innovators. This difference is largest between innovators and laggards, but also consistently appears between innovators and later adopters across the four psychological age dimensions. This effect appeared to be strongest for look-age, suggesting that looking young and wearing fashionable clothing are associated in the consumer's mind.

Discussion

The present study examined the relationship between age and fashion innovativeness for both male and female middle-class consumers, confirming the reports of past studies (Gutman and Mills 1982; Hirschman and Adcock 1978) that the negative association is weak and chiefly due to a falling off of fashion innovativeness in older age groups. The study further showed that when the effects of chronological age are controlled statistically, fashion innovators perceive themselves as younger than non-innovators. This finding has important implications for both consumer theory and fashion retailing.

The success of the use of psychological age in understanding fashion innovativeness suggests that researchers ought to explore further the potential of this construct and measure to explain aspects of buyer behavior which perhaps have been obscured by an habitual use of chronological age as a descriptor variable. For retailers, the strategic implication is that they should direct their new fashion appeals to a broad age group and not simply to the chronologically young, yet at the same time they should stress the link between fashion and youth for all age groups.

The correlational nature of the evidence presented here, however, prevents us from drawing causal conclusions about psychological age and fashion

innovativeness. Rather than perceived age leading to greater innovativeness, it may be that more innovative clothing buyers infer that they are younger than their chronological age. More likely, some third variable may produce both statistical trends. Further research should extend the study of psychological age within the fashion area to explore these possibilities. The interactions between psychological age and other demographic variables such as race, education, and income should be explored. And the limitations of this single study should be overcome with replications using different samples of consumers.

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Figure 1
Barak and Schiffman Measure of Psychological Age

Most people seem to have other 'ages' besides their official or 'date of birth' age. The questions which follow have been developed to find out about your 'unofficial' age. Please specify which age group you FEEL you really belong to: twenties, thirties, forties, fifties, sixties, seventies, or eighties.

	20's	30's	40's	50's	60's	70's	80's
I <u>feel</u> as though I am in my --	_____	_____	_____	_____	_____	_____	_____
I <u>look</u> as though I am in my --	_____	_____	_____	_____	_____	_____	_____
I <u>do</u> most things as though I were in my --	_____	_____	_____	_____	_____	_____	_____
My <u>interests</u> are mostly those of a person in their --	_____	_____	_____	_____	_____	_____	_____

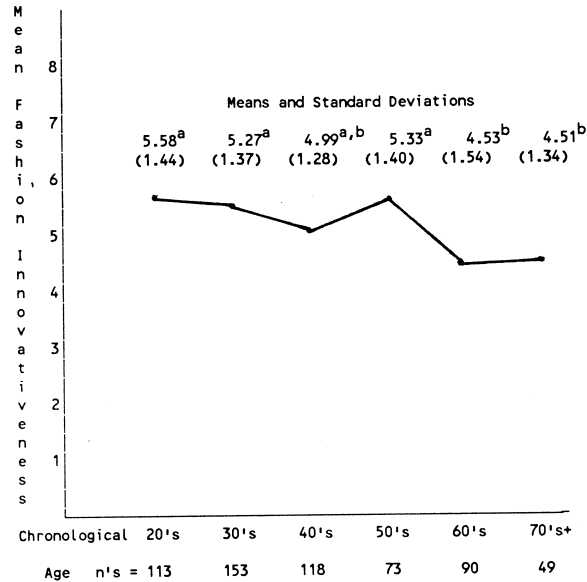
Table 1
Descriptive Statistics and Correlations

Variable Names	n	Range	Mean	SD	Pearson Correlations				
					FI	FEEL	LOOK	DO	INTEREST
ChronoAge	596	20-92	45.2	16.0	-.23	.84	.89	.81	.80
Fashion In.	606	1-8	5.1	1.4		-.24	-.27	-.25	-.26
FEEL	596	2-8	3.6	1.3			.87	.87	.86
LOOK*	591	1-8	3.6	1.4				.82	.84
DO	589	2-8	3.5	1.2					.87
INTEREST	580	2-8	3.6	1.2					--

Note: All correlation coefficients significant at $p = .001$.

*Some respondents in their 20's indicated that they "looked" in their teens.

Table 2
Chronological Age and Fashion Innovativeness



Note: Difference in means is significant:
 $F(5, 590) = 8.4, p < .001$,
 $\eta^2 = .26$. Means marked with the same
superscript are not significantly different
from each other by a Scheffe test ($p = .05$).

Table 3
Mean Scores on the Four Dimensions of Psychological Age:
Analysis of Covariance Results

	n	Observed Mean	Adjusted Mean*	F	Significance
FEEL-AGE					
Laggards	79	4.27	3.81 ^a	4.42	.0124
Majority	439	3.52	3.59 ^b		
Innovators	68	3.10	3.48 ^b		
LOOK-AGE					
Laggards	78	4.31	3.81 ^a	7.02	.00098
Majority	436	3.50	3.55 ^b		
Innovators	67	3.01	3.45 ^b		
DO-AGE					
Laggards	78	4.14	3.72 ^a	3.62	.027
Majority	433	3.49	3.57 ^{a,b}		
Innovators	68	3.06	3.40 ^b		
INTEREST-AGE					
Laggards	78	4.29	3.86 ^a	4.32	.014
Majority	427	3.58	3.64 ^b		
Innovators	65	3.15	3.52 ^b		

Note: Means marked with the same superscript are not sig. different from each other by a Scheffe test ($p = .05$).

* Means adjusted for effects of the covariate, chronological age.

STUDYING THE BODEGA IN HISPANIC BARRIOS:
RESEARCH REALITIES FROM A FIELD STUDY

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Abstract

The corner grocery store, or "bodega," is the focus of shopping activity within Hispanic neighborhoods. However, few formal studies have investigated this institution, possibly due to the complexities and difficulties encountered in research design and data collection. Using actual field experience from the Philadelphia barrio, the present paper offers insight into the bodega itself, discusses the environmental differences which are likely to affect research, and suggests practical recommendations for future study.

Introduction

The Hispanic population of the United States forms a market made up of 23.7 million persons. Increasing birth and immigration rates make it one of the fastest-growing markets in the country, as Hispanic-Americans are projected to supplant blacks within twenty years as this nation's largest minority group. Inadequate data availability and poor quality of data comprise major obstacles for marketers who wish to appeal to Hispanics (Hernandez and Kaufman 1990).

A particular shortcoming is the lack of in-depth information regarding a retail shopping institution which is largely preferred among immigrant Hispanics, the "bodega." This corner grocery store is the focus of shopping activity within Hispanic neighborhoods, or barrios, but has received little formal attention in both the academic and practitioner literature.

Possible reasons for this problem are the complexities and the difficulties encountered in conducting field studies regarding bodegas. Research methods which are commonly-used to study retailers in the mass market may simply not work in the barrio. Many unexpected problems are likely to be encountered in research design and actual data collection. The present paper attempts to fill this need by compiling a guide for retail research in Hispanic barrios.

The Bodega: An Oasis of Latin Culture

Grocery stores are thought to be social gathering centers in ethnic neighborhoods, serving functions well beyond simple convenience in purchasing near to the home. In particular, grocers in Hispanic neighborhood stores, or "bodegas," characteristically provide advice on issues such as finding a home, buying an automobile, or obtaining employment (Kizilbash and Garman 1975). In describing Hispanic markets in the New York area, Agins (1985) paints a picture of easy credit, gossip, and social interaction, creating "an oasis of Latin culture." Bodegas continue to have a special attraction, even for the affluent Hispanic who has left the barrio, but is likely to return to shop there (Flynn 1985).

A knowledge of successful retail strategy is also essential for supermarket chains which want to duplicate the familiar sights, sounds, and smells of Hispanic markets (Corchado 1989). Supermarket chains such as Vons' Tianguis, Fiesta Marts Inc., and Danal's Food Stores Inc. have carefully blended authentic atmosphere and product mix, emphasizing bilingual employees, freshness, Hispanic brands and products, and a sense of "family" or "community" (Hughes and Coupe 1987).

The Survey and the Neighborhoods

In the summer of 1988 we conducted consumer and retailer surveys in two neighborhoods -- one Hispanic and one Anglo. The main purpose of this survey was to study differences in coupon use and grocery store patronage between Hispanics and Anglos and to explain such differences.

Six Census Tracts were drawn from a predominantly Puerto Rican neighborhood in the city of Philadelphia, an area which can be termed as a "barrio." The proportion of Spanish origin residents in the selected tracts ranged between 45 and 69 percent. Two other contiguous tracts were selected to form the Anglo sample. In contrast, whites in these latter tracts comprised about 98 percent of the population.

The Hispanic tracts had one hundred twenty-three grocery stores within the selected Census boundaries, while the Anglo tracts yielded a total of thirty-seven grocery stores. Fifty Hispanic grocery stores were selected, using proportionate stratified sampling by Census Tract to determine the number of grocery stores to be sampled in each Hispanic tract. All thirty-seven Anglo retailers in the two Anglo tracts were included as part of that sample; however, some of these were found to be closed or ineligible (not grocery stores), reducing the number to thirty-three grocery stores. In both the Hispanic and Anglo samples, the sampling unit corresponded to the owner of the grocery store, or the person in charge of the grocery store.

Method of Administration

Telephone Surveys

Telephone surveys are a commonly-accepted method for conducting survey research in the general market. However, there are several problems encountered when researching a Hispanic market which may require some modifications. For instance, telephone ownership is low among Hispanics; about 69 percent of Hispanic households own a telephone (Strategy Research Corporation 1988). When a telephone is present, it is often the residential phone of the bodega owner or a public telephone just outside the bodega door. Actual observation found 20% of the bodegas sampled with telephones in front of the store, while 76% located them inside.

This low telephone ownership pattern can be traced back to Latin America (Dauten 1983). The number of telephone lines is limited in most of Latin America, the waiting period ranges from a few months to several years, and the price is prohibitive to most. Rather than being a commonly-owned necessity as in the United States, telephones are viewed as vehicles for communication with family members or close friends, or for use in emergencies.

Mail Surveys

Illiteracy is more likely to be a problem among Hispanics than among non-Hispanics. In 1988, only 51 percent of Hispanics aged 25 and over completed four years of high school compared to 78 percent of non-Hispanics (U.S. Bureau of the Census 1989). Actual measurement confirmed this expectation, with only 50% of the Hispanic retailers having completed high-school, versus 75% of the Anglo retailers.

Analysis of Census data prior to the study conducted in the Philadelphia barrio indicated that only between 20 and 30 percent of the Hispanic residents in the selected tracts were high school graduates, suggesting rather low literacy levels. Although bodega owners/managers seem to possess a higher level of schooling than other barrio residents, a mail survey may not be the most appropriate method of making sure that they will accurately understand all the questions.

Personal Interview Surveys

As a result, a personal interview survey was selected due to the low incidence of telephones within the Hispanic grocery stores and the low literacy levels in the Hispanic Census tracts.

Development of the Questionnaire

Question Wording

The choice of clear, understandable wording is absolutely essential in Hispanic barrio research. Questions need to be phrased in very simple language in both Spanish and English. Even words that are commonly used in Spanish may not be understood by the bodega owner or manager because of their typically low level of education. In addition, care must be taken when using technical retail terminology, such as "shelf-space allocation," which stands a great chance of being misunderstood. While the methods of merchandising may be well understood by the bodega owner, terms such as this may simply be unfamiliar or unable to be accurately translated.

Form of Response

Since the barrio environment may present alternatives which are unfamiliar to the researcher, fixed-responses must be evaluated through field testing. For instance, questions regarding how to decide which customers received credit and whose checks to cash are likely to be somewhat subjective decision rules of each individual retailer, based on the credit histories of the customers and on subcultural norms.

Bodegas may make use of business practices which are uncommon in the mass market. Such is the case of the promotional mix. Fixed alternatives based on local English-language newspapers, radio, and television cover comparisons with traditional media usage, but are likely to miss nonconventional promotional methods, such as church bulletins, local television guides, and loudspeakers on trucks.

Scales must also be chosen to insure adequate communication with the respondent. Some five-point Likert-type scales were found to be difficult for the retailers to interpret, particularly in distinguishing between terms such as "strongly agree" and "agree". A visual aid was developed, printed with the five scale points, which seemed to help retailer recall and use of the categories.

Translation

Since Census information suggested that approximately 40 percent of the Hispanic residents of the six tracts spoke no English at all, or did not speak it well, we assume that similar English-speaking abilities also characterized the Hispanic retailers. The questionnaire was first written in English and then translated into Spanish. Next, a bilingual translator back-translated the Spanish version into English. Discrepancies between the two versions were identified and these sections were reworded.

While back-translation is generally recommended in research involving Hispanics and Anglos (O'Guinn and Faber 1986; Valencia 1989), English language meanings may dominate in questionnaires originally written in English. In order to avoid scales which are "uncentered," questionnaires can be constructed by developing questions simultaneously from both cultures (Werner and Campbell 1973).

Sample Design

It is difficult to find and identify bodegas with confidence, since the telephone directory was inadequate. A significant number of stores in both Hispanic and Anglo neighborhoods did not have telephones or had them listed under the names of their owners as residential phones. Not only was the telephone directory an incomplete sampling frame, but because of the rapid turnover in ownership and frequency of business closings, phone listings were also inaccurate.

We developed a list of corner grocery stores by using city planning maps to chart a route through all streets of each of the selected Census Tracts, noting store names and locations -- street addresses when available and intersecting streets were recorded to establish location. Most of the bodegas in the sample were located at corners. Intersections may be preferred because they have heavier traffic and better delivery access than mid-block locations. In addition, commercial zoning restrictions often apply to non-corner locations throughout the barrio.

Another problem occurred since some bodegas did not have store signs -- 22 percent of the sample, thus we could not rely entirely on conventional sign cues for store recognition in the Hispanic

barrio. Bodega owners maintain little need for signs since they serve the neighborhood immediately surrounding the store, creating a localized business domain. When signs are present, they are often manufacturers' promotional signs. The Anglo stores were somewhat more likely to have actual store signs, with manufacturer's murals painted on the building.

Non-conventional cues were used, in addition to store signs, in order to overcome the problem of store recognition in the Hispanic barrio. The following cues aided in the identification process: 1) some bodegas had murals painted on the outside depicting neighborhood or Hispanic themes -- about 16 percent of the sample; 2) garbage disposal containers (dumpsters) could be found next to some bodegas; 3) pay phones in the barrio were often located at corners next to the bodegas -- about 20 percent of the bodegas in the sample had an outside public telephone. Corner store neighbors proved to be very helpful in corroborating whether some stores were actually in business or not.

Data Collection

Non-response

Non-response error is likely to occur when studying bodegas, since some of the bodegas as well as Anglo corner stores maintained rather informally-set schedules and hours. While a schedule was often posted, retailers reported staying open for their customers' benefits, rather than following actual clock time. Vacations and holidays also were taken and often communicated through the neighborhood by word of mouth. Stores occasionally had security gates which pulled down over the store front, and make the bodega appear padlocked or vacant. It would be easy for the interviewer new to the barrio to assume that these stores were closed or ineligible, which would greatly affect non-response error.

Field Problems

Some of the characteristics of the barrio environment may be new and unexpected experiences for the interviewer, generating fear or uneasiness. Nonexistent or tampered street signs, the deteriorated conditions of many bodegas and homes, vacant buildings, and drug dealings are commonly found. Care must be taken to build realistic expectations of the actual field environment and to provide training in how to handle these with confidence. For instance, drug dealers often approach interviewers passing by their street corners thinking that they are potential customers. Interviewers need to be told about this and how to handle the drug dealers' sales pitch as part of their training. In our experience, a simple "no" will suffice. Besides the sales pitch, drug dealers will not interfere with the interviewer's job as long as the interviewer does not interfere with their business.

In contrast, drug dealers often do interfere with bodega business. Drug activity in front of a bodega may intimidate customers, particularly mothers who are less likely to send their children to shop there. Bodegueros seem to cope with this

problem in different ways. One respondent reported opening his doors to the dealers as customers. A danger associated with this course of action is that the bodega may become a threat for a police drug raid, which may result in considerable deterioration of the store image.

Interruptions

In both the Anglo and Hispanic samples, the questionnaire administration was often interrupted by deliverymen or customers entering the store, needing help, or wanting to pay for their merchandise. Many of the transactions were informal in nature, with little or no use of the cash register. A conventional, interruption-free survey environment is not the norm in either the Hispanic or Anglo stores. Interviewers who do not expect this pattern are likely to become frustrated or interpret the attention paid to interruptions as interference or rudeness.

The interviewer in the bodega is clearly an outsider, often identifiable by demeanor, clothing style, or survey forms. Although welcomed hospitably, the interviewer is often viewed with curiosity, some suspicion, or both, by retailer and customers alike. Proper identification is important in order for the interviewer to avoid being confused with a social worker, a salesperson, or a policeman. Not only could such confusion contribute to refusals, but it may also create distortions in some of the respondent's answers.

Marketing Management Implications

This paper has attempted to provide some insight regarding the unique environment of the Hispanic barrio. While interviewer language, scale format, and sampling methods may have to be modified in conducting marketing research, the barriers they present are not insurmountable. On the contrary, the openness and congeniality of the Hispanic storekeeper greatly facilitates such research. Several recommendations are summarized below.

1. Researchers should use personal interviews when surveying barrio Hispanics.
2. Personal interviews can allow for typical interruptions more conveniently than the impersonal and less acceptable telephone survey.
3. Questions must be phrased in simple language in both Spanish and English, adjusting for the Spanish dialect of the barrio.
4. Retailing concepts may have to be redefined in order to achieve conceptual equivalence.
5. Fixed-alternative questions must be designed using categories that are relevant and meaningful to bodega owners and employees.
6. Open-ended answers should be encouraged.
7. Scales for fixed-alternative questions may need to be simplified.
8. Bodega owners should be given the choice of conducting the interview in Spanish or English.

9. Research questionnaires using the procedure of decentering combined with the method of back-translation.
10. Conventional sampling methods may not provide an accurate list of bodegas.
11. Actual observation supplemented by telephone directories should be used to compile a census.
12. Non-conventional cues should be determined by actual field observation for use in the development of the census of bodegas.
13. Interviewers should guard against inadvertently assuming that some bodegas are closed or out of business, based on appearances.
14. Neighbors should be approached in order to obtain information on the times of store openings and identity of the bodega owner.
15. Interviewers should be carefully trained in the realities of the barrio environment.
16. Interruptions should be expected when interviewing bodega owners.
17. Field observation can be used to "fill-in" during interruptions and for verification.

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Competition Between Specialty and NonSpecialty
Outlets: The Effect of Consumer Expertise¹

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Abstract

Specialty retailers continue to face increasing competition from nonspecialty outlets, such as discount department stores. This study looks at consumer expertise as a possible factor influencing specialty store and nonspecialty store shopping and buying. The results support most previous findings that nonexpert customers are more likely to shop and buy at a specialty outlet. Interest levels were also part of the analysis but were not found to be a significant factor.

Intertype Outlet Competition

Intertype outlet competition, as opposed to intratype competition, is a source of concern for marketing managers (Davidson, Sweeney and Stampfl 1984). Specifically, as nonspecialty stores broadened their merchandise lines, they have successfully attracted a wide range of customers and eroded the traditional customer base for specialty outlets. Specialty stores are generally considered to be those outlets that offer greater product depth within a narrow product range. Whereas nonspecialty, general merchandise stores encompass a range of outlet types including; variety stores, department stores, full-line discount stores, retail catalog showrooms, off-price chains, factory outlets, buying clubs and flea markets (Berman and Evans 1989).

Because specialty stores are seen as a source of information as well as products, customers lacking previous product knowledge seem likely prospects for specialty store services. Holbrook and Howard (1976) suggest that differences in the customer's level of clarity and self-confidence as they relate to a specific product may lead to different store choices. The customer with high clarity and self-confidence may look at the product as a shopping good while a customer with less self-confidence and a lower level of clarity may see the product as a specialty good. The latter customer faces an extensive problem solving situation while the former faces a routine shopping situation (Howard 1989). Clarity and self-confidence regarding specific products are aspects of a more general characteristic - consumer expertise.

The theoretical dimensions of consumer expertise have begun to be explored in greater detail (Alba and Hutchinson 1987, Chi 1983) and some interesting hypotheses have been suggested (Beattie 1982, 1983). However, there has been little empirical work testing the effects of expertise (Bettman 1986). The purpose of the research presented in this paper is to test the impact of expertise on consumer choice of specialty versus nonspecialty outlets. An understanding of the role expertise plays in the store type choice process can lead to increased

managerial potential to affect intertype competition.

Expertise

Expertise has been defined as the ability to perform product-related tasks successfully (Alba and Hutchinson 1987). The action orientation of this definition ties expertise to task performance which, in turn, is dependent upon actual experience. Familiarity or knowledge regarding a product or product class in the absence of experience is not considered to be a sufficient indicator of consumer expertise. But together, familiarity and experience serve to improve task performance and increase expertise.

Alba and Hutchinson (1987) suggest five dimensions to developing consumer expertise; 1) simple repetition improves task performance, 2) cognitive structures used to differentiate products become more refined as familiarity increases, 3) the ability to analyze information, isolating that which is task relevant, improves with familiarity, 4) the ability to generate accurate knowledge beyond the information which is given improves with familiarity, 5) the ability to remember product information improves with familiarity. If these dimensions have an impact on actual shopping and buying patterns than marketing managers can use expertise, or the lack thereof, as an important component in their overall marketing strategy.

A number of authors have already demonstrated the dramatic effect that expertise and familiarity can have on consumer behavior. Where within category similarities are maximized relative to between category similarities, subjects with greater expertise are more able to categorize products at levels above and below the "basic level" (Alba and Hutchinson 1987). As a result, the expert customer can discern finer discriminations within the product category and alternative substitutes available across product categories. In general, higher expertise leads to comparisons based on functional equivalence rather than surface similarities (Hutchinson 1983).

Familiarity with a product category has also been shown to decrease the search for external information (Reilly and Conover 1983). This finding is not surprising since the effort necessary for an expert to reach a given level of product knowledge would be less than that of a consumer having little or no expertise. Previous research also suggests that experts have an increased ability to restrict information processing to relevant and important information (Johnson and Russo 1984, Punj and Staelin 1983).

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These findings indicate that experts can quickly assess sales information and rely upon their own internal knowledge as a basis for evaluation.

Conversely, consumers with little product familiarity and low expertise tend to rely on the opinions of others (Furse, Punj, and Stewart 1984) and are less able to limit their information search (Brucks 1985).

Because consumers with low expertise cannot discern important information as well as experts they are influenced more by nonproduct information such as a salesperson's opinion (Brucks 1985). They are also more likely to weight highly the product attributes that are most easily understood or salient (Gardner 1983, Wright and Rip 1980). This means a greater reliance on promotion information and information made more clear in a sales presentation, areas where specialty stores could have a competitive advantage.

Interest

While the focus of the present research is on expertise, the level of customer interest is also considered to be an important factor. Buyer behavior models begin with a presumption of consumer interest in the buying situation. Howard and Sheth (1969) start with "stimulus ambiguity" while Engel, Blackwell and Miniard (1986) begin with "problem recognition". Moriarty and Galper (1978) more directly model interest as the second step following awareness in the industrial buying process. Whether consumer or industrial, the buyer enters the decision process with at least a measurable level of interest.

Before testing the effects of expertise on shopping and buying behavior it seems necessary to screen for the level of consumer interest. A low level of interest may mitigate against any measurable difference in shopping and buying patterns. The tendency for experts to restrict their information search, discern important pieces of information, and rely upon an internal evaluation criteria would be less relevant if the expert expressed little interest in the area. Similarly, there seems to be little point in looking for increased reliance among nonexperts on information provided by salespersons at low levels of consumer interest. While interest and expertise are not assumed to be independent from each other, neither are they thought to have a one-to-one correlation. Therefore, interest is presented here as an important screening variable.

Expertise, Interest, and Buyer Behavior

Given the restricted information search and greater self-reliance found among customers having high levels of expertise it can be argued that these customers are not the most likely to either shop at or buy from a specialty store. Such an argument contradicts the view held by some specialty store managers. These managers see the expert customer as the most promising

part of their customer base. They identify a high level of expertise with purchases of typically more sophisticated and expensive merchandise. As a result, their marketing efforts and their inventories are geared to the needs of this select customer group.

The perception that consumers with high expertise are likely customers for specialty stores has some indirect support. In a study conducted in 1972, specialty store customers were found to have greater product specific self-confidence than department store customers (Dash, Schiffman and Berenson (1976). A recent consumer behavior text concludes that consumer self-confidence and consumer risk-taking combine to be important determinants of store choice (Hawkins, Best and Coney 1986). But consumer self-confidence is only one aspect of consumer expertise. In addition, there have been significant changes in nonspecialty store retailing since the original study.

In many industries the continued success of nonspecialty stores, such as discount department stores, has led to an increased availability of a wide variety of products (Davidson, Sweeney and Stampfl 1984). Increased availability and volume selling has also led to increased price competition, and as a result, increased intertype competition. Consumers with high levels of expertise and corresponding high levels of product familiarity need no longer go to specialty stores, where products carry the higher margins associated with full service retail selling. Instead, they can rely upon their own knowledge base and weighted evaluation criteria, and buy from stores offering competitive prices.

It is hypothesized that a greater tendency to shop and buy at specialty stores will be found among consumers displaying a low level of product expertise. It is further hypothesized that these consumers will spend more time searching for information which, in turn, will translate into a greater number of outlets shopped. And once inside the specialty store, nonexpert consumers are hypothesized to display a greater tendency to purchase. Consumers with high levels of expertise are hypothesized to shop at fewer locations and to display a greater tendency to buy from discount department stores.

It is further suggested that the differences between high and low levels of expertise will be more apparent at moderate to high levels of interest. At low levels of interest the customer's level of expertise may not be as apparent since, by definition, the customer is not highly involved in the purchase. While differences may persist throughout the interest range, a low level of interest may dampen the impact. In addition, customers with low levels of product interest are not the main concern of most marketing managers.

Research in this paper is based on data collected from the photographic industry. The distinction between specialty and nonspecialty stores within the photographic industry is

primarily between traditional, full service camera stores and other outlets selling camera equipment. The nonspecialty store types contained in the data included: discount department stores, supermarkets, drugstores, combination stores, catalog showrooms, department stores, one-hour photo processing labs, mail order and home television shopping. As with many product lines, discount department stores have been particularly successful in obtaining a significant share of the market. This outlet type is specifically looked at in hypothesis 5. Since the data base contains only photo related questions no attempt will be made to generalize to other industries.

The following hypotheses are derived from the more general statements in the preceding paragraphs:

- H₁ At moderate to high levels of interest, consumers with a low level of photographic expertise are more likely than consumers with a high level of photographic expertise to shop at a specialty camera store.
- H₂ At moderate to high levels of interest, consumers with a low level of photographic expertise are more likely than consumers with a high level of photographic expertise to buy from a specialty camera store.
- H₃ At moderate to high levels of interest, consumers with a low level of photographic expertise who have shopped at a specialty camera store will display a greater tendency to purchase from a specialty camera store than will consumers with a high level of photographic expertise who have shopped at a specialty camera store.
- H₄ At moderate to high levels of interest, the number of outlets shopped by consumers with a low level of photographic expertise will be greater than the number of stores shopped by consumers with a high level of photographic expertise.
- H₅ At moderate to high levels of interest, consumers with a high level of photographic expertise are more likely than consumers with a low level of photographic expertise to buy from a discount department store, rather than from a specialty camera store.

Methodology

The above hypotheses were tested using a data base of 3007 consumer responses to a photographic-related questionnaire. The national sample, administered by an internationally recognized polling firm, was balanced geographically and according to gender. Responses pertaining to outlets shopped, store type where actual purchase was made, and number of stores shopped were based on the consumer's most recent purchase of a camera. Scale questions pertaining to expertise and interest were part of a set of psychographic questions related to photo involvement. The total questionnaire contained 140 questions.

Exhibit 1 shows the measurement items used to develop the expertise and interest scales. Items selected for expertise reflect the action orientation suggested by Alba and Hutchinson (1987). They indicate both product familiarity as well as the hands-on experience associated with using photo equipment and accessories. Interest items, on the other hand, were selected for their measurement of a general belief in the value of photography and picture taking. Measurement for each item was based on an agree/disagree scale ranging from 1 (strongly agree) to 5 (strongly disagree).

EXHIBIT 1 EXPERTISE AND INTEREST SCALES

EXPERTISE

- 1) I buy cameras which let me change parts if I want.
- 2) I rate my picture-taking skills as excellent.
- 3) I always try to add a creative touch when I take a picture.
- 4) I'm constantly looking to buy photographic accessories with the latest technology to help me take better pictures.
- 5) I am greatly interested in photography as a hobby

Cronbach's alpha = .817 N = 3007

INTEREST

- 1) Taking pictures is one way of expressing affection.
- 2) I like to take pictures at parties.
- 3) Parents should take pictures of their child in order to record changes as the child grows.
- 4) I like to take pictures of people close to me when they have just done something well.
- 5) The best way for a child to develop a bond with a parent is for the two of them to look at the child's photographs together.

Cronbach's alpha = .7254 N = 3007

Additional analysis of these two scales was performed in order to determine the degree to which they might be interdependent. While total independence was not expected, if the measures proved to be too highly correlated the stronger results hypothesized to occur at moderate and high levels of interest would not be present. A principle component factor analysis with oblique rotation was conducted as a test for interdependence. The results (Table 1) indicate that while a positive level of correlation is present, the scales are sufficiently unique.

TABLE 1
FACTOR ANALYSIS OF EXPERTISE (E)
AND INTEREST (I)

	<u>Factor 1</u>	<u>Factor 2</u>		<u>Factor 1</u>	<u>Factor 2</u>
E1	.79052	-.16768	I1	.13295	.63897
E2	.65872	.17598	I2	.07529	.64147
E3	.62706	.20081	I3	-.16145	.77726
E4	.81170	.02921	I4	.13023	.67197
E5	.80915	.00327	I5	-.01436	.66746

Correlation = .38198

The five measurement items per scale gave each respondent a score between 0 and 25 for Expertise and Interest. These scores were then divided at the 33% and 66% percentiles to establish Low, Moderate, and High levels. Table 2 shows the nine resulting groups, the cut-off scores, and their sample size. Since the hypotheses are based on recent purchase activities, only those respondents answering questions pertaining to a recent camera purchase were included. Thus, the total sample size for these groups has decreased from the original 3007 to 1645. [Note: Any further decrease in sample size resulting from a more specific hypothesis will be indicated in the appropriate table.]

TABLE 2
EXPERTISE/INTEREST GROUPINGS

		EXPERTISE		
		Low (E<15)	Moderate (15>E<19)	High (E>20)
I				
N	Low	N=217	N=116	N=90
T	(I<10)			
E	Moderate	N=311	N=286	N=187
R	(10>I<13)			
E	High	N=133	N=156	N=149
S	(I>13)			
T				

Results

Hypotheses H₁ thru H₃, and H₄ were tested using a Chi-Square test of difference. The hypothesis did not specify expected results for the moderate expertise group because there was no theoretical reason to expect the moderate group to act in a divergent manner. Analysis of this group was included and are reported here because of an expected linear effect of the expertise variable.

As hypothesized by H₁, the percentage of those indicating low expertise showed a greater tendency toward shopping at a specialty camera store than those with high expertise (Table 3). In fact, their specialty store shopping was twice that of respondents who measured a high

TABLE 3
CONSUMER EXPERTISE/INTEREST
AND OUTLETS SHOPPED

Expertise	Interest	Nonspecialty Store	Camera Store
		Store	Store
Low	Low	59.4%	40.6%
	Moderate	51.4	48.6
	High	38.3	61.7
Moderate	Low	73.3	26.7
	Moderate	66.1	33.9
	High	65.4	34.6
High	Low	74.9	15.6
	Moderate	84.4	25.1
	High	74.5	25.5

Chi-Square = 98.3 d.f. = 8
sig. < .01 N = 1645

level of expertise. This finding is consistent with earlier research regarding an expanded search for information among nonexperts. Quite unexpectedly, the results held regardless of the level of interest. Those customers having moderate expertise fell between the two expertise extremes, indicating a logical progression from low to high expertise.

Similarly, Table 4 indicates support for H₂. When it came time to actually make a purchase consumers with low expertise were far more likely to buy from a specialty camera store. As with H₁, the percentages were approximately twice those of consumers having high expertise, regardless of the level of interest. And, again, consumers with moderate levels of expertise fell in between the extremes. These finding could be the result of expanded search and/or the increased interest in obtaining additional opinions, such as those available from informed salespersons.

TABLE 4
CONSUMER EXPERTISE/INTEREST AND
OUTLET WHERE CAMERA PURCHASED

Expertise	Interest	Nonspecialty Store	Camera Store
		Store	Store
Low	Low	80.6%	19.4%
	Moderate	72.3	27.7
	High	67.7	32.3
Moderate	Low	87.9	12.1
	Moderate	84.3	15.7
	High	78.8	21.2
High	Low	90.0	10.0
	Moderate	87.7	12.3
	High	85.9	14.1

Chi-Square = 48.6 d.f. = 8
sig. < .01 N = 1645

However, when looking just at those consumers who shopped at a specialty store the differences between expertise levels decreases and H₃ is not supported (Table 5). This result calls into

TABLE 5
IF SHOPPED AT CAMERA STORE...
CONSUMER EXPERTISE/INTEREST AND
OUTLET WHERE CAMERA PURCHASED

Expertise	Interest	Nonspecialty Store	Camera Store
		Store	Store
Low	Low	52.3%	47.7%
	Moderate	43.0	57.0
	High	47.6	52.4
Moderate	Low	54.8	45.2
	Moderate	53.6	46.4
	High	38.9	61.1
High	Low	35.7	64.3
	Moderate	51.1	48.9
	High	44.7	55.3

Chi-Square = 6.8 d.f. = 8
sig. > .50 N = 602

question any over-reliance on the opinions expressed by salespersons on the part of consumers having low expertise. The lack of significant difference also indicates that experts who shopped at specialty camera stores were not found to be more likely than nonexperts to make their purchase at a specialty camera store. The lack of continuity among consumers having low, moderate, and high levels of expertise indicates that once in the store, expertise is not an important factor in determining whether or not a customer will make a purchase.

Table 6 reports the ANOVA of the number of stores shopped by each group. While the large sample size has contributed to a significant finding, the relatively low F value, the high residual, and the apparent lack of meaningful difference in the mean number of stores shopped resulted in a rejection of H_4 . It should be pointed out, however, that the largest differences found in the mean number of stores shopped is between low expertise/moderate interest, low expertise/high interest and high expertise/high interest.

TABLE 6
ANALYSIS OF VARIANCE OF
NUMBER OF OUTLETS SHOPPED

Source of variation	Sum of Squares	d.f.	Mean Square	F
EI Group	25.3	8	3.157	2.42
Explained	25.3			
Residual	2130.3	1636	sig. = .013	

Consumer Expertise/Interest and
Mean Number of Outlets Shopped

Expertise	Interest	Mean	Std. Dev.
Low	Low	1.94	1.15
	Moderate	2.14	1.21
	High	2.10	1.17
Moderate	Low	1.91	1.18
	Moderate	2.02	1.18
	High	1.89	1.07
High	Low	1.90	.99
	Moderate	1.92	1.14
	High	1.69	.96

H_5 specifically looks at the propensity of consumers with a high level of expertise to buy from discount department stores. The results in Table 7 support the hypothesis and show the strong tendency of the highly expert consumer to purchase from a discount department store rather than from a specialty camera store. Again, consumers with moderate expertise fall between those with high and low expertise, except under a condition of low interest. The tendency for more expert consumers to purchase from discount department stores is important since this is its primary outlet type competing with specialty camera stores. Prior research regarding the limited information search and the tendency to rely on internal evaluation criteria found among these consumers provides a great deal of theoretical support for this result.

TABLE 7
CONSUMER EXPERTISE/INTEREST AND CAMERA
PURCHASES FROM A DISCOUNT DEPARTMENT
STORE VS SPECIALTY CAMERA STORE

Expertise	Interest	Discount Dept. Store	Camera Store
Low	Low	41.6%	58.4%
	Moderate	55.8	44.2
	High	58.9	41.1
Moderate	Low	21.9	78.1
	Moderate	34.4	65.6
	High	40.2	59.8
High	Low	25.7	74.3
	Moderate	23.2	76.8
	High	24.1	75.9

Chi-Square = 61.2 d.f. = 8
sig. < .01 N = 826

Managerial Implications

The results of this research provide additional support for earlier findings regarding the tendency among consumers with low levels of expertise to turn to specialty outlets. They also support the notion that shoppers with high expertise will tend to buy from outlets known to compete more on the basis of price. Instead of focusing on the needs of the more expert buyers, managers of specialty camera stores should reinforce the already present tendency for nonexpert shoppers to visit their outlet.

Earlier studies suggest that information availability and informed opinions from sales people may be primary reasons nonexpert consumers shop at specialty outlets. Thus, managers of specialty stores need to develop marketing programs which highlight these outlet attributes, when compared to the information and opinions available at the local discount department store. A message directed at nonexperts having moderate to high levels of interest (such as first time parents and novice photo hobbyist in the case of the camera industry) will further support these customers' inclination to choose the specialty store.

Since there appears to be no difference between low and high expertise customers in their tendency to buy once they are inside, the key is to get the customer into the store. As a result, specialty stores need to aggressively position themselves as the place where problems get solved. Low expert customers will see their pending purchase as a problem requiring a solution while customers with high expertise are much less likely to perceive the purchase as a "problem" and much more likely to shop price.

In addition, the lack of any meaningful difference in the number of outlets shopped can be considered a plus. If nonexperts are only slightly more likely than experts to shop a variety of outlets, the manager gains

considerably by simply getting the nonexpert into the store. The greater tendency to shop and buy from a specialty outlet, the lack of significant difference in the number of outlets shopped, and the propensity for experts to shop at nonspecialty stores emphasizes the importance of attracting the nonexpert customer.

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Abstract

The supply-side or demand-servicing functions of inventory are well-known in the inventory, logistics, and retailing literature. However, this literature has yet to develop the demand-stimulating function of inventory. This paper introduces the concept of psychic stock, which is defined as retail inventory for stimulating demand. Operationally, psychic stock is measured as total inventory on hand minus the sum of cycle stock and safety stock. The consumer behavior theory is drawn upon to offer possible explanations for the impact of psychic stock on sales.

Introduction

Marketing channels and retailing literature does not recognize that inventory levels impact sales. While "quick response" retail technology reduces lead times (Miller 1987) and supply-side (cycle, in-transit, and safety) stock (Larson and Lusch 1989), a minimum level of (psychic) stock must be on the shelf to stimulate demand. Traditionally, marketers have recognized only the demand-servicing or supply-side aspects of inventory (Hardy and Magrath 1988; Lele 1986). In contrast, psychic stock is inventory that the retailer carries to stimulate demand. The psychic stock concept extends the shelf-space effect by making it explicit that stock level, as well as shelf space allocation, impacts sales.

Early writing on the shelf-space effect (Pauli and Hoecker 1952), gave rise to a rich stream of research into the relationship between shelf space and sales (e.g. Cairns 1962; Curhan 1972; Bultez and Naert 1988). However, the following two gaps remain in the shelf space literature: (1) the shelf-space effect has not been integrated with the impact of stock level on sales, and (2) shelf space research has yet to offer causal explanation of the effect of space (and stock) on consumers.

An early study on stock level, sponsored by Progressive Grocer, concluded that "substantially higher sales can be achieved merely by keeping grocery shelves and refrigerator cases fully stocked throughout the week" (Mueller, Kline and Trout 1953). A literature search uncovered only one article which conceptually recognizes the impact of both shelf space and stock level. Crouch and Shaw note that low stock levels are "likely to reduce exposure to the consumer and therefore may lead to a reduction in sales" (1989, p. 7).

Previous considerations of shelf space are mostly based on economic models of shelf space elasticity. The economic models assume that consumers are guided primarily by their perception of the size of shelf space allocation. However, consumers also may make attributions about the

stock levels they perceive. For example, if the shelves are poorly stocked, consumers may feel the product is old or has been picked-over by previous customers. An inquiry into consumer behavior aspects of stock level can lend causal explanation.

This paper introduces the concept of psychic stock. In the first section following, inventory classification theory is briefly reviewed. Next, psychic stock is identified as a new, demand-side inventory category. In the third section, an inventory model with psychic stock is developed. Then, the results of inventory item case studies are reported. Lastly, consumers' perceptual, attributional, and individual differences are detailed as potential causal agents for the psychic stock phenomenon.

Inventory Classification Theory

Quick response retail technology and item-level inventory analysis, like Direct Product Profitability (DPP), are exerting pressure to minimize inventory levels (Abend 1987; Schulz 1985). However, such efforts can lead to stockouts and lost sales (Thayer 1989). This conflict stems from the following typical inventory theory/modelling assumptions: (1) demand (or sales) determines required inventory levels to service that demand, and (2) inventory levels have no effect on sales.

Before adding psychic stock (inventory to stimulate demand) to current inventory classification systems, it is helpful to briefly review inventory classification theory. Leading textbooks in inventory management (e.g. Tersine 1988) and logistics (e.g. Stock and Lambert 1987) present classifications of types of inventory. Stock and Lambert (1987) identify the following categories of inventory: (1) cycle stock, (2) in-transit inventories, (3) safety stock, and (4) speculative stock. Tersine (1988) discusses a set of essentially synonymous categories, as follows: (1) working stock, (2) pipeline stock, (3) safety stock, and (4) anticipation stock. These inventory categories are described below, as they apply to a retail store.

Cycle stock in the retail store varies from zero to Q units (Q is the replenishment lot size), and averages $Q/2$ units. Stock and Lambert define cycle stock as "inventory that results from the replenishment process and is required in order to meet demand under conditions of certainty . . ." (1987, p. 399).

In-transit stock is inventory en route from the factory or distribution center to the store. Expected daily demand (r) divided by lot size (Q) is the number of orders arriving on an average day. Thus, average in-transit stock is: orders per day $\times$ order size $\times$ transit time (t), or $r/Q \times Q \times t = rt$.

Safety stock is inventory at the store "held in excess of cycle stock because of uncertainty in demand or lead time" (Stock and Lambert 1987, p. 400). If R is the maximum daily demand and lead time is certain, a logical policy would be to carry safety stock of: $t(R - r)$. Unlike probabilistic inventory models (see Tersine 1988), this assumption of known maximum demand allows safety stock to cover all demand. Thus, in the inventory model developed below, safety stock is overstated and psychic stock is understated.

Speculative stock includes additional inventory bought on deal (e.g. quantity discount) or acquired to support a special sales promotion. In demonstrating the existence of the psychic stock phenomenon, this first study looks at inventory items for which no special sales promotions are on. Also, this analysis is limited to items held at retail to service and/or stimulate current demand only. Any deal buying for purposes of diverting or satisfying future demand is not considered. Thus, speculative stock is not included in the model developed below.

All categories of inventory defined above are carried to service demand (Hardy and Magrath 1988). Marketers have traditionally viewed inventory as demand servicing only, i.e. inventory (the dependent variable) is a function of sales. In the next section, "psychic stock" is introduced as a new theoretical category of inventory -- and a retail merchandising tool to obtain or stimulate demand (see Exhibit 1).

EXHIBIT 1 TYPES OF STOCK IN THE MARKETING EFFORT

Marketing Effort

Obtaining Demand	Servicing Demand
- Personal Selling	- Warehousing
- Advertising	- Transportation
- Sales Promotion	- Order Processing
- Pricing	- Inventory*
- Merchandising**	

* includes Cycle, Safety and In-transit Stock
** includes Psychic Stock

Adapted from Hardy and Magrath 1988, p. 215

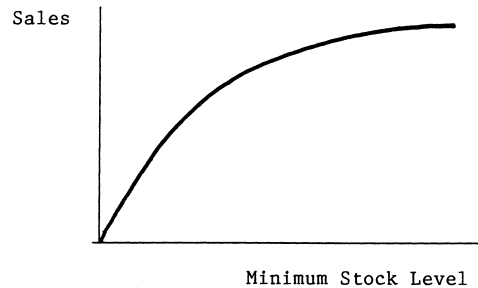
Psychic Stock

Psychic stock is inventory carried to stimulate demand. Conceptually, this turns the inventory/sales relationship around; now sales is the dependent variable. Operationally, at the retail level, psychic stock can be measured as that level of inventory above cycle stock plus safety stock.

The exponential relationship between shelf space allocation and sales of an item is well-known. For instance, Cairns notes that "the sales of an item in a store will increase (at least up to a point) with an increase in the amount of space allotted to it, and/or an improvement in the quality of the space" (1962, p. 36). Crouch and Shaw (1989) discuss a similar relationship between stock level and sales.

The inventory flow model shown in the next section is the first step in formalizing this relationship (see Exhibit 2). In this paper, the model is used to direct case discussions with retailers to demonstrate the existence of psychic stock.

EXHIBIT 2 THE PSYCHIC STOCK CURVE



Inventory Model with Psychic Stock

Exhibit 3 (available from the authors) is a diagram of the inventory flow model. Inventory is expected to vary from a minimum equal to the psychic stock level to a maximum equal to psychic stock (PS) plus safety stock plus cycle stock. If lead time (t) is certain, and safety stock is held to cover maximum expected demand (R), then upon arrival of a replenishment lot of Q units, total inventory on hand (I) is:
 $Q + t(R - r) + PS$, or

$$PS = I - [Q + t(R - r)] \quad (1)$$

Case Studies

Visits were made to several Norman, Oklahoma retail stores to demonstrate the presence of psychic stock. Four health and beauty items were investigated in three different stores. These items are labelled A, B, C, and D in Table 1, which applies equation (1) to data estimated during interviews with retail managers. For each of the four items, psychic stock was found.

TABLE 1
PSYCHIC STOCK FOR FOUR ITEMS

Item	I	Q	t*	R**	r**	PS
A	27	12	1.0	6	3	12
B	113	60	0.5	180	120	23
C	27	12	0.5	24	18	12
D	40	-	-	-	-	27

* in weeks

** in units per week

I, Q and PS given in units

In the case of item A, 12 units (the psychic stock level) is also the planned minimum level of inventory to have on hand. Item B is displayed in two places: (1) at the eye and waist level, and (2) on the "high wall," which is out of the consumer's reach but not out of the consumer's view.

For item C (like item A), the retail manager spoke in terms of minimum desired inventory level (8 - 10 units in this case). While the item D manager was reticent to discuss lead times and demand rates, psychic was none-the-less evident. Of the 40 units of item D on hand, 15 units were "on top," for display only and the remaining 25 units included 12 units of "suggested (minimum) quantity" stock.

In all cases the retail managers recognized the demand-stimulating function of their inventories -- in addition to the traditional demand-servicing function. At the end of each day all the stores have a policy that all items are "faced-up." This means to pull the inventory to the front of the shelf to make it appear that the shelf is fully-stocked. This is evidence that the demand-stimulating effects of psychic stock are deeply ingrained in accepted merchandising practice.

Alternative Explanations of Psychic Stock

In the 40-year history of shelf space literature, there has been little attempt to offer causal explanation for the shelf-space phenomenon. To date, every study has been descriptive in that these studies either tried to prove that the shelf-space effect existed or tried to quantify it. Further, the focus has been on space only, to the neglect of stock level. In this section, some possible consumer behavior "whys" for the psychic stock phenomenon are suggested.

Since the consumer makes the purchase decision, consumer behavior theory should provide potential causal explanations of the psychic stock phenomenon. The shopping experience varies considerably depending upon the consumer's level of awareness and the degree to which thought processes are "on-line." Shopping for commonly used grocery items likely involves much automatic processing, while shopping for outer-wear clothing is likely to be both on-line and high involvement. In addition to the level of awareness, individual differences are likely to mediate the shelf-space and psychic stock phenomena.

Picture a shopper in a large department or discount store that carries merchandise ranging from every day use items (e.g. soda pop, hand soap) to high involvement items (e.g. compact disks, sweaters). The shopper moves through the store operating with much of his/her cognitive power off-line, operating under either a general shopping script or a store-specific shopping script. At this point, the merchandising/person interaction is largely automatic, with stimulus perception being the only processing. Any purchase decisions made at this level of processing utilize the simplest and most basic heuristics.

If the script is interrupted, the person shifts toward on-line awareness and attributional processes (Fiske and Taylor 1984). This shift may be due to some salient merchandising effort, such as point-of-purchase signing or a novel or vivid display. The consumer is now using more complex heuristics or even conscious reasoning. With increasing on-line awareness, the consumer is

increasingly making attributions about the stimulus. For psychic stock, the consumer is attributing the mass of a particular product to something. Perhaps because there is a large mass, the consumer believes the item is "on-sale" or is a popular, fast-seller.

In addition to perception and attribution, individual differences will impact what attributions are made and what heuristics are used. In summary, the three general categories of explanations for psychic stock are perceptual, attributional, and individual differences. A list of possible explanations for the psychic stock phenomenon, arranged in approximate order from perceptual/off-line processing toward more on-line/attributional processing, follows.

Minimum Perceptual Threshold. Weber's research in the middle of the 19th Century suggests that there is some required minimum level of a stimulus before that stimulus is noticed. Although Weber's concept dealt with simple stimuli without interference from other stimuli (e.g. seeing a candle at 30 miles), the concept is transferable to an in-store merchandising situation. Thus, in the midst of other products, the shopper may never notice one facing of a particular product even if that facing is fully-stocked.

Random Chance. Simply by there being a larger mass of goods the chance of seeing a particular product may be increased.

Just Noticeable Difference. Many of the shelf space experiments lasted only a week (e.g. Cox 1970). Thus, some of the reported effects may have been due to the change in mass, rather than just the absolute size of the mass. Weber's Law ($JND = \Delta I = C \times I$) states that the change in intensity of just noticeable difference (JND) is proportional to the intensity of the stimulus (I). This suggests that the incremental increase required to interrupt a script can be quantified as JND.

Fechner's Law. This law states that the strength of a perception (S) grows as the logarithm of stimulus intensity (I), or $S = k \times \log I$, where k is a constant (see Kaplan and Saccuzzo 1989). A graphical model of Fechner's Law would have a concave shape somewhat like that in Exhibit 2. Fechner's Law suggests that: as the amount of psychic stock increases, the incremental effect on the individual will decrease.

Steven's Power Law. Fechner, like Weber, deals with differences in stimulus intensity. In contrast, Steven's Power Law deals with human identification of magnitude. Steven's Law is given by the equation:

$$S = b \times I^a \quad (2)$$

where b and a are constants. A graph of this equation would yield a concave curve with a shape somewhat like that in Exhibit 2. Because Steven's Law deals with magnitude estimation (rather than estimated increases) the psychic stock effect may follow Steven's Power function

rather than Fechner's log function.

Active Offer. In a more attributional sense, the more on-line consumer may see the large display as an overt or active offer by the merchant. After all, the merchant must have some reason for featuring so much "Tide" laundry soap.

Appropriateness. The consumer may attribute a large mass of merchandise to the fact that this is newly arrived merchandise. Depending on the type of product, the consumer may make attributions about seasonality (e.g. "It must be peach season"), freshness (e.g. "This bread must be fresh off the truck"), or fashion (e.g. "This group of suits must be the latest design").

Special Deal. This attribution may be a special case of active offer. Here, the consumer attributes a mass of merchandise to a special sales deal, and may buy on impulse. Even if the consumer knows the regular price, and realizes the merchandise is not on sale, his/her attention has been captured momentarily. Thus, s/he may ask: "Am I out of coffee at home?" -- and the sale may still be made.

Consensus. The consumer may attribute the mass of a good to its popularity among other consumers. Most consumers probably suspect that a merchant stocks more volume of high sellers. If the consumer has low brand preference, s/he may choose the brand that others apparently prefer.

Individual Differences. These factors, ranging from long-lasting personality traits to relatively short-lived attitudes, are likely to mediate perceptual and attributional processes. For example, persons who are highly susceptible to interpersonal influence may have a stronger tendency to make use of consensus attributions.

Other Potential Mediators. These include product type, consumer involvement, store atmosphere, location within the store, and shelf height of the merchandise. Product type is an intuitive candidate mediator. Who wants to purchase the last doughnut at the bakery, or the last dress on the rack?

Establishing the causes of the psychic stock phenomenon from a consumer behavior perspective will be a major task. There are many causal candidates, and interactions between candidates are additional candidates. Also, psychic stock is likely to interact with other in-store promotions, such as point-of-purchase signing and price promotions.

Summary and Conclusions

This paper has defined psychic stock, identified its existence, integrated it into inventory theory, and offered possible causal explanations. Future research should be pursued along two parallel paths -- inventory modelling and consumer behavioral modelling.

Future work could include mathematical modelling of the functional relationship between unit sales, psychic stock level (see Exhibit 2), and other in-store variables such as item price and promo-

tion. Unit sales are expected to increase (up to a point) with: (1) a decrease in price, (2) an increase in promotion, and (3) an increase in psychic stock level.

Further psychic stock research should also include consumer behavior lab experiments. Slides or videotapes might be used to simulate a shopping trip through a store where each subject has a limited budget. Different subject treatment groups would see different stock levels, and the psychic stock effect would be measured by subjects' mock purchases.

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CHANGING ECONOMIC CONDITIONS OF SMALL RURAL TRADE AREAS:
SOME NOTES ON THE PRESENCE OF DISCOUNT RETAIL CHAINS

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ABSTRACT

Discount retail chain (DRC) stores have exhibited phenomenal growth in recent years, and some have adopted strategies of locating in small rural communities. However, considerable controversy has developed concerning their impact on small rural economies. In fact, some communities have attempted to block their entry. This paper examines U.S. Department of Commerce Census data in an attempt to determine if DRCs have an impact on the economic environment of rural trade areas. It appears that counties in which DRCs are located may be economically more viable than counties without them.

Introduction

For years, the conventional view of retailing suggested that a trade area with a minimum population of 100,000 was necessary to sustain a full-line discount store (Stern and El-Ansary 1982, p. 64). However, in recent years several discount retail chains (DRCs) have successfully challenged that view. Wal-Mart Stores of Bentonville, Arkansas, has located a majority of its stores in communities with populations of less than 50,000, and they are frequently found in communities of less than 25,000 (Weiner 1981). Bill's Dollar Stores of Jackson, Mississippi, is a discount chain with about 350 stores in 10 states and concentrates on towns with 1,500 to 3,000 population. The company plans to expand at the rate of 100 stores per year (Bill's 1988). Other DRCs such as Ames Department Stores, Duckwall-Alco Stores, and Family Dollar Stores also have enjoyed considerable growth by adopting a small town location strategy (Gilman 1984). This success, together with the saturation of urban markets and recent relative increases in rural populations, has enticed other DRCs that have traditionally focused their efforts on large metropolitan markets (e.g., K-Mart, Target, Zayer) to open stores in small towns. Accompanying the growth of DRCs in rural communities is an emerging controversy concerning their social and economic impact.

The DRCs' success is testimony to the benefits they bring to consumers in terms of low prices, wide selections, and convenience. However, this success is often at the expense of the established local merchants. Many small town retailers find it extremely difficult to compete with the modern marketing practices of discount retail chain stores (Weiner 1981; Johnson 1982; Smith 1989; Stone 1988; Sheets 1989), and concern over this impact has led to lawsuits, attempts to prevent DRCs from locating in certain small communities, and a general concern for community welfare (Blumenthal 1987; Associated Press 1988).

It is not clear from a review of the literature

whether local merchants actually are forced out of business on a large scale or if a majority of them eventually are able to adapt. While complaints from local merchants are a primary source of the controversy, small independent businessmen have long been known for their creativity and innovativeness. According to David Glass, President and CEO of Wal-Mart, "(merchants) who don't do better or who do go out of business are those who do not want to reposition themselves in the market" (Associated Press 1988). The Crisis-Change Model of institutional change suggests that small independent retailers will go through a "defensive retreat" phase which would include lawsuits and proposed legislation before acknowledging the need to adapt and change in order to survive (Fink, et al. 1971). While such tactics appear to be occurring in many small communities (Blumenthal 1987; Associated Press 1988), it may not be possible for independent merchants to survive the effects of large chain store competition in the small town environment.

The purpose of this article is to report the results of an analysis of economic conditions in rural trade areas and to draw conclusions about the effects of large discount retail chain stores on rural economies. First, we provide an overview of the potential impacts of DRCs on rural trade areas. Second, we discuss the methodology used, noting specific hypotheses tested and the nature of the data used. Next, the results of hypothesis tests are reported, and finally conclusions and implications are discussed.

Potential Impact of DRCs

Determining whether the long run impact of DRCs on small communities is positive or negative should be a major concern of civic leaders, businessmen, and other local residents. If local retailers are forced out of business because of their inability to effectively compete or to find a profitable niche, it could lead to serious problems for the community. These problems may include reduced population, increased unemployment, an eroding local tax base, depressed property values, and loss of community leadership furnished by local business people. Adverse economic impact may extend to local banks, accountants, wholesale distributors, and others who supply goods and services to the area. Many of the merchants who could be affected are located in the downtown central business districts of small communities.

Loss of downtown merchants may cause the central business district (CBD) to decay. The problem is analogous to the decline of the CBDs of large metropolitan areas which followed the development of suburban shopping centers in large cities during the 1950s and 1960s. Shopping cen-

ters have been indicted for destroying downtown retailing, creating suburban sprawl, contributing to unemployment, stealing city tax revenues, and numerous other problems affecting urban areas today (Sussman 1981). An Urban Institute study for the U.S. Department of Housing and Urban Development (HUD) found a direct and causal link between regional shopping center development and varied urban decline indicators (Kaplan 1981).

The CBDs of our nation's cities eroded at an alarming rate during the 1960s and 1970s, and the cost to restore them has been enormous. Several federal programs have been developed specifically to revitalize economically distressed communities, and public investment in these programs exceeds 50 billion dollars (U.S. Bureau of the Census 1984; U.S. Department of Housing and Urban Development 1984). Between 1974 and 1983, for example, over 31.3 billion dollars was authorized for HUD's Community Development Block Grant program (U.S. Department of Housing and Urban Development 1984, p. 108). State and local funding also has been made available for downtown revitalization. In 1982 alone, U.S. cities spent approximately 4.7 billion dollars on housing and community development (U.S. Bureau of the Census 1984, p. 290).

Although discount retail chains are not shopping centers, there are many similarities between shopping center development and the growth of DRCs in rural communities with respect to potential impact, and small communities are becoming concerned (Lowe and Flannagan 1979; Strassburg, et al. 1980; Clithero and Levenson 1984). Furthermore, the use of public funds to restore downtown is spreading to small communities (Sussman 1981; Banner, et al. 1976).

In addition to economic problems, decay of the CBD involves psychological or emotional loss felt by citizens. Decay of the CBD is a visual and symbolic decline of the entire town. When this situation prevails, positive attitudes about the town's vitality and future are dampened. This discourages investment and contributes to other problems such as out-migration of young people. In a survey of community officials, Strassburg, et al. (1980) found that concern for revitalizing downtown was tied to economic and social factors such as the need for a healthy retail area, the desire to preserve historic buildings, the need to improve the tax base of the city, and the hope to restore pride in the community. Both economic and emotional motivation has led to organized efforts to prevent further decline and to revitalize the CBDs of small towns through investments of resources into the area (Clithero and Levenson 1984). Some of the necessary resources have come from investors but much has been provided by government, making the issue a public one (Sussman 1981; Banner, et al. 1976).

There has been little attempt to research the actual effects of DRCs on merchants in rural communities. Carusone (1976) studied retailers in 10 small communities in Ohio with populations ranging from 11,000 to 45,000. He found that the development of shopping centers and discount

houses in small communities had created highly competitive environments. The number of independent merchants in those communities decreased by approximately 8 percent during the 10 year study period while the number of chain store outlets increased by 11 percent. Walzer and Stablein (1981) found that the growth of regional shopping centers in general has had important impacts on consumption patterns and retail structure. Some merchants have adapted by offering wider selections at lower prices, but others have been forced out of business, in some cases compounding the effects of already declining local economies. Stone (1988) studied Retail Sales and Tax data for 10 small-to-medium size towns in Iowa to determine the effects of Wal-Mart stores on small towns and found mixed effects. The presence of a Wal-Mart store was found to have both positive and negative effects on businesses in a town. Per capita sales increased faster in towns with a Wal-Mart, and noncompeting businesses experienced gains as a result. However, merchants in direct competition experienced losses, and businesses in near-by small towns appear to suffer as well.

Methodology

An important question which has not been addressed has to do with the overall economic impact of DRCs in rural areas. If, as the Crisis Change Model suggests, small independent retailers are able to adapt and change to take advantage of their new environment, concerns expressed by opponents of the large chains would not be justified and there should be no difference in the economic conditions of rural areas with DRCs and those areas without them. More importantly, if there are no differences in the general economic conditions of these rural areas, one might conclude that even if some small independent merchants are forced out of business, the negative effects must be offset by positive effects in other sectors of the economy. Consequently, while there may be some income redistribution, the overall effects could not be construed to be harmful. However, if large chains have an overall negative impact, this impact should manifest itself in terms of the economic conditions of these areas. Thus, for the purposes of this analysis, the following two general hypotheses were tested:

- H1: The presence of a DRC will have no effect on the economic conditions of small rural trade areas.
- H2: The presence of a DRC will have no effect on the rate of change of economic conditions of small rural trade areas over time.

To test these hypotheses, Census data as reported in the Bureau of Census' 1983 and 1988 County and City Data Book were examined. The sample included 164 counties in Arkansas, Missouri, and Oklahoma with 1980 populations of less than 50,000 but more than 8,000 persons. The number of counties in each category is shown [Table 1](#). Counties were divided into those that had a large DRC at least one year prior to the report-

TABLE 1
SAMPLE OF COUNTIES STUDIED.^a

STATE	Counties with DRC		Counties w/o DRC		Total	
	No.	Mean	No.	Mean	No.	Mean
Arkansas	34	23834	21	14037	55	20093
Missouri	38	23896	42	15280	80	19373
Oklahoma	32	26992	15	16879	47	23764
Total	104	24828	78	15253	182	20725

^a Total number of counties in the three states = 266; sample does not include counties with populations greater than 50,000 or below 8,000. Also omitted were counties in which a large DRC was opened between 1980 and 1985. Population from 1980 Census of Population.

ing date of the data used and those that still did not have one as of one year prior to the next reporting period. For the purposes of [Table 1](#), the division was based on 1980 and 1986 data. The sample sizes vary from what is reported in [Table 1](#) because of the different reporting dates of some of the variables.

The sample initially represented approximately 68 percent (one standard deviation about the mean population) of all counties in the three states; the largest 16 percent and the smallest 16 percent of the counties, based on 1980 population, were omitted from the sample in an effort to provide representative comparisons. The issue of the impact of DRCs does not appear to exist at either extreme. None of the smaller counties which were eliminated contained a DRC, and larger counties have a population base to support many types of businesses. Moreover, with so many factors affecting the economies of larger counties it is not likely that the impact of a single institution could be measured by the available data. Additional counties were omitted if a major DRC was opened in the county during the years between the two reporting periods. This was done to ensure that valid comparisons of changes over time could be made between counties that had a DRC at the effective date of the data as reported in 1983 and those counties that did not have one at the effective date of the data reported in 1988.

The key variables examined were broken into several categories of economic conditions including: population, housing, employment, personal income, taxes, and financial deposits. Comparisons were made initially on the basis of Census data as reported in the 1988 [County and City Data Book](#). Counties with a DRC were compared to those without one. Secondly, comparisons were made on the basis of the percentage change in the aforementioned variables as reported in the 1983 and 1988 [County and City Data Book](#).

The mean population of counties with a DRC was 24,828 compared to 15,253 for counties without a DRC. In as much as this difference was statistically significant at alpha = .05, most of the

subsequent analyses were adjusted to a per capita (or per 1,000 population) basis. Statistical tests for differences in group means were conducted by use of [Minitab](#) (Ryan et al. 1986).

Results

[Table 2](#) indicates the difference in group means on the basis of population characteristics. As noted above, counties with a DRC were larger on average than those without one. This was true for both 1980 and 1986. Counties with a DRC grew at a significantly faster rate than other counties in the sample, and the net migration of population in those counties (net change after deaths and births are counted) was significantly greater in counties with DRCs. The fact that the populations of both types of county grew at all during this period is significant. Declining populations has been a major problem for rural areas in the recent past (Charlier 1986).

TABLE 2
DIFFERENCES IN POPULATION CHARACTERISTICS

Variable	Counties		T-Score
	w/o DRC (n=78)	with DRC (n=104)	
Mean Population (1980)	15,253	24,828	-6.08 ^a
Mean Population (1986)	15,911	25,249	-6.23 ^a
% Change in Mean Population (1980-86)	1.49%	4.42%	-2.76 ^a
Mean Net Migration (1980-86)	-3	449	-1.94 ^b

^aSignificant at alpha = .01

^bSignificant at alpha = .10

[Table 3](#) provides information relative to economic conditions based on the number and value of new residential housing permits authorized in each type of county. In both 1980 and 1986, counties with DRCs issued significantly more permits per capita than did other counties. However, the percentage change in the number of permits issued per capita was not statistically different for the two types of counties. Similarly, the value of new housing authorized was higher per capita in both years in counties with DRCs, but the percentage change over that time was not significant. Finally, the value of new housing per unit was not significantly different in the two types of counties in 1980, but in 1986 the value per unit in counties with a DRC was significantly higher (at alpha = 0.10). However, the percentage change in value per unit over time was not significantly different for the two types of counties. While it appears that counties with DRCs may enjoy somewhat of an economic advantage with respect to new residential construction, this advantage may be due to the larger size of those counties. Certainly, it could not be concluded from the data in [Table 3](#) that the presence of a DRC contributes to economic decline of rural areas.

TABLE 3
DIFFERENCES IN MEASURES OF HOUSING

Variable	Counties w/o DRC (n=78)	Counties with DRC (n=104)	T-Score
Number of New Housing Units Authorized per 10,000 Population			
1980	8.3	18.4	-3.05 ^a
1986	0.1	16.3	-3.75 ^a
% Change (1980-86)	69%	74%	-1.30
Value of New Housing per 10,000 Population			
1980	\$286	\$680	-2.89 ^a
1986	\$366	\$674	-3.03 ^a
% Change (1980-86)	46%	90%	-1.21
Value of New Housing per Unit			
1980	\$38,728	\$35,117	1.34
1986	\$37,441	\$43,203	-1.71 ^b
% Change (1980-86)	28%	27%	0.13

^aSignificant at alpha = .01

^bSignificant at alpha = .10

Table 4 shows measures of employment by type of county. In 1980, there was virtually no difference in the unemployment rates of the two types of counties, and while there was not a significance difference in the change in the rates over time, by 1986 the unemployment rate of counties with a DRC was significantly higher (at alpha = 0.10) than in counties without one.

Additional information in Table 4 suggests that counties with a DRC had a higher percentage of workers employed in manufacturing, retailing and services than other counties. This is possibly due to the fact that the counties in this sample in which retail chains are located tend to be larger on average, and larger counties would tend to have more opportunities outside of agriculture than smaller counties. With the exception of the percentage change in the number of workers employed in manufacturing (which was not statistically significant), the percentage of workers employed in nonagricultural trades decline between 1980 and 1986. Moreover, the percentage of workers employed in retailing and services declined significantly more in counties with a DRC than in other counties. It is not surprising that the portion of workers in retailing would decline since it would be expected that large retail chains would be more efficient utilizing less labor per square foot than the smaller independent merchants that they seem to replace. However, what is surprising is the decline in the percentage of workers employed in

TABLE 4
DIFFERENCES IN MEASURES OF EMPLOYMENT

Variable	Counties w/o DRC (n=78)	Counties with DRC (n=104)	T-Score
Unemployment Rate (1980)	6.92%	6.95%	-0.06
Unemployment Rate (1986)	8.68%	9.44%	-1.63 ^c
Change in Unemployment Rate (1980-86)	1.75%	2.49%	-1.51
Percent of Workers Employed in Manufacturing (1986)	11.1%	15.1%	-2.74 ^a
Workers Employed in Manufacturing % Change (1980-86)	-10.5%	-9.4%	-0.90
Percent of Workers Employed in Retail (1986)	9.0%	10.9%	-3.91 ^a
Workers Employed in Retailing % Change (1980-86)	-8.2%	-9.3%	-2.39 ^b
Percent of Workers Employed in Services (1986)	9.7%	11.7%	-2.87 ^a
Workers Employed in Services % Change (1980-86)	-5.3%	-7.3%	-2.01 ^b

^aSignificant at alpha = .01

^bSignificant at alpha = .05

^cSignificant at alpha = .10

services. Stone (1988) suggests that merchants not in direct competition with large chains, especially service organizations, would be expected to flourish with the added business brought to the area by the large discount retail chain.

Table 5 provides information relative to income per capita for the two types of counties. Money income per capita was higher in counties with a discount retail chain in both 1979 and 1985. Furthermore, the percentage change in money income was significantly higher in those counties in both in current and constant dollars. When adjusted for inflation, money income actually decreased in both types of counties, but the percentage decrease was significantly less in counties with a DRC.

Table 6 shows the level of local tax revenues and property taxes on a per capita basis. There were no significant differences in local tax revenues by the type of county, but property taxes were somewhat higher in counties without a DRC in both 1977 and 1982. It is conceivable that the higher level of sales brought in by discount retail chains would generate enough

TABLE 5
DIFFERENCES IN MEASURES OF INCOME

Variable	Counties w/o DRC (n=78)	Counties with DRC (n=104)	T-Score
Money Income per Capita (1979)	\$5,245	\$5,453	-1.53
Money Income per Capita (1985)	\$7,252	\$7,775	-2.91 ^a
Money Income per Capita % Change (1979-85)	38.8%	42.8%	-3.42 ^a
Money Income per Capita % Change in 1982 Dollars (1979-85)	-6.4%	-3.6%	-3.42 ^a

^a Significant at alpha = .01

TABLE 6
DIFFERENCES IN MEASURES OF LOCAL TAXES

Variable	Counties w/o DRC (n=78)	Counties with DRC (n=104)	T-Score
Local Tax Revenue per Capita (1977)	\$135	\$126	1.17
Local Tax Revenue per Capita (1982)	\$191	\$181	0.85
Local Tax Revenue per Capita % Change (1977-82)	45.5%	47.3%	-0.48
Local Property Taxes per Capita (1977)	\$119	\$108	1.66 ^a
Local Property Taxes per Capita (1982)	\$152	\$136	1.79 ^a
Local Property Taxes per Capita % Change (1977-82)	31.5%	31.0%	-0.13

^a Significant at alpha = .10

additional sales tax to permit property taxes to be lower, but much more research would be needed before this could be established. Additionally, the percentage change in property taxes between 1977 and 1982 was not significant. Consequently, if counties with a large chain store enjoy an economic advantage, that advantage is neither strengthening nor eroding over time.

Table 7 provides information about financial deposits in the counties studied. There were no significant differences in bank deposits on a per capita basis in either type of county for 1980 or 1986; however, the average percentage increase in bank deposits between the two years was significantly higher in counties without a DRC. This difference could be due to the loss of local merchant accounts in counties with a

TABLE 7
DIFFERENCES IN MEASURES OF FINANCIAL DEPOSITS

Variable	Counties w/o DRC (n=78)	Counties with DRC (n=104)	T-Score
Bank Deposits per Capita (1980)	\$4.23	\$4.54	-1.09
Bank Deposits per Capita (1986)	\$6.65	\$6.60	0.15
Bank Deposits per Capita % Change (1980-86)	61.1%	50.6%	2.45 ^a
S&L Capital per Capita (1980)	\$1.20	\$1.65	-2.00 ^a
S&L Capital per Capita (1986)	\$1.97	\$2.48	-1.61
S&L Capital % Change (1980-86)	89.0%	70.1%	1.59

^a Significant at alpha = .05

DRC; the accounts of large chains will normally be handled by corporate headquarters and a centralized bank for all stores in the chain instead of using a local bank.

The evidence presented above leads us to reject our two hypotheses. Counties with a DRC appear to have more and higher value residential construction, and money income per capita in those counties is higher and increasing faster (in current dollars). There does not appear to be any major differences in the unemployment rates of the two types of counties or in the local tax revenues collected. Counties with a DRC actually have lower property taxes per capita. Finally, the percentage change in bank deposits is less in counties with a DRC, but this does not seem sufficient to conclude that the presence of a large discount retail chain is harmful to a small, local economy.

Conclusions

The purpose of this research was to examine the economic conditions of small rural areas in an attempt to determine whether the presence of large discount retail chain stores can be associated with poor or declining economies. Concerns are growing that as large chains force small independent merchants out of business, the local economy will suffer. However, the results of this study indicate that the counties in which discount retail chains have located are not economically depressed relative to counties without a DRC. In fact, for the most part, these counties are economically more viable.

Naturally, it is possible that the reason for finding favorable economic conditions in counties with DRCs is that managers of the chains do a good job in selecting viable economies in which to locate their stores. Nevertheless,

concerns that these chains may create economic hardships on the areas in which they locate do not appear justified at this time. However, much additional research is necessary to determine the impact of DRCs on rural economies.

Future contributions can be made by examining specific communities instead of using county-wide data. Mail questionnaires of citizens and civic leaders could provide insight into local attitudes and more specific sociological impacts that DRCs may have. Finally, it may be helpful to examine the issue on a much broader geographic scale.

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TRADITIONAL AND NON-TRADITIONAL WOMEN-OWNED ENTERPRISES:
A COMPARATIVE STUDY OF RETAILERS AND REALTORS

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Abstract

This paper reports on a study of 169 women owned enterprises. The purpose of this study was to investigate the extent to which women who own a nontraditional female business enterprise, such as real estate, differ from women who own a traditional female business enterprise, namely apparel retailing. The findings of this study suggest that some entrepreneurial traits are gender based, while others are industry specific.

Introduction

During the past 30 years, women have dramatically changed the American labor force. According to the U.S. Bureau of Labor Statistics, in 1960 women comprised 32% of the total labor force. By 1980 women represented 42% of the labor force and by 1990 half of the labor force will be female.

The rising labor force participation rates for women have been the result of a number of factors as cited by Bloom (1986). The increase in working women during WWII remained after the war. Effective contraception in the early 1960's freed women from childbearing and gave them the opportunity of whether and when to have children. The economic pressures faced by the adult baby boomers required two incomes by many families to ensure a middle-class standard of living. Single parent families, due to increasing divorce rates, forced many women into the labor force. The growth of the service sector provided women more opportunities because of its flexible employment schedules.

Since 1965 the proportion of women obtaining college degrees has more than doubled (42% had college degrees in 1986), and the subjects women are studying have changed. In 1962 only one in 20 female students enrolled in a professional program; whereas now one in three have. As a result women's representation in a variety of occupations has begun to grow. While 45% of American laborers are women and 36% of the administrators and managers are women, only 5 to 10% top executive positions are held by women (Bloom, 1986). The apparent underrepresentation of women at the top of corporate structures has led an increasing number of women to consider self employment.

Over the last three decades there has been a significant growth in the number of women-owned businesses. In 1960, women started only one in ten new businesses; by 1985 one-third of the new companies were launched by women; and by 1995 it is projected one-half of the new businesses will be owned and operated by women (Parrish, 1986). Much of the growth in women-

owned businesses is in the service sector which usually requires little start-up capital.

A growing trend over the last two decades has been for women to enter traditionally male entrepreneurial endeavors such as computer technology, construction, manufacturing and real estate. From 1977 to 1982, the highest annual growth rates of female-owned businesses were in these non-traditional business areas (The State of Small Business, 1985). Such undertaking 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. This trend, along with changing demographics, lifestyles, and societal expectations (such as women's role in the home and child rearing practices), may eventually result in a blurring of any differentiating personal and professional characteristics between male and female entrepreneurs as women compete to prove their capabilities and gain market share in non-traditional female industries.

Previous research on female entrepreneurs allows for the development of a profile. Bowen and Hisrich (1986) conducted a review of previous studies on female entrepreneurs in order to develop their life cycle approach to entrepreneurial careers. Through this analysis the authors found that entire stages in the female entrepreneur's life cycle had been overlooked, such as career stages and non-work adult history. In addition, differing data suggested that comparisons needed to be made between women entrepreneurs in traditional female industries and those in non-traditional female industries.

Controlling by industry type to examine the differences between female entrepreneurs in traditional versus non-traditional female endeavors has been expressed as a need by other researchers (Scott, 1986, Stevenson, 1986). Yet to date, few studies have been designed in this manner. One such study undertaken by Chagnai (1986) examined the strategic management styles of eight women-owned enterprises (five in traditional female businesses, three in non-traditional female businesses) based on his "feminine entrepreneur" and "successful entrepreneur" models of strategic management. The "feminine mode" implies that women will act differently than their male counterparts as entrepreneurs and managers, whereas the "entrepreneurial mode" assumes that female and male entrepreneurs are similar in management styles. Because of the difficulties in attempting to categorize the eight businesses into either of the two management models Chagnai concluded a larger sample study was needed by industry type and by life cycle stages to more fully determine

the differences/similarities in management patterns.

Moore and Rickel (1980) undertook a study to investigate characteristics which distinguished women who choose traditional as opposed to non-traditional managerial career roles. Their findings revealed that women in nontraditional managerial career roles were more achieving, emphasized production more, saw themselves as having characteristics more like managers and men, and saw no self-characteristics which conflicted with those ascribed to male managers. They also considered the domestic role as less important, had fewer children, and fewer children living at home. These findings led Moore and Rickel to state that leadership attributes and behavior of women do vary between organizational settings and across occupational levels in predictable ways.

The steady rise in women's participation in the labor force, particularly women as small business owners, and the overall lack of written information about female entrepreneurs suggested a need for research in this area. The purpose of this study was to investigate the extent to which women who own a nontraditional female business enterprise, such as real estate, differ from women who own a traditional female business enterprise, namely apparel retailing.

Method

A mail survey was conducted in North Carolina using two groups of female entrepreneurs: the traditional female entrepreneur (TFE) and the nontraditional female entrepreneur (NTFE). The TFE's in this study were apparel retailers who were randomly selected from the Carolina-Virginia Fashion Exhibitors Membership Listing. The NTFE's were realtors who were randomly selected from the North Carolina Board of Realtors Membership Directory. Of the 480 questionnaires sent to the female entrepreneurs (240 per group), there was a response rate of 37.9% for the TFE's and 32.5% for the NTFE's. An identical questionnaire was sent to a like-sized random sample of male entrepreneurs for the same business sectors for the purpose of male/female comparisons. There was a response rate of 50.4% for the male apparel retailers and 33.3% for the male realtors.

A survey instrument was designed to illicit information regarding life and career stages of the TFE's and NTFE's. The questions were categorized as follows: business environment, adult family/non-work environment, childhood family environment, and personal data including previous experience and education. The survey design and implementation followed Dillman's Total Design Method (TDM) for Mail and Telephone Surveys (1978), except for omitting the final certified mail follow-up due to financial limitations. TDM is a systematic survey procedure which Dillman developed and perfected to maximize response rate, by paying detailed attention to the design and format of the questionnaire, as well as a timed implementation process.

Each survey question was analyzed using frequencies and percentages for both groups. A chi-square test was performed on select attributes from each group.

Results/Discussion

Demographic Profile

A profile of personal characteristics defined the mean age for the TFE's at 48.3 years and the NTFE's at 50.1 years, both middle aged. Over 90% of both groups were Caucasian and had high school diplomas. Based on the existing literature regarding the female entrepreneur and the few articles addressing the TFE's versus the NTFE's, it was suggested that more of the NTFE's would have a formal education and that education would be in a professional area. In this study slightly more NTFE's (36.5%) had college degrees than the TFE's (28.1%). The major field of study mentioned by about half of respondents of both groups was business.

Business Background

When respondents were asked what were the major reasons for choosing their particular business, nearly two-thirds (60.6%) of the NTFE's stated a major reason was previous experience in that area, whereas, only one-third of the TFE's stated their choice was because of previous experience. This finding was statistically significant at the .01 level. In addition, 58.1% of the NTFE's stated educational background was the major reason for selecting their particular field, yet only 15.4% of the TFE's stated this as a major reason. This finding was significant at the .001 level.

With respect to these findings the NTFE's decision to start a business was similar to the two industry groups of male entrepreneurs (retailers and realtors) surveyed in the present study. The NTFE's and the TFE's were also remarkably similar respectively to the male and female entrepreneurs in the Watkins and Watkins (1984) study on these attributes. They reported "For the male sample the normal route into entrepreneurship was to replicate a business of which the man had good prior knowledge, in both technical and managerial terms, as an employee of someone else; for the female sample, this (route) was almost unknown."

The average number of years worked in a managerial capacity was fairly similar for both the TFE's and the NTFE's (mean = 13.1 years and 14.3 years respectively). The mean number of years in their current business for the TFE's and the NTFE's was 9.4 years and 12.4 years respectively which suggests much of their managerial experience was acquired in their own business. An analysis of the entrepreneurial males of this survey revealed they too had few years in a managerial role before undertaking their business venture.

The TFE's decided to go into business for themselves on the average at a younger age (mean = 33.0 years) than the NTFE's (mean = 37.9 years). This finding was statistically significant at $p < .05$

level. For both groups the upstart of their business appears to have been within the child rearing years. For both groups of male entrepreneurs, the mean age at which they decided to go into their own business was six years earlier than their female counterparts. Later business startups for women may be tied to family obligations, namely child rearing. Birley's review of literature suggested that women seek out service industries, and most commonly retailing, that allow them flexible schedules in order to encompass the responsibilities of raising a family.

Current Business Profile

For 68.8% of the TFE's and 76.9% of the NTFE's the current business was the first business they had owned. Acquisition of the business differed somewhat between the groups. Although the majority of both groups were the founders (NTFE's = 81.8%, TFE's = 72.5%); nearly one-fourth of the TFE's had bought existing businesses, with the remainder of the businesses being inherited. Hours worked in the business both at the onset of the business and at the time of the survey were significantly more ($p < .05$ level) for the NTFE's than the TFE's. Nearly half of the TFE's worked between 40 to 60 hours per week, whereas nearly half of the NTFE's worked over 60 hours per week. The NTFE's were similar to the male entrepreneurs of both groups regarding the number of hours they put into the business which may be a reflection of going into business at a later age and thereby having fewer family obligations.

Ownership type suggested statistically significant differences between the two groups of female entrepreneurs ($p < .01$ level). Nearly two-thirds of the NTFE's operated sole proprietorships, whereas the TFE's were more evenly split between sole proprietorships (42.9%) and corporations (40.7%). Regarding managerial style, 71.0% of the NTFE's characterized their style as directive, whereas only 53.6% of the TFE's felt they used a directive management style and 37.4% stated they used a participative style of management. Both the TFE's and the NTFE's were comparable in the number of full time employees they hired, (mean = 2.3 and 2.6 employees, respectively). However, the TFE's hired significantly more ($p < .001$ level) part-time employees (mean = 2.3) as compared to the NTFE's (mean = 1.8). Regarding each of these business attributes, the differences appeared to be industry specific (retailing versus real estate) as similar findings were obtained when evaluating the two male entrepreneurial groups.

Nearly two-thirds (63.7%) of the TFE's stated they had started their businesses with another person; only slightly more than one-third (37.2%) of the NTFE's had begun their business with another person. This difference was significant at $p < .01$ level. The most frequently mentioned person for both female groups (approximately 40% each) was their spouse. The second most frequently mentioned person by the TFE's was their family (36.2), whereas for the NTFE's it was a friend (27.6%). These findings also appear to be industry specific, as both of the male entrepreneurial groups had similar results. Interestingly, 14% of the NTFE's began their business with an investor; none of the TFE's and very few of either of the

male groups began their business in this way.

Family/Non-Work Adult Environment

According to Bowen and Hisrich, little data regarding the female entrepreneur's family had previously been gathered. Therefore, a number of the survey questions were designed to elicit insight into this area. Both the TFE's and the NTFE's tended to have entrepreneurial fathers who were self employed and came from middle-to-upper income families. Over half of both groups stated they received "much encouragement" from their parents to be independent, take on responsibility, to be a high achiever, and that their parents showed an overall interest in their undertakings. However, this percent was consistently higher for the NTFE's on all four attributes.

Over 70% of both groups were married at the inception of the business and were married at the time of the survey. Although these figures do not reflect how many female entrepreneurs were divorced and remarried during their business years, it does suggest that the respondents were able to balance the responsibilities of work and home. Nearly two-thirds of both groups did not have financial responsibility for any children at the time of the interview, although as cited earlier they would have been within child-rearing age when they began their business.

Over three-fourths of the respondents from both the TFE's and the NTFE's stated they had families that were "very supportive" of their business venture. Over 50% of both female groups also stated that the person providing them with the "greatest support" in their business was their spouse. Over 90% of both the TFE's and the NTFE's listed someone as providing them with support in their business venture. However, on a scale of 1 to 10, there was a significant difference ($p < .01$) in the TFE's rating of the degree of support received (mean=8.9) than the NTFE's (mean=7.5). When asked the type(s) of assistance their support person gave them, the two female groups were quite similar. Over three-fourths stated they received emotional support, nearly half stated financial support, and nearly one-third stated co-worker support. Nearly half of the support persons for both female groups were either self-employed or were in management positions suggesting they were receiving assistance from individuals with a business background. On these family attributes more differences occurred between genders (male versus female) than between industry types (retailing versus real estate).

Conclusions

This study arose out of the growing trend of business startups by women and the lack of data on them and their business venture. Family background, educational background, previous experience, individual motivations, and resources all can influence the entrepreneur's decision to start his or her own business, the specific industry chosen, and methods of operation. The results of this study suggest some entrepreneurial traits are

gender based, while others are industry specific, and yet others may be a reflection of changing women's roles in society. With respect to educational background and experience, the NTFE's had more college degrees and prior experience than the TFE's, and in this respect the NTFE's were similar to the male entrepreneurs in the study. Regarding the family environment, the findings were more gender based (TFE's were similar to NTFE's), rather than industry specific. Results from the business profiles of the TFE's and NTFE's revealed characteristics that were more industry specific (females entrepreneurs were similar to the males in their industry) rather than gender based.

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. 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. 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.

As women continue to acquire the business skills, commercial networks, and financial resources that have long been available to their male counterparts, their entrepreneurial profiles, whether in traditional or non-traditional female industries, will continue to move even closer to that of their male counterparts.

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THE EFFECTS OF RETAIL SALES PROMOTIONS ON
CONSUMER DECISION MAKING STRATEGIES AND ATTITUDE-BEHAVIOR CONSISTENCY

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Abstract

The purpose of this paper is to investigate marketers' ability to affect the attitude-behavior relationship through the design and implementation of sales promotions, specifically point-of-purchase displays. Three dimensions that may be manipulated in a sales promotion environment -- availability of information, motivation, and opportunity for deliberation -- are described and hypothesized to affect consumer decision making. Strength of prior brand attitudes within a product category is thought to moderate the effect that these factors have on consumer decision making strategies. Further, it is suggested that engaging in either an attribute-based or attitude-based decision making strategy will determine observed attitude-behavior consistency.

Introduction

The Importance of Research on Sales Promotions

Research on sales promotions is needed in part because of the increasing emphasis being placed on sales promotions by marketers. Sales promotions have been growing in importance over the last two decades and are expected to continue to grow at a more rapid rate than advertising expenditures in the foreseeable future. Sales promotion expenditures by manufacturers totalled over \$70 billion dollars in 1984 and accounted for 65% of the average combined advertising/promotion budget. Furthermore, the annual growth rate of sales promotion expenditures in 1984 outstripped that of advertising -- 12% for sales promotion versus 9% for advertising (Information Resources, Inc. 1985). Despite the increasing emphasis on consumer and industrial promotions, sales promotion continues to be one of the most underresearched areas of marketing (Rhea and Massey 1986).

Previous Research on Sales Promotions

Numerous studies have been conducted which have sought to identify factors that contribute to increases in promoted brand sales. Primary among those factors is the type of promotional tool employed, e.g., coupons, price promotions, and point-of-purchase (POP) displays. Additionally, a variety of other variables have been investigated which may moderate the promotion-brand sales relationship, including competitor promotions (Moriarty 1985), brand loyalty (Massy and Frank 1965), consumer characteristics (Cotton and Babb 1978), and product price and sales volume (Curhan 1974).

Most of these studies have been concerned with the promotion and various environment variables that are correlated with promotional success, not why promotions are successful or not. A departure

from such macro level analyses may shed some light onto how promotions can be designed and implemented to be maximally effective. Specifically, we are interested in how promotions affect consumer decisions about whether to purchase a particular brand or another. Germane to this is the study of (consumer) decision making.

Conceptual Development

Consumer Decision Making

Decision making theorists recognize two basic decision making strategies which are used by individuals to choose among alternatives. One is characterized by an individual utilizing their specific knowledge of the attributes of the alternatives to make a decision (e.g., the employment of a compensatory type strategy inherent in the Fishbein and Ajzen (1975) theory of reasoned action), which is referred to by Sanbonmatsu (1988) as an attribute-guided decision rule. The other involves a strategy in which decisions are guided by a "target" or "global" attitude.¹ As opposed to an attribute-based strategy, this is considered to be an attitude-based strategy (Sanbonmatsu 1988), though it is recognized that an attribute-based strategy also involves attitudes.

The primary distinction between these two strategies is one of processing style, which describes how attitudes relate to the decision to engage in a behavior. A predominant approach to the study of the attitude-behavior relationship has been that of Fishbein and Ajzen (1975). Their theory of reasoned action focuses on a very deliberate decision process. This theory suggests that individuals consider closely their beliefs toward the act in question and then summate those beliefs to arrive at a specific attitude toward the act. Specific attribute and normative beliefs are weighted before the individual decides to engage or not engage in the behavior.

On the other hand is the "spontaneous processing model"², suggested by Fazio (1986), which characterizes a far less deliberate process. The

¹The terms target attitude and global attitude were defined by Sanbonmatsu (1988). Target attitude refers to a summary evaluation of a decision alternative, while global attitude refers to a summary evaluation of a superordinate category of which an object is a member.

²Though not explicitly named in earlier papers by Fazio and his colleagues, Fazio (1989) referred to his model in this way.

model centers on spontaneous activation of the attitude upon mere observation of the attitude object. Once activated, the attitude biases perceptions of the object in the immediate situation, and behavior simply follows from these perceptions without any conscious reasoning process.

The difference between these two processing styles is likened by Fazio (1986) to the distinction offered by cognitive psychologists between automatic versus controlled attention and memory processes. Automatic is any process that leads to the activation of some concept or response whenever a given set of external initiating stimuli are presented, regardless of a subject's attempt to ignore or bypass the distraction (Shiffrin and Dumais 1981). Alternatively, control processes require the active control or attention of the individual. While the Fishbein and Ajzen model suggests a controlled process, the Fazio process model centers on a more automatic process instead.

Automatic or Controlled Process?

When, then, is an automatic attitude-behavior process versus a controlled one likely to operate? Sanbonmatsu (1988) proposed that there are at least three conditions that affect decision making style. First is the availability of information, referring to whether or not a person possesses the relevant knowledge structures in memory (Tulving and Pearlstone 1966) or has the information readily available in the decision making environment. An individual may or may not have available an attitude relevant to the situation; likewise, specific attribute information may or may not be present either in memory or in the environment. Lacking either of these types of information will make it more likely that the individual will engage in a decision making process which is based on the type of information that is available.

Second is the motivation underlying a decision. The amount of effort or deliberation devoted to the decision making task is affected by the extent to which a person fears making an invalid judgment. Motivation was first conceptualized as the fear of invalidity by Kruglanski and Freund (1983). Fear of invalidity is described by Kruglanski (in press) as the importance of avoiding an invalid conclusion, stemming from the perceived costliness of making a judgmental mistake. Fazio (in press, p. 27) suggests:

"... it is such 'fear of invalidity' that likely motivates individuals to undergo the effortful reflection and reasoning involved in a deliberative attitude-behavior process. Without such inducement, individuals have little reason to undertake a deliberative analysis. They perceive little potential cost to permitting behavior to flow spontaneously from however one has interpreted the event. Instead of considering and weighing the potential consequences of the behavior, individuals can allow themselves the effortless luxury of being 'theory-driven'."

The last factor suggested by Sanbonmatsu (1988) is the individual's opportunity or ability to access and utilize the decision relevant information, which is a function of the attentional capacity that is available. This in turn is affected by such things as processing load, need for cognition (Petty and Cacioppo 1986), distraction (Petty, Wells, and Brock 1976), and arousal (Sanbonmatsu and Kardes 1987). An automatic attitude based decision process will typically be less attention demanding than a controlled decision process. Thus, an automatic process will more likely be engaged in a situation in which there is little opportunity to access and utilize relevant knowledge.

Similar to the conceptualization provided by Sanbonmatsu (1988), Fazio (in press) proposes a MODE Model of the Attitude-Behavior Relation that suggests that motivation and opportunity are the determining factors in whether individuals engage in the "theory-driven" mode characterized by the spontaneous processing model or in a "data-driven" deliberative process.³

Relevance of the Decision Making Process and the Attitude-Behavior Relationship to Marketers

Sanbonmatsu (1988) suggests that a social influence agent striving to get an individual to act upon their attitudes should try to minimize the likelihood that specific counterattitudinal attribute information be accessed and utilized. Generally speaking, this may be accomplished by prompting the individual to make a quick, spontaneous decision, by downplaying the importance of the decision (decreasing motivation), or by preventing the individual from contemplating the decision (limiting opportunity).

Marketers would prefer consumers to act upon their favorable attitudes, if possessed, and thus should seek to increase the likelihood that an automatic decision making process takes place -- that is if the consumer possesses a strong attitude. If the consumer possesses a positive, albeit weak attitude, marketers may wish to have consumers engage in a controlled decision making process in which favorable information about their brand and/or negative information about competing brands is utilized.

In contrast, if an agent wishes to influence an individual to not act upon their attitudes, the agent should try to establish conditions that will minimize the likelihood that attitudes guide the decision in an automatic fashion, and instead maximize the likelihood that the individual will engage in a controlled decision making process, utilizing specific counterattitudinal attribute information. The implication for a marketer is that if a consumer possesses a negative attitude toward its brand, or a less favorable attitude

³ Availability of attribute or attitude information is not discussed by Fazio as a determining factor, though we might assume he is assuming the availability of both types of information leaving only motivation and opportunity as the moderating variables.

than that held for competing brands, attempts should be made to play up the importance of the decision (increase motivation), instruct the individual to think carefully, and allow for the retrieval of relevant information (increasing opportunity).

Not discussed by Sanbonmatsu, but relevant to marketers, is when there has been no attitude formed about its brand. In this situation marketers would be wise to engage consumers in a controlled decision making strategy, making available positive information about its brand.

In addition to the suggestions offered by Sanbonmatsu (1988)⁴, the availability of information may also be manipulated in a manner that would affect the decision making process. That is, an influence agent could make available in the decision environment or elsewhere, attribute specific information if the objective was to cause a controlled, attribute based decision making process. Conversely, if the objective is to increase the likelihood of an automatic process, specific attribute information could be withheld, providing instead cues to enhance the retrieval of a general attitude toward the object.

Marketers, in their attempts to have consumers use their generally positive attitudes in their decisions about whether to purchase their brand, could withhold attribute specific information about their own brands and perhaps avoid placing the consumer in a setting in which competitors provide product attribute information. Alternatively, the likelihood that negative brand attitudes will guide the decision not to purchase the brand can be attenuated by influencing consumers to engage in a controlled process, utilizing positive attribute information, by providing such specific attribute information to consumers.

Strength of Attitude as a Moderating Variable

It is suggested above that by increasing an individual's motivation to make a valid decision or by giving a consumer greater opportunity to access and utilize attribute specific information that a retailer or manufacturer would be able to influence a consumer to engage in a controlled attribute based decision strategy. But is this likely in all situations? It is plausible that it would be increasingly difficult to influence a consumer's decision strategy, the stronger the attitude held by that consumer. If an individual is a loyal fan of Coke products, no amount of extra time in a shopping environment is going to get one to consider the relative prices of other soft drinks or other attributes believed to be salient by the manufacturer or retailer. Likewise, if by experience (generally producing a stronger object evaluation association than otherwise (Fazio 1986)) one learns that they hate Kroger brand canned green beans they will be unlikely to heed the advice that they should compare

relative benefits and prices to discover that the Kroger brand of green beans have a relative value greater than the Del Monte brand. Fazio (1986) suggests that the associative strength between an object and the evaluation may determine the accessibility of the attitude from memory. Once accessed the attitude is likely to affect perceptions of and behavior toward the object.

The Effect of Sales Promotions on the Decision Making Process and the Attitude-Behavior Relationship

The techniques suggested above can be employed by retailers and manufacturers in their design and implementation of sales promotions that are designed to maximize brand sales. The degree to which specific, manipulable attributes of sales promotions can affect the attitude-behavior relationship is the primary issue. The Sanbonmatsu (1988) framework provides a structure to investigate this issue. Specifically, the purpose of the proposed study is to investigate marketers' ability to affect the attitude-behavior relationship through the design and implementation of sales promotions, specifically through the influence of the three factors -- availability, motivation, and opportunity -- suggested by Sanbonmatsu (1988) as determinants of the decision making process.

Nature of Promotions Used by Retailers in Conjunction with Manufacturers

The sales promotion tools most often employed by retailers (often in conjunction with the manufacturer) are price promotions in their various forms -- unadvertised in-store price specials, advertised features (loss leaders), with or without a point of purchase (POP) display, with or without coupon, and POP displays. The focus of this study will be on POP displays because of their flexibility in design with respect to the factors identified by Sanbonmatsu (1988). Other promotional tools may also be designed to vary along one or more of these dimensions, but POP displays appear to be particularly suited for this preliminary analysis.

In their use of POP displays, how can retailers and manufacturers design them to influence consumers' decision making strategies, and thus the attitude-behavior relationship? Discussed above were three factors that may mediate consumers' strategies -- availability, motivation, and opportunity. How may each of these be manipulated in a promotion context, and what will be the likely effects of these manipulations?

Hypotheses

The discussion above concerning consumer decision making provides the foundation for the hypotheses offered below.

Availability of Information -- In general, the availability and accessibility of specific attribute information will make it more likely that an attribute-based decision making process will be

⁴His study was restricted to memory-based (as opposed to stimulus-based) decisions in which it was assumed that individuals had available both attitude and attribute information.

used by consumers. Sales promotion tools and their environments may be designed to offer attribute-specific information, making the availability of attribute information greater than if designed without attribute information. However, strong prior attitudes toward a brand would likely lead a consumer to ignore attribute information, following instead their attitudinal leanings. If the prior attitude was instead weak, the consumer might be more likely to incorporate the attribute information into their decision.

H₁: When an individual possesses a weak prior brand attitude, exposure to sales promotions that offer attribute-specific information will more likely result in an attribute- vs. an attitude-based strategy.

H₂: When an individual possesses a strong prior brand attitude, he will more likely use an attitude- vs. an attribute-based decision making strategy despite exposure to sales promotions that offer attribute-specific information.

In considering the effects of the availability of information, we might envision two scenarios in a retail setting. One is where attribute information is made available in display form only for one promoted brand in a product class as is often the case in a grocery store, the other where attribute information is made available for all brands in the product class as is often found in, for example, a "hi-tech" store carrying stereo equipment, televisions, and appliances. It is expected that as more attribute information becomes available across brands in a product class, making brand comparisons across attributes easier, that an attribute-based strategy would become more likely than an attitude-based strategy. Making increasingly large amounts of attribute information available for many brands may not serve to enhance the likelihood of a more deliberative decision making strategy. Malholtra (1982) indicates, based on his own and others empirical investigations, that individuals cannot optimally handle more than ten items (attributes) of information simultaneously. Similarly he reports that there exists some evidence to suggest that individuals can optimally process a maximum of only six alternatives. The implication is that consumers are likely to adopt simplifying information-processing strategies under conditions of information load.

H₃: Short of creating conditions of information overload (more than six alternatives and ten attributes), additional attribute information made available for more than one brand will make it more likely that an attribute- vs. an attitude-based strategy will be used than when attribute information is made available for only a single brand.

Motivation -- Generally, a more deliberative, attribute-based decision making strategy will be more likely used by individuals as the fear of invalidity increases. Promotions can be designed to increase the fear of invalidity and should thus be able to affect decision making strategy through manipulations of motivation. Strength of attitude is again believed to moderate the effect

of fear of invalidity on decision making strategy.

H₄: When an individual possesses a weak prior brand attitude, promotional environments that invoke a high degree of fear of invalidity will more likely result in an attribute- vs. an attitude-based decision making strategy than environments that invoke a low degree of fear of invalidity.

H₅: When an individual possesses a strong prior brand attitude, he will more likely use an attitude- vs. an attribute-based decision making strategy despite exposure to promotional environments that invoke a high degree of fear of invalidity.

Opportunity -- An individual is more likely to deliberately evaluate a brand by considering attribute information when the opportunity allows. Promotional environments may be manipulated to make opportunity more or less available. As with availability of information and motivation, strength of prior attitude is believed to impact whether opportunity to process by attribute will affect decision making style.

H₆: When a consumer possesses a weak prior brand attitude, sales promotions environments that do not limit opportunity to evaluate attribute information will more likely result in an attribute-based decision making strategy than when opportunity is limited.

H₇: When a consumer possesses a strong prior brand attitude, he will more likely use an attitude- vs. an attribute-based decision making strategy despite exposure to a sales promotion environment that does not limit opportunity.

Attitude-Behavior Consistency -- One implication of whether individuals use an attribute or an attitude-based strategy is the observed consistency between prior attitudes and behavior. Obviously, if an individual engages in an attitude-based strategy the observed consistency should be high. The observed consistency when an attribute-based strategy is used depends on whether the attribute information incorporated in the evaluation is attitudinally-congruent or not. If the attribute information is congruent we would still expect a high degree of consistency between the prior attitude and behavior; if the attribute information is incongruent the observed consistency will be low.

H₈: Attitude-behavior consistency will be low when an individual engages in an attribute-based strategy and predominantly incorporates attitudinally-incongruent attribute information.

H₉: Attitude-behavior consistency will be high when an individual engages in either an attribute-based strategy and predominantly incorporates attitudinally-congruent attribute information, or when the individual engages in an attitude-based strategy.

Conclusion

In this paper we have discussed a conceptual framework that suggests several concrete ways in which sales promotions may be designed to affect consumer decision making strategies, and hence, attitude-behavior consistency. Armed with a sense of market segments' strength of attitude positions (this is not unreasonable given the level of market research conducted today by the majority of consumer goods companies), the value of this framework to retailers and manufacturers alike would be the added ability it lends to influence consumers to either continue buying a particular brand or to sway consumers to purchase a brand that they might otherwise not.

Having laid the groundwork in this paper, the next natural step is to test the hypotheses. A lab experiment is first recommended to establish the hypothesized relationships. The true test, however, is whether the relationships hold in a variety of retail settings and forms of sales promotions. Thus, a series of field studies should be performed to identify boundary conditions under which the relationships do hold.

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ON DEFINING AND MEASURING STORE IMAGE

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Abstract

We review the concept of store image and question whether researchers consistently define and measure this important retailing construct. We pose three questions that researchers must answer before they can uniformly define and measure store image: (1) Is store image "in the mind" of the consumer, or a property of a store? (2) At what retailing level (e.g., chain, store, department, product class) is the concept of store image most relevant to the consumer? (3) Are aggregate measures or disaggregate measures the most suitable measures of store image? Where possible, we propose answers to these questions or address the consequences of accepting alternative approaches.

Introduction

Image theory suggests that human behavior is directed by the images that humans have of their environment (Hite and Bellizzi 1985; Lindquist 1974). A primary tenet of image theory is that humans oversimplify their circumstances (i.e., create symbolic representations imbued with salient meanings, yet representing an entire network of meanings and values (Hite and Bellizzi 1985; Lindquist 1974)), particularly when faced with uncertainty.

The idea that a store has an image was advanced first in Martineau (1958). The general acceptance of this notion by marketers is exemplified by the Winter, 1974-75 issue of the *Journal of Retailing*, which is devoted to retail image research. Yet, despite the myraid of store image studies published since 1958, store image is defined inconsistently. Though some definitions of store image focus on the functional qualities of stores (cf. Weale 1961; Ring 1979; Hooley and Cook 1985), other definitions focus on perceptions of consumers (cf. Kasulis and Lusch 1981; Hite and Bellizzi 1985). Additional definitions assert that store image is more than qualities or perceptions; thus store image is defined also as an attitude or the result of some process.

Our purpose here is to examine the definitions of store image, to identify the questions that researchers must answer before they can uniformly define or measure store image, and, where appropriate, to suggest our answers to these questions. The questions we pose are:

1. Is store image "in the mind" of the consumer, or a property of a store?
 - a. If store image is a cognitive concept, how does a consumer acquire an image of a store?
 - b. If store image is a cognitive concept,

how does the concept of "store image" differ from the concept of "attitude?"

2. At what retailing level (i.e., chain, store, department, product class) is the concept of store image most relevant to the consumer?
3. Which is the most suitable approach for measuring store image: an aggregate or disaggregate approach?

Store Image: In the Mind of a Consumer
or a Property of a Store?

Our first question concerns whether to conceive store image as a cognitive concept or as a property of a store. Store image has been conceived in both ways. Psychologically-oriented definitions characterize store image as a cognitive construct (cf. Doyle and Fenwick 1974; James et al. 1976; Marks 1976; Engel and Blackwell 1982) or as a stimulus (cf. Kunkel and Berry 1968; Hite and Bellizzi 1985). Property-of-a-store definitions portray store image as an element of retail strategy (cf. Weale 1961, Cardozo 1974, Ring 1979).

This question has methodological implications: how store image is conceived determines how store image should be measured. Conventional measures of store image rely on semantic differential and Likert-type questions about functional store attributes. Such measures encourage researchers to treat store image as a composite of strategic and tactical decisions (i.e., store image is operationalized as a set of questions about store attributes) rather than as a psychological construct.

We recommend that researchers locate store image in "the mind of the consumer," rather than in the store. Why? First, there is no compelling reason to locate store image in a different place than other types of image; image is conceived generally as a psychological construct. Second, because image theory suggests that consumers' base their behavior on their images about things, rather than the things themselves, measures of consumers are more valid than measures of stores and their associated attributes.

Each consumer's image of a store is determined by many different stimuli, including peer comments, family traditions, advertising and promotion, and the store itself. However, researchers should not equate store image with stimuli. Instead, researchers should base their strategic and tactical advice to retailers (e.g., change the advertising themes) on consumer perceptions and thoughts about stores.

We find the definition in Mazursky and Jacoby (1986) is the most appealing and the most consistent with our notion of store image. Specifically, Mazursky and Jacoby (1986) describes store image as "a set of cognitions and/or affects . . . which represent what that phenomenon (store image) signifies to an individual" (p.147).

How Are Store Images Acquired?

We believe that a consumer acquires an image of a store through the process of forming perceptions of that store. Viewing store image as the dynamic, complex interaction of many perceptions suggests that store image is more than just a collection of functional qualities and psychological attributes.

On this view, store image is not static; it varies across consumers, stores, situations, and time (Kunkel and Berry 1968). A consumer acquires a store image through a developmental process that involves functional qualities and perceptions as well as the interaction of these qualities and perceptions with individual, situational, and environmental factors. How images are developed and acquired, as well as the relationship of such images to the consumer's behavior, are considered by this process-oriented view of store image.

Several researchers address or incorporate this process-orientation into their definitions of store image. May (1974) stresses the varying composition and complexity of images and their dependence on store-specific and individual influences. Marks (1976) characterizes store image as the synergy of an individual's perceptions of associated store dimensions. Perhaps the definition most indicative of store image as a process is the one proposed by Mazursky and Jacoby (1986); their definition emphasizes the determinants of store image (e.g., perceptions or memory inputs) and the interaction of these determinants with each individual's psyche.

How Does Store Image Differ from Attitude?

Several researchers, by defining store image as a type of attitude or set of attitudes, suggest that store image results from the consumers' affective reactions to or evaluations of store attributes. One shortcoming of this type of definition is that researchers who define store image as analogous to an attitude fail to explain how images are formed within an attitudinal framework. Only Doyle and Fenwick (1974) avoid this problem; they define store image as ". . . the consumer's evaluation of all salient aspects of the store as individually perceived and weighted" (p.40). Components of Fishbein's multiattribute attitude model (e.g., evaluation, saliency; Fishbein and Ajzen 1975) are present in this definition, with individual perception and weighting representing belief strength.

Equating store image with attitude also raises the question of discriminant validity. If store image is defined as an attitude or set of attitudes, then what is the difference between image and attitude (Mazursky and Jacoby 1986)? If store image is an attitude or set of attitudes,

then why does the stream of store image research continue, rather than being subsumed under the aegis of attitude research?

If we assume that store image is a property of a store, then equating store image with attitude also hinders us from considering "attribute interactions" (Marks 1976). Researchers have explored the notion of attribute interaction and the joint effect of such interaction on store choice (Ring 1979). Reich et al. (1977) suggest that how an individual values a given store attribute is influenced by store-specific information and the importance of other relevant attributes; thus an individual cannot value and perceive store attributes independently. Furthermore, these interactions cannot be captured in the often-used weighted multiattribute model of attitude (e.g., Fishbein and Ajzen 1975).

Store Image: At What Retailing Level is the Concept Most Relevant to the Consumer?

Our second question concerns where in the retailing hierarchy store image becomes a salient cognitive concept in the mind of the consumer. For example, if a consumer's image of one store in a retailing chain is based upon perceptions of the chain, then his or her store image should be global in nature, and accompanied by images of particular stores as members of that chain.

Alternatively, consumers may form an overall image of a department store and form separate images for each department within the store. Cardozo (1974) reports that store images vary across store type and across product classes. These results suggest that consumers form store images at the departmental level or the product class level; thus perceptions about the different product classes carried by a store cause consumers to associate many images with that store.

We recommend that researchers conceive store image at the product-class-level. However, retailers who adopt a product-class-level notion of store image face the onerous task of tracking and responding to dozens of images; thus the product-class-level notion of store image is the most valid from a theoretical perspective and the least practical from a managerial perspective.

Store Image: Aggregate or Disaggregate Measurement Approach?

Researchers use various techniques to measure store image, including uni- and bi-polar rating scales, rank ordering (of stores or attributes), open-ended questions, paired comparisons (of stores or attributes), perceptual mapping exercises, and psycholinguistic techniques (Cardozo 1974). Their use of such varying techniques begs the question of whether aggregate measures or disaggregate measures best capture the images held by consumers.

As stated in Zimmer and Golden (1988), "the prevailing approaches to image measurement . . . generally do not attempt to capture the gestalt of store image. Measurement is often incomplete and

focuses only on the parts" (p.265). We agree with Zimmer and Golden (1988). Disaggregate measures (i.e., those measures that rely on attribute-anchored rating scales, rank ordering of attributes, and researcher-specified store dimensions and attributes) do not gauge store image; rather, they gauge the consumers' perceptions of attributes, whether store-specific or not.

Store image research often focuses on identifying relevant store attributes. One shortcoming of this focus is that the attributes thus identified are too store-specific. For example, Ring (1979) reports that the image of a men's wear store should be measured across three attributes: "best for conservative, everyday men's wear," "best for current, up-to-date men's wear," and "best for the very latest, most fashionable men's wear." Because a different set of attributes best measure the image of a grocery store or another type of retailer, it is unclear that this attribute based approach will lead to generalizable knowledge about the concept of store image.

Aggregate measures (such as open-ended questions, free response data, focus groups, in-depth interviews, perceptual mapping, and psycholinguistic techniques) are well-suited for capturing the complexity of a consumer's store image. Unlike disaggregate measures of store image, these unstructured measurement techniques (Zimmer and Golden 1988) allow a consumer to evaluate a store from his or her perspective, and not the researcher's perspective. With aggregate techniques, store images are elicited at the consumer's level of abstraction. We believe that an aggregate approach is preferable to relying on a collection of isolated store attributes that may or may not be salient to a given consumer.

Summary

We reviewed various definitions and measures of the concept of store image; as the Appendix shows, store image is not defined consistently. One major inconsistency is how store image is conceptualized -- as a set of store attributes or as a psychological construct. We recommend that researchers adopt the latter conceptualization. Those researchers who discuss store image as a set of store attributes only create semantic confusion when they label these attributes themselves as store image.

Furthermore, if store image research is to result in a body of generalizable and usable knowledge, then researchers must determine the location of store image and its relevance to the consumer before they can develop a valid set of procedures for measuring store image. Only after they consistently define, conceptualize, and measure store image can researchers study validly the acquisition and development of store image and the relation of store image to such constructs as store loyalty, store patronage, and store choice.

We believe that retailers will make more effective tactical and strategic plans if they consider the consumer's gestalt perceptions of their stores, rather than the consumer's isolated perceptions of their store's attributes, which may

lack salience. Additionally, retailers who believe that store images are dynamic will monitor, and thus respond to, the changing needs of targeted consumers.

We advocate that researchers adopt the measurement approach championed in Zimmer and Golden (1988). If researchers cannot reach a consensus about the nature of store image, then they can use this approach to probe consumers for additional insights. Alternatively, researchers could adopt a theory-in-use approach, where they ask retailing managers to articulate their thoughts about store image and how to manage it.

Though we do not offer complete answers to the questions that we originally posed, yet our answers are a beginning. We call for other researchers to improve upon our answers. Once researchers provide such answers, researchers can speak a common store image language; otherwise, researchers will continue to construct a store-image Tower of Babel.

Appendix

A Chronology of Selected Definitions of Store Image

Martineau (1958)

...the store personality or image - the way in which the store is defined in the shopper's mind, partly by its functional qualities and partly by an aura of psychological attributes (p.47).

Arons (1961)

"Image" was taken as the "personality" the store presents to the public: a complex of meanings and relationships serving to characterize the store for people (p.2).

Weale (1961)

...the fact remains that a store's future business with the same customers depends largely on how well it has met the aspirational level of the consumer's image of satisfactory price, quality, and service. It is within this framework that the consumer evaluates her concept of the store's image (p.40).

Kunkel and Berry (1968)

...image may be defined as discriminative stimuli for an action's expected reinforcement. Specifically, "retail store image" is the total conceptualized or expected reinforcement that a person associates with shopping at a particular store. ...retail store image at any one point in time is the result of previous differential reinforcement in the context of a store (p.22).

Cardozo (1974)

In this new definition, the image of a particular store includes (a) the other stores among which consumers will shop for specified products, and with which consumers will compare the particular store for that product class; (b) the dimensions which consumers use to compare that store with other stores; and (c) the relative position of a store vis-a-vis other stores which consumers regard as its competitors in a specific product class (p.87).

Doyle and Fenwick (1974)

What do we mean by the term store image? The term is used interchangeably with attitude toward the store to describe the overall impression a consumer has of it. . . .Store image. . . rather than being viewed as an irrational construct may be regarded as the consumer's evaluation of all salient aspects of the store as individually perceived and weighted (p.40).

Lindquist (1974)

. . .store image is complex by nature and consists of a combination of tangible or functional factors and intangible or psychological factors that a consumer perceives to be present (p.31).

May (1974)

. . .the "image" - the composite of the dimensions which the consumer perceives as "the store." What makes up an image is a group of dimensions whose presence and importance vary from store to store. How these dimensions are put together to form the complex image of a particular store - plus the relative importance of each dimension - depends upon the store itself, and on the consumers who shop there (p.19).

Oxenfeldt (1974)

. . .an image is more than the sum of its parts. It represents interaction among characteristics and includes (or is strongly affected by) extraneous elements. It also has some emotional content -- i.e., it includes an element of being drawn toward or repelled by the store (p.9).

James, et al (1976)

. . .a set of attitudes based upon evaluation of those store attributes deemed important by consumers (p.25).

Marks (1976)

. . .it [store image] is not merely the sum of objective individual dimensions associated with the store; rather, a store's image is a composite of dimensions that consumers perceive as the store. Store image is an overall picture that is more than the sum of the parts, for the parts interact with one another, in the consumer's mind (p.37).

Reich, et al (1977)

. . .the process of forming an image of a store is like the process of forming impressions of people and other objects. . . the only major difference between the two is one of content, the specific nature of the informational stimuli themselves and not the fundamental underlying processes (p.609).

Ring (1979)

The sum total of the strategic and tactical actions taken by a given store or chain of stores is the "product" or "image" which the store presents to the consuming public. . . .store image is produced by the joint effect of a multiplicity of store or product attributes (p.25).

Kasulis and Lusch (1981)

Simply stated, stores project a "personality" to consumers through their design features, employees, merchandising strategies, etc. This personality or image is conveyed through the functional

characteristics of the store as well as through their psychological properties. . . .a consumer's image of a store is based on perceptions of both the objective and subjective attributes (pp.419-420).

Engel and Blackwell (1982)

. . .one type of attitude, measured across a number of dimensions hopefully reflecting salient attributes (p.518).

Hooley and Cook (1984)

. . .the current image of the store, namely the beliefs of the customers and potential customers of what the store offers them in its retail mix (p.132).

Hite and Bellizzi (1985)

. . .store image is complex by nature and consists of a combination of tangible or functional factors and intangible or psychological factors that a consumer perceives to be present. Therefore, store image is the stimuli, from a combination of objective and emotional material, which produces the total personality that an individual associates with a particular retail outlet for expected reinforcement (p.8).

Mazursky and Jacoby (1986)

. . .we propose a definition which more explicitly addresses the process aspect of store image development. According to this definition, image is:

1. a cognition and/or affect (or a set of cognitions and/or affects)
2. which is (are) inferred
3. either from a set of ongoing perceptions and/or memory inputs attaching to a phenomena (i.e., either an object or event such as a store, a product, a "sale," etc.)
4. and which represent(s) what that phenomenon signifies to an individual (p.147).

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Abstract

In-store field experiments and laboratory experiments have been frequently used in retailing and marketing research. This paper reviews the relative benefits and liabilities associated with field and laboratory experiments. We find that both of these approaches have contributed in the past to retailing and marketing knowledge.

Introduction

Marketing researchers have historically utilized both field and laboratory experiments to develop new knowledge. The difficulties of implementing research in the field (e.g., simple logistics and a complex, interacting environment) provide a host of frustrations and pitfalls for the experimenter. The main alternative to in-store or field research is laboratory research. However, laboratory research raises questions about the value of measuring only behavioral intentions rather than actual behaviors. The issue of whether intentions are good predictors of behaviors is one which has been empirically tested on several occasions with equivocal results.

In light of this lack of overwhelming evidence supporting measures of intention, one recent article has made a call for the return to measures of behavior. Newman and Sheth (1982, pg. 3) state that "behavior change, as opposed to attitude change, is emerging as a competitive marketing strategy." The implication of this statement is that research must be done closer to the sources of behavior or, more specifically, through retail field studies and research at the point of consumers' purchases.

If marketing researchers are interested in studying buyer behavior at the point of purchase, it is necessary to address certain issues associated with differences between laboratory and field research. Unfortunately these are not simple problems of logistics. The differences between these two types of research pose fundamental problems which shape not only their implementations, but their designs, their strengths and weaknesses, their underlying assumptions, their validities, and most importantly, the types of conclusions which can be inferred from their results.

Many researchers have tended to prefer the use of laboratory experiments because of the ability to better control extraneous variables. With such control comes a stronger experimental design from which to draw statistical conclusions and a greater confidence for making inferences. In contrast, retail field experiments offer a myriad of competing, interacting, and uncontrolled variables which do not lend themselves to neat designs or confident conclusions.

With this background, the purposes of this article are to:

- 1) evaluate the relative strengths and weaknesses of retail field experiments;
- 2) report on a few existing experimental retail studies which have appeared in the marketing and retailing literature.

Field Experiment Strengths

The overwhelming strength of field experiments lies in external validity, which addresses the issue of how well results from the tested sample may be generalized to the larger population. By escaping the artificial arrangements of the laboratory, the field researcher is more certain of getting a natural or "true" response from the subject. Harre and Secord (1972) especially caution that lab experiments are often so artificial and restrictive as to render their results impotent. The laboratory environment restricts subjects' ability to react, inhibits certain behaviors, isolates behavior from its normal context, and asks subjects to react to variables (sometimes on paper and pencil) as they would normally. This can result in role-playing by the subject, and handicaps researchers' ability to generalize results from the lab to the real world. In contrast, in natural settings, subjects' behavior is not reactive to the lab setting; behavior is measured in the context in which it normally occurs; manipulations can be designed to occur "naturally" in the environment; and a broader range of variables may be studied than in the lab.

Another strength of field studies is that they may better generate conclusions and solutions which are applicable in the real world. Lab experimenters have often been criticized because of their failure to appreciate, understand, and diagnose management problems. Work in the laboratory is typically more theory-oriented; and often these theories neither specify how their abstract constructs can be embodied in real world intervention nor identify the levels that uncontrolled theoretical variables will assume in a particular application. Thus, the value of doing field research may be particularly useful in an applied field such as retailing.

Field Experiment Weaknesses

The usefulness of field experiments as a research device has been criticized on several grounds by many sources. These criticisms center around two issues: internal validity and implementation difficulties.

Internal validity addresses the issue of how confident the researcher can be in specifying cause and effect relationships between variables. Naturally, the more rigorous the experiment (e.g.,

control groups, complex experimental designs, randomization of subjects to treatments) the stronger the internal validity of the research. This internal validity is weakened in many field experiments because there are so many extraneous factors which are often difficult to control.

More importantly, low internal validity not only means that the data or results contain error but also signifies that this error is biased. Unfortunately, because the decision maker may never know the source of the bias, making inferences from the results is tenuous at best and dangerous at worst.

The second critical weakness in field research involves the difficulties associated with implementing research in the "real world." It is very difficult to adapt experimental designs to field settings as the accessible test units of interest are often too few and unrepresentative of the target population. Randomization is frequently difficult to achieve, as are control groups. In addition, there are the practicalities of securing cooperation from retailing managers and owners, gaining access to firms and records, obtaining cooperation from employees, and manipulating treatment variables. All of these drawbacks make field studies not only hard to implement, but also difficult to replicate. Laboratory studies involving quasi-experimental designs offer interesting alternative research designs to address some of the drawbacks of field studies.

As summarized above, various researchers have raised questions about the relative effectiveness of field versus laboratory experiments for retailing research. Four such important issues include:

- 1) How accurately does the laboratory simulate the real world?
- 2) Do laboratory and field studies yield similar results?
- 3) To what extent have laboratory and field experiments been used in retailing and marketing research?
- 4) Have both approaches contributed to marketing knowledge?

We address the latter two questions in the following section.

Experimental Retail Studies

Both laboratory and field experiments in a retail setting have been commonly reported in marketing journals. [Table 1](#) summarizes four laboratory experiments in the retailing area. Test units include adult volunteers (Berkowitz and Walton 1980), shoppers (Beardon, Lichtenstein, and Teel 1984), adults (Sawyer, Worthing and Sendak 1979), and students (Delta Bitta, Monroe, and McGinnis 1981). The dependent variable in these lab experiments is usually some type of behavioral intentions. Treatments manipulated are marketing variables such as advertising, price, and sales promotion.

[Table 2](#) summarizes six retail field experiments. All six use sales as the dependent variable, which allows management to evaluate the results in terms

of traditional organizational objectives (sales, profit, and return on investment). The test units are some form of retailing outlet (e.g., supermarkets, restaurants, and pharmacies). Again, the treatments include price, promotion, and display space.

[Tables 1](#) and [2](#) show that both laboratory and field experiment retail studies are frequently reported in journal publications. Despite potential methodological weaknesses, retail field experiments continue to be extensively used in retail studies and have served to advance retailing knowledge.

TABLE 1
RETAIL LABORATORY EXPERIMENTS

Study	Test Units	Treatments	Dependent Variable
Berkowitz and Walton (JMR , 1980)	Volunteer adults	Retail price, Advertisement	Willingness to buy
Beardon, Lichtenstein, and Teel (JR , 1979)	Grocery shoppers	Price, coupons and brands	Behavioral intentions
Sawyer, Worthing, and Sendak (JM , 1979)	Adult females	Price, product, and point-of-purchase information	Simulated choice
Della Bitta, Monroe and McGinnis (JMR , 1981)	Undergraduates	Comparative price advertisement	Behavioral intentions

TABLE 2
RETAIL FIELD EXPERIMENTS

Study	Test Units	Treatments	Dependent Variable
Litvack, Calontone and Warshaw (JR , 1985)	Supermarkets	Price	Unit sales
Chapman (JR , 1968)	Restaurant	Coupons	Household sales
Cox (JMR , 1964)	Supermarkets	Shelf space	Unit sales
Curham (JMR , 1974)	Supermarkets	Price and advertising	Unit sales
Gagnon and Osterhaus (JR , 1985)	Pharmacies and supermarkets	Floor displays	Unit sales
Woodside and Waddle (JAR , 1975)	Supermarkets	Price and promotion	Unit sales

The two main goals of our study were to: a) outline the major benefits and weaknesses associated with field experiments; and b) explore the use of lab and field experiments in the retailing literature. With respect to the second objective, we find that both field and laboratory designs have been extensively reported in the literature to advance retailing knowledge (see [Tables 1 and 2](#)).

For various reasons, experimental subjects are likely to over-report their likelihood of purchasing a product displayed in a laboratory setting. There is a desire to please the experimenter, and there may also be subtle social pressures which encourage "purchase" in the laboratory. Thus, it may be necessary for retailing managers to discount or reduce sales estimates forthcoming from laboratory settings.

To make this problem of over-reporting even more difficult, student subjects (in contrast to housewife subjects) are likely to under-report their purchase intentions in a laboratory setting. Of course, this problem is exacerbated when the product category is not especially appropriate for the student market segment. Despite the fact that some researchers and journal editors have specifically warned against the dangers of employing student subjects (see Ferber 1977), other researchers have specifically insisted that student subjects are very appropriate (and even preferable) for those conducting theoretical laboratory research (see Calder, Tybout, and Phillips 1981). A more moderate view is that student subjects are only valid when the product category under study is appropriate for a student audience (Goodwin and Etgar 1980).

Situational variables quite often mediate consumers' responses to marketing stimuli. In a sense this may also explain why comparing laboratory and field studies often results in conflicting conclusions. Obviously, there may be situational differences between previous studies which have not been factored out, held constant, or controlled for. Thus, it is not surprising to find that at times field results mirror laboratory findings, while at other times they are quite divergent.

The influence of situational factors suggests that there must be an attempt to isolate and identify the various factors which mediate consumers' market responses. These factors may come from a variety of sources (e.g., product, environmental, individual consumer differences, etc.). The point here is not to try and pin-point the full range of potential mediating variables, but only those which have important influences on buyer behavior.

Electronic scanner data provide one mechanism for facilitating in-store or field research. Specifically, such data make it much easier to collect information in a natural setting. For example, one of the main problems associated with shelf space experiments is monitoring inventory levels for the experimental product. Scanner data make this task almost automatic. Thus, in the future, it should be relatively easy for retailers to calculate cross elasticities of demand.

As outlined in this paper, there are benefits and liabilities associated with both laboratory and field experiments. Laboratory research is preferred if the knowledge base is sufficient for identifying a theory to be tested. Field research provides a pool of empirical generalizations which in turn may lead to theory development. As well as outlining the philosophical differences between these two approaches, we have also highlighted the differences between: a) measuring behavioral intentions versus measuring consumer purchases; and b) using student subjects versus other samples (such as housewives).

In the past, retailing knowledge has originated from diverse sources (see [Tables 1 and 2](#)). This pattern should continue in the future development of retailing knowledge, as the weaknesses of field research are complemented by laboratory research (and vice versa). Such diversity is necessary in order to maintain a broad perspective on the way in which research problems are defined and approached. Nonetheless, individual researchers should be mindful of the benefits and liabilities inherent in each particular research design.

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SERVICE MARKETING

THE ROLE OF MARKETING IN EDUCATIONAL SERVICES
PERCEPTIONS OF PRIVATE SCHOOLS

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Abstract

Two hundred and fifty three private elementary and secondary schools from all over the United States were included in interviews to determine the extent to which they employed marketing techniques. The results of a factor analysis indicate that private schools do not view promotional activities in any unified way. There is no single factor which contains all or most of the marketing variables. It becomes clear that private schools engage in certain recruiting activities or community fairs but do not identify those activities with advertising or other school promotions. The implications of these perceptions for schools and the marketing discipline are examined.

Introduction and Literature Review

The marketing of educational services has received attention from some of the most respected authors on marketing. Philip Kotler (1985) in his book Strategic Marketing for Educational Institutions takes a direct approach. The purpose of the book is "to lay out the elements of marketing as they relate to educational institutions, and to demonstrate their applications to educational settings." (Kotler, 1985) The book is a timely and important one. It attempts to introduce marketing techniques and demonstrate how these techniques must be planned, integrated and managed. Its real value, however, might be clearer if there was some empirical assessment of the current level of use of marketing techniques and how they are managed by educational institutions. In other words, has the concept of marketing infiltrated all levels of education, or is there a trickle down effect evident? The academic literature provides a hint. By 1985 there were over one hundred articles written on the use of marketing concepts and how they might be strategically implemented for educational institutions (See especially Green, 1982 and Litten, 1980) Not one author addressed the applications for elementary or secondary schools. Colleges and universities seem to be at least aware of the elements of marketing, and how to use them. As one author states, "many college presidents who a decade ago would have turned up their noses at the idea of advertising for students have now turned to the mass media in order to survive." (Wilms, 1987) Elementary and secondary schools have not yet shown evidence of employing marketing techniques. Private schools have the particular burden of justifying their cost, as well as other characteristics which may impose additional burdens on parents. As one author stated, "Parents who in opinion polls or questionnaires express an intention to transfer their children to private schools may change their minds when faced with such realities as the additional expense and time required to send their children to private schools." (Lieberman, 1986) These schools then need to assess

the needs of their potential applicants and promote themselves accordingly. This research was conducted to learn more about one aspect of elementary and secondary private education that has gone unexamined to date. In attempts to answer some very preliminary and pragmatic questions about marketing for private schools. The following questions were formulated and served as the basis for the research:

1. Do private schools actually market themselves? If so, which techniques are most popular, or least likely to be utilized.
2. What are the implications of the findings on marketing in private and secondary schools?
3. What should the role of marketers and/or the discipline of marketing be in light of the findings?

Design and Methodology

In an attempt to answer these questions, a questionnaire measuring twenty nine variables was constructed. The inclusion of each variable was determined by a thorough review of articles available on marketing educational service. While the exploratory nature of this study precludes the formulation of theoretically based hypotheses, the statistical analysis did center around the potential relationship between marketing activity and selected demographic variables including programs offered at the institution. Data was collected through telephone interviews using a structured non-disguised approach. The interview schedule was developed after review of all pertinent literature on assessing the use of marketing techniques in educational institutions. Questions were added to identify responses to social trends such as providing extended day care during school vacations, or flexible schedules. Schools were asked if they had allocated positions and budgets exclusively for the marketing management effort, publicity campaign, etc. Complete descriptive statistics were obtained including affiliation, tuition, student-teacher ratios, faculty size, etc. The final interview schedule contains twenty nine questions which are intended to describe the school, the marketing techniques that are utilized, and the school offerings in the area of special programs.

Sampling Procedure

A directory titled, Private Schools of the United States (1988 edition) provided an organized listing of over 15,000 private elementary and secondary schools. All entries were indexed by grade level allowing stratified sampling of private elementary and secondary school listings. Each entry included the school's name, address, telephone number and the name of the school's principal

or director.

All schools were chosen from each state using a stratified random sample to facilitate comparisons between the school types. One third of the schools called were listed as "Catholic", one third were "Religious Non-Catholic" and one third as "Private Independent". Final interviews differ somewhat from this distribution due to non-response and availability of schools of the designated type in certain states. Three unsuccessful call backs were made before an entry was declared a non response. In the case of a non-response a substitute entry from the state was selected. Calls were made at all times of the day and on every weekday. Data collection spanned a three week period. The final sample includes two hundred and fifty three interviews, at least five from each state including Alaska and Hawaii. Elementary schools comprise 60% of the sample (152 cases), while secondary schools make up the remaining 40% (103 cases). The final sample includes 34% Catholic, 40% Religious Non-Catholic and 26% Private Independent schools. The final response rate for the study is 92%. Three hundred and sixty one calls were placed, and two hundred and fifty three resulted in complete interviews. The stratified random sampling procedure, exceptionally high response rate, and the national representation make the findings of this study useful as we attempt to generalize about the pervasiveness of marketing techniques for private schools.

Analysis

To understand the interrelationships within the data, a factor analysis was performed using the twenty nine variables previously identified. Factors were rotated for better interpretability. Each of the factors that make up the profile of private schools were examined in order to determine the underlying factors. Specifically, the focus is on the marketing/promotion variables to see if in fact they form a meaningful factor and how integral that factor might be in determining the profile of private schools. From the findings it would appear that schools are most meaningfully defined by demographic characteristics. These include size, tuition, and grade level, as well as programs offered. Those variables having to do with entrance requirements such as waiting lists, admissions tests or availability of scholarships appear to have little impact on a schools self-image. The results of the factor analysis were examined including the particular characteristics which loaded on each factor to identify the underlying dimensions.

Findings

The results of the factor analysis are summarized in Table 2. As can be seen, nine factors with eigen values of at least 1.0 were extracted to account for 60% of the variance in the data set. The nine factors have been assigned names based on those characteristics which loaded most heavily in each of them. The resultant factors are called (1) Profile/Posture, (2)

Publicity, (3) Affiliation, (4) Promotion, (5) Additional Services, (6) Special Programs, (7) Market Development, (8) Availability, and (9) Admissions Package.

Table 2 presents the characteristics that load most strongly on each factor. Within each factor, the characteristics are arranged in decreasing order of factor loadings. For each of the characteristics the communality is the proportion of the statements variability that is explained by the factors derived. For twenty-two of the twenty nine characteristics, the nine factors explain at least half of the variability in school responses.

The nine promotional type variables are spread over five of the first seven factors. Therefore, promotional activities are not viewed or responded to as a consistent group of related variables. Giving talks about the school throughout the community is associated with school demographics and whether or not there is a Promotion/Admissions Director. It appears in Factor 1 and helps to explain 18% of the variance. Acknowledging referrals is associated with athletic programs- leading one to believe that athletics as a source of recruiting and somehow acknowledges referrals is something done in conjunction with athletic programs. Strangely enough, these two variables form the second largest factor and explain 9% of the variance. School affiliation (private, catholic, religious non catholic) forms its own factor and alone explains 8% of the variance. Obviously, much of what we see coming from private schools is directly a result of their affiliation.

It is interesting to note the other factors containing promotional variables. Factor 4, accounting for 6% of the variance, is comprised of three marketing variables- using TV ads, radio ads, and having open house activities. The only other variable in this factor is having a school nurse. This does demonstrate an important promotional factor and the sense that private schools do not connect open house activity with the more traditional marketing practices of advertising on radio and in newspapers.

Factor 5 contains no promotional variables. It is, however, clearly made up of variables that describe special programs or services (i.e. bus service, programs for accelerated children etc.) and accounts for 5% of the variance.

Factor 6, like factor 4, contains promotional variables. Using television to advertise, attending school fairs with other schools and meeting regularly with current or prospective parents load most heavily on factor 6. The other variables in that factor include offering day care, guidance counselors, and financial aid. This factor appears to associate certain marketing or promotional variables with "extras" or offerings that are beyond what most private schools might engage in. This factor accounts for 4% of the variance.

Factor 7 appears to be a recruiting variable, formed by the original two variables - source of new students, and distribution of written materials. It is interesting to note that mailing or distributing brochures is an activity connected only with those typical channels by which most new students are identified. Written material is made available to the affiliated church or religious group, or to current families. Brochures are seldom advertised in conjunction with schools promotions. This factor accounts for 4% of the variance.

The final two factors relate to availability of positions at schools and their entrance requirements. Each accounts for 4% of the variance.

Summary and Conclusions

1. Since the highest ranking dimension of the factor analysis is demographics, it appears that securing or creating positions in private schools for marketing professionals is a key for private schools. Positions of that type are associated with the demographic profile of the school as well as the concept of a promoter who speaks outside of the school on its behalf. Without such a position, private schools will continue to market themselves in a disjointed and haphazard way.
2. Acknowledging referrals should be an administrative task associated with the director or marketing person. Applications should carry an inquiry of how the applicant heard about the school. This could be an important source of information for future marketing efforts.
3. Efforts such as using television, or attending school fairs should be an integral part of an overall marketing plan and not unusual "extras" to be attempted only on occasion.
4. Written materials are an important source of communication with potential segments. To restrict their distribution is to restrict their life line. All communications schools have with potential families should make them aware of the existence and availability of brochures. Those brochures should include the demographic characteristics as well as information on how to apply or to get further information.
5. Schools without a position for a marketer or admissions director should seek out marketing consultants from area universities or in the community. These professionals could contribute greatly to the school's goals by creating appropriate marketing strategy.

The use of factor analysis makes it clear that marketing variables are not viewed by private elementary and secondary schools as related and consistent. Some activities are delegated to inappropriate departments or channels rendering them ineffective. If private schools are to effectively embrace marketing they must learn more about the discipline and work to institutionalize the process through an ongoing marketing position.

Those schools that do allocate a specific position to the marketing effort, view themselves as much by that fact as by their demographic profile. The inclusion of that position in the largest factor indicates that schools consider it to be an essential to the definition of who they are as their size, tuition program offered.

In the absence of such a position, marketing activity will continue to be dispersed among various players. If marketing activity continues to be viewed and treated as a series of unrelated tasks as seen in this study, schools will never realize their opportunities the marketing discipline can offer.

TABLE 1
SUMMARY OF FACTOR ANALYSIS

<u>Characteristic</u>	<u>Factor Loading</u>
1. <u>Profile/Posture</u> E=5.1	
# of special programs	.84
faculty size	.74
level	.63
enrollment	.63
tuition	.59
market/admissions person	.56
give talks	.43
2. <u>Publicity</u> E=2.6	
acknowledge referrals	.39
athletic programs	.26
3. <u>Affiliation</u> E=2.2	
type of school	.77
4. <u>Promotion</u> E=1.8	
ads in newspapers	.63
open house	.49
nurse	.38
ads on radio	.34
5. <u>Additional Services</u> E=1.3	
bus service	.55
additional fees	.43
accelerated programs	.26
class size	.18
6. <u>Special Programs</u> E=1.2	
tv ads	.50
meet with parents	.47
school fairs	.38
guidance counselor	.18
financial aid	.16
7. <u>Market Development</u> E=1.1	
source of students	.43
distr. written materials	.35
8. <u>Availability</u> E=1.1	
waiting lists	.57
9. <u>Admissions Package</u> E=1.0	
academic scholarships	.69
admissions test	.25

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TRAVELER DESTINATION IMAGE MODIFICATION PROCESS AND ITS MARKETING IMPLICATIONS

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Abstract

This paper, using the traveler behavior model presented by Gunn (1972) in conjunction with an empirical analysis of American tourists traveling overseas, examines how the tourist destination image and tourist perceptions are modified and enhanced through travel to that destination. Marketing implications are drawn.

Introduction

The role of a destination image in tourism has a greater significance in marketing when viewed through the framework of the traveler's buying behavior. In the area of consumer behavior studies, many researchers have theorized that a consumer's buying process is multi-staged and that a consumer's motivation to purchase a good or service is triggered by an expectation that the object of purchase will satisfy his/her felt needs. The basic position of these multi-stage models of consumer buying behavior is that an individual consumer, when purchasing a good or service, goes through the stages of (1) need recognition, (2) information search, (3) evaluation of alternatives, (4) choice of product or service, and (5) post-purchase evaluation (Berkman and Gilson 1986).

A number of researchers in recreation and tourism have studied the need recognition phase of the consumer decision making process (for a review, see: Chon 1989). In addition, many travel and tourism researchers have studied the phases of information search through post purchase evaluation (Clawson and Knetch 1966, Crompton 1979, Fridgen 1984, Gartner 1986, Gartner and Hunt 1987, Goodrich 1977, Goodrich 1978, Gunn 1972, Haati 1986, Hunt 1975, Mayo 1973, Phelps 1986, Pizam et al. 1978).

The findings of these studies generally indicate that: (1) an individual traveler's travel experience is multi-staged; and (2) a destination image formation and modification occurs throughout an individual traveler's travel experience. These studies also suggest that the images which individuals in the market place hold about a destination have a crucial role in a destination's marketing success. This occurs because the decision maker acts upon his/her image, beliefs and perceptions of the destination rather than his/her objective reality of it (Hunt 1975).

Gunn (1972) in his book Vacationscape: Designing Tourist Regions provides an encompassing model of the relationship between a traveler's buying process and a destination image. He theorizes that an individual traveler's travel behavior can be explained through the seven-phase imagery modification frame work, which include: (1) Accumulation of mental image about vacation experience; (2) Modification of those images by further information; (3) Decision to take a vacation trip; (4) Travel to the destination; (5) Participation at the destination; (6) Return travel; and (7) New accumulation of images based on the experience. Gunn suggests that a tourist destination image changes over each of the seven stages of the travelers' vacation travel decision making cycle. This paper,

using the traveler behavior model presented by Gunn in conjunction with an empirical analysis of American tourists traveling overseas, examines how the tourist destination image and tourist perceptions are modified and enhanced through the stages of "travel to" and "return travel." Marketing implications of major findings are presented.

Methods

Data were collected through questionnaire surveys conducted with American visitors to South Korea (referred to as Korea hereafter) in the summer of 1985. Self-administrative questionnaires were distributed to American airplane travelers who were making their first-time visits to Korea at the Los Angeles International Airport and aboard flights from Los Angeles to Seoul, Korea. The same questionnaires were administered to American travelers who had completed their first visits to Korea and returning to the United States at the Kimpo International Airport of Seoul, Korea, and aboard flights between Seoul and Los Angeles.

Due to limitations in money and time, a random sampling process was not employed and block sampling procedures were used. This was accomplished by identifying first-time visit American tourists traveling to and from Korea at the airports and aboard pre-selected flights, and by administering surveys to these travelers. The stay of the visitors returning home was not controlled, resulting in a major limitation of the study. Survey efforts resulted in a collection of 204 usable responses by American travelers traveling to Korea and 240 usable responses by American travelers who had completed their visits to Korea and were returning to the U.S.

Demographic information is reported but not presented due to page limitation. In both groups of respondents, the following similarities were noted: (1) over 77% were between 21 and 50 years of age; (2) over 75% were college educated; and (3) over 60% had household income of over \$60,000. The most common purposes of the respondents' visits to Korea, in both groups, were business/government related and pleasure travel.

The survey questionnaire consisted of a series of statements dealing with the respondents' perceptions of Korea as a travel destination in terms of seven categories. The seven categories included: (1) shopping opportunities and related attributes; (2) American visitors' perceptions of Korean people; (3) historical and cultural attractions of Korea; (4) perceptions concerning safety and security in traveling to and in Korea; (5) scenic beauty of Korea; (6) general travel related conditions and resources of Korea; and (7) general attitudes of American tourists toward Korea as a place to visit.

In constructing the questionnaire items, a total of 82 general publications on Korea as a tourist destination and advertising brochures published by the Korean government, the Korea National Tourism Corporation (KNTC), and other travel related organizations of Korea were analyzed. Then, an effort was made to develop a comprehensive

set of opinion statements in descriptive sentences, which, taken together, would constitute a valid content universe of the images of Korea. The number of items (opinion statements) in each of the seven categories were determined based on the relative weight of the seven categories found in the content analysis process. Cronmpton (1979) suggests that this method of opinion statement construction minimizes the danger of forcing respondents to react to a standardized framework which may not be an accurate representation of a destination's images. The questionnaire instrument was thus constructed and field tested using 32 American travelers visiting Korea. Cronbach's alpha among inter-items resulted in further modification of the instrument. A correlation of 0.85 among items in each category was considered as an indicator of strong temporal reliability. The final questionnaire consisted of 26 opinion statements dealing with various aspects of Korea's travel related attributes (Table 1). Responses were measured using a seven-point Likert-type scale with "Strong Agree" and "Strongly Disagree" as anchor points. The items in each category of measurement were averaged and standardized into a single scale for further analysis.

TABLE 1
QUESTIONNAIRE ITEMS RELATED TO SEVEN AREAS OF
DESTINATION IMAGE INCLUDED IN SURVEY INSTRUMENT

Shopping Related Attributes of Korea:

- . Shopping is one of the largest tourist attractions in Korea.
- . Inexpensive goods are widely available in Korea's shopping places.
- . Korea does not have good shopping centers.
- . Korean made merchandise is not good quality.

Attributes Related to the People of Korea:

- . Koreans are friendly.
- . Koreans have pleasant attitudes.
- . Koreans do not value cleanliness in their living environment.
- . Koreans are receptive to foreigners.

Historical And Cultural Attractions:

- . Korea's cultural heritage is one of the richest in the world.
- . Korea has many historical attractions (museums, historical buildings, etc.)
- . Korea seems to have many cultural attractions (folk music, arts, dancing, etc.)

Safety And Security Concerns:

- . Political situation in the Korean peninsula has little to do with my decisions to visit Korea.
- . There exists a safe environment for foreign visitors in cities of Korea.
- . Korea does not provide safe transportation.

Scenic Beauty of Korea:

- . Korea has wonderful scenic beauty.
- . Korea has natural beauty.

General Travel Related Resources:

- . There are many inconveniences for American tourists in Korea (hotels, foods, etc.)
- . Korea seems not to be as fine a place as it is advertised to be.
- . Suitable accommodations for foreign visitors are available in Korea.

General Attitudes toward Korea:

- . I like everything associated with Korea.
- . After this trip, I would like to return to Korea.
- . Korea is no better than any other oriental countries as a tourist destination.
- . After this trip, I will probably tell my friends to visit Korea if they plan to travel to the orient.
- . A trip to Korea costs more than what is worth.
- . One cannot say that he/she saw the orient without seeing Korea.

Findings

The t-statistic was used for statistical testing. The statistical analysis performed on the seven scaling dimensions (Table 2) suggested that there exist significant differences in the perceptions of Korea as a tourist destination between the group which

was traveling to Korea and the group which was engaged in return travel. Moreover, the perceptions of Korea by post-visitors were more positive compared with the perceptions held by pre-visitors.

The findings suggest that there exists a discrepancy in the perceptions of Korea as a tourist destination between the American tourists who have actually experienced traveling in Korea and the American tourists who were en route to Korea. The findings further indicate that the perceived reality of Korea as a tourist destination by post-visit American tourists is more favorable than the image held by American tourists traveling to Korea.

Moreover, the degree of discrepancy in images of Korea between pre-visitors and post-visitors was particularly greater (positively) in the areas of (1) safety and security; (2) scenic beauty of Korea; (3) shopping opportunities and related attractions; and (4) general attitudes toward traveling to Korea. In an unrelated study of North American travel writers' image of Korea as a tourist destination, Hunt and Chung (1985) found that there was a large perceptual difference regarding safety and security concerns associated with Korea between those travel writers who had visited Korea and those who had not. This current study confirms the findings of Hunt and Chung (1985). The overall findings of this study, viewed in terms of Gunn's (1972) seven-phase traveler behavior model, suggest that significant destination image modifications, in this case image enhancement, occur as a result of the traveler's visit to that destination.

TABLE 2
PERCEPTUAL DIFFERENCES OF KOREA
BETWEEN PRE- AND POST-VISIT VISITORS

Opinions/ Perceptions	Mean Value(1)		t-value
	Pre-visitors (n=204)	Post-visitors (n=240)	
Shopping related attributes	4.71	5.43	9.65*
Korea's people	5.19	5.50	3.68*
Safety and security	4.70	5.28	6.23*
Scenic beauty and natural attractions	3.96	4.87	9.86*
Historical/cultural attractions	5.27	6.16	9.43*
Travel related and resources	4.37	4.63	2.77*
General attitude toward Korea	4.13	4.99	10.65*

*Significant at 0.01 probability level.

Note (1): Based on a seven-point scale; the larger the value, the more favorable the responses.

Implications

The significance of this study's findings exists in their marketing implications. The findings indicate that the most appropriate marketing objectives a tourist destination (i.e. Korea in this case) could employ in the market place appear to be two-fold: (1) the creation of a positive image of the destination at the traveler's destination choice stage so that "initial purchase" by first-time visitors can be encouraged; and (2) the satisfaction of tourist needs through the offering of the highest surplus benefits

of experience (positive reality). These objectives could be met by successful publicity and promotional efforts aimed at both unknown and identified potential tourists.

The most logical strategies that the tourist destination (in this case, Korea) could adopt in implementing the marketing objective defined above would include the following. First, the results of this study suggest current tourism product image strengths of the destination (Korea) as perceived by the respondents in the study. These images can provide guidelines for designing advertising themes to emphasize image strengths. The market (American tourists) evaluated the destination (Korea) more favorably on its scenic beauty, the people, shopping attractions, and historical and cultural attractions than on other dimensions which this study attempted to measure. Therefore, promotional efforts should highlight these attracting features. In other words, the destination country seems to have the potential for enhancing the traffic to the country from the target market by emphasizing those attributes which are positively perceived in the market place in tourism advertisements.

Second, this study, while revealing the destination country's current tourist product related image strengths, revealed some image weaknesses. Among the seven scaling dimensions, safety and security associated with American tourists' travel in Korea; travel resources related perceptions; and the general attitudes of American tourists toward Korea, received the least favorable responses from the American tourists in this study. Moreover, in the case of safety and security related concerns and the general attitudes of American tourists toward Korea, a significantly high perception variance was noted between the pre-and post-visit American tourists. That is, the perceptions held by pre-visitors were less favorable than those held by post-visitors. This indicates that the perceived reality of the product (Korea as a tourist destination) was not favorable, and the perceived image of the product (expectation about Korea as a tourist destination) was even more negative. The marketing implication is that, while making a publicity and promotional push on these dimensions, Korea should upgrade its tourism product attributes on these dimensions.

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HOW TO IMPROVE PERCEIVED SERVICE QUALITY BY INCREASING CUSTOMER PARTICIPATION

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Abstract

A conceptual framework is developed to examine the impact of customer participation in service delivery on perceptions of service quality. It is proposed that for certain services, such as those familiar to consumers or those requiring a low level of expertise, increased customer participation will generally lead to higher perceived service quality. Both direct and indirect effects of customer participation on perceived service quality are examined. A causal model is proposed to encompass these relationships and serve as a foundation for future empirical research. Implications for service firms are discussed.

This paper examines a major determinant of service quality -- customer participation -- and proposes a model based on literature and social psychology theory to describe the relationship between customer participation and service quality. The model explicates the underlying reasons for this relationship in a series of propositions. The relationship is set up as a causal model which can be used to test the outlined propositions in future empirical research. The model is amenable to both survey and experimental research designs and also serves as an illustration for investigating other determinants of service quality.

Introduction

The importance of service quality to consumers and therefore to providers is unquestionable. Consumers are seriously committed to seeking quality in their purchases and in their lives, and in recent years have been demanding higher quality services (Rabin 1983; Berry, Zeithaml, and Parasuraman 1985; Sherden 1988). For service providers, quality is directly linked to image, sales, and profitability (Berry, Bennett, and Brown 1989; Buzzell and Gale 1987; Lewis & Booms 1983; Rothman 1983; Rudie & Wansley 1985). Moreover, with the growing role of services in the U. S. economy, service quality is becoming an increasingly important research area for conceptual and empirical applications. It is not surprising that the Marketing Science Institute has given very high priority to research related to "the perception and evaluation of service quality" (Marketing Science Institute 1986).

Research on service quality has focused mainly on determinants that originate with the service provider. Customer-related variables and their impact on service quality have not received much attention. Yet, due to the interactive nature of services, customers can and do affect the quality of services provided. By applying theoretical insights from various disciplines, conceptual models need to be developed to describe the relationships between service quality and a whole range of customer-related determinants including encounter-related, demographic, and psychographic variables.

Empirical support of such relationships can help in developing services marketing theory, which can then be applied by service firms to improve service quality. Also, past research on service quality has relied mainly on surveys and simple analytical tools such as cross-tabulations. There is a need for more experimental research and sophisticated analytical techniques to enhance our knowledge of service quality and its determinants.

Background

Many services today can be designed with increased customer participation. Examples are food bars in restaurants, home banking, and do-it-yourself services ranging from tax preparation to car washes. Thus, it is worthwhile exploring whether increased customer participation would improve the perceived service quality of the service. There have been some conceptual articles describing the concept of customer participation (Silpatik and Fisk 1985; Bateson 1985a; Schneider and Bowen 1985) and one well-known empirical study on customer participation (Langeard et al. 1981). There has also been some discussion about the link between customer participation and service quality (Lovelock and Young 1979; Zeithaml 1981; Mills and Moberg 1982), but no conceptual model has been developed to describe the relationship.

Studies have been done on "actual waiting time" in service situations, and queuing theory has been successfully applied to service industries with waiting lines such as telephone service and airlines (Czepiel 1980). This approach is equally applicable to fast-food restaurants, banking, grocery stores, department stores, discount stores, post offices, public health delivery systems, and so on. There has been some research and/or discussion linking customer participation with waiting time and waiting time with service quality (Maister 1985; Langeard et al. 1981; Bateson 1985b) but no conceptual framework has been suggested linking the three variables. Research on perceived control in services marketing (from the customer's perspective rather than the contact person's) has been fairly limited (Bateson 1985a; Langer and Saegert 1977; Langeard et al. 1981) but does establish a link between perceived control and perceived service quality.

Developing a Conceptual Framework

Perceived Service Quality

Bonner and Nelson (1985) point out that the customer's perception of service quality is often different from the producer's evaluation. Jacoby and Olson (1985) support this difference by introducing two separate concepts of quality: actual (objective) quality and perceived (subjective) quality. They propose that perceived quality is more closely tied to sales performance, and therefore merits more attention. In his book, Commit to Quality, Townsend also makes a distinction between "quality in perception" and "quality in fact."

Zeithaml (1988) defines perceived quality as a consumer's judgment about the overall excellence or superiority of a product. Given that the word "product" as used today encompasses both goods and services, perceived service quality can be defined as the consumer's judgment of the overall superiority of a service.

The model developed in this paper is based on the concept of perceived rather than actual service quality. Perceived service quality can be operationalized using a multi-attribute scale to measure customer perceptions of various attributes of service quality (cf. Gronroos 1983; Klaus 1985; Parasuraman, Zeithaml, and Berry 1985).

Customer Participation

"Customer participation" refers to the degree to which the customer is involved in producing and delivering the service. It is a behavioral concept related to the customer's active role in the service encounter (Silpatik and Fisk 1985). Bateson (1985a) writes that it is only in the service industry that the customer has both a "production role and a consumption role." For instance, in a self-service situation such as the use of a bank automated teller machine (ATM), the customer is also the producer.

Schneider and Bowen (1985) illustrate the concept of partial customer participation with examples such as bank customers filling out deposit slips, and tax accountants' customers keeping and bringing their receipts. Full customer participation, on the other hand, occurs in the use of ATMs, or self-service gas-stations, laundromats, and car washes. Even the acquisition of service-related information before the service delivery is a form of customer participation (Schneider and Bowen 1985, Bowen 1986), because it saves the service provider time and effort.

Thus customer participation has two components. One is the option customers have to perform a given service themselves rather than having someone else provide it for them. This component can be operationalized by measuring the extent of the respondent's willingness to participate in service production given that an option to do so is available. The second component of customer participation is the acquisition of service-

related information at the site of the service delivery. The ability and willingness of customers to acquire such information can be measured to operationalize this aspect of customer participation.

Customer Participation and Perceived Service Quality

In the past, the issue of customer participation and its benefits for the firm have been discussed mainly in terms of productivity (Lovelock and Young 1979; Mills and Moberg 1982; Silpatik and Fisk 1985; Bateson 1985a; Schneider and Bowen 1985). It has been pointed out that allowing the customer to perform some of the tasks associated with service delivery reduces labor costs and increases the efficiency of the organization. However, there has been some concern about whether the customer would be willing to participate in the production and delivery of the service, and then be expected to pay for it too, i.e. would customers perceive a higher service quality if they had to participate in its production?

Some authors do propose a possible relationship between customer participation and service quality. Zeithaml (1981) explains that customer participation plays a role not only in the production of a service, but also in its definition, which in turn affects the quality of the service. For example, in purchasing financial services, if customers fail to define their investment objectives and/or to communicate them to the service provider, they will not obtain high quality investment advice. Chase (1978) advocates reducing customer contact (which often leads to increases in customer participation), to increase the efficiency of a service operation. For example, the purchase of self-service gasoline reduces customer contact but increases customer participation.

Lovelock and Young (1979) believe that increasing customer participation not only increases productivity, but also results in better service to the customer. For instance, they point out that self-service buffets not only save on labor costs but also allow the customer to select the "food they want, in the quantities they want, and without delay." Mills and Moberg (1982) list the activities that the customer should perform for improving service quality, and suggest that the firm regard the customer as a "partial employee."

It is important to note that for services requiring a high level of expertise, most customers would prefer to have the service performed for them. Similarly, for services that are new and unfamiliar, the majority of customers will not perceive benefits in performing the service themselves. Thus, although the literature seems to indicate a general relationship between customer participation and perceived service quality, it is more likely that this relationship will only hold for highly familiar or low-expertise services. Thus, it is proposed that:

P1: For highly familiar or low-expertise services, an increase in customer

participation will result in an increase in perceived service quality.

Perceived Waiting Time

Although the measurement of actual waiting time in service production and the determination of the optimum number of telephone operators, ticketing clerks, tellers, check-out clerks, or health care providers helps the service firm to improve productivity (Czepiel 1980), it may not have a direct effect on perceived service quality. Instead, a better means for increasing perceived service quality may be to reduce "perceived waiting time", or the time a customer perceives he/she has waited during a service encounter. Nevertheless, actual waiting time will affect an individual's perception of waiting time. Thus:

P2: An increase in actual waiting time will result in an increase in perceived waiting time.

However, actual waiting time is not the only determinant of perceived waiting time. While five minutes may seem very short to one person, it may seem very long to another, depending on their personalities, time availability, and even demographic characteristics. In terms of measurement, actual waiting time can be clocked by the researchers. Perceived waiting time is a variable that is also fairly easy to operationalize. One simply asks the respondents how long they think they have waited.

A famous Federal Express commercial in the early 1980s had noted that "waiting is frustrating, demoralizing, agonizing, aggravating, annoying, time-consuming, and incredibly expensive" (Fortune 1980; Maister 1985). Maister reiterates the common knowledge that waiting affects our overall perceptions of service quality. If a customer perceives that they have not waited long, they are likely to evaluate the service more highly. Hence we can make the following proposition:

P3: A decrease in perceived waiting time will result in an increase in perceived service quality.

Time is an important attribute to people who prefer to participate in a service encounter (Langeard et al. 1981; Bateson 1985b). Lovelock and Young (1979) also support the idea that people tend to participate more in service production in order to reduce perceived waiting time. We know from personal experience that if we are occupied while waiting, the time seems to pass more quickly. In his propositions on waiting, Maister (1985) suggests that unoccupied time feels longer than occupied time. Thus, people often prefer to participate in service production because "doing something" helps reduce perceived waiting time. This is even more relevant if customers are familiar with the service and perceive it as one that requires a low level of expertise. Therefore based on observation and backed by literature, it is proposed that:

P4: For highly familiar or low-expertise services, an increase in customer participation will result in a decrease in perceived waiting time.

Perceived Control

"Perceived control" can be described as the amount of control that a customer feels he/she has in a service encounter. (Note that this is a different concept from the control perceived by customer-contact personnel cf. Zeithaml, Berry, and Parasuraman 1987). Borrowing from psychology, perceived control can be thought of as a combination of decisional control and cognitive control. Averill (1973) defines decisional control as the control perceived by individuals when they have the option to choose an outcome. He defines cognitive control as the control perceived by individuals when they gain adequate information about or are able to appraise a given situation. Both forms of control are related to the individual's ability to reduce stress in a given situation. Perceived control can be operationalized using these two constructs.

Many service situations offer customers a choice between self service and full service (gas stations, banks, restaurants, car washes). If a service firm offers only self service and a competitor provides only full service, customers still have a choice. They can choose to participate in service production or to be waited on. Thus, the very option of participation versus non-participation appears to be associated with greater perceived control (decisional). Empirical research shows that "doing-it-themselves" offers customers more control over the situation and that "control" as an attribute is more important to people who prefer to participate in service encounters (Langeard et al. 1981; Bateson 1985a).

Acquiring information about the service (on site) is a form of customer participation that is also likely to be associated with increased perceived control (cognitive). Bateson (1985a) writes that perceived control can be increased by educating the customer. For instance, reading literature on one's specific health problem while waiting in a doctor's office is likely to educate the patients, increase their participation in taking care of their own health, and increase their perceived cognitive control. Thus, the following propositions are suggested:

P5a: For highly familiar or low-expertise services, an increase in customer participation (in terms of performing the service themselves) will result in an increase in perceived control.

P5b: For most services (including unfamiliar and high-expertise services), an increase in customer participation (in terms of acquiring information about the service while on site) will result in an increase in perceived control.

By inductive reasoning it would appear that there must be a link between perceived control and

perceived service quality. Bateson (1985a) writes that the concept of perceived control can be usefully applied in understanding the service encounter; he suggests that by increasing perceived control one can enhance the value of the service to the customer. Empirical research also supports this proposed relationship. In a study on crowding and cognitive control in a supermarket situation, Langer and Saegert (1977) found that perceived control affects consumer behavior in a service encounter and is an important dimension along which consumers appraise services. The respondents in this study who were given information about the likely effects of crowding had higher cognitive control, were better able to finish the shopping task, and appraised the shopping experience more positively. Thus we can postulate that:

P6: An increase in perceived control will result in an increase in perceived service quality.

Perceived Control and Perceived Waiting Time

Applying the concepts of decisional and cognitive control, we can investigate a possible relationship between perceived control and perceived waiting time. Maister (1985) postulates that uncertain waits feel longer than known waits, and unexplained waits feel longer than explained waits. If a person is uncertain about the length of the wait, or, if no explanation is given about the reason for the delay, the cognitive component of the individual's perceived control will decrease and as a result his/her perceived waiting time is likely to be longer. Conversely, the longer a person perceives he/she has waited, the decisional component of his/her perceived control is more likely to decrease because the person senses a reduction in control over the outcome.

Everyday observation would tend to support these relationships. If customers perceive that they have not waited too long, they will feel more in control. Also, if they perceive a high level of control in a given service encounter, they will tend to conclude that their waiting time has not been unreasonably long. Thus there appears to be a two-way or non-recursive relationship between perceived control and perceived waiting time:

P7: A decrease in perceived control will result in an increase in perceived waiting time.

P8: An increase in perceived waiting time will result in a decrease in perceived control.

A Causal Model Based on the Conceptual Framework

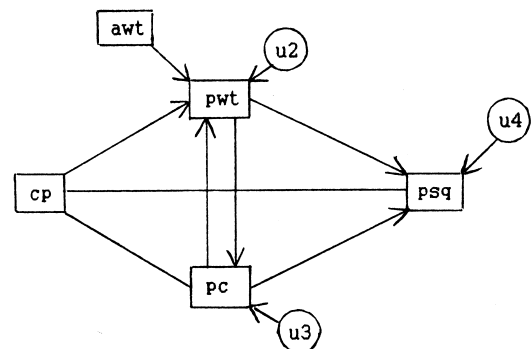
It may be noted that all the propositions in this paper are causal or directional in nature. Hence a causal model can be developed provided that other conditions for confirmatory analysis can be met (cf. James, Mulaik, and Brett 1987). We have seen that the variables can be operationalized, the relationships can be expressed as theoretical statements, and that they are supported by literature. The only major question then is

whether other exogenous variables may possibly have an effect on perceived service quality.

It is true that other variables (such as price, environment, technical expertise, consumer orientation) would normally affect perceived service quality. However, if this model is to be applied to study how participation affects the perceived service quality for a given service firm, then all extraneous variables that might otherwise affect service quality (price, environment, etc.) can be assumed to be held constant. This is easy to visualize for a given service location. By offering customers the option to participate or not, customer participation can then be viewed as the only exogenous variable that affects incremental changes in perceived service quality. In terms of causal analysis, the system is self-contained.

Figure 1

A Causal Model Showing the Impact of Customer Participation on Perceived Service Quality



where,

cp = customer participation
pwt = perceived waiting time
awt = actual waiting time
pc = perceived control
psq = perceived service quality

and u2, u3, and u4 are the disturbance terms containing random shocks and unmeasured variables.

The causal model is presented in Figure 1 and each proposition developed in this paper is represented by a path. The model shows the direct effect of customer participation on perceived service quality (see proposition P1) as well as its indirect effect through the intermediate variables of perceived waiting time and perceived control (see propositions P3-P6).

Finally, given that the model is not fully recursive, the two-way interaction between perceived waiting time and perceived control (see propositions P7, P8) requires that one of these two variables must have an "instrument" i. e., an independent variable that has a direct effect

only on that variable. Actual waiting time serves as the perfect "instrument" for perceived waiting time (see proposition P2).

Summary and Implications

Past research on the determinants of service quality has focused mainly on variables directly controlled by the service provider. The conceptual framework developed in this paper focuses on a customer-related determinant of service quality. A causal model is proposed to describe the relationship between customer participation and perceived service quality, particularly for highly familiar, low-expertise services. It is suggested that customer participation affects perceived service quality both directly and indirectly through its effect on perceived waiting time and perceived control. Key terms are defined and suggestions are made regarding operationalization of the variables.

For readers concerned about the exclusion of customer expectations in the model, the following explanation should help. Most of the research on customer expectations of service quality suggests that service quality is the difference between perceived and expected service. If perceived service exceeds expectations, the quality is higher and vice versa. Consequently, firms must ensure that expectations do not rise too high. The other task of the firm is to improve perceptions of the service delivered as much as possible. Given that expectations are created largely by media and past experiences, this model concentrates only on improving the perceived service in order to increase service quality.

The model can be tested in future empirical studies across many types of service situations. It is amenable to both survey and experimental research designs. If empirically supported, it can contribute to services marketing theory, which can then be applied by practitioners in the service industry to improve service quality.

The verification of the model will allow firms to enhance service quality by re-designing their services to offer increased customer participation. Full-service restaurants can consider adding food bars, tax accountants can offer an optional service where clients do more "homework," and public health delivery systems can provide useful health-related information to patients who wait. Post offices can install stamp machines, airports ticketing machines, and department stores electronic displays with fashion information. Such equipment encouraging customer participation is already being tested but the advantages have not yet been established.

If verified, the model can also offer insights on how waiting time and control from the customer's perspective affect perceived service quality. Thus, it can encourage firms to reduce waiting time and/or design the service encounter to keep customers occupied while they wait. Some service firms already seem to be concerned about these issues. The use of service-related information on the telephone to occupy and inform people "on hold" is increasing. Banks post interest rates

and other information where people waiting in line can read it. Some doctors provide health-related printed information in waiting rooms and a few have experimented with showing health-related videos to waiting patients.

It must be acknowledged that not all individuals are equally likely to participate in service delivery. Most people seem more than willing to participate if there are time and cost savings (Lovelock and Young 1979). Some may prefer to be waited on irrespective of circumstances. Others prefer to participate in service delivery across all situations, irrespective of cost savings; these people are more likely to be young, male, well educated, and impatient (Langeard et al. 1981). The proposed model can be used to test whether the relationships postulated are stronger for certain groups of customers. Also, some customers may be less able than others to participate due to physical or mental handicaps. In this case, services commonly regarded as requiring low expertise will be considered as high-expertise services by these people and they will act accordingly.

Although the model does not take into consideration the influence of other customers on the premises and interactions with service providers, these factors may be indirectly included in the other variables. For instance, if the line for full service is long (i.e. many customers are on the premises), there may be a greater incentive to participate. In terms of this model, the customer is translating the presence of customers into waiting time and choosing to participate in order to reduce waiting time and increase perceived control.

A legitimate concern of some service firms is that increased customer participation may reduce control by the provider and thus lower employee morale, increase the variability of the service provided, and hamper professionalism. The solution may lie in carefully designing the service (cf. Shostack 1984) so that part of it can be performed by customers to increase both efficiency and perceived service quality, while the rest of it can still be performed by the providers to minimize detrimental repercussions.

An important implication for marketers is that if customers do perceive a higher service quality when they participate in the delivery of certain services, then they may be willing to pay a higher price. Some firms have successfully incorporated this assumption in their strategies. For example, TRW Inc. sells computerized and customized mailing lists to other companies for direct marketing (*The New York Times* 1989). The client has the flexibility to experiment with different combinations while the company saves a bundle in labor costs. Rather than admitting that this is a cost-cutting measure and passing the savings on to customers via lowered prices, TRW astutely markets the service as a value-added offering and has been extremely successful doing so (Dabholkar 1990).

REFERENCES AVAILABLE UPON REQUEST

THE NEED FOR POSITIONING IN THE HEALTH CARE MARKET

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ABSTRACT

A firm must be aware of its current market position before successful marketing strategies are developed. Although positioning has been used extensively by producers of manufactured goods, this planning concept has not been as well developed for service offerings. This study provides a practical application of positioning for the health care market through examination of the perceptions of 321 potential hospital consumers and the subsequent construction of a perceptual map. Based upon perceptual mapping, marketing strategies are developed for each health care facility. Finally, generalized marketing strategies for health care facilities are listed.

INTRODUCTION

As hospitals face an increasingly competitive environment, the institution's market position plays a key role in customer patronage decisions. A hospital's market position is derived from an aggregate of individual perceptions concerning how a hospital is viewed relative to its competitors. A hospital which has a superior market position has successfully attained a differential advantage over its competitors.

Hospitals provide services; consequently, customers have a difficult time evaluating competing hospitals due to the lack of a physical product. In the absence of a tangible product, variables which make up the social and physical context of service delivery increase in importance (Berry 1980, Lovelock 1981 and Shostack 1977). Shostack (1977) refers to these variables as peripheral cues which are tangible pieces of evidence that coincide with service delivery. These cues may include the physical facility where the service is provided, the human element providing the service, and/or the content of the media promoting the service. Therefore, researchers suggest the creation of a strong organizational image to provide the customer a basis for evaluation (Judd 1968, Knisely 1979, Uhl and Upah 1980). How each firm's image is perceived by customers leads to the firm's market position.

Empirical evidence supports the notion that firms are differentiated by consumers to an extent based on image attributes (Bearden 1977, Schiffman *et al.* 1977, Nickel and Werthemer 1979). Moreover, much of this research has identified positive relationships between a favorable organizational image evaluation and organization preference, patronage, and loyalty. Thus, hospitals should strive to achieve a superior market position, through image development, for the purpose of generating a favorable consumer response.

The results of positioning studies provide hospitals valuable information about the

perceptions of their own customers as well as customers of competing institutions. Administrators are able to utilize this information in determining actionable programs such as improving customer relations with current markets served, and/or identifying opportunities in attracting new market segments. Hence, the fruits of positioning research have the potential for aiding administrators in the improvement of present and future performance of a hospital's operations.

LITERATURE REVIEW

Consumer satisfaction has been shown to be integrally connected to company success, especially in times of intense competition. There is a plethora of articles which have illustrated this in terms of companies which market tangible products. However, marketing's adoption and application to intangible services, and in particular health care, is still in its early stages. Only the last 10 years have witnessed the application of marketing principles and procedures to health care facilities (e.g., MacStravic 1981; Tucker 1981; Wallace and Venkatesan 1981; Berki and Ashcraft 1980; Berkowitz and Flexner 1980-81; Kotler 1979; and Loebis 1978). The application of marketing to hospitals is seen in the works of Berkowitz *et al.* (1982), Boscarino and Steiber (1982), Robinson and Cooper (1980-1981), and Gould (1988).

Consumer perceptions are important in understanding what ultimately leads to consumer satisfaction at a particular hospital or other health care facility. One fundamental avenue for academic research lies in the identification of those salient attributes associated with health care facilities which are used by consumers in making their particular choice.

Earlier research in this area collected information by utilizing two different approaches. The first approach involved surveying physicians and hospital administrators regarding their perceptions of consumer choice criteria for hospital selection decisions. Berger and Gultinan (1981) identified 10 such criteria from the works of Doyle and Ware (1977), Greenely and Schoenherr (1975), and Ware *et al.* (1976). In a subsequent study, Malhotra (1983) found 6 specific criteria. The problems associated with this first approach is that administrator and physician perceptions may be biased and not accurately reflect the perceptions held by customers.

Scammon and Kennard (1983) attempted to alleviate this potential bias by employing the second approach -- surveying customers. As a result, 26 attributes were identified that were associated with the general image of health care providers. With the use of discriminant analysis, 9 variables were determined to be useful predictors of customer satisfaction.

Both potential patients as well as health care personnel were involved in this selection process. In another study Steiber (1988) correlated 10 categories of patient satisfaction with quality. He found that concern from staff, nursing care, and physician care, respectively, had the highest impact on the patient's overall rating of the hospital's quality of care.

Although previous research efforts have attempted to identify consumer choice criteria for hospital selection, they have all focused on tangible attributes. Doyle and Ware (1977) propose that it may be even more important to look at underlying intangible dimensions to understand the consumer choice process. These underlying dimensions could serve to link together the appropriate tangible attributes associated with health care choice. They could also serve as the basis for perceptual mapping and the development of competitive strategy (Hair *et al* 1987). Thus, the purpose of this study is to identify tangible attributes associated with facility choice (hospitals in particular) using both patients and hospital personnel and then identify intangible dimensions which underlie these attributes. The results are then used in perceptual mapping for the purpose of developing effective positioning strategies.

IMPLICATION FOR STRATEGY DEVELOPMENT

Armed with the knowledge of competitor positioning in the health care market, management can structure a more efficient and effective marketing plan. This is particularly true with regard to the promotional plan since the mapping axes are often the major underlying intangible dimensions, and the tangible attributes associated with these dimensions can be stressed in advertisements to improve the facility's position in the mind of the consumer (Ries and Trout 1982). In a recent study (King 1989), consumers stated that most hospital advertising was "useless, boring, and uninformative." One hospital executive confirmed this when he stated: "There is a lot of learning to do before we consider ourselves sophisticated marketers" (p. B1).

Upon the determination of the firm's market position, strategies should be considered which improve the firm's current position. Ohmae (1982), a strategist for the consulting firm of McKinsey & Company, lists four possible strategies for strengthening a company's position in a market relative to its competitors:

1. **Identify the key factors of success.** Once found, the company can concentrate its resources into a particular area where it can most effectively gain a competitive advantage over its competitors.

2. **Look for relative superiority.** The focus should be to exploit the weaknesses of the competitors. As Ohmae explains, the task of the strategist is to either: a) "make use of the technology, sales network profitability, and so on, of those of its products which are not competing directly with the target competitors, or b) make use of any other differences in the

composition of assets between the enterprise and its competitors" (p. 39).

3. **Take the aggressive initiative.** Challenge any givens in the way business is conducted in the industry. In other words, change the rules of the game. Look for a new, innovative approach.

4. **Focus on strategic degrees of freedom.** Competitive advantage is gained through the opening up of new markets or the development of new products. This is a classic niching or focusing strategy. Look at unfilled needs in the market and be the first to fill them.

What does all this mean for the strategic health care planner? The use of perceptual mapping provides the basis for the development of a more competitive strategy. The perceptual map is a view of what consumers believe is the relation of the different competitors in the market. The health care marketer is then able to see which facility or service attributes need to be stressed to improve the hospital's market position within the mind of the consumers.

THE STUDY

The study was conducted in a metropolitan area, served by seven hospitals, with a population of approximately 1.25 million people. The first step involved the questionnaire development using Critical Incidents and Repertory Grid Techniques. While focus groups are often used in the situation, the authors believed other techniques might uncover criteria which otherwise might not be identified. The Repertory Grid Test is based upon the work of Kelly (1955) and attempts to develop personal constructs which are able to fully represent a particular object or series of objects. This is accomplished through the use of a series of cards which are presented to the respondents in groups of threes. All of the different objects that are part of the set of interest to the researcher (the 7 different hospitals in this case) are represented on separate cards, and three are chosen at random for examination by the respondent who then proceeds to answer why two are alike and one is different in each grouping. This continues until either 1) the respondent cannot come up with any further constructs or 2) a thirty-minute time limit is reached. The other tool used, Critical Incidents, was used in the work of Flanagan (1954), and it builds upon the experiences of the respondent to elicit information about a particular object or set of objects of interest. The respondent is asked to provide examples of the very best and the very worst aspects associated with the object in question. Both of these techniques were employed using hospital personnel (nurses and marketing department personnel) as well as current patients. As a result, 26 different attributes were identified as important in the choice of a hospital, and were used in the construction of the questionnaire. These attributes were as follows (in no particular order of importance):

1. Friendliness of the Nurses
2. Atmosphere of the Hospital Room
3. Quality of the Hospital Food
4. Ability of the Hospital Staff
5. Family-Orientation of the Hospital
6. Attitude of the Hospital Staff
7. Distance of Hospital from the Home
8. Quality of the Care of the Nurses
9. Friendliness of the Doctors
10. Reputation of the Hospital
11. Quality of the Care of the Doctors
12. Compassion of the Hospital Staff
13. Cleanliness of the Hospital
14. Religious Affiliation of the Hospital
15. Availability of Maternity Services
16. Doctor Association with the Hospital
17. Profit-Orientation of the Hospital
18. Size of the Hospital
19. Association of the Hospital with Others
20. Size of the Hospital Ad Campaign
21. Modernity of Hospital Equipment
22. Availability of Pediatric Services
23. Involvement of the Hospital in Community
24. Range of Hospital Services Provided
25. Availability of VIP Services
26. Progressiveness of the Hospital

It is important to clarify the use of staff here since the respondents were very clear that "staff" were hospital employees other than doctors or nurses (e.g., orderlies, volunteers, etc.) These 26 attributes were included in the final survey instrument, and each respondent was asked to choose his or her favorite hospital from the choice set of 7 and rate that hospital on the 26 attributes using a 7-point semantic differential scale. There were no special incentives offered to respondents, and only one questionnaire wave was employed.

The sampling procedure used by the authors was a randomized cluster sampling involving the use of census tracts within the respective metropolitan area. The tracts were randomly selected with a proportional sample being drawn from each tract given a quota of 350 respondents. The selected tracts were compared to the unselected tracts in an effort to identify differences, but none were found. Of the 350 completed surveys, 321 were found to be acceptable for the study.

THE DATA ANALYSIS

The first step was to run a factor analysis to identify underlying intangible dimensions associated with the 26 hospital choice attributes. An SPSS PC+ factor analysis program was employed, and number of factors identified was determined by the eigenvalue greater-than-one criteria. Principal Components factor extraction was used, and 6 factors had eigenvalues greater than one:

Factor	Eigenvalue
1	6.45249
2	2.46165
3	1.88177
4	1.39642
5	1.32536
6	1.06181

Next, a scree plot was constructed to determine the optimal number of factors. A visual examination of the plot suggested that three factors be retained for further study. Varimax rotation was then applied to produce an interpretable solution (i.e. simple structure). The factors produced had high factor loadings on at least 5 associated hospital choice attributes, and there was no overlap of attributes across the three factors. The rotated factor loadings and the corresponding associated attributes are as follows:

Attribute	Factor 1	Factor Loading
Size of the Hospital		.70221
Progressiveness of the Hospital		.66792
Involvement in Community Affairs		.65949
Range of Services Provided		.62977
Modernity of Hospital Equipment		.61012
Availability of Pediatric Services		.60120
Availability of VIP Services		.59628

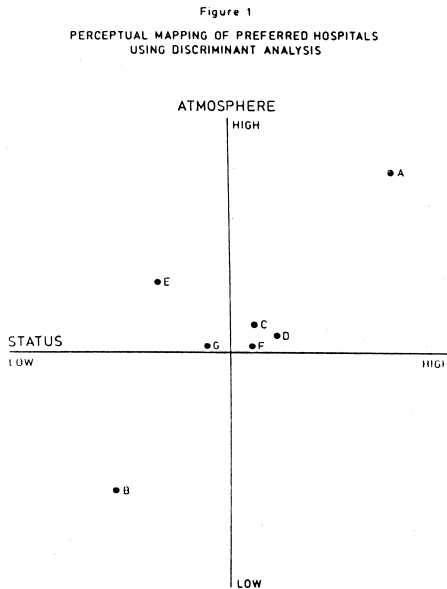
Attribute	Factor 2	Factor Loading
Quality of Nursing Care		.75592
Friendliness of the Nurses		.70764
Hospital Atmosphere		.70218
Cleanliness of the Hospital		.69670
Reputation of the Hospital		.66615
Family-Orientation of the Hospital		.64263
Quality of the Food		.55808

Attribute	Factor 3	Factor Loading
Attitude of Hospital Staff		.70311
Ability of the Hospital Staff		.69992
Quality of Doctor Care		.66026
Compassion of the Hospital Staff		.63124
Friendliness of the Doctors		.60248

As a result of the factor loadings and combinations of attributes, the first factor was identified as STATUS since the most preferred hospital was viewed as large, modern, possessing a wide range of services, and progressive. The second factor was identified as ATMOSPHERE because attributes dealt with ambience and atmospheric variables associated with the hospital. The final factor was, for obvious reasons, identified as STAFF.

The next step in the analysis was to save the factor scores and run a discriminant analysis using SPSS PC+. The discriminant was run with seven groups (the seven hospitals included in the study) with the favorite hospital being the dependent variable. The factors then became the basis for discriminant mapping of the different hospital choices, and since the two most important canonical discriminant functions corresponded to the two most important factors, the axes were able to be identified. An orthogonal rotation allowed the third factor STAFF to be rotated out leaving only the other

two factors STATUS and ATMOSPHERE remaining as the two-dimensional axes for the discriminant mapping. While STAFF was not shown to explain very much of the observed variance, it is interesting to postulate that STAFF may be seen (remembering that staff refers here to other than doctors and nurses) as roughly the same across the seven hospitals involved. Aspects dealing with doctors and nurses were incorporated in the other remaining intangible factors. This may explain why earlier studies may have shown greater importance for a STAFF factor. The map produced appears in Figure 1:



DISCUSSION

The marketer for Hospital A in the perceptual map (Figure 1) can see the facility is in the strongest possible position in this market. The strategic focus should be on holding or improving their position with a continuation of the previous advertising approach. What this marketer must be careful of, however, is to not get overconfident and take the position of strength for granted. This would open the door for aggressive competitors to begin chipping away at the position of strength.

Hospitals C, D, and F all appear to be in an approximate grouping on the perceptual map. This indicates that they are viewed similarly by the consumers in the market. They are seen as having better than average status as well as better than average atmosphere, but they are significantly behind the market leader. Each of these hospital's strategic focus should be on improving their position at the expense of hospital A. The two ways this can be accomplished are: 1) the use of comparative advertising stressing why the particular hospital is better or different than hospital A and 2) the use of competitive depositioning stressing negative aspects associated with hospital A. Each approach could improve the

position of a market follower, which is shown as a better alternative to hospital A, regarding specific attributes. This strategy requires a higher marketing expenditure level, but can be very effective in reducing the perception of the leader in the mind of the consumers. As a practical example, any of these hospitals could build on the negative aspects of larger size. Advertising could be aimed at the consumer being nothing more than a "number" at hospital A. A smaller hospital should be presented as the preferable alternative where personal care is stressed for each patient.

Hospital G is in the position of being seen as average on both dimensions. This may result from some confusion on the part of the consumers in the market. In effect, consumers may only be "lukewarm" to this competitor. This indicates a weak position, and requires the marketer to build on either or both of the dimensions to create a better position relative to the stronger competitors.

Hospital E is seen as having better than average atmosphere and less than average status. It is possible, in this case, that the marketer could build this into a nice niche. It would be very difficult for this hospital to position itself against the leader, but it could position itself as the low status yet high atmosphere alternative to other competitors. This movement would be similar to the positioning strategy of Hewlett-Packard in the personal computer market. HP knew that it could not be all things to all consumers and compete head to head with IBM, but it did want to be the highest quality producer for the advanced computer user. This high price-high quality approach is a viable strategy particularly when the competitor does not have the resources to compete directly against the market leader.

Hospital B is in a very difficult position. It is seen as inferior to other facilities on both dimensions. Repositioning would require starting from scratch to build a new point in the mind of the consumer, but trying to stress attributes simultaneously on both dimensions would not be practical. Hospital B must slowly move itself on one dimension until it can build some credibility, with the strategic focus being on developing a specific niche.

CONCLUSION

Once a market has been perceptually mapped, the health care marketer is in a better position to develop more effective strategic plans. Using marketing mix variables, it becomes possible to change position on the map for your own facility or your competitor's facilities. The key, of course, is being able to enter the mind of the consumer.

Health care facilities have at least four generic positioning strategies that can be applied to their market place:

1. **Strengthen and leverage the current position.** A facility should emphasize the distinctiveness and strengths of their service offerings. For example, Hospital A can insure that information about atmosphere and status are communicated in promotional activities. Distinct advertisements that stress

differential advantages and public relations releases for each dimension will further enhance this market leader position.

2. **Search for a new unowned position** - Health care administrators may view the perceptual map and determine there is a more appropriate position to hold. In effect this allows the facility to search for a new unowned position valued by customers. This strategy should be considered by Hospitals C, D, and F.
3. **Deposition or reposition the competitor.** Firms that cluster together should attempt to make known important differences between their facility and competitors that would change consumers' perceptions. For example, making consumers aware of a lack of facilities or services at competing health care locations. Hospitals C, D, F, and G may all consider using this option.
4. **Join the exclusive club.** Just as the "Big Seven" accounting firms became the "Big Eight", health care facilities may attempt to position themselves adjacent more positively perceived competitors. For example, Hospital E might use advertisements and public relations materials to position itself with Hospital A regarding atmosphere. This would position Hospital E as a direct competitor of Hospital A and possibly capture market share from the market leader.

As a final comment, Ries and Trout contend that positioning is primarily a psychological exercise that takes place in the minds of the consumers. Consequently, as the health care facility's market position changes, so do consumers expectations concerning the facility. Therefore, the authors want to remind the reader that temporary positioning and/or repositioning may occur because of advertising and public relations campaigns. However, to retain the facility's new position, and to insure consumer satisfaction, consumer expectations must be met. Therefore, promises made through marketing communications must be deliverable.

REFERENCES

Available from the authors upon request.

EXAMINING MARKET OPPORTUNITIES FOR OPTOMETRIC SERVICES¹

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Abstract

Through an application of importance-performance analysis, patient perceptions of the importance of various health care attributes as well as supplier performance in the provision of optometric services are analyzed. The results indicate that a number of market opportunities are present for optometrists who adapt their offerings to more closely match patient (consumer) interests.

Introduction

In March of 1989, the Federal Trade Commission issued a rule prohibiting state restrictions on certain optometrists' business practices. When this rule takes effect, it will invalidate laws in as many as 44 states that: (1) limit the number of branch offices an optometrist can own or operate, (2) prevent optometrists from having offices in shopping malls, (3) disallow the use of trade names, or (4) prohibit optometrists from working as employees of retail stores or optical-store chains. Because of its likely major impact on the industry, this ruling has been called "Eyeglasses II" (Saddler 1989).

Its predecessor, "Eyeglasses I," was an FTC ruling in 1978 that has revolutionized the way eyewear is provided. In that ruling, the FTC required that optometrists must provide patients with a written prescription of corrective lenses that are needed (*Wall Street Journal* 1978, Brauer 1984). Traditionally, patients had simply selected any necessary eyewear from the assortment offered by the particular optometrist who had conducted the vision examination.

Perhaps one of the most interesting developments for marketing observers have been the creation of "megooptical stores." These large (up to 20,000 square feet) retail stores carry as many as 10,000 different frames from which the customer can choose and sometimes offer one-hour service on new glasses. Conveniently located within major population centers, these progressive retailers have made significant progress toward the creation of a widespread consumer belief that eyeglasses are a *fashion* item. In fact, Carol Hopper, vice president of Opti-World very accurately characterized megoopticals as the principal change agents in transforming eyewear provision from the medical environment to the fashion business where marketing and merchandising dominate as success factors (Abend 1984).

Megoopticals have recruited and now employ numerous executives from marketing-oriented companies

such as Procter & Gamble and Quaker Oats, to name a few. In addition, many of the store employees who interact with customers have previous work experience in selling fashion items, often at leading department stores. Yet with all of this marketing-oriented talent, and even with a thorough recognition of the importance of a marketing emphasis, there is still widespread concern that many of the competitors lack adequate marketing expertise. According to Dean Butler, President of U.S. Shoe's Precision Lens Crafters, many of the new stores are operated by people who "don't understand marketing. All they know is price advertising" (Abend 1984, p. 48). Perhaps because of this, some of the firms that committed substantial resources to penetrate this market have already gone out of business.

Obviously, the 1978 FTC ruling greatly increased the need for a thorough understanding of what consumers want from the retail providers of optical goods. The more successful participants in this sector of the industry shifted from a medical/technical to a marketing approach. Marketing effectiveness in the optometric industry will be greater enhanced if strategies are based on a detailed examination of consumer preferences.

Consequently, the following empirical study should be of interest because it provides a succinct, yet thorough examination of the consumer market for optometric services. It identifies market opportunities, as well as satiated needs, within this sector of the health care industry.

The Study

Research Approach

Importance-performance analysis is a useful research procedure for examining consumer attribute preferences and satisfaction levels. Originally developed by Martilla and James (1977), the technique has been refined for better identifying market opportunities within the health care sector by Hawes and Rao (1985).

There are three major advantages of the importance-performance technique over other market analysis procedures. (1) Importance-performance analysis is very easy to use. The level of technical sophistication is not high, and the method does not require any understanding of advanced statistical methods. (2) The results of the procedure clearly indicate how decision-makers should proceed. (3) The procedure provides a graphic illustration of the results. This greatly facilitates the presentation and interpretation of the findings. Often, research findings are not implemented by marketing managers because they do not understand the analytic techniques

¹ The authors gratefully acknowledge the financial support for this project provided by the Research Committee at the University of Akron.

and are skeptical or uncomfortable with the results. The graphic presentation serves to overcome this barrier.

The usefulness of importance-performance analysis in the present study is further supported by recent research on gap analysis which suggests that "clients do evaluate the 'quality' of professional services" (Brown and Swartz 1989). Furthermore, that study, as well as others (e.g., Zeithaml, Berry, and Parasuraman 1988), have very clearly shown that sellers often err in their judgments about consumer satisfaction levels. Consequently, primary research -- rather than executive judgment -- is necessary in order to have a more accurate reading of consumer preferences and satisfaction levels.

Even when consumer perceptions are measured empirically, however, the researcher must view any reports of "high" satisfaction with caution. Past research has shown that consumers are reluctant to complain about a negative service encounter (Quelch and Ash 1981). This may be particularly true in the health care sector due to: generally outstanding performance of health care providers, patient inability to identify poor performance, especially for highly technical procedures, and/or patient reluctance to criticize the medical establishment (Noyes et al. 1974).

How The Technique Works

Importance-performance analysis involves the concurrent examination of consumer (patient) views of the importance of relevant marketing attributes and attitudes concerning the performance of the health care provider in satisfying each of these needs or wants. While knowing the satisfaction level for each of these attributes is useful information, there is great benefit from also knowing the importance of each attribute to consumers. Essentially, the joint understanding of attribute importance and satisfaction has a synergistic benefit to the analyst.

Each application of importance-performance analysis begins with an identification of the marketing factors or attributes which are likely to be relevant to the particular situation being studied. Examples might include: cost, location convenience, quality of service, or any of several other items. Once the list is finalized, consumers rate the importance, then their level of satisfaction for the provision of each marketing attribute.

The overall mean value for each attribute on the importance and satisfaction measures are then computed. A two-dimensional graph with importance representing the vertical axis and the performance scale shown horizontally is then constructed (see [Figure 1](#)). The mean importance value and mean performance rating for each attribute are plotted as points on the four quadrant grid. The quadrant in which each attribute is plotted indicates the appropriate strategy.

Furthermore, a 45 degree diagonal line through the B and C quadrants (see [Figure 1](#)) represents points where the importance and performance

ratings are equal. Thus, any plotted attributes above the diagonal would represent "market opportunities," because importance measures are greater than satisfaction levels. Attributes plotted below the line are "satiated needs" due to satisfaction levels greater than perceived importance (Hawes and Rao 1985).

Applying Importance-Performance Analysis

To develop the list of key marketing attributes for the study previous studies were reviewed (Anderson 1982; Berger and Gultinan 1981; Berkowitz and Flexner 1980-81; Elwell and Cooper 1980; Glassman and Glassman 1981; and Mitry and Smith 1979). These studies suggested a preliminary list of attributes that was further refined by four focus group interviews.

The final survey instrument included twelve optometric services selection attributes and several demographic questions. Respondents were first asked to indicate the importance of each attribute in their most recent selection of an optometrist. A five-point, balanced importance scale ranging from 1 (not important) to 5 (important) was used. Satisfaction with optometric performance of each attribute was also measured. A five-point, balanced scale ranging from 1 (very dissatisfied) to 5 (very satisfied) was used.

A team of personal interviewers was assembled and trained in the administration of the survey. Each was paid on an hourly basis for the time spent in conducting interviews. All of the interviewers were marketing majors at an urban university who had completed a course in marketing research.

Respondents were screened at the beginning of the interview so that only those who had visited an optometrist within the past two years were surveyed. This was done to restrict the sample to consumers who had at least some familiarity and recent experience in the selection of a provider of optometric services. Two hundred and two (202) in-home personal interviews, each lasting approximately one hour, were conducted in upper-middle class neighborhoods of Akron, Ohio, a large, midwestern community.

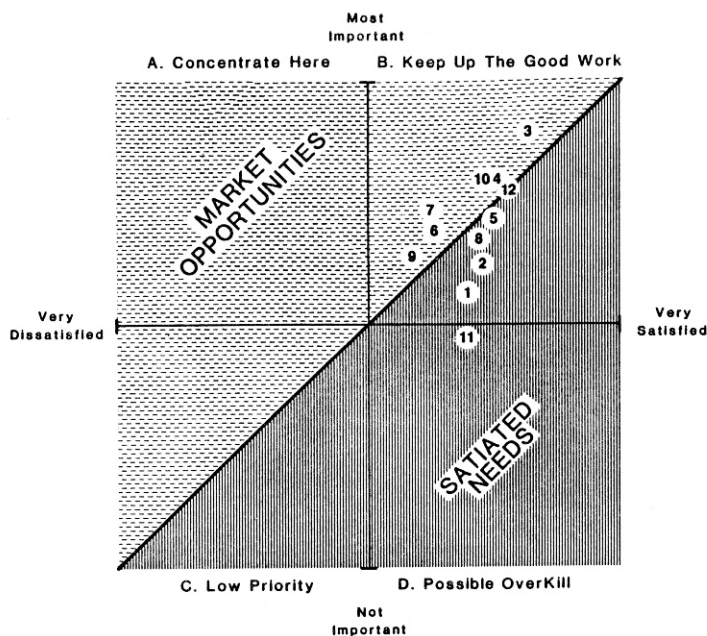
Due to budgetary and other constraints, a purely random sample was not feasible. However, in the researcher's judgment, the sample used in the present study was a good cross section of upper-middle class households in the optometric market. It was a reasonable compromise between exacting scientific specifications and resource utilization.

The Findings

Importance of the Attributes

The results of the research on attribute importance are shown in [Table 1](#). As one might expect for a health care service, quality of care was the attribute with the highest importance value. On a 5-point scale, the mean value was 4.6. Easy to understand explanations of diagnosis/treatment

Figure 1
Importance-Performance Grid^a



^a See Table 1 for a description of each attribute.

was a distant second at 4.19. A very close third was amount of health information provided. Interestingly, both the second and third ranking attributes relate to the optometrist's communication with the patient. The fourth highest mean value was personal attention at 4.13. Reviewing these top four attributes, it is apparent that each relates directly to the individual optometrist providing the professional service and his or her interaction style with the customer. While not entirely oriented to technical expertise, these variables represent well recognized components of the doctor's professional services to his or her patients.

The fifth ranking attribute was cost of services at 3.93. This was probably of even greater concern among the subset of respondents who were not covered by health insurance for optometric services. The sixth attribute was efficient staff. This highlights the importance of managerial skills on the part of the optometrist.

Availability/ease of securing an appointment ranked seventh at 3.72, friendly staff ranked eighth at 3.68, and amount of time spent in waiting room was ninth at 3.60. When considering the scores for the seventh and ninth attributes in relation to quality of care, it is obvious that while consumers want some convenience, this is far less critical than being served by a well qualified optometrist. Also, it is interesting to note that efficiency was more important than

friendliness, for staff members. Again, this clearly shows that consumers valued content (efficient staff) more than style (friendly staff).

Billing procedures/handling of insurance forms, convenient location, and attractive office and facilities were the lowest ranking attributes. This does not indicate that they were unimportant -- only that the others were of even greater importance. In fact, even the lowest ranking factor had a mean value of 2.92 which is only slightly below the midpoint on the 5-point scale. Thus, the hypothesis that these 12 attributes are of importance in the selection of an optometrist was supported by the empirical evidence.

Performance Results

Performance was measured by assessing the level of satisfaction expressed by respondents for each attribute. In general, consumers indicated that they were satisfied with the performance of optometrists. On the 5-point scale, mean values ranged from a high of 4.26 to a low of 3.34 -- still considerably above the balanced scale's midpoint.

The highest mean value was for quality of care, followed by personal attention and amount of health information provided. These averages (each over 4.0 on a 5-point scale) indicate very high satisfaction with the performance of optometrists.

The fourth highest mean value was 3.97 for efficient staff. The next highest ranking mean was 3.94 for easy to understand explanations of diagnosis/treatment. Next was billing procedures/handling of insurance forms at 3.92 and friendly staff at 3.87. Convenient location was the eighth ranking mean value at 3.82.

The ninth ranking attribute in terms of satisfaction was attractive office and facilities, followed by availability/ease of securing an appointment, cost of services, and amount of time spent in waiting room. It should be emphasized that even for these lower-ranking attributes, the mean values are still above the scale's midpoint. While the previously mentioned caution concerning the possibility of consumer "yea-saying" in response to satisfaction with health care services should be considered, there is ample evidence that consumers indicated, for the most part, considerable satisfaction for optometric services.

Importance-Performance Grid Analysis

The results of the research become even more useful when jointly examined by means of the importance-performance grid. There is a synergistic effect from simultaneously analyzing each marketing attribute's importance as well as its satisfaction level. Figure 1 shows the results of this analysis.

By plotting the coordinates of each attribute's importance and satisfaction mean value, the analyst can immediately determine whether the suggested strategy is: (a) concentrate here, (b) keep

up the good work, (c) low priority, or (d) possible overkill. For optometrists serving this market, "keep up the good work" is the strategic implications for all but one of the attributes studied. The remaining variable -- attractive office and facilities (#11) -- fell into Quadrant D. This indicates that the level of satisfaction was high for a variable of low importance. Consequently, optometrists were engaging in "possible overkill" in terms of this marketing variable.

Another output of the grid analysis is an identification of attributes plotted above the 45 degree diagonal line which represent "market opportunities." Here, the mean importance value exceeds the mean satisfaction score. Thus, consumers indicated that providers were not devoting as much attention and resources to the provision of satisfaction as consumers wanted.

Variables plotted below the diagonal line represent "satiated needs." In this case, the mean satisfaction level exceeds the average importance score. Consequently, marketers searching for competitive advantages should not focus here.

In the present study, seven attributes had higher importance than performance mean values. The magnitude of this difference reflects the relative extent of marketing opportunity. In the present study, the attributes representing market opportunities included: cost of services, quality of care, amount of time spent in waiting room, easy to understand diagnosis/treatment, availability ease of securing an appointment, amount of health information provided, and personal attention.

Five marketing attributes were determined to represent "satiated needs." Efficient staff, friendly staff, billing procedures/handling of insurance forms, convenient location, and attractive office and facilities do not appear to be areas where competitive advantage can easily be gained.

Discussion

Of the seven market opportunities, amount of time spent in waiting room and availability ease of securing an appointment represent managerial functions. Easy to understand diagnosis/treatment, amount of health information provided, and personal attention reflect the optometrist's interpersonal skills and communication from his/her organization. Both of these areas seem to offer low cost opportunities to establish competitive advantage and simply require sensitivity and managerial attention on the part of optometrists.

One of the two remaining market opportunities is cost of services. It may be more difficult to increase customer satisfaction without sacrificing profits here. Perhaps, however, there is a market need for a lower-end offering. Customer perceptions of quality of care also offers an important area for improvement. This may warrant additional research to identify specific dimensions of "quality." Perhaps the most beneficial

aspect of this research is to motivate optometrists to take advantage of the five "importance/satisfaction" gaps that seem relatively easy to meet.

This research has examined consumer (patient) perceptions concerning the provision of optometric services. In essence, it provides a succinct, yet thorough examination of the market for optometrists. While the sample was not one from which global generalizations can be drawn, it is thought to reasonably represent a mainstream segment within this overall market.

The "fallacy of the means" concept deserves some consideration in reviewing these results. This concept suggests that if a person has one hand in boiling water and another frozen in ice, his hands are, on the average, comfortable. Any marketing analysis procedure which concentrates on "average" values must confront this issue, especially if the market might be highly segmented when distinct subgroups have highly variant needs and wants.

In the present research, the fallacy of the means does not appear to be an issue -- at least in terms of demographic segmentation. To determine whether the market could be divided into distinct demographic subsets, several multivariate analysis of variance (MANOVA) procedures were conducted. In each separate application, the twelve importance measures or the twelve performance values for each of the twelve attributes represented the multiple intervally scaled criterion variables while one particular demographic variable was used as the categorical predictor variable. Consequently, first for the importance measures, then for the satisfaction measures, a total of 20 separate MANOVAs were performed.

There was no evidence of distinct market segments based on any of the 10 tested demographic variables: sex, marital status, years of education, age, employment status of husband, occupation of husband, employment status of wife, residence type, or income. Therefore, at least in terms of several commonly used demographic segmentation bases, there was no indication that the fallacy of the means concept is present in this study. Of course, other segmentation bases, especially psychographics, could be involved.

Finally, it is interesting to note that the attributes which have driven the recent development of megopticals (low cost, convenient location, no waiting, and lavish facilities) were not among the most important factors in the present study concerning the selection of optometrists. If the fallacy of the means concept is not present (as the demographic evidence indicates), this may suggest that customer needs within these two sectors (retail eyewear provision versus optometry), are more distinct than originally believed -- certainly more distinct than was the case before 1978 when the two were usually jointly provided. Even though cost and waiting time represent the first and third most significant gaps in importance versus satisfaction for optometrists, the remaining evidence does not support the notion that the strategies successfully used

TABLE 1

Importance and Performance Ratings
of the Attributes for Optometrists

Attribute Number	Attribute Description	Importance Rating ^a	Importance Rank	Performance Rating ^b	Performance Rank
1	Convenient location	3.36	11	3.82	8
2	Billing procedures/ handling of insurance forms	3.46	10	3.92	6
3	Quality of care	4.60	1	4.26	1
4	Amount of health information provided	4.18	3	4.05	3
5	Efficient staff	3.81	6	3.97	4
6	Availability/ease of securing an appointment	3.72	7	3.54	10
7	Cost of services	3.93	5	3.47	11
8	Friendly staff	3.68	8	3.87	7
9	Amount of time spent in waiting room	3.60	9	3.34	12
10	Easy to understand explanations of diagnosis/treatment	4.19	2	3.94	5
11	Attractive office and facilities	2.92	12	3.76	9
12	Personal attention	4.13	4	4.08	3

^a Where importance ranged from 1 = not important to 5 = most important.

^b Where performance ranged from 1 = very dissatisfied to 5 = very satisfied.

by megopticals for retail eyewear provision could be exactly duplicated for the optometric services sector of this industry.

Perhaps the previously described perception of a fashion-orientation for retail eyewear provision can accurately be contrasted to a continuing perception of a medical-orientation for optometric services. While it would be imprudent to draw global generalizations from these findings, this study provides considerable insight into the changing market for optometric services as "Eyeglasses II" takes effect.

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The Effect of Negatively Stated Disclosures in Legal Ads
on Consumer Perceptions of the Lawyer:
An Exploratory Study

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Abstract

With the advent of lawyer advertisements, regulation of such ads also materialized. Some states, such as Texas, have since adopted a system of legal specializations within the practice of law. The regulation of legal ads in Texas has taken a specific form when they indicate a legal specialty. The requirement is that any ad suggesting a specialty must state whether the lawyer has been designated a specialist in that area.

The present study was designed to test the communication effect of the required disclosures. The results indicate a denigration of uncertified lawyers advertising specialties. This does not appear to have been the intent of the required disclosure and the study suggests that such specific regulations should be tested before implementation.

Introduction

In 1969, The President of the State Bar of Texas appointed the Special Committee on Advisability of Specialization Recognition with the manifested intent that "The State Bar of Texas should proceed to regulate specialization rather than allow its development without adequate protection to the public and that certification of specialists in certain defined fields would be beneficial to both the public and the Bar (Wells 1978, p. 688)." By 1974, the plan for legal specializations was approved. The philosophy supported is expressed in the State Bar of Texas Plan for Recognition and Regulation of Specialization in the Law (1986) as "To promote the availability and quality of the services of lawyers to the public in particular fields of law is to serve the public interest and advance the standards of the legal profession." Eleven fields of specialization were developed as were the requirements for being designated a specialist in one or more the areas.

Once advertising of legal services was legalized in 1977, the regulation of it with respect to legal specializations became important. How should advertisements containing references to specialization be controlled? The method decided upon was a quite simple one. If an advertisement for legal services refers to or suggests a particular specialization in practice for which the lawyer is not certified, the affirmative disclosure, "Not certified by the Texas Board of Legal Specialization" must be included in the ad. If the lawyer is certified in the area suggested in the ad, he/she must include the disclosure, "Certified by the Texas Board of Legal Specialization in [specialty area]."

What was apparently not considered was the impact the disclosure might have as stated. With respect to certified lawyers, the intent would seem clear. The disclosure should communicate to the consumer that the lawyer advertised has special credentials in that area. This is, of course, true since the lawyer does have to meet requirements in that area exceeding those of uncertified lawyers, but it is not necessarily related to the lawyer's competence. A lawyer might practice a specialty area successfully for many years and not choose to become certified. It must have been believed that positive disclosure would communicate this. A serious question arises, however, regarding the negative disclosure required of uncertified lawyers.

It would not seem the intent (which must be inferred) would be to damage the image of lawyers who are not certified, but only to communicate that they are not "specialists" in that area. Herein lies the difficulty. If consumers do not interpret the disclosure in the intended way, the result might well be an unintended denigration of the specific lawyer and, but more significantly, the legal profession in general. This certainly is not the intent of the disclosure. Thus, if it can be inferred that the intent of the disclosure requirement is to portray higher quality among certified lawyers while not damaging uncertified lawyers, since certification is in no way mandatory, some question as to the efficacy of the disclosures, as required, in accomplishing the objective must be raised.

The purpose of this study is to examine the question of efficacy in both the positive and negative disclosures. Does the positive disclosure enhance the perception of certified lawyers, and does the negative disclosure actually damage the perception of uncertified lawyers who, through experience, might be as good or better than a certified lawyer in the same area? In short, is the inferred intent of the disclosure accomplished?

While Texas is the only state requiring this exact disclosure, all states have some form of regulation over attorney advertising. The Supreme Court ruled that misleading advertising was not protected by the first amendment but that regulation was to be left in the hands of the individual states. In the case of direct mail advertisements, for example, 18 states have adopted the American Bar Associations model rule or some variation of it to control this type of advertisement. So the form of regulation varies somewhat from state to state, but regulation exists in all of them. Thus any form has substantial national public policy implications since it may become a model for other states.

Review of Literature

Two bodies of research were examined for purposes of the present study. These were the areas of deceptive advertising/affirmative disclosure and the processing of negative information. While there is no deceptive advertising per se in this study, the topic of this paper really relates to the efficacy of corrective advertising in changing consumer opinions through a form of affirmative disclosure. And since the disclosure that is required by law is a negatively stated one, the efficacy of negative information in communicating a message is also relevant and may have profound public policy implications.

The impact of negative information is relevant for the present study in two respects. The first relates to the likelihood of attending to the information that is available and the second is the comprehensibility of information that is processed. Since the disclosures required by law mandate that a lawyer affirm the fact that he/she is not certified by the Board of Legal Specialization, the semantic structure of the message is more complex and more unique in advertising which, except in cases of corrective advertising, generally does not focus on what the object of advertisement is not. The more frequent case is a positive disclosure about what the object is.

With regard to the impact of negative information, Abelson and Kanouse (1966) conclude, "There are many observations and studies suggesting that negative information about people is more compelling than positive information (p. 196)." It was further concluded by Kanouse and Hanson (1971) that negative data about objects affect attribute judgments more than positive data. These two conclusions, combined with the novelty aspect of a negative disclosure in an advertisement, suggest that such information is more likely to be attended to and used in assessing the object of an ad, the lawyer, in this study.

This is further complicated by the fact that negatively phrased information has been demonstrated to be more semantically complex and, consequently, more difficult to analyze correctly. Trabasso, Rollins and Shaughnessy (1971) demonstrated that reaction time in processing negations exceeds that for positives and that greater error rates were attributed to negations. Clark and Chase (1972) demonstrated that both reaction times and errors increased when comparing negative sentences to pictures than when comparing positive sentences. While reaction time is not a factor in viewing advertisements, the increased semantic complexity attributed to negations is important for purposes of this study since the likelihood of errors in processing increases.

This review suggests information in advertisements that is negatively phrased is likely to attract the viewers attention more than the same information phrased positively. Further, the semantic properties of negations might lead to

confusion as to the meaning of the statements and, thereby, induce perceptions that may not have been intended and could be false.

Jacoby, Nelson and Hoyer (1982) distinguish between corrective advertising and affirmative disclosure. They state that corrective advertising is for the purpose of correcting erroneous beliefs while the objective of affirmative disclosure is to instill new beliefs. While substantial research has been directed at corrective advertising (Armstrong, Guroi and Russ, 1979; Dyer and Kuehl, 1974; Mizerski, Allison and Calvert, 1980), relatively little relates directly to affirmative disclosures. This is particularly true where no deception has been involved.

Of the research cited, only Jacoby, Nelson and Hoyer (1982) consider the form of the message as an important dimension. The research in corrective advertising focuses more on measurement (Armstrong, Guroi and Russ, 1979), medium (Mizerski, Allison and Calvert, 1980) and altering attitudes where deception has already occurred (Dyer and Kuehl, 1974). Of particular importance for the present study is the Jacoby, Nelson and Hoyer finding that, consistent with previously cited research on information processing, negatively phrased disclosures would be more often misunderstood than positively phrased disclosures. The authors "strongly confirmed" the hypothesis that positively worded statements were better understood than negatively worded ones. And as Funkhouser (1984) states, "Comprehension, therefore, is the key step in communicating affirmative disclosure messages, for if consumer comprehension fails, the message cannot have the intended, beneficial impact on beliefs and/or behavior (p. 27)." He further concludes that indirectly stated messages lead to comprehension problems and that problems in affirmative disclosures can arise when consumers generalize the disclosure beyond its intended meaning.

On the basis of the research on negative information and affirmative disclosures, the hypotheses for the present study can be formed.

H1: Negatively worded advertising disclosures will produce proportionally more significant differences in consumer evaluations of lawyer attributes than positively worded disclosures when compared to advertisements without disclosures.

H2: Negatively worded advertising disclosures will result in significantly lower consumer evaluations of lawyer attributes than advertisements without disclosures.

H3: Positively worded advertising disclosures will result in significantly higher consumer evaluations of lawyer attributes than advertisements without disclosures.

Methodology

Two studies were performed, of which the first was designed to develop the items for the questionnaire for the second. The second study was to assess the subjects' attitudes toward the lawyer in an ad using the questionnaire developed from the results of the first study.

Study 1

Subjects. The subjects in Study 1 were undergraduate students enrolled in business classes. The sample consisted of 46 individuals who participated on a voluntary basis while in class. Test instruments were distributed randomly to all students in the class with the instruction that those who did not wish to participate could return the form uncompleted.

Experimental Stimuli. The test instruments used in Study 1 were three print ads developed for the study. Three versions of an ad which appeared in a daily newspaper were modified for use in this study. The versions were identical except for the type of disclosure included. One version contained the negative disclosure, "Not certified by the Texas Board of Legal Specialization." The Second version contained the positive disclosure, "Certified by Texas Board of Specialization - Consumer Bankruptcy Law." The control ad was the same as the other two, but with no mention of certification, i.e., no disclosure. The name, address and phone number were altered from the ad which actually appeared so a familiarity factor would not manifest itself in the results, but the structure of the ad was the same.

The instructions to the subjects, included below the ad, specified that the ad had appeared in a major newspaper and gave the date. They were asked to read the ad and then describe the lawyer in the ad in their own words.

Results. The test instruments were analyzed by the researchers who noted any adjectives or phrases that the subjects had used in describing the lawyer in the ad. Those that appeared were then categorized to determine if consistent patterns developed. The result of this subjective evaluation was then used to develop a closed end questionnaire to be used in Study 2.

The categories that were developed included ethical standards, licensing, experience, training, fees charged, education and degree. Variations of these categories appeared in all three versions of the ad and none appeared unique to any version. In addition, many subjects commented on poor wording in the ad itself. The researchers concurred and the ad was modified accordingly for Study 2.

Study 2

Subjects. The sample for Study 2 consisted of 116 undergraduate students enrolled in business courses, none of whom had participated in Study 1. Subjects again participated on a voluntary basis. The subjects were split into three

groups and the test instruments were assigned at random to the groups. The groups were physically separated to insure that each was not aware that alternative forms of the test instrument were used.

Experimental Stimuli. The test instruments for Study 2 were the same versions of the ad for Study 1 with only a minor modification in wording for clarification. All three versions were still identical to each other with the exception of the disclosure used. The same three disclosures were used here as were used in Study 1.

Questionnaire. The final questionnaire used in Study 1 contained 18 items. The first 11 were five point Likert scales with choices from "strongly agree" to "strongly disagree." The 11 phrases were developed from the results of Study 1 with the addition of three of specific interest to the researchers. The orientation (positive or negative) of the statements was determined randomly as was the order in which they appeared.

The next five items asked for the subject's perception of the lawyer's years of experience (1-10 or more), years of law school (1-10 or more), hours of continuing education (5-50 or more in increments of 5), success rate (10%-100% in increments of 10) and fees (10\$-100\$ per hour in increments of 10). The final two questions asked if the subject would recommend the lawyer to a friend and if he/she knew what the Texas Board of Legal Specialization was. In the last seven questions the subject was asked to circle the response that corresponded to his/her belief about the lawyer.

Analysis. The data for Study 2 were analyzed using Analysis of Variance with each of the two experimental groups (positive and negative disclosures) being tested against the control group (no disclosure). Because of the exploratory nature of the study, an alpha of .10 was considered an acceptable level of significance in rejecting the null hypotheses.

To determine if all the Likert scales constituted separate dependent variables, a factor analysis using Varimax rotation and a cutoff eigenvalue of one was performed. The result of this analysis suggested that only two clear factors existed. Each contained only two of the items. As a result of this, "is licensed to ..." was combined with "has a valid law degree" for one factor and "is concerned ..." was combined with "would take advantage ..." for the second factor. These two factors were named "credentials" and "concern" respectively. The remaining seven items were analyzed as separate dependent variables. Thus there were nine dependent variables found within the Likert scales and ANOVA was performed on each.

Analysis of Variance was also used to analyze the remaining five interval scales for specific characteristics of the lawyer. Each of these was considered a separate dependent variable in the analysis.

The last variable, "Do you know what the TBLS is?" was not analyzed since no variation in response resulted. No respondent knew what the TBLS was. The variable "would you recommend this lawyer ...," was analyzed using Chi Square analysis since it produced nominal data.

For testing hypothesis 1 regarding the frequency of significant results, a binomial test for two proportions was used. Since the two groups are independent, the proportion of significant results should be the same for the positive and negative disclosures.

Results. Hypothesis 1 suggests that a greater frequency of significant results should occur for negatively worded than positively worded disclosures. The final proportions of successes were .40 and .13 for the negative and positive disclosures respectively. Using a binomial test for the difference between two proportions, the null hypothesis was rejected with $p < .01$. There were significantly more significant results for negative than positive disclosures as hypothesized.

Table 1 presents a summary of the results of the Analyses of Variance. Of the nine Likert scales, three were found to be significant for the negative disclosure. These were "charges less than other lawyers," "has respect for the law" and "I would consider using this lawyer." In addition, each was significant in the hypothesized direction with the negative disclosure having the lower mean rating. It should be noted that a higher score for "charges less ..." means his fees are lower. For the positive disclosures, one of the dependent variables, "concern" was significant and it was also significant in the predicted direction with the positive disclosure yielding a higher evaluation than the control.

TABLE 1
MEANS FOR EACH ITEM

	Version		Version	
	Cont	Neg	Cont	Pos
Concern	2.7	2.6	2.7	2.9
Credentials	3.1	3.3	3.1	3.5*
Ethics	2.7	2.5	2.7	2.5
Experience	2.5	2.6	2.5	2.7
Training	2.6	2.4	2.6	2.6
Advantage	2.6	2.4	2.6	2.8
Fee	3.0	3.4*	3.0	3.0
Respect	3.1	2.7**	3.1	3.4
Use	2.0	1.6*	2.0	2.4
Education	3.5	2.3	2.5	2.6
Yrs. Exper	3.3	3.2	3.3	4.2
Yrs. Educ	4.1	3.1**	4.1	4.0
Cont. Educ	18.3	15.8	18.3	22.1
Success	37.9	27.3**	37.9	35.0
\$/hour	35.9	25.6**	35.9	47.6**

* significant at $< .10$

** significant at $< .01$

For the remaining variables under the negative disclosure, three of the dependent variables, years of education, success rate and fee per hour were highly significant. In addition, each

was significant in the hypothesized direction with the negative disclosure yielding a lower evaluation than the control.

In the positive disclosure, only one of the remaining variables was significant. Fee per hour was significant in the predicted direction with the positive disclosure version yielding higher perceived fees than the control.

To analyze the variable "would you recommend...?", the "yes" response was removed since only one subject responded in that category. For the remaining responses the Chi Square was significant ($p < .05$) indicating a relationship. For the negative disclosure and control versions the pattern of responses are approximately equal. But for the positive disclosure, fewer subjects said "no" and more said "maybe" indicating a greater likelihood of recommending the lawyer when the positive disclosure is made.

Thus hypotheses 2 and 3 are confirmed from these results. In cases where a negative disclosure was significant, it resulted in lower evaluations of the lawyer in the ad. When a positive disclosure was significant, it yielded a higher evaluation of the lawyer.

Summary and Conclusions

Since the legalization of advertising for lawyers, most states have adopted some form of regulation regarding these advertisements. While the states may vary in their methods, two things are evident. They all do it and they tend to look to the American Bar Association and to each other for direction. Thus practices in any one state have potential significance for all the others.

Among those with specific guidelines regarding legal specializations, Texas has one of the most specific laws. If a lawyer who is not a certified specialist in an area of law which he/she advertises specifically, the negative disclosure, "Not Certified by the Texas Board of Legal Specialization" is required. A certified lawyer who advertises a specialty must use the positive disclosure, "Certified by the Texas Board of Legal Specialization in [area of specialization]." The message communicated by these disclosures has not been adequately studied however, and previous research in related areas suggests the message intended and the message received may be different.

Though no precise statement of intent has been made, it can be inferred that the purpose of the positively stated disclosure is to enhance the perception of the lawyer since he/she does, in fact, have credentials beyond those of an uncertified lawyer. Since certification is not a requirement of Texas law and since a major criterion for certification is five years of practice with a substantial involvement in the particular field of law, the intent of advertising regulation is to promote certified lawyers but not to denigrate uncertified lawyers. On

the basis of these inferences, the message communicated by the disclosures was tested.

On the basis of previous research three hypotheses were developed. These were that more differences would occur for negatively worded disclosures, negatively worded disclosures would result in diminished evaluations and positively worded disclosures would result in enhanced evaluations. All three of the hypotheses were confirmed in the study. While significant differences were not attained in all of the scales, in each case where one resulted, the difference was in the hypothesized direction.

As negatively phrased disclosures tend to draw more attention to the lack of specialization, the fact that only one respondent in 109 indicated any knowledge of the Texas Board of Legal Specialization may help to explain the adverse reaction to the negative disclosure. This lack of

knowledge might result in adverse inferences by viewers of these ads well beyond their intended effect. Some respondents in Study 1 even suggested the lawyer in the ad with the negatively phrased disclosure was practicing without a license. Future research should focus on this aspect of the negative disclosure. If respondents know what certification is, will the reaction still be adverse?

While the present study was exploratory in nature, two policy implications are clear. First, a clear statement of the intent of advertising controls needs to be established. Second, thorough examination of the communication effects of any form of advertising control should be carried out on a regular basis.

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LAWYERS' PERCEPTIONS OF CLIENT DISSATISFACTION

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Abstract

Many professionals have developed an interest in issues relating to the marketing of their services. In spite of the increased use of marketing techniques, there is some question as to whether a true sensitivity to client needs has been developed. One test of such a proposition is to consider how firms of professionals respond to client dissatisfaction. This paper describes a study conducted among managing partners from 147 law firms. The results suggest that while some lawyers are sensitive to client dissatisfaction, relatively few firms have implemented any policies regarding complaint management.

Introduction

Practitioners in various professions are awakening to the need to become more sensitive to client concerns. The legal profession provides several examples of the apparent adoption of a more marketing oriented philosophy including extended office hours, the increased use of non-traditional locations such as shopping centers, and experiments involving open pricing. A further illustration, albeit controversial, is that of lawyer advertising which often generates debate as to whether such promotion is beneficial or detrimental to the general public.

In spite of the application of some of the techniques of marketing, the question remains concerning the extent that law firms can be said to have accepted, or even considered, the marketing concept as a basic operating philosophy. One test of such a proposition would be to look to the area of complaint management since organizations which are sensitive to and respond to customer dissatisfaction are likely to be adoptees of the marketing concept. While customer dissatisfaction has received considerable attention in the product literature, relatively few studies have been directed to services, and fewer still have involved clients of professional services. The investigation described in this paper sought to assess lawyers' perceptions of the extent of client dissatisfaction and to identify how the managing partners of law firms have responded to this challenge.

Background Literature

Customer dissatisfaction has been a popular subject in both the academic and trade literature. Much of the former has been directed to the development and testing of taxonomies of the consumer complaint process (e.g. Hirschman 1970; Day and Landon 1977).

While differing in their specifics, most models utilize a "walk, talk, squawk" conceptualization. According to these models, a dissatisfied consumer may decide to change suppliers or brands (walk), engage in negative work-of-mouth (talk), or complain to the firm, authorities, or media (squawk). Given these alternatives, it is apparent that most managers would prefer that dissatisfied customers complain directly to the firm. Indeed, the literature frequently suggests that organizations do what they can to facilitate complaints. Fornell and Wernerfelt (1987) further demonstrate that proper complaint management can actually lower total marketing expenditures, especially in the area of promotion.

An quick review of trade sources suggests that the reports of the Technical Assistance Research Programs, Inc. (1979, 1986) have had an especially strong influence on industry. In fact, the TARP findings have been reported so often in the business press that they appear to have become operating principles for complaint managers. The list of maxims offered by Rhoades (1988) is typical.

- The one unhappy customer you do hear from represents 26 others, six with serious problems.
- It costs five times as much to find a new customer as it does to keep an existing one.
- If complaints are handled quickly, 95% of customers will remain loyal.
- A dissatisfied customer will tell 10 other people about the experience.
- Complaint management can be both a profit center and a useful competitive tool.

While the above statements are undoubtedly overly generalized, there is reassurance in the fact that the academic and trade literature lead practitioners to the same general conclusions.

In particular, both provide that customers must have the opportunity to express dissatisfaction at its earliest possible stage of development. Each emphasize that a dissatisfied customer must not be viewed as an "enemy" but rather as an opportunity to not only cultivate a repeat customer, but to develop an organization which is more responsive to the market. Even the issue of implementation seems adequately covered in both the academic and business literature (Moyer 1984).

Services and Professional Services Literature

The research relating to dissatisfaction among consumers of services represents only a small proportion of the total body of relevant literature. There is some evidence that dissatisfied consumers of services are less likely to act on their concerns than are dissatisfied consumers of products, whether durables or non-durables (Day and Bodur 1978). This general reluctance to complain about services probably stems from their intangibility which makes comparisons to quality standards the more difficult.

Clients of professional services face a particular challenge in assessing quality levels. Each of the key elements of the satisfaction/dissatisfaction process—expectations, perceived performance, and post-purchase judgement—present the client with difficulty. As noted by Hite and Fraser (1988), professional services are complex (performance is difficult to judge), their effects are often delayed (post-purchase judgement), and usage may be so infrequent as to prevent a consumer from collecting enough information to develop informed expectations of quality. Expectation formation is frequently made the more difficult by the lack of price signals. A further complication concerns the service provider. Brown and Swartz (1989) observe that professionals frequently, "... appear to be more task and self-oriented than client oriented." Such a description could be taken from an introductory marketing text describing production orientation.

While several authors have utilized legal services in their research and one paper even identifies a number of marketing tactics which might be applied to the management of a legal practice (Darden et al; 1981), hard data relating to the extent of dissatisfaction are not easy to come by. An interesting source of information comes from the Office des Professions de Quebec, a Government Department which serves as an initial mediator and clearinghouse for complaints regarding all professions in that Province. Statistics cited for 1986 indicate that 277 complaints were received per 1000 lawyers practicing in that jurisdiction (Protect Yourself 1987). By way of comparison, there were 142 complaints per 1000 dentists and 49 per 1000 physicians. Indeed, of the 40 professions for which statistics are cited, only opticians (340) and notaries (469) received higher rates of complaint than the legal profession. Based on these comparisons, it would seem that client dissatisfaction should be of interest to the legal profession, especially to managing partners.

Development of Research Propositions

In many jurisdictions, the legal profession operates under a very formal system of complaint handling. Dissatisfied clients may exercise the

option of lodging a formal complaint, usually in writing, with the appropriate Law Society. This time consuming, quasi-legal procedure may well discourage all but the most enraged of dissatisfied clients but also flies in the face of the most fundamental principle of complaint management, namely to encourage the customer to bring complaints directly to the seller at the earliest possible time.

Preliminary discussions with several law firms, suggested that the profession is in a state of transition; some firms have developed some form of "complaint management" while others remain at a more preliminary stage. This postulated difference in responsiveness to clients gave rise to a series of research propositions. The first such proposition was that members of the two groups would differ in their perception of the extent of dissatisfaction among clients. If one assumes that all clients are perfectly satisfied or, at least, that the extent of dissatisfaction is minimal, then any energy devoted to dealing with dissatisfaction would be wasted. In contrast, of course, a lawyer more receptive to client concerns would be more sensitized to the issue.

Proposition One: Responsive lawyers perceive higher levels of client dissatisfaction than do less responsive attorneys.

A second possible explanation for a difference in responsiveness might be traced to satisfaction with the existing, formal system. Simply stated, a belief that the existing system is working may dissuade a managing partner from devoting resources to a system of complaint management within the firm.

Proposition Two: Responsive lawyers are less satisfied with the existing formal system than their less responsive colleagues.

A jaundiced observer might point out that the whole issue of dissatisfaction can safely be ignored provided most clients find it difficult to engage in behavior that is detrimental to the firm. Indeed, it may be that many dissatisfied clients do not walk, talk, nor squawk but simply do nothing. Accordingly, the following proposition was tested.

Proposition Three: In comparison to responsive lawyers, non-responsive lawyers perceive a lower likelihood that dissatisfied clients will undertake some action.

Yet another possible reason for failing to develop a system to deal with dissatisfaction may stem from the perceived reasons for complaints. In preliminary interviews, several tentative explanations for dissatisfaction were suggested. While acknowledging that perhaps some dissatisfaction could be laid at the doorstep of the lawyer, it was suggested that much dissatisfaction could be traced to the nature of the legal system ("There are winners and losers - winners are happy, losers aren't"). Another suggestion was that some

people are chronic complainers who will never be satisfied ("Complainers complain. Period.") or were simply people who had little understanding of the complexities of the law thus making some disappointments inevitable. Such explanations gave rise to the following proposition.

Proposition Four: In comparison to responsive lawyers, non-responsive lawyers are more likely to attribute client dissatisfaction to factors beyond the personal control of the practitioner.

In the preliminary stages of the study a series of descriptive factors were identified that might distinguish between responsive and non-responsive lawyers. Some of these factors relate to the nature of the firm including size and whether it was located in an urban or rural setting. Other factors concern the individual lawyer including years at the bar and the extent to which the individual had the opportunity to specialize in a preferred area of practice.

Proposition Five: Responsive and non-responsive lawyers differ in certain descriptive categories associated the individual and the law firm.

Methodology

A major issue in designing the questionnaire concerned the measurement of responsiveness to dissatisfied clients. One behavioral and one attitudinal measure were developed. The first measure required a series of questions dealing with the extent to which the firm followed-up with clients after a file was closed; whether there was an established firm policy in this area; the reasons for the policy, if any, and so on. This measure follows from suggestions in the literature that professionals must be proactive in dealing with dissatisfaction. The second measure was concerned the respondent's attitude toward complaints, whether they should be encouraged, and why. Since responsiveness implies behavior, any attitudinal measure of such a variable must be considered a proxy indicator. While "receptiveness" would perhaps be a more accurate descriptor for an attitudinal measure, the terms responsiveness and receptiveness are used interchangeable throughout this paper.

The extent of perceived client dissatisfaction was measured simply by asking the respondent to estimate the percentage of clients that are dissatisfied with the quality of legal service received from their firm and, secondly, from the profession in general. Also employed was a five point agree-disagree item concerning client satisfaction. A similar response format was utilized for items directed to satisfaction with the existing formal system and satisfaction with the firm's approach to client dissatisfaction. Additional items concerned the nature of complaints and whether such complaints might be attributable to lawyer (especially in the area of client communication), the client, or the nature of the law. Respondents were also asked to indicate which group, if any, exhibited the

greatest propensity to express dissatisfaction. Respondents could select from different categories of age, education, income, and sex or, in each case, indicate that complaint behavior was unrelated to the variable.

A modification of the scale developed by Singh (1988) was utilized to measure the respondents' perceptions of the likely behavior of dissatisfied clients. According to Singh, consumers engaged in three types of complaint behavior (CCB). Voice behavior is directed to parties directly involved in the exchange, such as the retailer or the manufacturer. Third party actions are directed to official bodies while private actions involve interaction with friends and associates. Respondents were asked to use a four point scale to indicate the likelihood that dissatisfied clients would engaged in the behavior described in the items.

Finally, a variety of descriptive information was collected including the size of the firm, the respondents preferred area of practice and the percentage of time spent in that specialty, and the number of years at the Bar. Locations of firms were also recorded with lawyers practicing in either or both of the two largest cities, each with a population of 200,000, classified as urban. Since next largest community has a population of only 35,000, the remainder of the sample was termed rural.

A questionnaire was mailed to the managing partner or sole practitioner of each of the 270 law firms in the Province of Saskatchewan. In all cases, the respondent was asked to answer the questions with respect to individual clients as opposed to corporate or government accounts. The initial mailing yielded 110 responses with a second mailing resulting in an additional 39 returns. Of the total of 149 questionnaires, 147 were usable resulting in a response rate of 54%. A comparison of the pattern of answers between the first and second wave revealed no significant differences. Further, when the responses were grouped into urban and rural categories, the proportions were consistent with the overall population. The relatively high response rate combined with the above test results serve to reduce any concerns associated with non-response error.

Three scales were developed for the investigation associated with the sources of client dissatisfaction, whether the client (7 items), the lawyer (7 items), or inherent in the nature of the law (8 items). While a factor analysis provided some support for this distinction, the reliabilities of the individual summated scales ranged between .57 to .64. These low alpha coefficients are at a level of minimal acceptance and suggest that the scales are promising but require further refinement.

Results

Two potential measures were utilized to distinguish between responsive and non-responsive lawyers. The first measure was directed to the issue of client follow-up. While only nine firms indicated that they had a standing policy in this area, 100 firms reported that they sometimes engaged in follow-up activities. Analysis of the answers provided to an open question revealed quite a different picture. By far the most frequently reported follow-up activity was the mailing of reminders to past clients that their wills should be updated. Other answers referred to the use of Christmas cards and receptions for major clients. Only one firm reported administering spot checks to measure the level of client satisfaction. While this variable was discarded from further analysis, its use did prove instructive. It would appear that many law firms have not progressed very far in the area of complaint management.

The attitudinal measure was derived from responses to several questions which related to the value of complaints from clients. Answers to an open question proved especially informative as they provided the means to distinguish between a receptive group, those respondents with an apparent concern for clients, and a less receptive category of lawyers who stated or implied that complaints should be discouraged or, at best, tolerated. This classification proved relatively easy to execute. The two authors achieved high inter-judge reliability with 134 identical classifications based on independent sorts. Consensus was quickly reached for the remaining 13 sample members.

In view of the exploratory nature of the study, the research propositions were tested at a 90% confidence level. Table 1 presents data associated with the first and second research propositions. As indicated, lawyers who are more responsive to client complaints appear to be more sensitized to client dissatisfaction. It is also of interest that lawyers demonstrate a commonly observed trait of believing that their firm better serves the customer than does the industry as a whole. No support was received for the proposition that less responsive lawyers would be more supportive of the formal complaint mechanism employed by the Law Society. While it is dangerous to draw conclusions in the absence of norms, a rating of 3.8 on a 5 point scale suggests something less than enthusiasm by either group of lawyers.

TABLE 1
PERCEIVED EXTENT OF
CLIENT DISSATISFACTION

	Responsive n = 77	Non-responsive n = 70	
% of clients dissatisfied with the services of the profession in general	13.3	8.3	p < .01
% of clients dissatisfied with the service of the firm	3.9	2.8	p < .10
Clients are generally satisfied with quality of legal services received (5 = strongly agree)	4.0	4.1	n.s.
In general, I am satisfied with the formal complaint handling mechanism of the Law Society (5 = strongly agree)	3.7	3.8	n.s.
In general, I am satisfied with our firm's approach to complaint management (5 = strongly agree)	4.2	4.3	n.s.

The information presented in Table 2 contrasts the two respondent groups based on their expectations of the actions likely to be taken by dissatisfied clients. The two groups proved virtually identical in their perceptions of client complaint behavior. Clearly, any differences between the groups in the area of complaint management are not based on differing beliefs as to the likelihood that clients will engage in behavior which is negative to the firm. This finding may be viewed in a positive light since it suggests that those firms that are reacting to client concerns are not doing so simply to preempt negative client behavior.

TABLE 2
PERCEPTIONS OF
CLIENT COMPLAINT BEHAVIOR (CCB)

	Responsive n = 75	Non-responsive n = 67	
Do nothing (4 = extremely likely)	2.3	2.2	n.s.
Voice CCB	12.2	12.1	n.s.
Third Party CCB	3.7	3.6	n.s.
Private CCB	11.8	11.9	n.s.

Table 3 presents data associated with the fourth research proposition, namely that the two groups could be distinguished based on their perceptions of the sources of client discontent. The data supports the suggestion that responsive lawyers are more willing to acknowledge that at least some of the reasons for client dissatisfaction may be due to factors under the control of the attorney. In the predicted direction, but just outside the limits for statistical significance, is the finding that less responsive lawyers are more likely to see the client as being the source of the problem. Neither group was more likely to stereotype complainers; in each case approximately 50% of respondents identified at least one demographic factor as characterizing people with, "the greatest propensity to express dissatisfaction."

TABLE 3
SOURCES OF CLIENT DISSATISFACTION

	Responsive n = 76	Non-responsive n = 68	
Factors under the control of the lawyer	27.8	26.3	p < .05
Factors associated with the client (unavoidable)	22.3	23.2	n.s.
Factors associated with the nature of the Law (unavoidable)	24.1	23.2	n.s.

The final research proposition suggests that certain descriptive factors are related to the relative responsiveness of the two groups tested. Several differences were identified. In contrast to the traditional image of the "country lawyer", the responsive lawyers proved more likely to be found in urban settings (Chi-square; $p < .05$) and to practice in larger firms (t-test; $p < .10$). Perhaps the rural lawyer faces a less competitive market and therefore sees few tangible benefits of client management. Alternatively, lawyers in small towns have little opportunity to specialize and may be so overwhelmed by day-to-day tasks that they do not have the time to consider the longer term issue of client dissatisfaction. Supporting this latter explanation is the finding that client sensitive attorneys spend 68% of their time working within their preferred specialty as opposed to only 55% of their less responsive colleagues (t-test; $p < .10$). The two groups were indistinguishable with respect to years of experience.

Conclusions

This study represents a preliminary attempt to assess the importance of dissatisfaction among clients of professional services. Until practitioners, in this case lawyers, become sensitized to the concerns of their clients, better service is unlikely to result. While the findings must be treated with caution in view of the restricted geographic area in which the study was conducted, it appears that some lawyers are awakening to the need to be more responsive to client needs but, to date, relatively few managing partners have put into place proper systems of complaint management.

The law profession is increasingly adopting the techniques of marketing but the development of a true marketing orientation would seem to be some time off. To the extent it is possible to draw parallels with the consumer goods sector, it would appear that the practice of law is only now leaving the "production era" and is entering the "sales era." If such a parallel does exist - an obvious subject for future research - it might be expected that law firms will further adopt techniques involving promotion and selling. Yet given the increasingly competitive market facing attorneys, the most cost effective approach would be to look first to those defensive marketing tools designed to keep and enhance contacts with existing clients.

From the point of view of the academic, the entire question of market orientation among service providers, especially those in the professions, demands further research. On the basis of the results of this study, measures directed toward the issue of client dissatisfaction should be included in future research as they are likely to prove most useful.

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THE INTERACTION OF MARKETING WITH OTHER FUNCTIONAL UNITS
IN PRODUCT/SERVICE MANAGEMENT:
R & D, PRODUCTION, AND HUMAN RESOURCES

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Abstract

The interaction of marketing with other business functional units has been receiving increasing attention of the discipline. This study examines the impact of the quality movement, services expansion, and the evolution of marketing on the relationships between marketing, production, and human resources management, concluding that increasing interaction is taking place.

The marketing discipline has a history of concern regarding its interface with other business functional units (e.g., Wind 1981). More recently, given the increasing pressures of international competition, the interface issue is taking on added importance (e.g., Hutt and Speh 1984).

Recent attempts at developing interface models, both conceptually (Gupta, et al., 1986) and empirically (Ruekert and Walker 1987), have included environmental elements in their considerations. These models, however, are based on organizational behavior concepts, and their environmental influences do not include broad, evolutionary developments which may serve to indicate a more substantial and enduring framework for conceptualization.

The purpose of this paper is to examine three long term environmental trends for their impact on the marketing interface with other disciplines. These trends are: the emergence of services as the dominant portion of our modern economy; the burgeoning importance of product/service quality as a critical factor in international business success; and the evolving role of marketing. These trends have particular importance with respect to the interaction of marketing with R & D, production, and human resources management.

The sections below begin with a discussion of the environmental trends. This is followed by an overview of the literature regarding the interface of marketing with the three other functional areas, and synthesis of that literature with the environmental trends. Finally, conclusions are made regarding marketing discipline expectations in the near future.

Environmental Trends

The Quality Movement

The quality of all products has been an item of increasing importance on the national agenda (e.g., Ross and Shetty 1985), particularly since empirical investigation showed the close ties between product quality and profit (Schoeffler, et al., 1974). More recently, concern for service quality has also been made evident (e.g., Quinn and Gagnon 1986). This high level of concern for quality has led industry to develop

methods for quality improvement, which are increasingly being reflected in both the literature of several academic disciplines and the practice of a multitude of industries.

Quality concepts have evolved over the years since the turn of the century (Wood 1988). Quality was initially defined as conformance to engineering design requirements, with each item of production inspected by the shop foreman. Increasing manufacturing mechanization and production volume led, in the 1920's, to the beginning of the utilization of professional inspectors, and further evolved into the inspection of random samples of production rather than each individual item. This concept, called statistical process control, until recently has been the main focus of the quality profession (Fortuna 1988).

In the early 1960's, after the post-war demand had slackened and international competition began to increase, leading quality thinkers began to define quality in terms of conformance to customer requirements, rather than just conformance to design requirements (Feignbaum 1961). However, it was not until the 1980's that the concept of sample inspection was substantially implemented by American manufacturers, and they began to think in terms of fully incorporating customer requirements into the design and production of products.

Several quality concepts have generally been accepted by leading American industries, and are rapidly being diffused (Wood 1988). Examples are that quality originates with top management but is the responsibility of everyone throughout the organization, and the "customer" of the production process may be internal, e.g., the next step in the assembly line.

The Evolution of Marketing

The historic basis of the origin of marketing, at the turn of the century, began with the economics' concept of the separation of the processes of production, distribution, and consumption. Marketing has traditionally concerned itself with the distribution and selling of goods, acknowledging production as a separate function beyond its domain, and paying little attention to services (e.g., Bartels 1962, Orsini 1987).

Early marketing theorists, with a goods orientation, were firm in their separation of production and distribution. Weld (1916) established the direction of marketing for decades to come as he used the economic utility types of form, time, place and possession to define the domain of marketing as the latter three types only. Discussing the economic concept of production, he stated:

"... production may be roughly divided into two great divisions, viz., manufacturing or crop raising on the one hand, and marketing on the other. Marketing begins where the manufacturing process ends." (Emphasis added - p. 6.)

This focus of the marketing discipline, on selling and distribution, continued until well after mid-century.

With the emergence of the "marketing concept", in the 1950's, there began to be acceptance of the enlarged domain of the marketing discipline. It was concluded that marketing did have some effect on form utility, as it served to "...introduce the marketing man at the beginning rather than the end of the production cycle ..." (Berry 1988, p. 26). Interestingly, General Electric, with its strong consumer orientation, may be the birthplace of both the "marketing concept" in the marketing discipline (Berry 1988), and the "quality as conformance to customer requirements" concept of the quality movement (Wood 1988).

The current influence of marketing on form utility is now accepted by both the marketing and design/production disciplines (e.g., Bissell 1971, Wind 1981). This expansion of the orientation of the marketing discipline, from just selling/distribution to the inclusion of influence on product design, can be illustrated by contrasting the AMA-adopted 1960 and 1985 definitions of marketing (Ferrell and Lucas 1988, p. 13):

Marketing is the performance of business activities that direct the flow (emphasis added) of goods and services from producer to consumer or user. (1960)

Marketing is the process of planning and executing the conception, (emphasis added) pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives. (1985)

The Services Impact

The marketing discipline has become increasingly concerned with services. For example, there has been an over eight-fold increase in the services marketing literature in the past decade, compared to the prior decade (Fisk and Tansuhaj 1985), and the American Marketing Association created its Services Marketing Division in 1982. This is reflective of the national economy, where two-thirds of current employment, and 90% of the newly-created jobs, are in services (Heskett 1986). One of the fundamental concepts concerning products (in the generic sense) is that they can be considered as bundles of attributes, both tangible and intangible (e.g., Shostack 1977). They can range from the "pure" tangible (e.g., chewing gum) to the purely intangible (e.g., a college education), or constitute some combination (e.g., a meal in a restaurant). In this discussion, services will be considered as "pure" services, or the service component of combination products.

If services were simply intangible goods, then despite their economic importance little unique theory would be applicable. The reason for the recent voluminous services literature is the contention that their unique characteristics cause marketing differences, which ought to be understood and managed in our highly competitive economy.

While the majority of the literature supports the important differences contention, a minority does not. For example, Wyckham, Fitzroy and Mandry (1975), and Enis and Roering (1981) contend that any marketing differences which do exist between goods and services are differences of degree rather than differences of kind. They are held to be minor in comparison to the other existing differences among product classes.

Lack of empirical research has caused this minority contention to remain a serious consideration. As Bateson (1985) observes:

"The debate over the differences between goods and services has been going on now for many years. There is no simple answer to the question ... Whether the differences are of degree or kind may never be resolved." (p. 60)

The shortcoming of the pro and con sides of the "services are different" debate, other than the paucity of empirical research, is that the debate has been based on consumer behavior factors only. The "differences" conflict lies in the issue of whether or not consumers will exhibit unique behaviors in their shopping efforts for services as compared to goods (e.g., Zeithaml 1981), or whether the variation of shopping behavior between goods and services is greater than the variation of shopping behavior within goods or services. Rather than engage in further debate, an alternative is to view the differences from the perspective of the manager rather than the consumer (e.g., Canton 1989).

The managerial differences between services and goods are principally caused by two services characteristics: intangibility, and the participation of the consumer in the "production" process. While intangibility has received the most attention in the services marketing literature, participation may be the most important one for managers (Chase, Norcraft and Wolf 1984). For the participation characteristic, rather than going to a store and purchasing an item produced hundreds of miles away, the services customer typically takes part in the actual process of producing the service. Using college education as an example, students are expected to read books, take notes, and engage in discussion as part of the learning process they have purchased.

Thus, with services, the consumer is actually in the "factory", taking part in the "production" process of an intangible product, and typically consuming that product on the premises. These are substantial changes from the original thrust of the discipline, with the conceptual separation of production, distribution and consumption, and focusing on tangible items. They make reexamination of the traditional relationships between

marketing and other business disciplines a necessity.

Marketing Interfaces

While individual industries may generate their own methods for addressing the changing nature of marketing interfaces with other disciplines, differences between industries mitigates the ability of inter-industry transfer of management expertise. The development of a common theoretical base for these interfaces will not only allow such a transfer, but also serve as a guide for any particular industry to consider in their operation applications. These interfaces are not just important to the marketing discipline, but also to the production, human resources, and R & D disciplines. A few prominent authors have conceptualized about the impact of services on the interface between marketing and these disciplines (e.g., Gronroos 1983, Lovelock 1984, and Zeithaml, et al., 1985). However, this impact has not been closely examined. The status of the interfaces of marketing with production, human resources, and R & D may be summarized as follows.

R & D

The business function with the greatest depth of consideration of interface with marketing is R & D, particularly in the context of new product development (e.g., Rothberg and Mellott 1977). Despite long held conclusions that the "marketing concept" had led to an acceptable communication level between marketing and R & D (Hise 1965), Rothberg and Mellott (1977) cite repeated articles in both disciplines calling for greater cooperation; this situation remains as a contemporary problem (Rossman 1987).

Recent concern in the quality movement is the development of methods of structuring the "voice of the customer" into the design of products. Quality Function Deployment (QFD), a Japanese management method, is one recent example of efforts in that area (Hauser and Clausing 1988). This method is intended to force a face-to-face interaction between marketers and product designers, thus insuring adequate consideration of customer desires.

In a manufacturing company, product design is thereby increasingly the joint task of the marketing and R&D departments, while process design is increasingly the joint task of the R & D and production departments; both the latter departments utilize engineers. With services, however, the situation is more clouded, and open for even greater marketing impact. Because the product is intangible, the skills of scientists and engineers are typically inapplicable. What type of skills are necessary for the person the services manager hires to design the new service? What department in a service business is the equivalent of the R & D department of a manufacturer?

The provision of design functions for services, where intangibility obviates the skills of the engineering discipline, has left a void in the literature in this regard. Shostack (1982) and

Kingman-Brundage (1989) have addressed this void by suggesting the marketing discipline should begin to develop its own expertise in service design, while Orsini and Karagozoglu (1988) conceptualize the possibility of a joint marketing/operations approach. In either case, the marketing discipline is becoming substantially more involved in the creation of form utility for services.

Production

The production/marketing interface has generally received little attention in the marketing literature, due to the traditional separation of the disciplines in manufacturing industries. The production/operations management discipline, similarly, has primarily concerned itself with issues related to manufacturing at the plant level (Chase 1980). As with R & D, marketing/production communication has historically been called for at the planning level (e.g., Cleland and King 1974), but ignored at the working level.

Several trends indicate a need for a broadened concept of consumer behavior, to review findings in the human resources literature and relate them to the new directions of marketing. One trend is the quality movement concept of internal customers of quality; this is related to the marketing concept of production personnel as consumers of internal marketing efforts (e.g., Streshic 1989). Marketers are thereby becoming involved in applying their expertise in the manufacturing production process.

Several trends are notable in the services area, most prominently customer participation in the service production. This is beginning to involve the marketing discipline in expressing interest in the consumer as producer (e.g., Langeard, et al., 1981). Not only is understanding this non-traditional area necessary for undertaking the service purchase process, but it also has potential for improving service productivity.

Services are also generating a burgeoning marketing interest in situations where there are combinations of traditional skills. One of these is where the seller is also the producer, a situation rarely addressed in the sales management literature. Another newly recognized situation exists where there is a necessary combination of technical and interpersonal skills (Gronroos 1983), e.g., the bedside manner of a doctor. The general recommendation of separating technical from interpersonal functions (e.g., Chase 1985) provides no guidance for cases where separation is not feasible.

The operations/marketing interface in services has recently received attention by Orsini and Karagozoglu (1988). They point out that while some areas of production are of little concern to service marketers, e.g., inventory systems and materials requirement planning, other areas are of concern, e.g., layout, scheduling, and quality control, especially in areas of the service business where the customer is present. They conclude that both disciplines have to acquire a greater understanding of some specific areas within the other's domain.

Human Resources

The interface between human resources and marketing has received substantial attention in only one area: sales management. Literature on human resources issues related to salesperson training, selection and compensation abound in the marketing literature. However, the interface between human resources and marketing appears to now be receiving increasing attention in other areas recently, due to the services and quality evolutions.

The Total Quality Control concept has raised the issue of internal marketing: the marketing of quality and other concepts to employees (e.g., Band 1989). Advertising campaigns, such as Ford's "Quality is Job 1", are examples of traditional marketing applied to employees as well as customers. As the worker is in the role of a consumer, marketers other than sales managers will be required to develop an understanding of such traditional human resource areas as worker motivation and organizational design.

The marketing discipline considers itself to be the connecting link between the consumer and the organization; therefore, if the consumer goes into the "factory", then marketers must do the same if they are to understand consumer decision processes. By participating in the production process, the customer plays the role of a producer, as well as a consumer. This will also require marketers to consider some traditional human resources issues, such as job design, training, performance appraisal and organizational design (Davis 1979) in order to more effectively deal with the consumer as producer.

Conclusions

The marketing discipline originated at the turn of the century as an outgrowth of economics, with concerns primarily focused on the distribution of manufactured products. Expanded concerns of the discipline, to the broader exchange process and marketing concept, have been paralleled by shifts in the national economy from agriculture/manufacture dominance to services dominance, and increasing concerns with product quality and international competition.

In the manufacturing sector, increasing concern for producing products more closely aligned to customer needs is causing management to induce a stronger marketing/R & D interface. Further, the application of internal marketing, an outgrowth of the quality movement, is leading the marketing discipline to investigate human resource and production areas previously beyond its domain.

In the service sector, these trends are exacerbated by the presence and participation of the customer in the production process, requiring an understanding of the role of the customer as co-producer. Further, the lack of an existing discipline oriented to intangible service design, as the engineering discipline is oriented to the design of tangible goods, is leading the marketing discipline to become interested in the design of services.

With the acknowledgement of this change, we may anticipate a timely change in the content of marketing textbooks, and reconfiguration of marketing curricula. Limitless research opportunities are opened to investigation, as attested to by the rapidly increasing volume of literature in this area.

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THE VALUE-ADDED ROLE OF BOUNDARY-SPANNING EMPLOYEES

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Abstract

A goal of this exploratory study was to gain insights into the role which boundary spanning employees play in the formation of consumer preferences for products. Consumers were surveyed regarding their most recent sales encounter with a life insurance agent. Regression and factor analysis reveal that the most important aspects measured in this study were those which describe the agent rather than the core product. This exploratory study indicates that variables such as the personality and trustworthiness of boundary spanning employees may be more important than core product attributes in the formation of some consumer product preferences.

Introduction

As producers become better able to assess consumer wants and to produce products with the combinations of core attributes desired by consumers, competitive advantage will shift toward other aspects of the product offering. Although this idea has been discussed recently in regard to services marketing (Lovelock 1989; Cina 1989), it is just as applicable to goods marketing. The ability of all manufacturers of a given product class to produce the tangible product attributes that people want will cause these to become "Do or Die" features (Lovelock 1989) or "minimal requirements" (Cina 1989) and will cause competitive advantage to lie elsewhere.

These other non-core aspects of the product offering include those which tend to facilitate the purchase, such as the availability of the product, dealer or manufacturer financing, and the services provided by a salesperson or agent. The sale, for example, of an automobile is dependent on more than attractiveness of styling, options offerings, quality, or price. It also depends on such variables as the availability of the product, the ease of possession (financing), and the satisfaction with (or willingness to be coerced by) the salesperson. If the sale of an automobile, or of any product, is as much affected by these latter aspects as by the core product attributes, then marketers should attempt to gain as much of an understanding of these non-core (extended) aspects as of the core product attributes themselves.

The research reported here is an initial exploration in a line of research that will be concerned with the role of various activities and performances of boundary spanning employees in relation to other product attributes and marketing mix variables. Boundary spanning employees, such as bank tellers, waiters, insurance agents, or automobile salespeople, may be thought of as those employees in an organization who are a point of contact with the organization's customers, relating the organization with elements outside it (cf., Leifer and Delbecq 1978). Boundary spanning employees may, for example, provide "value added" services in conjunction with some core product, may provide cues about future service performance, or may be the primary

"producer" of a services product. Very little is known about managing and improving this customer interface (cf., Bowen and Schneider 1985).

The approach of the present line of research is that we might be able to gain a better understanding of how to manage this interface if it is viewed as a process. We are interested in the production and distribution of the services aspects of products and in how these aspects relate to the other marketing mix elements of the product. This approach departs somewhat from most services marketing research in that it approaches services from a process, rather than a product, perspective. This approach departs somewhat from most research of the boundary-spanning role in that it attempts to relate elements of the boundary-spanning process with other marketing mix elements.

This paper will briefly discuss some previous approaches to the salesperson as a boundary-spanning employee and contrast these with the present line of research. Our approach, that an employee who is at the interface between an organization and its customers is part of a boundary spanning process which results in value-added to the core product, is then compared as being similar to the approach taken in the logistics customer service literature, where logistics is viewed as a boundary spanning process which results in value-added to the core product. Finally, the results and implications of an exploratory survey are discussed.

The objective of this paper is twofold. The first is to propose an approach to investigating the boundary spanning role which is somewhat of a departure from most previous research. The second is to report the results of a brief exploratory survey based on this approach. We were more interested in gaining insights into our approach than we were in the specific results of the survey.

Previous Measures of Salespeople as Boundary Spanning Employees

Many of the non-subjective measures of service encounters which have been used are only short-run indications of effectiveness. Schneider (1980) notes, for example, that bank teller's evaluations depend more on the count at the end of the day than the courtesy they display, and airline reservation clerks are judged more on paperwork errors than on the goodwill they generate.

The salesperson as a boundary spanning employee is of particular interest in our research because more reliable non-subjective measures of effectiveness can be made. We would expect, generally, that performance measures of annual sales or amount of repeat business with previous customers would correlate with overall customer satisfaction with the services provided by these employees. Much past salesperson research has attempted to measure and relate employee motivation, personality profiles, job satisfaction,

career "success", and such, to "boundary spanning effectiveness. Lockeman and Hallag (1982), for instance, studied the correlation between personality traits (feels unloved, likes crowds, quiet, serious, etc.) and successful and unsuccessful salespersons. Lamont and Lundstrum (1977) found such salesperson characteristics as endurance, ego strength, membership in civic organizations, and physical height to be "effective in explaining managerial performance ratings." Other studies have attempted to relate salesperson performance with measures such as motivation (e.g., Teas 1981; Tyazi 1985; Walker, Churchill, and Ford 1977) or job satisfaction (e.g., Bagozzi 1978; Churchill, Ford, and Walker 1976).

While knowledge of these sorts of characteristics have been useful in providing insight into the general potential of a salesperson to be effective, they are not direct measures of specific boundary spanning activities and performances which result in satisfied customers. These studies do provide evidence, however, that certain personality characteristics, levels of motivation, levels of job satisfaction, and such, can cause salespeople to perform in ways which result in satisfied customers. It is these specific performances and activities which are variables more directly involved in the boundary spanning process which are of particular interest in our research.

A number of studies concerned with personal selling activities have investigated variables which might be considered to be more directly involved in the boundary spanning process. Weitz (1978) found a relationship between salesperson performance and knowledge of customer decision making. Sujan, Sujan, and Bettman, (1988) attempted to further this work in identifying aspects of knowledge that distinguish more effective from less effective salespeople. Williams and Spiro (1985) found a relationship between customer-salesperson communication styles and sales.

Most related to the approach of the present investigation is that of Saxe and Weitz (1982), which measured multiple activities and performances which may be involved in the boundary spanning process. Their SOCO (selling orientation-customer orientation) scale was developed and used to find a high correlation between salesperson performance and having a customer orientation. The present investigation, however, is more general in that it examines a range of boundary spanning variables (e.g. customer orientation, product knowledge, salesperson appearance, etc.) and their relationships with other marketing mix variables (e.g. product benefits and price).

The Approach of the Present Research

The initial phase of the present line of research is an attempt to answer the following questions: (1) What are some of the variables which may be directly involved in the boundary spanning process? (2) How do these variables relate to those of the core product in determining consumer purchase behavior? We know very little about improving and managing this customer interface (Bowen and Schneider 1985), but if we can identify a generalizable set of variables involved in the boundary spanning process and their relationship to other marketing mix variables, we might then be better able to make improvements in this interface.

The survey reported here is an initial attempt to explore these questions by simply observing the boundary spanning process as it exists. This approach is similar to that which has been followed successfully in the customer service research in the logistics discipline. Although logistics customer service is a topic which will keep researchers busy for many more years, the research done in that field has been able to achieve a level of maturity which has allowed the practical application of our knowledge of the process to strategic logistics decisions.

Evolution of Customer Service Literature

Early logistics customer service research was concerned with identifying logistics activities which could be quantified and managed, such as order cycle time or order completeness. By the late 1960s, the customer of distribution services was being recognized as an important part of the distribution process. Stephenson and Willett (1968) emphasized that trade-offs must be considered between the two key variables of cost and serving the customer. Hutchinson and Stolle (1968) recognized customer service as the purpose and end result of a physical distribution system. Perreault's early work on customer service emphasized the service output of physical distribution from the perspective of the customer (Perreault 1973; Perreault and Russ 1976). LaLonde and Zinszer (1976) again placed emphasis on the customer of distribution services, defining customer service as "those activities that occur at the interface between the customer and the corporation's products or services." (p. 2).

By the time of the LaLonde and Zinszer study, there were perhaps as many definitions of customer service as there were authors on the subject, but all generally agreed that customer service was the output of the physical distribution process. Customer service was being recognized as a general variable which could differentiate products as well as differentiate the providers of distribution services. The evolution continued so that today customer service is recognized as a process which results in value added to the product or service being exchanged (LaLonde, Cooper, and Noordewier 1988).

The present paper focuses on the services-producing employee as being conceptually similar to the boundary-spanning process of logistics activities. Just as logistics customer service is currently viewed as the interface between two organizations, as a boundary-spanning organizational interaction, and as a process rather than simply as a "service" or "product", similar conceptualizations have begun to appear in the services marketing literature. Service encounters are described as the organization's most immediate interface with the customer (Bowen and Schneider 1985), as dyadic, human interactions (Solomon et al. 1985), and as having a behavioral input and an output defined by customer satisfaction (Dixon and Smith 1983).

Like the logistics process, then, the boundary spanning role of, say, bank tellers, waiters, or sales clerks, acts as an interface between the goods or services producing organization and the customer. As in the logistics process, the output of these boundary spanning roles results in some utility to a satisfied customer. Like the logistics process, the present research views employee boundary spanning as a process which may be composed of identifiable and measurable

activities. The objective of this initial research, like the early logistics customer service research, is to first identify and measure activities or variables of the process about which we might later develop hypotheses concerning the relationship between these process variables and other marketing mix variables.

The Survey

Our initial inquiry into the boundary spanning process was focused on the activities of life insurance salespersons. This particular boundary spanning role was chosen in part because it is relatively difficult for consumers to differentiate between brands and products within brands of life insurance (cf., Crosby and Stevens 1987; Johnston-O'Connor, O'Connor, and Zultowski 1984). This would imply, then, that the agent selling the product is an important factor differentiating life insurance products, affecting which brand or policy a consumer purchases. Thus, the results of this line of research should be generalizable to other products in which competitive advantage may lie more in aspects associated with boundary spanning employees than with the core product itself, or to products where the core product is the service(s) of boundary spanning employees.

Consumer respondents were asked to provide information concerning their last encounter with a life insurance salesperson. Respondents were qualified as people likely to have seriously considered the purchase of life insurance (according to age, stage in the family life cycle, etc.) in the past three years. Respondents (n=55) in this exploratory survey were asked to indicate their level of agreement or disagreement with ten statements regarding the behavior of the agent (predictor measure). In addition, a response measure was taken concerning purchase intentions. It was necessary to use a qualified sample because respondents who would not be in a position to seriously consider the purchase of the product would be expected to indicate a low intention to purchase regardless of the effectiveness of the agent.

Some statements in the survey (Appendix 2) were concerned with the core product (e.g., the agent emphasized the benefits of owning the product), while other statements were concerned with the agent (e.g., the agent would pretend to agree with me just to please me). Some statements concerning the agent were adapted from the SOCO Scale (Saxe and Weitz 1982) discussed earlier. Purchase intention, the response variable, was measured by asking respondents to indicate how close they were to actually making a purchase by placing an "X" on a line anchored by "never even considered it" and "purchased the product". The survey questions were designed to measure the following variables:

IDENTIFIER	VARIABLE
1. AGTKNOW	agent knowledge
2. PRICE	product price
3. PROBEN	product benefits
4. AGTPERS	agent personality
5. BRAND	product brand
6. AGTREC	agent recommendation
7. PROTECH	product technical features
8. AGTAGREE	agent pretends to agree
9. AGTAPER	agent appearance
10. AGTSEL	agent sells what is easiest
11. PURINTEN	purchase intention

Statistical Analysis

Univariate and Bivariate Summaries

The correlation matrix of all data is shown in Appendix 1. The most notable feature is the high correlation of AGTPERS with PURINTEN. A simple regression of PURINTEN on AGTPERS alone yields an adjusted R-square of .30 ($F=.0001$; $T=.0001$). The normal probability plot is remarkably straight. Although specific relationships were not hypothesized a priori, such a strong relationship between any two variables was not expected.

A relatively high correlation was found between AGTPERS and AGTAGREE and AGTSEL. This seems to be a logical association. AGTKNOW and PROTECH are relatively highly correlated; this association seems logical.

PROBEN and BRAND show almost no correlation with any of the other variables. The scatter plots of these two variables against PURINTEN indicate that these generally fall to the right of the plot. Apparently, most agents, effective and ineffective, tend to stress product brand and the benefits of owning the product.

Principal Component and Factor Analysis

A principal component analysis (using the correlation matrix) was performed with all variables included. As might be expected from the correlation structure, PROBEN and BRAND have very small weights in the first eigenvector. They are contrasted in the second principal component, and are weighted together in the third. A factor analysis was also performed. The distinction of PROBEN and BRAND from the other variables was very clear in the factor plots. PROBEN and BRAND each become factors after a varimax orthogonal rotation. This is not especially useful information in understanding the remaining variables of the agent, and these two variables were removed for further analysis. The response variable, PURINTEN, was also removed.

Using the correlation matrix in a principal components analysis, the first principal component accounts for about 42% of the variance, and all variables are weighted reasonably closely. The second principal component, accounting for about another 13% of the variance, groups PRICE with AGTREC in contrast with AGTAPER. The third principal component, accounting for about another 11% of the variance, groups AGTAGREE and AGTSEL (an "honesty" factor) with AGTKNOW. The fourth principal component accounts for about another 11% of the variance in contrasting PRICE and AGTREC. These appear to be logical groupings. After a varimax orthogonal rotation, a factor analysis appeared to group all variables excluding PRICE and AGTREC. The second factor did not make a logical grouping.

Discussion and Conclusion

Two variables, PROBEN (product benefits) and BRAND, were found to have little covariance with any other variables and appear to be stressed by most agents. This may be an important finding in that it indicates that competitive advantage, at least in the life insurance product, may lie outside the core attributes of the product. Although this was not specifically hypothesized, this finding supports the motivation behind conducting this line of inquiry.

Agent personality appears to be relatively highly related to purchase intention. A possible explanation is that consumers who were not especially interested in the purchase of the product when contacted by an agent tended to elicit less desirable behavior from the agent; this exploratory survey was too brief to detect that possibility. AGTAGREE and AGTSEL were grouped together (as an "honesty" factor) and contrasted with AGTKNOW, indicating that these respondents may be sensitive to the "honesty" or "trustworthiness" of the agent. At this writing, we are in the process of administering a survey which is an attempt to detect those activities and performances of an agent which may be causes of respondents' perceptions of an agent's personality, honesty, knowledge, and such.

The sample used for the survey reported here was small and not as "qualified" as desired. The survey itself was very brief and included no checks for construct validity; many more variables must be used before claims of conclusive evidence can be made. The significance of this investigative survey, however, is that it indicates that it is possible to study boundary

spanning as a process consisting of identifiable activities.

Logical relationships were found, and marketing mix elements of core product, price, and agent attributes were distinguishable. These findings indicate that further research is warranted. A more substantial consumer survey is to be designed using potential variables which have been identified from other boundary spanning and salesperson studies. This larger consumer survey is to be used to identify variables which will then be used in a survey of life insurance agents. An agent survey will allow response measures of long term relationships with clients, which is a more desirable measure of boundary spanning employee effectiveness than the purchase intention measure used in a consumer survey. After these initial studies have identified a set of variables which impact the effectiveness of this particular boundary spanning role, researchers might then be in a position to hypothesize the relationship of these variables to boundary spanning effectiveness, to each other, and to the core product attributes.

Appendix 1
Correlation Matrix

PRICE	PROBEN	AGTPERS	BRAND	AGTREC	PROTECH	AGTAGREE	AGTAPER	AGTSEL	PURINTEN	
.230 (.090)	ns	.440 (.0008)	ns	.284 (.036)	.495 (.0001)	.328 (.014)	.358 (.007)	.276 (.041)	.346 (.010)	AGTKNOW
	ns	ns	ns	ns	.270 (.046)	.300 (.026)	ns	.230 (.091)	ns	PRICE
		ns	ns	ns	ns	ns	ns	ns	ns	PROBEN
			ns	.335 (.012)	.421 (.001)	.593 (.0001)	.374 (.005)	.501 (.0001)	.571 (.0001)	AGTPERS
				ns	ns	ns	ns	ns	ns	BRAND
					.355 (.008)	ns	ns	.308 (.022)	.360 (.007)	AGTREC
						.376 (.005)	.299 (.026)	.389 (.003)	.418 (.002)	PROTECH
							ns	.582 (.0001)	.240 (.078)	AGTAGREE
								.341 (.011)	ns	AFTAPER
									.467 (.0003)	AGTSEL

Appendix 2
Survey Questions

1. The agent was very knowledgeable about the product line.
2. The agent did not stress the price (cost) of the product.
3. The agent emphasized the benefits of owning the product.
4. I disliked the agent's personality.
5. The agent emphasized the companies that issue the products he was selling.
6. If I was to purchase a life insurance product from this agent, I would purchase whatever the agent recommended I should purchase.
7. The agent did not stress the technical details of the product.
8. The agent would pretend to agree with me just to please me.
9. The agent's personal appearance was poor.
10. The agent tried to sell me what he thought he could convince me to buy, rather than what would be best for me in the long run.
11. On the line below, place an X to indicate how close you were to actually making the purchase: (anchored by "I never even considered it" and "I purchased the product")

Questions 2, 4, 7, 8, 9, and 10 were reverse coded for analysis.

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CONSUMER PERCEPTIONS OF SERVICES SALESPeOPLE

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Abstract

Little research attention has been devoted to examining consumer perceptions of salespeople, let alone services salespeople. In view of the growing importance of services marketing in this country and the key roles salespersons play in consumer purchases, studies on services salespersons are warranted. Hence, the purpose of this paper is to investigate consumer attitudes and perceptions of salespeople involving major household services. Consumers' perceptions of the importance of alternate sources of information were also investigated. Data were collected through 422 questionnaires completed and returned by the members of the Arkansas Household Research Panel. Descriptive analysis was conducted and the findings discussed. Implications of the findings for services marketers were noted.

Consumer Perceptions of Services Salespeople

With services accounting for 60.5 percent of the U.S. gross national product and 50 percent of the total income spent by consumers, the importance of services marketing is undeniable. (See U.S. Industrial Outlook 1989; Peter and Donnelly Jr., 1985). Marketing scholars have devoted considerable research to investigating the various aspects of marketing in the context of services sectors. However, a review of services marketing literature indicates one area of investigation lacked research attention. This area is the consumer perceptions of services salespeople. This is unfortunate, especially in view of the acknowledged fact that salespersons play key roles in consumers' purchases of services. George and Kelly (1983) noted that, in the marketing of services, the person doing the selling determines to a significant degree the satisfaction the customer derives from that service.

To date, research studies that had investigated consumer perceptions of salesperson's attributes were largely confined to the product marketing contexts (e.g. Lumpkin and Greenberg 1982; Williams and Seminerio 1985; Wilson and Lichtenthal 1985). However, marketing of products and services are considered to be different due to the (i) intangibility, (ii) inseparability of production and consumption, (iii) heterogeneity in their output, and (iv) perishability of services (Uhl and Upah 1983; Zeithaml et. al. 1985). In fact, services marketing calls for concepts and strategies that are different from those oriented towards the product sector. Hence, many insights gained on the desirable attributes of product salespeople may not be generalizable to those of services salespeople.

Research studies on consumer perceptions of salespeople are warranted because results of such studies could provide valuable information to services marketers in: selection of salespeople, developing sales training programs, understanding of consumer (customer) preferences, and formulating effective personal selling strategies in general. The few studies examining consumer evaluations of service personnel dealt with specific services (e.g. Rao and Rosenberg 1986; Webster 1988). Rao and Rosenberg examined attributes dental patients consider important in a dentist. Such research, while helpful, is limited to specific professional service providers; and hence the findings may not be generalizable to many buying situations involving salespeople.

Presently, the literature is devoid of studies identifying the critical attributes of salespersons in the selling of major services in general. Therefore, the purpose of this paper is to investigate empirically and report consumer attitudes and perceptions of services salespeople based on their experiences in purchasing major household services such as insurance, auto and appliance repair.

Background

Since literature pertaining to consumer evaluation or perceptions of services salespeople is limited, similar studies using product salespeople are reviewed to provide perspectives as to the particular attributes consumers emphasized in salespeople. William and Seminerio (1985) carried out a content analysis to determine the factors of industrial salespeople that provided industrial buyers with the greatest level of satisfaction. Their data were obtained from Purchasing magazine. Since 1977, Purchasing magazine has conducted annual contests in which its readers were invited to nominate outstanding sales representatives that called on them, and to report the sales representative's top three characteristics. The researchers found that the most frequent set of attributes favored by buyers consisted of: (i) thoroughness and follow through, (ii) knowledge of his/her product line and (iii) willingness to go to bat for the industrial buyer within the supplier's firm. The second set consisted of salesperson's market knowledge and willingness to keep the buyer posted with such knowledge. William and Seminerio noted that knowledge of the buyers' product line and technical education, which have traditionally been considered salient selling attributes, were in the least mentioned set. It would be interesting to see if consumers seek the same set of attributes in services salespeople in the context of major services purchases.

Another important study of salesperson attributes was conducted by Wilson and Lichtenthal (1985). They contended that salesperson-related attributes subset is particularly important in mature industrial markets. Since product- and company-related attributes are virtually identical at the mature stage, salespeople's attributes become critical. One phase of their study yielded eight attributes customers considered important in selecting suppliers. These eight attributes mainly pertained to product performance, delivery date, quality and price. It appears that some of these attributes may not be applicable to the study of services salesperson attributes. One possible explanation for not finding salesperson related attributes to prevail over product- or company-related attributes could be due to the buyers being queried about their suppliers instead of their suppliers' sales representatives.

While Wilson and Lichtenthal (1985) confined their study to the industry sector, Hawes, Rao and Mast (1987) concentrated theirs on the consumer durable sector. To develop a pool of relevant salesperson attributes, the researchers conducted a series of in-depth interviews with salespeople who sold durable goods to consumers, and three focus group interviews with recent purchasers of consumer durables. The final questionnaire consisted of 25 attributes measured on a 7-point bipolar rating scale. Factor analysis on this set of attributes yielded seven factors, namely: ingratiation, patient buying assistance, product knowledge, credibility, timely service, courtesy and charm, and assertiveness. The researchers noted that credibility was the highest rated attribute and customers almost universally viewed it as an absolutely essential attribute.

Consumers' perceptions of salespeople may also be influenced by information they received from friends and relatives (e.g. Gummeson 1987; Mangold et. al. 1987; Webster 1988). Mangold et. al. studied new residents' selection of dental services and found that these residents relied more on personal (word-of-mouth communications) than on nonpersonal (radio, television, newspaper and professional associations) sources of information, even after adjusting for the greater number of nonpersonal over personal sources to choose from. Their study also revealed that although new residents were willing to rely on nonpersonal sources, they were still more likely to rely on a personal source when one was available.

Mangold's et. al. study has important implications for the present research. Since consumers prefer personal sources of information, it is even more critical that services marketers understand the consumers' perceptions of alternate sources of information in other major household services purchase situations, not just professional services such as dental services. Such knowledge would be critical to understanding the implications of buyer-seller interaction and the consequent referral business which might follow. This may determine the gain or loss of potential future customers resulting from the

word-of-mouth process initiated by the buyer-seller interaction process in major services buying situations.

Purpose of the Study

The purpose of this paper, as stated earlier, is to investigate and report consumer perceptions and attitudes in relation to services salespeople involving the purchase of major household services. The following are the specific objectives of this research investigation:

1. Evaluation of the importance of various sources of information in helping the consumer to make major service purchases.
2. Consumer perceptions of salespeople's dependability in providing various types of purchase relevant information and help in the purchase of major services.
3. Consumer perceptions of the overall dependability of various types of salespeople in helping and aiding consumers make appropriate purchase decisions.
4. Consumer evaluations of service salespeople's attributes in the context of purchasing major household services.
5. Consumer attitudes towards services salespeople.

Data Collection

Questionnaires designed to collect data to achieve the stated objectives were sent to 550 members of the Arkansas Household Research Panel (AHRP). The members of the panel represented households from various cities and their surrounding communities containing populations of 5,000 or greater in the state of Arkansas. The response rate was approximately 80 percent.

Each questionnaire contained items dealing with specific purposes stated under the previous section. A 6-point Likert-type rating scale was used to gather consumer perceptual and attitudinal data. To facilitate concise reporting of frequencies, the 6-point scales were collapsed into three categories. However, the means and standard deviations computed were based on the 6-point scale.

Research Findings and Discussion

Sources of Information in Purchasing Services:

The research findings on various research objectives are presented in Tables 1 through 5. The data in Table 1 deals with the consumer use of various sources of information in their purchase decisions of major household services and the relative importance they attach to such sources of information. Relative to seven sources of information included in the question, consumers considered discussions with relatives, friends and neighbors as the most important source of

information. This source was considered the most important by 69.2 percent and another 27.2 percent considered the source as moderately important. It is interesting to note that "discussions with salespeople" was considered as the next most important source of information in the purchase of major household services. Consumer Report articles came in third. However, the frequencies and means of these latter two sources were too close to imply any differences in perceptions of importance of these sources. Catalogues and sales brochures were among the least important sources of information. Results of this research suggest that when purchasing major household services such as life insurance, real estate, home improvement etc., consumers seem to depend on service salespeople as major source of information. Given the intangible nature of any service and often the technical complexities involved in purchasing many major household services, human interaction with salespeople is considered more important by consumers than the use of nonpersonal sources of information. These research results are consistent with Mangol's et. al. research study. In general, consumers emphasized personal sources (in this case, discussions with relatives, friends, neighbors, and salespeople) over nonpersonal sources (catalogues and sales brochures etc.,). Given this finding, if marketers of major household services can increase the credibility of their salespeople, then they can vastly increase the productivity of their salesforce in marketing their services.

Table 1 about here

Dependability of Salespeople:

The next research purpose dealt with the consumer perceptions of the dependability of salespeople for explaining the various aspects of purchase, generally aiding in reaching the purchase decision and in attending to any potential problems after the purchase takes place. The relevant data on the dependability aspects are presented in Table 2. The majority of the respondents considered that salespeople were either "very dependable" or "moderately dependable" with regard to explaining various features of the purchase. In this sense, the respondents in this study felt that service salespeople in general were dependable in providing the information and explaining the service features. Based on mean values, the three aspects which were mentioned by the respondents for service salespeople dependability are: (1) explains various features; (2) explains various alternatives and (3) lets me take my own time to decide. A high percentage of respondents (72.9 percent) also felt that service salespersons were either very dependable or moderately dependable in attending promptly to any problems after the purchase. However, service salespeople were not considered to be very dependable by majority of the respondents with regard to: (1) explaining both good and bad aspects and (2) suggest what is good for me. These research findings imply that consumers perceive services sales-

persons to be good, but yet biased, information providers. Alternatively, the results may indicate that these salespeople lack "service knowledge" and hence, do not understand what is good or suitable for the customer. This explanation is plausible as the intangible nature of services makes attainment of this knowledge difficult (Shostack 1984).

Table 2 about here

The data presented in Tables 1 and 2 seem to suggest that although consumers view service salespeople as important source of information and consider them as a dependable source for various types of information, they are skeptical of the objectivity and trustworthiness of such information in terms of protecting consumers' interests. A possible strategy for overcoming this would be for salespeople to make them not only as useful information providers but also as trustworthy problems solvers protecting the interests of consumers. These aspects may be given special attention in designing and implementing sales management programs in services marketing contexts.

Dependability of Different Types of Salespeople:

Consumers were asked to rate the dependability of various types of major goods and service salespeople on a 6-point scale varying from "very dependable" to "least dependable". The resulting data were presented in Table 3.

Table 3 about here

From Table 3, it is noted that among the major goods salespeople, major appliance salespeople were considered to be most dependable to help and aid customers in making the right type of purchase decision. This is reflected in the highest mean value for this type of salespeople. Among the major services included, "other household repair people" were rated highly dependable. The types of salespeople for which relatively low ratings assigned by the respondents were: automobile salespeople and auto repair salespeople. From the data presented in Table 3, it is also interesting to note that the average mean score of goods salespeople (automobile, major appliances, furniture and carpet) was 3.76 while that of services salespeople (real estate, insurance, auto repair, appliance repair and other household repair) was 3.73. The difference between the two means was not significant at the 5 percent level of significance (p value = 0.90). Apparently, goods salespeople are not considered to be more dependable than service salespeople in helping and aiding customers in making the right type of purchase decisions.

Perceptions of Salespeople Attributes:

The respondents were asked to evaluate service salespeople on 18 salesperson attributes on a 6-point scale ranging from "very favorable" (6) to "very unfavorable" (1). The resulting data were presented under three collapsed categories along with mean values and standardization for each of the attributes in Table 4

Table 4 about here

From the data presented in Table 4, the top five attributes which were most favorably evaluated by consumers are as below:

Attribute	Mean Value
1. Courteousness	4.46
2. Eager to sell	4.45
3. Knowledgeable of item being sold	4.41
4. Makes the conversation pleasant	4.23
5. Warm personality	4.17

The following five attributes were least favorably rated among the 18 salespeople attributes included, as revealed by the mean values.

Attribute	Mean Value
1. Follows up after the sale is over	3.26
2. Does not keep me waiting	3.67
3. Does not try to sell a higher priced item	3.72
4. Makes me feel the person cares	3.81
5. Trustworthiness	3.85

From the listing of the top five and the bottom five service salespeople attributes as evaluated by consumers, it is clear that consumers seem to evaluate more favorably those salesperson attributes which involve salesmanship skills which are normally expected from competent salespeople. However, when it comes to those attributes which involve empathy, caring and trustworthiness, consumers evaluated salespersons less favorably. These findings are consistent with the findings on dependability for providing various types of aid and help discussed under an earlier section.

More interestingly, the attributes which involve empathy, caring, and trustworthiness are some of the quality dimensions noted in the Parasuraman, Zeithaml, and Berry (1985) study. It appears that services salespeople were more lacking in "service quality" than in "salesmanship skills". The attribute related to "follow through after the purchase" was evaluated least favorably based on respondents' experience. Given the fact that consumer satisfaction is derived only in the post-purchase phase, services marketers should pay special attention to this attribute of their salespeople and develop programs which will improve the "follow through" activities and procedures so that consumers will perceive this attribute more favorably. This conclusion is further reinforced by the research finding reported by William and Seminerio (1985). Their research found that "follow through" was among the attributes in the most favored set.

Consumer Attitudes Towards Salespeople:

In relation to eleven attitudinal statements describing the pro and con aspects of salespeople, the respondents were asked to express the degree of their agreement or disagreement on a 6-point scale ranging from "strongly agree" (6) to "strongly disagree" (1). The resulting data are presented in Table 5.

Table 5 about here

From the data presented in Table 5, it is evident that a large majority of the respondents felt that "consumers depend on salespeople for aid and help in buying". This attitude dimension has one of the two highest mean ratings of 4.39. While this reflected the positive aspects of consumer attitudes towards services salespeople, the negative attitude that "because of salespeople's pressure tactics, consumers should have the legal right to call off the deal after a few days" was rated equally high with a 4.39 mean rating. Similarly, consumers expressed strong sentiments, agreeing that law enforcement agencies should investigate consumer complaints involving salespeople. These negative attitudinal dimensions reflect consumers' strong beliefs of their rights in the marketplace and their "readiness" to resort to legal recourse. Services marketers should strive through appropriate programs to assure consumers honest and ethical behavior of their salespeople to avoid expensive litigation. However, majority of the respondents do not feel that service salespeople are outright dishonest nor do salespeople rush them into making a wrong decision. These favorable attitudes are reflected in the low mean ratings on these attitudinal dimensions.

Summary and Implications

The current research has shown that consumers view services salespeople as important sources of information in the purchase of major household services. They also indicated that catalogues, pamphlets, and sales brochures to be the least important sources of information. There was also some general indication that consumers prefer personal, as opposed to nonpersonal sources of information in making their major services purchase decisions. These findings have important implications in designing and implementing appropriate promotional mix strategies in the context of marketing of major household services. This research suggests that major household services marketers may want to place more emphasis on personal selling and communications with opinion leaders than on mass media advertising or direct mail.

The results showed that consumers perceived service salespeople to be dependable for explaining service features and alternatives, in addition to being patient with their purchase decisions. From this, it may be concluded that services marketers should train their services salespeople adequately in the above purchase

aspects so that consumers' perceived dependability of salespeople on these aspects will continually be reinforced. Consumers appear not to fully trust salespeople's recommendations, and consequently may ignore them even if they were good ones. Marketing managers of services industries may have to research and develop new selling techniques or presentations to overcome this psychological barrier on the part of consumers. Salespeople may have to place customers' needs and interests above their own interests to make a sale at times, in order to gain customers' trust and continued patronage.

No significant differences were found in consumers' perception of the overall dependability in the contexts of goods and services selling. However, only a limited number of types of salespeople were examined here and hence, true differences may not have been detected. One suggestion for future research would be to examine if stereotyping exists among services and goods salespeople, and if so, to examine the effects of such stereotyping on selling effectiveness. The set of attributes consumers evaluated favorably in services salespeople in this research were: courteousness, knowledgeable of item (service) being sold, and eagerness to sell. Given such favorable evaluation of these attributes, service marketers should strive to maintain and reinforce these desirable qualities of their salespeople.

While consumers did not feel that services salespeople were outright dishonest, they nevertheless strongly desire government intervention on the conduct of sales. Given significant differences noted in the literature between goods and services, an appropriate follow-up to this study would be a comparison of consumers' perceptions of services versus goods salespeople.

One final note is that little attention has been devoted to examining consumers' perceptions of salesperson attributes, let alone services salespeople attributes. This study has provided some understanding of consumer perceptions and attitudes towards services salespeople. However, caution must be exercised in generalizing the results of this study due to certain limitations. For example, the respondents' perceptions may be influenced by the level of purchase involvement and other situational factors. Next, our sample based on AHRP households may not be representative of the general consumer population nationwide. Future studies are needed in other service areas, geographic settings, and selling contexts.

Note: Due to space limitations, [Tables 1](#) through [5](#) may be obtained from the first author.

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THE ROLE OF MARKETING IN MASS TRANSIT

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Abstract

This study examines the role of marketing in mass transit. Because of the potential benefits that any public system may gain from the implementation of the marketing concept, a nationwide survey of public transit systems was conducted to assess the current status of marketing practices in public transit and suggest useful strategies for implementing the marketing concept in these systems.

Introduction

As portrayed in the mass transit industry, marketing is a misunderstood concept, and "probably the most misunderstood of all transit management functions" (Transit Marketing Management Handbook 1975, p. 5). A 1975 study conducted for the U.S. Department of Transportation found that all transit systems perform some marketing functions to some degree, but only a few maintain an integrated marketing activity with all elements of marketing working in balance. The study revealed that a large majority of transit marketers tend to equate marketing with advertising and public relations. Research and goal setting were the most frequently deficient activities among transit marketers (Transit Marketing Management Handbook 1975).

This study focuses on one sector of public transit: bus transport. More specifically, the purpose of the research was to identify the nature and the extent of utilization of the various elements of a marketing program in the development and delivery of publicly-owned bus transit systems in the United States.

The Study

Publicly-owned transit systems accounted for 92 percent of the domestic transit systems in use in 1979 (Fitzgerald 1986). Bus ridership was the predominant form of mass transportation accounting for 67 percent of the passenger trips provided in 1985 versus other modes such as heavy rail, commuter railroad, subway, ferry, and streetcar (Transit Fact Book 1987). The types of buses that are utilized for transit service in this study are designed for frequent stop service with front and center doors, normally run by a diesel engine and do not contain luggage storage compartments or restroom facilities (Transit Fact Book 1987).

Data for the study was gathered through a self-administered, mail-back questionnaire distributed under the auspices of the Riverside Transit Agency (RTA). A systematic random sample was obtained by selecting every other name in the

1988 American Public Transportation Association (APTA) United States Membership Roster which lists members in alphabetical order by system name. The APTA list was selected because it accounts for approximately 80 percent of the public transit systems in the United States, and no other listing was as complete. A total of 163 questionnaires were mailed out to existing bus transit systems in all 50 states.

Each of the systems selected from the APTA list was sent a survey package. This contained the survey instrument, a pre-addressed stamped envelope, and a cover letter on RTA stationery with an offer to send the survey results if a business card was enclosed with the completed questionnaire. Eighty-five of the 163 surveys were returned for a 52 percent response rate. All regions of the country were represented in the returns with the Southern, Mid-Western, and Eastern regions accounting for approximately 70 percent of the response.

Findings and Discussion

Marketing Orientation

The major finding of this study is the apparent absence of the marketing philosophy from the nation's bus-transport system. Many of the traditional marketing functions were either non-existent or poorly executed. The survey showed that, in general, marketing's role is primarily promotional instead of being the underlying philosophy around which a customer-oriented organizational culture is built. This condition was especially evidenced by marketing's lack of influence in the crucial areas of system policies and service design.

In response to the question of "Is there a marketing function within the agency?" the majority (93 percent) indicated having such a function in their agency. Fifty-five percent indicated having separate staff performing the marketing activities; 36 percent reported having the marketing function combined with other operational departments; and only one percent indicated having outside consultants handle the marketing responsibilities.

The three most frequently cited positions in transit marketing departments are 1) marketing department head (64 percent), 2) telephone information clerk (46 percent), and 3) marketing secretary (35 percent). Overall, the respondents reported a mean of 11.6 employees within their marketing departments. The persons in charge of the marketing function in the surveyed bus-transit agencies were reported to be males with at least a Bachelor degree in Marketing or related studies, an average of 6.2 years of experience in transit marketing, and an average

of 9.4 years of experience in marketing overall. These managers were paid an average of \$35,273 per year.

Overall, the majority (82 percent) of agencies surveyed indicated preparing some type of an annual marketing plan. Most of these agencies (54 percent) had their plans prepared exclusively by agency personnel, while the rest sought the help of outside consultants. A cross tabulation showed that most of the systems which reportedly did not prepare an annual marketing plan were indeed the smaller ones which had neither the personnel nor the budget for the process.

The average annual marketing budget reported was \$465,000. The allocation of these funds was reported to be determined by administrative decision (73 percent). Only 21 percent allocate their funds on the basis of a marketing plan.

Marketing Research

The nature and extent of marketing research utilization in public transit systems was also investigated. The results indicate that approximately 50 percent conduct some type of rider/non-rider research at least once every year, while almost one fourth of the respondents conduct such research every three years or never. Rider surveys are often on board and self-administered (66 percent) or on-board surveys administered by a researcher. Other modes of data gathering such as telephone personal interviews, focus groups, and direct mail were reported being used by over 40 percent of the respondents.

Most of the research conducted by the agencies appear to be aimed at the current users. Ninety-four percent seek attitudinal information toward the system and similar numbers collect demographic and service utilization type of information. A slightly smaller group (86 percent) perform need assessments or evaluate incentives for increasing system utilization.

In the area of segmentation, only traditional demographic and geographic bases were reportedly being used. Sixteen percent do not make any attempt at segmenting in their advertisements, and less than 30 percent utilize gender or ethnic background in their promotion programs. Such low recognition of these variables is alarming given the increasing number of women and ethnic minorities in the labor force.

Promotion Mix

Newspapers and radio were the most used promotional media, with most of the agencies (55 percent) reported not using an outside agency for placement of ads. In the area of copywriting and production greater input from advertising agencies and independent contractors was reported.

Approximately 70 percent of the systems do not pretest their advertisements. Primarily only large systems pretested their ads. Advertisement

pretesting is usually done in focus groups using transit system personnel as subjects. Most systems indicated that they evaluated their advertising campaigns using primarily ridership data. The only exceptions were those systems that surveyed frequently and transit marketers with over ten years of experience in marketing. These two groups used much more telephone interviews than any other groups but still relied mainly on ridership data for evaluations.

Press releases were issued frequently by most systems and were almost always produced in-house (94 percent), and community awareness newsletters are published by only 42 percent of the systems. A cross-tabulation revealed that the more press releases a system issued, the less favorable the attitude of the media was toward the system. This was probably due to the tendency shown in the survey that the larger the system, the more press releases they would issue, and the larger the system, the more could go wrong thus resulting in a less favorable media. Publishing a community awareness newsletter made no difference in media attitude.

Customer Service and Public Information

In the area of customer service and public information, most systems reported having dedicated telephone information clerks, but only 62 percent utilize call sequencers in spite of their proven benefits and the availability of federal grant money for purchase. Few systems (16 percent) had large numbers of kiosks with route and schedule information posted. Nearly one-third indicated they did not post that type of information anywhere in their system. The vast majority of systems (67 percent) publish their ridership materials and advertisements only in English. The large systems located in the East and West were the primary users of other languages. This is probably due to the clustering of immigrant populations in the larger cities of those two major geographic regions of the country.

Most systems offered some type of special way to prepay fares. The most common method was monthly passes (82 percent) followed by tickets (64 percent). The primary outlet for these programs was independent vendors (82 percent) followed by agency-run outlets (68 percent) and mail order (65 percent).

The majority of systems (68 percent) surveyed publish an employee newsletter at least once a month. Most systems (69 percent) had adopted some type of incentive programs for their drivers and maintenance personnel, but only about 26 percent had such programs for administrative personnel.

Conclusion and Recommendations

At a time when most states are seeking solutions to their gridlock traffic and smog problems, greater attention is focusing on the need for developing a rider-oriented public transport system. The results reported in this study offer some hope but leave much to be desired.

It is not sufficient that these public transport agencies hire people with degrees in marketing or related areas. Nor is it sufficient to perform research and develop promotional programs. It is imperative that these organizations develop organizational cultures that are rider oriented. Such cultures would go beyond the motions of performing marketing functions to developing a philosophy of operation that is rooted in the concept of customer satisfaction.

Marketing in mass transit is a developing phenomenon. In its present form, however, it is primarily a promotional function equated with advertising and public relations. If these systems are to gain the riders' confidence and support, they must become more responsive. This greater orientation should manifest itself in increased routes, improved performance, variation of modality, and target marketing (that is, appeal to professionals, mothers with children, minority groups, etc.).

Only an outright commitment to a strong customer orientation would motivate the American public to leave their automobiles behind and take instead the bus, the train or the subway. Given the nation's apparent traffic problems and its aging system of roads, one hopes that marketing will not just exist as a department in public transit agencies, but that instead, it will become the driving force and overall philosophy of each transit system.

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DOES THE DEGREE DESIGNATION OF A DOCTOR MAKE A DIFFERENCE
IN THE CONSUMER SELECTION PROCESS: AN EMPIRICAL STUDY

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Abstract

Professional services marketers are increasingly concerned about the role credentials play in clients' selection process. This study evaluates the impact of the degree designation of oral maxillofacial surgeons on a national random sample of potential clients. The results indicate that the degree designation does make a significant difference in clients' perception.

Introduction

The medical care industry is in a state of rapid change. Fundamental shifts in the supply, demand, and cost structure of the health care services market has created a more competitive environment. In response new health care services and products are being introduced at an accelerating rate. Additionally, this recent proliferation of alternative health care delivery systems available to consumers has been supported by an increase in promotional and informational activity on the part of health care providers.

Independent physicians and small group practices realize that it is increasingly difficult to attract and maintain a sufficient patient base in the face of intensifying competition (Baumgarten and Hensel 1988; Tracy 1985; Van Doren and Smith 1987; Weinrauch 1982). But, they have difficulty knowing how to manage their particular practices more effectively in response to a more competitive health care marketplace (Fitch 1986). More fundamentally, they have little understanding of the health care consumer's information search and physician selection process.

Although there is a large body of literature on patient satisfaction (see Ware, Davies-Avery, and Stewart 1978 for a comprehensive review, Feletti, Ferman, and Sanson-Fisher 1986 for a recent empirical study, and Brown and Swartz 1989 for insight into patient expectations and experiences as compared to physician perceptions), research on consumer selection of physicians and dentists has been more limited (Crane and Lynch 1988; Kuehl and Ford 1977; Stewart, Hickson, Pechmann, Koslow, and Altemeier 1989; Wotruba, Haas, and Oulhen 1985). The pattern emerging from the few studies that have been done is that consumers believe they lack the competence to evaluate the quality of health care service in more than the most general and superficial way (Cartwright 1967; Stewart et al. 1989). In fact, for many medical procedures consumers are unable to accurately evaluate the level of technical medical care received even after treatment (Linn, DiMatteo, Chang, and Cope 1984).

The inability to accurately evaluate technical medical qualities during the physician selection process has most likely contributed to the finding that little information search activity takes

place when consumers select a health care provider (Stewart, et al. 1989). This finding is consistent with the information processing (Petty, Cacioppo, and Schumann 1983) and attitude formation literature (Chaiken 1980), which suggests the ability to use information is the key determinant of the extent of the search process.

In a recent study of the selection process across a variety of physician types, Stewart et al. 1989 found that the formal qualifications of the doctor is one of the most important factors in the medical care consumer's decision process. However, this presents the consumer with a dilemma because of perceived inadequacies in understanding and using available information about medical provider qualifications. Consumers often lack the technical skill to evaluate the meaning and importance of credentials displayed by physicians (Bloom 1984).

The problem for physicians attempting to market their practices is that one of the few manageable pieces of tangible evidence is their technical qualifications as represented by credentials. Health care consumers, however, may underuse or misunderstand credentials during the physician practice selection process.

Background and Purpose

The purpose of this study is to evaluate the impact of comparable but differing types of medical credentials on patient perceptions of physician qualifications and the medical care selection process. More specifically, The College of Oral Maxillofacial Surgeons is concerned that the conferring of two different degrees is confusing to patients. Some members are pushing for unification under a single degree designation. There is controversy as to which degree is superior in terms of conveying competence. Two different sets of tangible credentials are being displayed to the public and the issue of impact on the consumer's selection process is being debated.

Oral maxillofacial surgeons are specialists who do some or all of the following: treat jaw problems; extract teeth; treat tumors or cysts in the mouth; perform facial cosmetic surgery; do dental implants; treat facial pain; and perform general oral surgery. Oral maxillofacial surgeons hold either a Doctor of Medical Dentistry (DMD) or a Doctor of Dental Surgery (DDS) from a degree granting institution. The training and preparation required for each degree is identical. From a credentialing perspective oral maxillofacial surgeons receiving a DMD or DDS degree have achieved equivalent competency levels. The designation, DDS versus DMD, simply reflects the preferences of degree granting institutions, rather than differences in program substance according to The College of Oral Maxil-

lofacial Surgeons.

The credentials of DMD and DDS serve as tangible representations of an oral maxillofacial surgeon's training and competence. Because of the difficulties consumers have in judging medical competence they tend to rely heavily on personal referrals as to the practice's reputation (Crane and Lynch 1988; Stewart et al. 1989), and somewhat less on tangible evidence of credentials and experience (Mac Stravic 1987) in the physician practice selection process. Consequently, the research questions posed are: (1) Do consumers perceive differences in training for the DMD versus the DDS degree? (2) Does the degree designation of DMD versus the DDS degree make a difference in the oral maxillofacial choice process?

Methodology

The survey was designed to be administered via telephone. The questionnaire was developed and pretested on a limited sample of consumers as well as oral maxillofacial surgeons. The pretest led to several drafts of the questionnaire which culminated in one that The College of Oral Maxillofacial Surgeons agreed upon.

The survey was conducted using a Professional Field Service with centrally controlled computer assisted telephone interviewing. The sample size of 400 was used to give a 95% confidence level and a potential error of plus or minus 5%. The sample was purchased from Survey Sampling and was a nationwide probability sample based upon open phone exchanges. The interviewing was completed within a 7 day period of time. Calls were made at night to insure the inclusion of dual working as well as non-working households.

The resulting sample's demographic characteristics are depicted in Exhibit 1. Seventy percent of the respondents were female, and 72% indicated that they were married. Thirty-eight percent of the sample graduated from college with an additional 27% stating that they had some college education. Thirty-one percent were employed as professionals, managers, or in technical occupations. The sample was relatively up-scale in income as 53% had a total family income above \$35,000, and only 24% earned less than \$25,000 per year.

Results

The questionnaire was designed to determine the extent to which the public was aware of oral maxillofacial surgeons. Forty seven percent of the participants in the study indicated that they had not heard of oral maxillofacial surgeons. The respondents who had definitely heard of oral maxillofacial surgeons represented 43% of those surveyed. An additional 9% said they thought they had heard of these surgeons. As one might expect, more affluent, higher educated professionals had greater awareness of oral maxillofacial surgeons. For example, college graduates and people having graduate degrees were much more aware of oral maxillofacial surgeons (47% and 62%

respectively) in comparison to those without a college degree (35%). Likewise, people earning between \$50,000 and \$75,000, and those over \$75,000 indicated a very high awareness of these surgeons (56% and 73% respectively). Professional workers had the highest level of awareness (51%) of all occupation categories white collar workers (33%) and technical people (35%) the lowest.

EXHIBIT 1 DEMOGRAPHIC PROFILE OF SURVEY PARTICIPANTS

Age		Marital Status	
21-30	29%	Single	20%
31-40	25%	Married	72%
41-50	17%	Divorced	8%
51-60	14%		
61 & over	15%	Sex	
		Male	30%
		Female	70%
Education			
Some High School		8%	
Graduated High School		27%	
Some College		27%	
Graduated College		28%	
Graduate School		10%	
Occupation			
Blue Collar		7%	
Office Worker		9%	
Manager & Technical		10%	
Professional		21%	
Retired		12%	
Student		7%	
Other		12%	
Housewife		23%	
Total Family Income			
Under \$15,000		9%	
15,000 to 25,000		15%	
25,001 to 35,000		23%	
35,001 to 50,000		29%	
50,001 to 75,000		15%	
Over \$75,000		9%	

Thirty two percent of the respondents had been treated by an oral maxillofacial surgeon sometime in their life. Education was a key difference in treatment as college educated consumers used oral maxillofacial surgeons much more often than consumers with no college education (38% versus 22% respectively). Additionally, females were heavier users (36%) in comparison to males (24%). Usage also increases with age to a point. The lowest usage as might be expected is among 21 to 30 year olds (25%), and those over 61 (29%).

When asked if they were aware of what oral maxillofacial surgeons do, 32% of the respondents indicated that they did know. When these respondents were asked specifics in an open ended manner, their responses reflected accurate perceptions of the conditions most commonly treated by oral maxillofacial surgeons.

All respondents were informed by the interviewers as to the actual types of problems treated by oral maxillofacial surgeons. Beyond this, respondents were told that the surgeons may hold one of two kinds of degrees, a D.D.S. (Doctor of Dental Surgery) or a D.M.D. (Doctor of Medical Dentistry) degree. They were then asked if they perceived a difference in training between the two degree designations for oral maxillofacial surgeons. The majority of respondents (50%) said, "I don't know." However, 36% indicated that there indeed was a difference in training with only 15% saying there was "no" difference. Respondents with more education perceived greater differences in medical training than less educated consumers. Likewise, people earning \$25,000 to \$75,000 and between 31 and 50 years of age felt there was more difference than other groups within the study.

A series of questions were then asked of each respondent regarding preferences for a DMD or DDS oral maxillofacial surgeon in treating specific conditions. Table I displays the full set of data and the complete questions.

As one can see in Table I there is a significant difference at the .01 level between DMD's and DDS's with respect to the length of schooling received. DMD's were perceived as receiving more formal education than DDS's by 64% of the respondents.

With respect to oral surgery 56% of the respondents preferred DDS's in comparison to 44% for DMD's (significant at the .01 level). Likewise for tooth extractions DDS's were more likely to be selected by 78% of the sample versus 22% for DMD's (significant at the .01 level). For a dental implant like a permanent artificial tooth the preference was for the DDS over the DMD (64% versus 36% significant at the .01 level).

When asked about cosmetic facial surgery the DMD designation was strongly preferred by 75% of the respondents in comparison to DDS's, who were preferred by only 25% (significant at the .01 level). Tumor and/or cyst surgery in the mouth was similar with respect to preference as DMD's would be recommended by 53% of the respondents while DDS's would be recommended by 47% (significant at the .05 level).

The data do not provide clear resolution to the degree unification debate for the College of Oral Maxillofacial Surgeons. The DDS degree was clearly preferred for treatment of oral surgery, tooth extractions, and artificial teeth. In contrast, the DMD degree was preferred for cosmetic surgery, and to a lesser degree the removal of tumors and cysts. Although the unification of the two degrees under a single designation may make sense from a communication perspective, the data are not compelling for the choice of one degree over the other from a competence conveyance and provider selection process standpoint.

If the oral maxillofacial surgeon's degree serves as tangible evidence as to the level and type of training and expertise associated with the service provider, the mere physical display of degree designation may mean that patients gravi-

tate toward or away from specific practices in the face of different oral problems. If consumers have a choice between several oral maxillofacial surgeons who are otherwise viewed as equal, degree designation may play an important role in the selection process for specific problems.

TABLE I
PERCEPTIONS OF THE DMD OR DDS

Questions	Respondent Answers			
	DDS	DMD	Z	P
Which, of either oral maxillofacial surgeon categories, do you think have to go to school longer, a DDS or DMD?	36%	64%	-9.76	.01 **
If you had a problem that oral maxillofacial surgeons deal with and you had your choice of a DMD or a DDS, which would you choose?	51%	49%	.645	.3594
If you were going to have <u>oral surgery</u> , would you be most likely to select a DDS or a DMD?	56%	44%	4.07	.01 **
If you were in need of a <u>tooth extraction</u> , would you be most likely to select a DMD or DDS?	78%	22%	23.57	.01 **
If you were considering <u>cosmetic facial</u> surgery, would you be most likely to select a DDS or DMD?	25%	75%	-19.6	.01 **
If a friend or relative was considering a <u>dental implant</u> like a permanent artificial tooth, would you recommend a DMD or DDS?	64%	36%	10.04	.01 **
If you had a <u>tumor or cyst</u> in your mouth that needed treatment, which would you be more likely to recommend a DMD or DDS?	47%	53%	-2.08	.0188 *
Which Doctor do you think charges more money, a DDS or a DMD?	35%	65%	-10.22	.01 **

*significant at 95% level of confidence
**significant at 99% level of confidence

More specifically, degree designation may imply more or less competence for the treatment of specific conditions based on whether the consumer perceives them to be more dental or medically related. The greatest differences can be seen in the preference for the DDS degree for tooth extractions, and the DMD degree for cosmetic facial surgery. Supporting this line of thought is the finding that DMD's were perceived to have received more formal education, which may be related in the consumer's mind to the fact that the term medical (and letters, M.D.) is contained within the title, Doctor of Medical Dentistry.

Interestingly, the data indicate that the perception of longer schooling associated with the DMD degree is not an advantage in all cases. For the simpler, more dental oriented conditions the term dental contained within the designation, Doctor

of Dental Surgery (DDS), may be more important because of the implied specialization in dental surgery related problems.

Beyond this, DMD's were perceived as charging more money than their DDS counterparts (65% versus 35% significant at the .01 level). This can be both an advantage and disadvantage for the DMD. It is advantageous if people associate their perceived higher medical charges with greater levels of training, skill, knowledge, and competence. At the same time, it could mean that some consumers eliminate DMD's as a higher priced alternative. This is particularly a problem if consumers have a choice between equally acceptable DDS and DMD providers. This is also a problem since the high price perception of DMD's is not an accurate one in general.

Conclusions

The clear message is that the public is somewhat confused as to the DMD and DDS degree designations. The College of Oral Maxillofacial Surgeons, therefore, should consider educational programs to inform and clarify misperception relative to education received and problems treated by oral maxillofacial surgeons, regardless of whether they are DMD's or DDS's. This could be accomplished through a campaign combining advertising, public relations activities such as appearances on talk and TV news and radio programs, presentations to civic and community groups, and the use of printed materials in the form of brochures and direct mail.

The data indicate that physicians should not assume patients understand what a degree designation (DMD or DDS) means. Further, designation may carry with it incorrect perceptions as to education, price, and the types of services rendered. Thus, for physicians' marketing efforts, the challenge is to more carefully consider the role displayed credentials can play in the consumers evaluation of qualifications during the information search and selection process. A useful physician practice marketing activity would be to attempt to improve the ability of medical care consumers to understand and accurately process information about technical medical qualifications. Information as to the training, experience, and expertise associated with a physicians credentials needs to be packaged and presented in the terms consumers understand.

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STRATEGIC MARKETING

HOW MARKETING MANAGERS USE MARKET SEGMENTATION:
AN EXPLORATORY STUDY

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Abstract

Much of the previous market segmentation research has focused on methods of positioning total markets into segments and rarely on how marketing managers actually use market segmentation in practice. In contrast, this article first discusses the organizational environment in which marketing managers make segmentation decisions. Then it describes results of a survey of marketing managers about the segmentation variables they use, the criteria they choose to form segments and to select target market segments, and different marketing actions used to reach different segments. Suggestions are made for future research.

Introduction

Market segmentation, one of the most fundamental concepts in marketing (Wind 1978), is also one of the more widely studied topics in the marketing literature. Much work has appeared discussing such issues as the rationale underlying its merit as a strategy (e.g., Kotler 1988), different bases which might be used to segment a market (e.g., Assael 1981), statistical techniques which can be helpful in segmentation research (Wind 1978) and normative issues in segmentation (Elrod and Winer 1982). Yet, very little has appeared which has examined how applied segmentation research is conceptualized by marketing managers and how the results are translated into marketing strategy.

Translating the results of segmentation research into marketing strategy is often an enormous problem. Wind (1978) observes that "no rules can be offered to assure a meaningful translation and, in fact, little is known (in the published literature) on how this translation occurs" (Wind 1978, p. 333). Market segmentation is often viewed as a stepwise process (Wind 1978; Hlavacek and Reddy 1986; Rudelius, Walton and Cross 1987). The figure below summarizes typical steps in a segmentation study.

Step 1: Select Variables
to Consider

Step 2: Form Market
Segments

Step 3: Choose Target
Market

Step 4: Take Marketing
Actions to
Reach Segments

Step 4 is the translation or implementation step--the ultimate reason for doing the three previous market segmentation steps. Wind (1978) further notes a "strong tendency to define segments in terms favorable to corporate decision makers' objectives." The net result is that we know much more about the theoretical and methodological segmentation issues than about the translation-into-strategy process.

We first propose that segmentation research should be seen as a knowledge-generation process engaged in by marketing managers in which the organizational environment significantly affects the process. We then describe the results of a survey of product and market managers engaged in segmentation projects that utilize the four-step segmentation sequence outlined above. These survey results lead to some suggestions on research to enhance our understanding of market segmentation.

Segmentation Research and the Organization

Segmentation research should be viewed as a knowledge-generation process affected not only by the information needs of the firm but also by the marketing managers involved in the project and the organizational environment in which the project is conducted. This environment affects each stage of any segmentation effort, from the conceptual work which guides the project, through the design of the project, data collection and analysis, to the evaluation of the results and subsequent translation of the research into marketing strategy.

Conceptual Level

Sometimes marketing managers may avoid spending money on data collection and segmentation research if they sense the firm is committed to its current strategy or if there is little likelihood of operational results. In other instances the information needs may be enormous because different segmentation bases may require estimates of the reactions of both consumers and competitors to a great number of potential changes in the firm's marketing strategy. In both cases marketing managers often are forced to construct strategic plans based on inductions whose accuracy has not been studied empirically. Moreover, marketing managers undoubtedly ascribe little importance to theory and may choose variables on the basis of "management needs" (Wind 1978).

Design/Analysis/Level

Managers are probably fairly unconcerned with reliability and validity issues. As a consequence validity may oftentimes be assumed or untested (Wind 1978) unless the data challenge strongly held inductions (Deshpande and Zaltman

1982). The technical merit of the research may then come under examination. Many marketing managers may not fully appreciate the advantages and limitations inherent in some of the more sophisticated current statistical techniques and have less confidence in recommendations based on their use.

Evaluation Level

Out of necessity, marketing managers emphasize the pragmatic business value of any segmentation research. They may see little pragmatic value in negative information or unsupported hypotheses. Uncertainty in their decision environment may be so great that such information may not be seen as worth the cost of the research. Marketing managers often extrapolate sketchy research results due to severe time and budget constraints. These leap-of-faith extrapolations can be a source of business advantage for some entrepreneurial marketing managers and spawn substantial payoffs. They can also lead to significant errors and disasters.

Organizational Environment

We presently have little insight into how the organizational environment affects segmentation decisions although they have been studied in other decision contexts (Janis and Mann 1977; Hogarth 1980; Wright 1984). Segmentation researchers should consider the organizational context to appreciate the factors which may help shape the process. Our current normative models do not consider organizational factors, but data suggest the political acceptability of research results has a significant impact on the use of these results in business practice (Despande and Zaltman 1982).

The organizational environment is a powerful force in shaping marketing decisions. It has dominant values, strong players, rites, and rituals that must be taken into account to understand the process (Bonoma 1985). Compromise and self-interest may be important considerations in segmentation decision making. As Weitz and Wensley (1984) have observed, marketing managers can be both purposeful and politically astute. When making complex, important decisions, they may tend to avoid an early commitment to a single course of action. Politically astute managers may want to avoid giving opponents a target. In marketing segmentation decisions this may be reflected in utilizing more variables, considering more segments, and postponing decisions intended to focus marketing efforts on fewer segments.

Marketing managers often approach this incremental decision making process with a "satisficing" strategy. In this approach, possible decision strategies are examined sequentially and one is chosen if the decision requirements are satisfied "well enough." March and Simon (1958) contend this decision strategy is widely used and argue that searches for optimal solutions involve more complexity and cost and may not be worth the effort. This implies a form of cost-benefit tradeoff in decision making. Whether marketing

managers use such a tradeoff in segmenting markets is largely unknown. Perhaps marketing managers merely fall into the habit of using simplistic decision rules because they seem to work "well enough" in meeting constraints set by their organization's environment.

Telephone Survey of Marketing Managers

The objectives, approach, and results of an exploratory survey of marketing managers to determine how they use market segmentation in their own organizations are summarized below.

Objectives

Using a sample of 32 marketing and product managers, an exploratory telephone interview sought to identify how these managers:

1. Select the variables used in segmenting their markets.
2. Form the segments using these variables.
3. Choose the target market segments on which to focus their marketing efforts.
4. Take marketing actions to reach the chosen segments.

These objectives parallel the four-step segmentation sequence described earlier.

Approach

Three aspects of the approach need clarification: questionnaire development, the sample, and data analysis.

Questionnaire Development. After identifying the research objectives, we developed a draft questionnaire and pretested it on a sample of six marketing and product managers to simplify it, to clarify wording, and to reflect more accurately the way the managers view the market segmentation process. We were concerned that respondents would give automatic knee-jerk reactions like, "Of course we always segment markets using key variables and marketing actions." To reduce the chances for this automatic response, we (1) used some early distractor questions about the respondent's search for new business opportunities to view slightly the main topic and (2) asked for examples, where possible, of segmentation variables and marketing actions they said they used.

Sample. We used a quota sample with three selection criteria: (1) product versus service offering, (2) consumer versus industrial target customers, and (3) large (over 500 employees) versus small (500 employees or less) size. This 2x2x2 quota sample resulted in 8 cells. We obtained 4 telephone interviews in each cell for a total sample of 32 respondents.

The sample was chosen in a large U.S. metropolitan area. Responding firms varied from those selling high-tech products to financial services and from firms with less than 100 employees to those on the Fortune 500 list. In the smaller firms the respondents often had titles like Vice

President of Marketing or Director of Marketing while in larger firms the respondents carried titles like Product Manager, Marketing Manager, or Market Manager. Fifty-nine percent of the respondents were men and 41 percent were women. Marketing employees, excluding sales representatives and managers, in these firms varied from a low of 1 to 3 marketing employees to over 50. About one-third of the respondents had over 10 years of marketing experience and two-thirds had some graduate work or an MBA.

Data Analysis. Because of the small sample, the data analysis was limited to quantitative data using conventional descriptive statistics and qualitative data on comments and examples provided by respondents. The results presented here report the percentage of times the marketing managers use a specific variable or criterion in the segmentation process on the products or services on which they work.

Survey Results

The results are presented in terms of the four objectives identified earlier that correspond to the four steps in the market segmentation process.

Variables Used in Segmentation Decisions. Two of the 32 marketing managers reported that they did not segment their markets--mainly because it wasn't seen as cost effective. **Tables 1A** and **1B** summarize the answers of the remaining 30 marketing managers (in the "total" column) and of 7 or 8 respondents in each of the four sub-categories, such as "consumer products" or "business services." While the small samples make minor percentage differences unimportant, large percentage differences suggest genuine differences in behavior among the marketing managers surveyed.

TABLE 1A
VARIABLES MANAGERS USE TO SEGMENT MARKETS

Variables Used to Segment Market	Kind of Market ^a	Total	Consumer . . .	
			Product	Service
Firm's Characteristics	Business	85%	--	--
Demographic	Consumer	82	88	79
Geographic	Both	56	47	79
Application/Use	Business	53	--	--
Benefits to Buyer	Both	42	46	43
Usage Rate	Both	38	53	46
Psychographic	Consumer	38	38	38
Buying Situation	Both	32	43	56

^aKind of markets means consumer business, or both.

TABLE 1B
VARIABLES MANAGERS USE TO SEGMENT MARKETS

Variables Used to Segment Market	Kind of Market ^a	Total	Business . . .	
			Product	Service
Firm's Characteristics	Business	85%	84%	86%
Demographic	Consumer	82	--	--
Geographic	Both	56	50	50
Application/Use	Business	53	59	46
Benefits to Buyer	Both	42	31	46
Usage Rate	Both	38	15	22
Psychographic	Consumer	38	--	--
Buying Situation	Both	32	12	21

^aKind of markets means consumer business, or both.

While segmentation researchers often stress the value of psychographic (Lesser and Hughes 1986) and buying situation (Dickson 1982; Srivastava, Alpert, and Shocker 1984) variables, marketing managers still rely on more traditional segmentation variables--demographics (82 percent of the time) for consumer products and services and the buying firm's characteristics (size and SIC) for business products and services (85 percent of the time). Psychographic and buying situation variables are used far less frequently.

Tables 1A and **1B** contains some other surprises: usage rate is far more important for consumer than business offerings and geographic segmentation variables are especially important for consumer services. In response to an open-end question, 53 percent of the respondents (16 of 30) said they segmented markets because it was cost efficient. The segmentation variables they choose are easy-to-use ones that marketing managers believe apply to their business, industry, and customers--suggesting at least some support for the "satisficing" search strategy mentioned earlier.

Criteria Used to Form Segments. Many segmentation studies by academicians use "similarity of needs of customers within a segment" and "difference of needs of customers between segments" as the appropriate criteria to use in forming market segments (Grover and Srinivasan 1987; Dickson and Ginter 1987). As shown in **Table 2**, these two criteria are in the middle of the ranked list of criteria but are far more important to marketing managers selling consumer products than in the other three subcategories. Overall, the feasibility of a marketing action (77 percent) and stability of the segment through time (35 percent) are the most and least important criteria, respectively.

TABLE 2
CRITERIA MANAGERS USE TO FORM SEGMENTS

Criterion	Total	Consumer . . .		Business . . .	
		Product	Service	Product	Service
Feasibility of Marketing Action	77%	78%	86%	78%	63%
Potential for Increased Profit/ROI	72	81	86	56	67
Similarity of Needs Within Segment	68	84	57	59	71
Difference of Needs Between Segments	54	75	43	47	50
Simplicity of Assigning to Segments	53	44	71	53	42
Stability through Time	35	38	46	38	17

Criteria Used to Select Target Market Segments.
Once the market segments are formed, a marketing manager must choose segments on which to focus marketing efforts. Table 3 shows that size of the market in the segment (86 percent) is the most important criterion, followed by compatibility with the firm's objectives and resources (84 percent), and profitability (81 percent).

TABLE 3
CRITERIA MANAGERS USE TO SELECT MARKET SEGMENTS

Criterion	Total	Consumer . . .		Business . . .	
		Product	Service	Product	Service
Size of Market in Segment	86%	88%	82%	81%	93%
Compatibility with Objectives/Resources	84	81	96	78	92
Profitability	81	84	89	66	86
Expected Growth of Segment	78	78	61	84	86
Ability to Reach Buyers in Segment	78	84	82	69	79
Competitive Position in Segment	72	78	71	69	67
Cost to Reach Buyers in Segment	60	75	75	44	46

Marketing managers see more subtle or cost-oriented criteria--such as segment growth, ability and cost of reaching buyers in the segment, and the firm's competitive position as being of lesser importance. One marketing manager summarized her direct approach to selection criteria by saying "It's simply REAL/WORTH/WIN!" Translated, this means:

- o REAL - Is the market segment a real market opportunity?
- o WORTH - Is the market segment worth our effort to reach it?

- o WIN - Is the market segment a place where we can win?

Marketing Actions to Reach Different Segments.
Unless the marketing manager takes different marketing actions to reach different segments, there is no reason for using a segmentation strategy. Tables 4A and 4B show that different advertising appeals and media (65 percent), products/services (56 percent), and sales promotions (47 percent) are the most important distinctive marketing actions to reach different segments. Different prices (33 percent), sales forces (26 percent), and distribution systems (23 percent) are significantly lower in importance. But there are large variations across the four subcategories. For example, different products/services are far more important in consumer markets (75 and 71 percent), than business markets (41 and 36 percent). Curiously, different advertising appeals and media are far more important for consumer services (86 percent) and business products (84 percent) than for the other two subcategories--consumer products (53 percent) and business services (36 percent).

TABLE 4A
MARKETING ACTIONS MANAGERS USE TO REACH DIFFERENT SEGMENTS

Criterion	Total	Consumer . . .	
		Product	Service
Different Advertising Appeals/Media	65%	53%	86%
Different Products/Services	56	75	71
Different Sales Promotion Programs	47	31	64
Different Prices	33	56	15
Different Sales Forces	26	13	13
Different Distribution Systems	23	6	39

TABLE 4B
MARKETING ACTIONS MANAGERS USE TO REACH DIFFERENT SEGMENTS

Criterion	Total	Business . . .	
		Product	Service
Different Advertising Appeals/Media	65%	84%	36%
Different Products/Services	56	41	36
Different Sales Promotion Programs	47	59	32
Different Prices	33	13	50
Different Sales Forces	26	26	50
Different Distribution Systems	23	19	29

Future Research Directions

This study was exploratory so the conclusions are tentative. Nevertheless the research results show the wide variation in the importance of the factors present in each step of the four-step market segmentation process described earlier. So this exploratory research precedes what is planned to be a large-scale study of the practices of marketing managers.

Recognition must also be made of the managerial tradeoffs present in the segmentation process. Ultimately trade-off information should be incorporated into a normative model of segmentation. For market segmentation studies to be useful to marketing managers, they must recognize the potential profits of adding new segments, threshold costs, and response-function approximations. But they also need an understanding of the marketing, R & D, and manufacturing synergies of entering new segments. The effects of all relevant costs on profits should be considered collectively, not in isolation. How marketing managers actually make segmentation decisions has received little attention in the segmentation literature. The normative models which have appeared have rarely considered the organizational influences on segmentation decisions. This paper has urged the overt study of these factors. If we can develop segmentation models to explain how research results are translated into strategy, then we will be able to develop better guidelines to manager the process. More research clearly needs to be conducted to describe and improve the process of making market segmentation decisions.

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"MARKETING IN THE 1970s: A SYMPOSIUM" REVISITED
AND A TREPIDATIOUS PEEK AT THE 1990s

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Abstract

In the January, 1970 issue of the Journal of Marketing, then-editor Eugene J. Kelley ran a special lead section entitled "Marketing in the 1970s: A Symposium." Solicited articles from eight pre-eminent scholars comprised this collection. The following paper steps back two decades in time and reviews the predictions made and their accuracy. Some of the more momentous missed calls are also addressed and some qualified prognostications are made with respect to this concluding decade of the twentieth century.

Introduction

In the words of Kerin and Peterson (1987, p. 1-2), "Strategic marketing management consists of six complex and interrelated analytical processes: 1) Defining the character of the organization's business; 2) Specifying the purpose of the organization; 3) Identifying organizational opportunities; 4) Formulating product-market strategies; 5) Budgeting financial, production, and human resources; 6) Developing reformulation and recovery strategies."

Integral to this process is development of an unmyopic perspective on the true nature and direction of one's business and realistic assessment of environmental threats and opportunities. In short, there is no acceptable substitute for broad managerial perspective. To attain such perspective effectively one must come up for air occasionally from the day-to-day grind and take a good, long, hard look around. The January, 1970 issue of the Journal of Marketing did just exactly that by leading off with invited contributions from eight individuals widely considered to be among the leading thinkers of the time in the field of marketing. Their charge was to look forward into the upcoming decade and to assess major trends and issues and their likely implications for marketing practice.

Clearly strategic planning is a crucial exercise and we feel that an occasional glance over the shoulder is useful. History is a marvelous teacher and also a harbinger of the future for those who ignore it. In that vein we dropped back twenty years to review these previous efforts before taking a stab at the 1990s ourselves. In the main our predecessors performed pretty well and while we have no illusions regarding our ability to match them, we do expect we can generate some lively and stimulating debate. Time alone, however, will be the arbiter.

We now turn to the previous efforts and will recap them in order. **Table 1** presents a combined set of their predictions in something akin to scorecard format. Following this review we will offer up our own brand of futur-ology.

What's Ahead for Marketing Managers (Buzzell, 1970)

In the lead piece of the symposium, Robert D. Buzzell discusses two broad categories of change which he foresaw for the 1970s. These were 1) changes in industry and company structures, and 2) environmental pressures. Under the former he posited a "continuing trend toward bigness in American industry," greater diversification of products and services within large corporations and increased international expansion.

Under the second category he made three specific predictions. The first was that technological change would continue apace; second, an acute shortage of qualified managers would develop; and third, there would be continued improvement in computer efficiency and in the quality of computer based models and systems.

From these he evolved five types of effects on marketing: 1) The trend toward decentralization of authority within large firms will continue and probably accelerate. 2) A critical shortage of qualified marketing management talent will develop. 3) Top-level management will rely increasingly on formal corporate planning systems. 4) Some companies will have to modify their selling methods to meet the needs of large, diversified, multinational customers, both manufacturers and distributors. 5) There will be extensive experimentation in the definition of a proper role for corporate marketing units.

Changes in Distributive Institutions (Davidson, 1970)

In a nutshell, Professor Davidson made six specific postulations regarding marketing in the 1970s. These were constrained to distribution issues and were as follows: 1) rapid growth of vertical marketing systems, 2) intensification of intertype competition, 3) increased polarity of retail trade, 4) acceleration of institutional life cycles, 5) emergence of the "free form" corporation in distribution, and 6) growth in non-store retailing.

The Future of the Computer in Marketing (Kotler, 1970)

Professor Kotler's visions for the future were less expressly laid out than the previous two. Basically, he cites several reasons why he feels that the future marketing executive will be cast in the role of a "market engineer" and "he will have a heavier involvement in planning, rather than doing, and in profit maximization rather than sales maximization." (Kotler, 1970, p. 11) Driving this are trends he sees in information technology (marketing intelligence, marketing research and company accounting systems) and analytical models and tools such as decision theory and simulation.

Measurement and Data Analysis (Green, 1970)

Essentially Professor Green foresaw widespread dissemination of multidimensional scaling as a measurement tool amongst marketing practitioners. This, coupled with various multivariate analytical techniques such as cluster analysis, factor analysis, discriminant analysis and canonical correlation, would lead to "richer prescriptive models and testable behavioral theory."

Of particular interest is the fact that he points out at least twice how weakly scaled much marketing related data actually are and toward the end of the piece he speculates on the possibility of misuse and abuse. "The increasing proliferation of computer programs and the desire to try 'new things' may lead to more abuses of these developments than could have possibly been committed before the computer. The availability of 'canned' programs (as a seeming substitute for conceptual understanding of the methodology) will unfailingly provoke misapplications on the part of those too impatient to invest the time to understand the assumption base and rationale of the 'black box'." (Green, 1970, p. 17)

Buyer Behavior and Related Technological Advances (Howard, 1970)

In essence this one is a pitch for research efforts geared toward refinement and validation of The Theory of Buyer Behavior (Howard and Sheth, 1969). The major prediction was that such a comprehensive theory would result in an operational technology which would have a major impact on the science and practice of marketing. This new technology (his and Sheth's model) would have major relevance for company market researchers, marketing managers, marketing information systems, company presidents, public policy makers, and university researchers.

Industrial Marketing: Trends and Challenges (Lotshaw, 1970)

This piece was perhaps the most readable of the eight. Interestingly, the author was one of only two non-academic contributors to the symposium and also one of only three to even mention the word profit.

Specifically, Lotshaw identifies four developments which provide the basis for five emerging trends he sees in industrial marketing. The four developments of which he speaks are:

1) significant changes in the pattern of final demands; 2) the rapid pace of technological change; 3) the increasing size and complexity of the industrial firm and its customers; and 4) the growing impact of the computer and management sciences. The five emerging trends which shake down from the foregoing developments are: 1) increased marketing involvement in providing direction to R & D and acquisitions, 2) increased use of formal marketing planning, 3) emphasis on systems in all aspects of marketing, 4) more effective coordination, direction, and control over line marketing activities, and 5) new direction in marketing research. He then discusses each of these five in some detail.

The Growing Responsibilities of Marketing (Lavage, 1970)

Congruent with the era (hot on the heels of Woodstock and the rather turbulent '60s) Robert Lavidge addressed the social role of marketing. Specifically he states that "... it is likely that marketing people will have an expanding opportunity, and responsibility, to serve society during the 1970s." (Lavage, 1970, p. 25)

The particular issues he discusses are: 1) efficiency and social justice, 2) consumerism, 3) the struggle of the poor for subsistence, 4) the marketing of social and cultural services, 5) the day-to-day functioning of the economy, and 6) the use and pollution of society's resources. Essentially every point Lavidge raised remains an issue today.

The Expanding Role of Marketing in the 1970s (Ferber, 1970)

Professor Ferber's contribution did not lean so much toward the making of predictions as it did toward a synopsis of the foregoing seven. It was essentially an integrative capstone piece. If a prediction could be extracted it would seem to run along the following lines. The seemingly contradictory terms of integration and diversification "... are likely to be the key words in a world in which marketing will be assuming increasing importance." (Ferber, 1970, p. 29) He bases this on anticipated developments in computers, systems analysis and more formal models of decision making.

Brief Discussion of the Symposium

In general these eight articles provided very interesting and enjoyable reading. As previously mentioned, the soothsayers performed pretty well on the whole as shown in [Table 1](#).

TABLE 1

A Summary of the Predictions in
"Marketing in the 1970s: A Symposium"

Prediction	Author(s)	Came True	Remains True	Debat- able
1. Increasing size/complexity of business firms	Buzzell, Lotshaw	Yes	Yes	
2. Corporate integration; system approach to planning; system analysis; increased formal planning	Buzzell, Davidson, Howard, Lotshaw, Lavidge, Ferber	Yes	Yes	
3. Increased corporate diversification	Buzzell, Lotshaw, Ferber	Yes	Yes	
4. Corporate decentralization	Buzzell, Davidson, Ferber			Yes
5. Computers will enable more sophisticated methods of market analysis	Kotler, Green, Buzzell, Davidson, Lotshaw, Ferber	Yes	Yes	
6. Abuse of computer power	Green, Lavidge			Yes
7. Development of more useful, realistic models of market and buyer behavior	Howard, Kotler, Green			Yes
8. Greater role of behavioral sciences in marketing research	Howard, Lotshaw			Yes
9. Technology as both cause and effect of marketing change	Buzzell, Howard, Lotshaw, Green	Yes	Yes	
10. Societal issues will be the source of many opportunities and conflicts for marketers	Buzzell, Lavidge, Ferber	Yes	Yes	
11. Growth of vertical marketing systems	Buzzell, Davidson	Yes	Yes	
12. Critical shortage of qualified marketing managers	Buzzell			Yes

There have been, of course, a great many momentous happenings which did not get mentioned. But in fairness to the writers their charge and consequently their focus was fairly constrained.

Among the myriad omitted items to which one could point, a few do seem to stand out. For instance, the "energy crisis" had begun to become evident even in the era of the symposium and the first Arab oil embargo transpired only three years after the appearance of these articles. The impact of that incident on the world and certainly the practice of marketing is incalculable.

At least in part the energy crunch contributed to the rise of Japan as an economic powerhouse and more recently the emergence of the entire Pacific Rim. Again, this development has radically altered the complexion of not just the United States, but the entire world.

Another trend whose seeds may well already have been sown at the time of the symposium

was the trend toward deregulation. As this process wends its way through the economic structure of the U.S. from trucking to banking to airlines to communications and so on, there are tremendous implications for marketing.

While one of the authors (Buzzell) did mention Western Europe (along with the U.S. and Canada, but not Japan) none even hinted at the economic power the E.C. had the potential to possess or the potentially rich markets offered across the Atlantic. Of course, it would be untoward to criticize them for failing to predict the total integration due to transpire in 1992. This would have been impossible to foresee and indeed it remains to be seen how well it will work.

Another set of related items which one would think could have been spotted at the time were the demise of the Bretton Woods Agreement, the removal of the gold backing from the U.S. dollar and the complete overhaul of the international monetary system. There were many, many factors well documented all through the sixties which pointed directly at the inevitability of this situation.

One would think perhaps also that the "birth dearth" could have been spotted as an emerging trend in this era along with the rising role of women in the United States and all that it has brought with it in terms of social as well as marketing changes. Indeed, all eight authors in the symposium were males as were the other ten authors who contributed pieces to the regular portion of the issue. How markedly this has changed! Only one symposium author mentioned women and this was Professor Buzzell in his recommendations for coping with the "critical shortage of qualified marketing management talent" which he predicted.

While several of the authors mentioned expanded roles for computers in the future, none made so bold as to predict "a computer in every pot," so to speak. Given that space travel had already transpired many times and Americans had prowled around on the moon at the time these articles were written, the miniaturization phenomenon might have been apparent.

On the other hand, many developments such as fax machines, space shuttles, VCRs, tentative normalization of relations with Russia and a host of others would clearly have been impossible to foretell.

What do the 1990s hold in store? Who knows? But we thought it might be fun to get out on a limb and make some comments regarding forces we feel may shape the future. If nothing else we might be able to provoke some interesting discussion.

Possible Developments to Watch in the 1990s

It is tempting for an academic type to split the field of marketing into functional dimen-

sions and prognosticate with respect to each.

However, we have elected not to approach issues of the 1990s with that type of rubric. Rather we prefer to highlight a number of coming developments which we feel will impact all components of the marketing process and, indeed, business as a whole. While tomes could be written about each of these, we will keep our discussion brief. This deliberate sketchiness is not a ploy to sidestep the magnitude of the import for marketing, but rather an attempt to point up several items while still adhering to the space limits of the A.M.S.

When speaking of the strategic planning process, marketers generally mean five years or so by way of horizon. Of the things we will mention in the remainder of this section, many have already commenced and we feel certain the effects of most on the marketing arena will be very apparent well before 1995.

America's Decaying Infrastructure

Even before final completion of President Eisenhower's incredibly ambitious interstate highway network, major deterioration of completed portions is much in evidence. The same holds true for secondary roads, bridges, airport facilities and rail lines. For a peripatetic populous such as ours this is particularly annoying, if not downright dangerous, on a purely personal level. But the situation clearly transcends the inconveniences associated with rough and bumpy highways and traffic gridlocks. As this continues, and it surely will in the short run, major impacts are sure to be felt on distribution, customer service and perhaps ultimately pricing.

When public policy makers swing into action to effect repairs the price tag will be enormous. No matter how the fundraising is disguised, it will fall ultimately on business, consumers and taxpayers. While fortunes may well be made in construction and related industries, many other types of businesses (especially those heavily dependent on discretionary income) will feel the pinch.

Waste Disposal and Landfills

This is another area of concern which has already begun to manifest itself. Our long term affluence and the associated throwaway society have created a monster--and it is not all Pampers, Luvs and Huggies. As the places to put refuse continue to fill up and become ever scarcer there is bound to be a great hue and cry and much finger-pointing. Marketers had better be prepared as the implications here will ripple right back up through the system and impact everything from packaging to product development.

More worrisome yet is the problem of disposal of toxic wastes. If the magnitude of effort and dollars targeted toward asbestos removal is any indication, then "we ain't seen nuthin' yet." Just wait until the regulators go after

P.C.B.'s, freon in old refrigerators and other cooling units, nuclear waste, brake fluid, underground fuel storage tanks, septic systems, unused agricultural chemicals and an endless swamp of other man-made items which may be deemed hazardous to human health, groundwater or some species of animal. When one really ponders this one it's daunting indeed.

Another Energy Crisis

The plain and simple truth is that we are a petroleum driven society. Many people think only of gasoline, diesel fuel and motor oil when they hear petroleum, but there are literally thousands of other petrochemical products which surround us and are taken completely for granted. The odds are close to 100% that you are sitting on, leaning on or wearing some at this moment. Equally plain and simple is that oil is a finite and nonrenewable resource. Unfortunately, too, the U.S.A. is consuming and importing more oil now than ever before. The stage is set.

Americans responded quite nicely to conservation necessities in the 1970s, and may well do so again. However, the transition will likely be much more painful. Financing several years' worth of shooting wars in the Middle East has operated to keep petroleum prices artificially low for several years now and memories of \$35 to \$40 per barrel and long gas lines have dimmed. Unfortunately these unrealistically low prices have stymied exploration and also the development of alternate energy sources. Furthermore American society has elected to deem some of the most viable alternatives as socially unacceptable--to wit, the stripmining and burning of coal, nuclear generated electrical power, and the development of new hydroelectric facilities. Even if there were limitless amounts of crude oil available (indeed, there nearly are in shale and tar sands deposits), we are severely constrained by refining capacity. Building a new refinery has become a virtual impossibility as absolutely no one wants one in his/her community. Running flat out and glitch-free, our current capacity can only barely match demand.

Given the situation as it now exists, a tiny handful of countries ringing the Persian Gulf will soon again dictate our future.

Environmentalism

While environmental issues are not new and have been in the forefront for many years, it is more recent for this movement to have as much political and legislative clout as it does now. It is, therefore, inextricably intertwined with the preceding three items discussed in this section. The creation of highways, byways, airports, etc. use up land and resources. Construction of a nuclear power plant is virtually out of the question. Oil exploration both on and offshore is fought tooth and nail by extremely influential groups. Fringe groups with extremist ideas

and tactics have sprung up and in the past year have actively promoted and brought to fruition tree spiking and equipment sabotage in logging operations in the Rocky Mountain West.

We predict that episodes such as these will continue and that the situation will get worse before it gets better. In the meanwhile as economic prosperity and growth fuel demand, major dislocations will result. The notion of "demarketing" may well be resurrected in a newer and more meaningful form.

Land use planning will become a major issue for all aspects of business as well as daily life. Water will also loom large in the very near future. Like many other types of resources, land is finite and water also tends in that direction. We look for these to be extremely large issues amongst the environmental forces in the 1990s.

Labor Scarcity

We concur with Buzzell (1970) and others that this will be a problem, but not unique to marketing. However, there are new wrinkles now. For one, we have largely tapped the female sector as Buzzell predicted. As we dried up this pool by creating career women, we similarly dried up the baby pool and this will surely exacerbate future labor shortages. It's true that immigration (legal and otherwise) will alleviate some pressure, but by no means all.

The second wrinkle which looms large here is the appallingly high illiteracy rate in the U.S.A. Our educational system has served us poorly and shortchanged vast numbers of young citizens--most notably the "underprivileged." As life becomes increasingly complex there simply is no work for the marginally and the completely unskilled. Demand will be for the trained and the trainable and we predict they will be in extremely short supply. The direct impacts of this are fairly obvious, but there are myriad other, more subtle considerations which will become critical in the very near future.

One bright spot on the horizon is a large and growing pool of healthy, trained and industrious senior citizens. If public policy makers will rethink retirement issues and social security penalties we may be able to short circuit the major brunt of the labor crunch with help from this pool.

Miscellaneous Other Factors

Considerations of space preclude any great detail on a host of other considerations, both ominous and promising. However, we can't resist the temptation to itemize at least a few:

- i) The abysmal savings rate of Americans must change. Far too much investment must be undertaken soon and we cannot

continue to lean on foreign capital to fund it.

- ii) A companion to this is, of course, the national debt and chronic budget deficits. Something absolutely must change or we will finally get our comeuppance.
- iii) The advent of Fortress Europe in '92. It seems to us unrealistic to assume nationalistic tendencies, currency alignments, a disparity in living standards (especially with Spain and Portugal now in the E.C.), completely passport-free movement, etc. can all be dealt with immediately no matter the intensity of planning effort. However, much of western Europe will ultimately become at least a semi-unified community with a combined population roughly 50% greater than that of the United States. Further, if current trends continue, one might look to a similar movement in the satellite countries of the U.S.S.R.
- iv) The combined influences of an aging populace, the A.I.D.S. epidemic and the drug problem will strain the financial resources and social fabric of the United States nearly to the breaking point.
- v) Technology transfer from government research labs to the private sector will produce "wonder" products the likes of which we can only dream about. This technology transfer was mandated by Public Law 96-480, the Stevenson-Wydler Act of 1980, and has as yet to get into full swing. It will, however, be something to behold.
- vi) Biotechnology will come into its own. Alar apples and a host of other herbicides, pesticides, preservatives, etc. have begun to terrorize the consumer. Science will make great strides in creating technology which is more socially acceptable than chemicals. Marketers will need to do the convincing.
- vii) A rededication to quality will emerge in the United States. We largely lost our competitive edge on quality issues, but we can, will, indeed must, regain it.
- viii) The trend toward "bigness" as foreseen by Buzzell (1970) and Lotshaw (1970) will continue. Merger mania a la Donald Trump, Kohlberg/Kravis/Roberts, Carl Icahn, et al. is alive and well and will remain so.
- ix) The academic side of marketing will continue to create terribly specialized, very narrowly scoped individuals who will write increasingly arcane and abstruse manuscripts read by very few colleagues and no practitioners.
- x) The actual art of marketing products will remain important, the emphasis on and techniques for the marketing of services will continue to grow, but the real growth area in marketing will be idea marketing. Given what society will inevitably confront very soon, this absolutely must happen and the ideas have to be good ones. Otherwise, it's all over but the shouting.

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