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

Jon M. Hawes
George B. Glisan *Editors*

Proceedings of the 1987 Academy of Marketing Science (AMS) Annual Conference



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Proceedings of the 1987 Academy of Marketing Science (AMS) Annual Conference



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FOREWORD

It has been a distinct honor to serve the Academy of Marketing Science in 1986 as Co-Editor and in 1987 as Editor of *Developments in Marketing Science.* I have learned much from this experience and have thoroughly enjoyed working with the very professional people from around the world who are involved with the Academy of Marketing Science, especially Naresh Malhotra, Roger Jenkins, and the many other exceptional people who make good things happen in this outstanding organization.

This year's conference should be one of the best ever. Many special sessions, workshops, and plenary sessions have been planned. Furthermore, approximately 100 competitive papers will be presented. These papers were selected through a rigorous blind review process. Only 54 percent of the submitted papers were accepted for presentation at the competitive sessions and inclusion in these Proceedings. The papers presented at the Research In Progress sessions were judged worthy of condensed abstracts in these Proceedings. These presentations should be of high interest to all as the papers are further refined through feedback received at the conference.

The preparation of the 1987 Proceedings has been my responsibility, but there are many other people who actively assisted in this project. First, of course, is George Glisan of Illinois State University, the Co-Editor of this volume. George performed his duties with great efficiency and professionalism.

A great deal of help was also provided by Pat Johnson, the world's greatest secretary who works in the Department of Marketing at the University of Akron. Barb Dughi, my Dean's Secretary, is also one of the world's greatest secretaries and she was a major contributor to the success of this project, too.

The administration of the University of Akron should also be acknowledged for their important contributions. Dr. Dale Lewison, Head of the Marketing Department, and Dr. James Dunlap, Dean of the College of Business Administration, were extremely generous in their moral and financial support for this project. I really appreciate their ''Let's do it! How can we help?'' attitude and concern for the success of these Proceedings.

In preparing this publication, I have tried to minimize errors within the short time frame allowed for the project. My sincere apologies are extended for any mistakes that may still exist.

May 27, 1987
Akron, Ohio

Jon M. Hawes
University of Akron

PREFACE

The Revised Articles of Association of the Academy, approved by the Board of Governors in the Spring of 1984 and by the general membership in the Fall of that year, 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.

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

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

With foreign members and subscribing institutions in excess of 150, the Academy's international thrust and recognition is significant. The Academy is committed to biennial "off-shore" conferences to be held in August of each year. These international conferences have been held in Canada (Nova Scotia), 1983; in Scotland (Stirling), 1985; and, in August of 1987, our Conference will be held in Barcelona, Spain. This year's Barcelona Conference promises to be an exciting one.

The Academy is also committed to supporting "special topic" conferences. In 1985, the Retailing Conference held in Charleston, South Carolina, featured the most prominent retailing scholars in the U.S., and the conference was rated an outstanding success by all who attended. With Cleveland State University, the Academy jointly sponsored a Marketing Tourism Conference in 1986. We actively solicit proposals for such special topic conferences.

The new 8½" x 11" format and cover design of the *Journal of the Academy of Marketing Science* has generated considerable excitement in the field. Under the able leadership of Dr. Irene Lange, *JAMS* has seen many substantive and qualitative changes. Sometime during 1987, we hope to name a new editor for *JAMS* who will assume the reign at the May 1988 Annual Meeting.

These Conference *Proceedings,* the Academy Monograph Series, the annual Membership Directory, and the (now) quarterly Newsletter comprise the rest of the Academy's publications. All of these are vehicles for the dissemination of the ever-increasing knowledge base in the discipline of Marketing and provide a stimulating forum for the Fellows (members) of the Academy for the exchange of new ideas and the rethinking of old ones.

On behalf of the Officers and Board of Governors of the Academy, I want to thank Tom Mentzer, Vice President for Programs, under whose overall aegis this year's Annual Conference was developed. Special thanks and kudos go to Naresh Malhotra, this year's Program Chairman. The program was one of our best ever. The long hours and hard work of actually "doing" this conference were shared by C. P. Rao, Co-Chairman for the Conference. And in the same breath, equally enthusiastic thanks and appreciation go to the Editor of these *Proceedings,* Jon Hawes. Putting together these *Proceedings* is an especially difficult and time-consuming task. Harold Berkman and his staff are also due our thanks for their usual superb job in handling local arrangements.

Finally, and perhaps most importantly, congratulations to all the authors whose papers survived the tough screening process and appear in these *Proceedings.* Therein is the very heart and soul of this Conference. All of the track chairpersons, session chairs, special panel members and discussants also rate a special salute for their important contributions to the success of the Conference. The Academy is particularly grateful for the financial and moral support given to the Conference (and the Academy) by Georgia Tech, the University of Miami, the University of Arkansas, and the University of Akron.

We hope you have an enjoyable and professionally rewarding meeting and will participate again next year in Montreal, Canada, at the Queen Elizabeth Hotel, April 27–30, 1988.

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CONSUMER BEHAVIOR

THE INFLUENCE OF DIFFERENT SHOPPING BEHAVIORS ON RATIONAL CHOICE: AN EMPIRICAL INVESTIGATION

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Abstract

This study seeks to contribute to our knowledge of rational choice by consumer decision makers. Inconsistencies in rational choice were demonstrated. A major question addressed was whether subjects strongly exhibiting distinct selected shopping behaviors would make choices different than the general sample. Two shopping behaviors,price consciousness and shopping enthusiasm, exhibited differences from the general sample. The experimental results suggest a need for further research with different methodology to explain buyers' rational choice behavior with differing attitudes.

INTRODUCTION

Consumer choice processes, at both the individual and aggregate levels, are receiving increasing attention in the marketing literature. (See Wright 1985 for a comprehensive review of individual, small group, and organizational decision making.) Unfortunately, the issue of rational choice in the decision making process has received only negligible attention in the marketing literature. Yet, Tversky and Kahneman (1981) claim that the assumption of human rationality is the basis for explanations and predictions of people's choices in their everyday lives.

The research reported here seeks to contribute to our knowledge of rational choice in the consumer decision-making process. The intent is to demonstrate potential inconsistencies in rational choice when decision problems are framed in different ways and when consumers exhibit differing shopping characteristics.

THE ISSUE OF RATIONAL CHOICE

Choices made in everyday life are based on assumptions about human rationality. Tversky and Kahneman (1981) point out that while a definition of rationality is not agreed upon, there is general agreement that rational choice should satisfy some elementary requirement of consistency and coherence. Consistency, according to Tversky and Kahneman, refers to agreement or harmony, while coherence is a systematic or methodical connectedness.

Tversky and Kahneman (1981) define a decision problem (choice) by the acts or options among which one must choose, the possible outcomes or consequences of these acts, and the contingencies of conditional probabilities that relate actions to outcomes. An important aspect of the decision problem is the decision frame. The frame that a decision maker adopts is controlled partly by the formulation of the problem and partly by the norms, habits and personal characteristics of the decision maker. Rational choice requires that preference should not reverse with changes in the decision frame.

Human rationality has been at the center of the debate between economists and psychologists about the influence of price information on consumer behavior. The economic model of buyer behavior assumes that the determinants of a buyer's purchase decision are: complete information (i.e., knowledge about all goods), income, and preferences. Given these assumptions, the consumer chooses among alternative products so as to maximize utility (see Monroe, 1979). By relaxing the economist's assumptions about perfect buyer information and the buyer's information processing capabilities, social science researchers posit that buyers make quality inferences and purchase decisions based upon the available information cues, of which price is one cue.

The economic perspective tends to be much more supported by the rational choice concept, while the psychological perspective has often been found in actual consumer behavior. Thus the economic model, with its assumptions of rational behavior, is useful for prediction of consumer choice. The psychological model of consumer choice is more concerned with the understanding and explanation of consumer choice. However, it would appear that the ability to understand and explain consumer behavior would assist in better prediction of choice. Thus, the issue then becomes one of identifying the conditions under which rational choice behavior holds.

RESEARCH METHOD

This study was designed to explore whether or not certain subgroups of buyers make different choices than the aggregate buying group. Specifically, the research sought to examine whether strong feelings about the way decision makers shop and/or about shopping in general have an impact on how decisions are made. Additionally, replication of Tversky and Kahneman's (1981) results is attempted in order to examine the robustness of their findings.

The methodology section is organized as follows: (i) the procedure for defining different shopping behaviors is discussed and the taxonomy of behaviors is identified, (ii) an overall hypothesis based on Tversky and Kahneman's (1981) research is stated, and hypotheses based upon the shopping behavior taxonomy are presented, (iii) the measurement instrument is described, (iv) the sample group is depicted, and (v) the procedure for analysis is explained. The following section then presents the results of the research.

Taxonomy of Shopping Behaviors

The measurement scale for development of the taxonomy of shopping behaviors was selected from the 300 "activity, interest and opinion" statements administered by Wells and Tigert (1971). Thirty-one statements measuring feelings about shopping behavior were included in the instrument distributed to the sample subjects. Responses to the seven point scale were factor analyzed, with five factors identified: price consciousness, shopping enthusiasm (time spenders), new brand buying (innovators), self-confidence, and self-designated opinion leadership.

Hypotheses Tested

The first hypotheses replicates earlier work by Tversky and Kahneman (1981). The intent of this replication is to show the robustness of Tversky and Kahneman's findings in a different population. The remaining hypotheses test for variation when decision makers are identified as having different degrees of the five shopping characteristics. These characteristics are examined to determine if any of the five may be an underlying dimension of rational choice.

H1: Decision makers will systematically reverse their preference for alternatives when variations in the framing of acts, contingencies, and/or outcomes of decisions are made.

H2: Price conscious decision makers will show a lesser tendency to systematically reverse their preference for alternatives when variations in the framing of acts, contingencies, and/or outcomes are presented than decision makers who are not price conscious.

H3: Decision makers who have an enthusiasm for shopping will show a lesser tendency to systematically reverse their preferences for alternatives when variation in the framing of acts, contingencies, and or/outcomes are presented.

H4: Decision makers who try new brands will show a lesser tendency to systematically reverse their preference for alternatives when variations in the framing of acts, contingencies, and/or outcomes are made.

H5: Decision makers who are more self-confident will show a lesser tendency to systematically reverse their preference for alternatives when variations in the framing of acts, contingencies, and/or outcomes are made.

H6: Decision makers who view themselves as opinion leaders will show a lesser tendency to systematically reverse their preference for alternatives when variations in the framing of acts, contingencies, and/or outcomes are made.

Measurement Instrument

In addition to the scale used to determine the shopping behavior taxonomy, the measurement instrument included five problems initially examined by Tversky and Kahneman (1981), a sixth problem suggested by Thaler (1980), and a seventh problem set presented by Della Bitta, Monroe, and McGinnis (1981) in a study of competitive price advertisements. These seven problems represent an attempt to show the robustness of Tversky and Kahneman's (1981) findings to different populations. The first set of problems has identical outcomes but the questions are framed differently to appeal to contradictory attitudes toward risks involving gains and losses; the second set shows how concurrent decisions framed independently can be systematically reversed when the decisions are combined; the third set is logically argued by Tversky and Kahneman (1981) to be the same; the fourth pair of questions concerns the framing of outcomes where the outcome can be perceived as positive or negative in comparison to a neutral reference point.

The next two problem sets were examined to better understand how consumers frame problems. Problem 5 tested a situation where the relative price difference was different, but the actual price difference was the same. In Problem 6, the relative price difference was the same, but the actual price difference was not. The final problem set investigated whether the framing of sale information would produce any reversals, or at least strong differences, when the outcomes were identical.

Sample Group

Data were collected from 108 junior and senior marketing students at a large eastern university. Since the objective of this research was to explore theoretical relationships, rather then generate findings that could be directly applied to a particular situation, there appeared to be reasonable grounds for using a college student population. In addition, Calder, Phillips, and Tybout (1981) support using homogeneous respondents to allow for more precise theoretical understanding.

Procedure for Analysis

The analysis followed Tversky and Kahneman's approach of using descriptive statistics to detect differences between treatments. The dichotomy of buyer behavior traits (lesser versus greater tendencies) were developed from a seven point Likert scale where subjects either generally agreed (points 1,2,3) or disagreed (points 4,5,6) to the statements. Responses indicating no opinion (point 4) were not included.

RESULTS AND DISCUSSION

This section discusses the results of each of the problem sets and the results of the hypothesis testing. It is emphasized that the testing of the attitude hypotheses (H2 thru H6) is an exploratory procedure that uses Tversky and Kahneman's (1981) methodology. The research develops the groundwork for more rigorous research if there seems to be plausible differences in this research.

Problem Sets 1 thru 4

The first four problem sets focus on the replication of Tversky and Kahneman's (1981) study and tend to show the robustness of the findings for a different population. Table 1 presents the results of the analyses for the first four problem sets.

In the first problem set, the replication achieved the same systematic reversal of choice that was demonstrated in the original research. Subjects saw Problem 1a. as an opportunity to be risk averse and therefore chose the prospect of saving 200 lives, while in Problem 1b. subjects were risk takers by choosing the option of a two-thirds probability of 600 people dying.

The second problem set shows that concurrent decision framed independently are systematically reversed when the decisions are combined. In Problem 2a. the risk-averse choice was predominant, while in Problem 2b. the risk taking alternative was selected most frequently. Because decisions (i) and (ii) were presented together, Tversky and Kahneman (1981) argued that the subjects had to choose one prospect from the set A and C,B and C,A and D,B and D. The most common pattern, A and D, was selected by 69 percent of current sample group (73% in Tversky and Kahneman), while the least popular set, B and C, was chosen by 2 percent (3% in Tversky and Kahneman). When the subjects were asked to evaluate these decisions in a combined fashion, as in Problem 2b., subjects showed a systematic reversal (i.e., the combination of decisions B and C became superior).

TABLE 1

	Problem 1.a		Problem 1.b
Program A	62% (72%) *		23% (22%)
Program B	38% (28%)		77% (78%)
	N=50 (152)		N=56 (155)
	Problem 2.a		**Problem 2.b**
i: [Alternative A]	75% (84%)	[A&D]	9% (0%)
i: [Alternative B]	25% (16%)	[B&C]	91% (100%)
ii: Alternative C	6%(13%)		
ii: Alternative D	94%(87%)		
	N=49 (150)		N=54 (86)

	Problem 3.a	Problem 3.b	Problem 3.c
Option A:	54% (78%)	50% (74%)	16% (42%)
Option B:	46% (22%)	50% (26%)	84% (58%)
	N=35 (77)	N=40 (85)	N=31 (81)

	Problem 4.a	Problem 4.b
Yes	92% (88%)	68% (46%)
No	8% (12%)	32% (54%)
	N=51 (188)	N=57 (200)

*Tversky and Kahneman (1981) results are shown in parentheses.

The next trio of questions were logically argued by Tversky and Kahneman (1981) to be the same. Problems 3b. and 3c. have the same probabilities and outcomes, while 3a. and 3b. become the same in probability and outcome. Therefore, consistency would indicate similar responses for all three questions. Subjects, however, showed a systematic reversal of preference in Problem 3c. when compared to the other two questions.

Concerning the fourth problem set, Tversky and Kahneman (1981) asserted that variations in the reference point would determine whether a given outcome was evaluated as a gain or loss. The difference between the two questions in the problem set is suggested to be the "effect of psychological accounting" where the purchase of a new ticket in Problem 4b. will require an overall expense of $20. In Problem 4a., the "theatre account" shows only an expense of $10 since the lost ten dollar bill was not debited to that account. The results for Problem Set 4 in Table 1 support this framing of the outcome to cause a reversal of choice.

Hypothesis 1

The results of the first four problem sets generally replicate the results reported by Tversky and Kahneman (1981). The analysis of the replication data showed the same reversals as in the original study and is interpreted as inconsistent behavior. Thus, the prior findings are found to be robust over a variety of settings and give sound support to the first hypothesis. Additionally, this empirical observation lends support to the psychological perspective that relaxes the assumption of rationality in buyer's choice behavior.

Problem Set 5

Problem Set 5 provided the only major discrepancy between Tversky and Kahneman's (1981) original study and the current replication. Whereas the original study produced the systematic reversal suggesting the decision makers do not frame the problem in the same way, the replication study did not show the reversal of choice (Table 2). While the absolute difference of $5 was the same for both problems, the relative difference was not. For the $125 calculator, the savings was 4 percent. For the $15 calculator, however, the savings was 33 percent.

The sample group in the original study appear to frame the problem in the context of relative differences and, thus, produced the systematic reversal. An informal debriefing of some of the subjects in the replication study shed light on their framing of the problem. Many said, "a $5 saving to spend twenty more minutes in Boston traffic was definitely not a good choice." It appears that the problem was framed in terms of the absolute price difference for this latter group of decision makers.

When the data were partitioned by consumer characteristics, subjects who were price conscious, shopping enthusiasts, or self-confident showed behavior that differed from the general sample. The 33 1/3 percent savings had a stronger impact for price conscious buyers than the 4 percent savings, even though absolute savings was $5 in both situations. Buyers with less shopping

enthusiasm appeared to be inconsistent by showing a reversal in 5a. (i.e., more likely to make a trip to save $5 on a $15 calculator). Since the sample size of less enthusiastic buyers was small, these results are inconclusive. In addition, the sample size of less confident buyers also limits analysis. In summary, the level of price consciousness did show differences in choice behavior.

TABLE 2

	Problem 5.a	Problem 5.b
make trip	6% (29%) *	19% (68%)
not make trip	94% (71%)	81% (32%)
	N=51 (88)	N=57 (93)

*Tversky and Kahneman (1982) results shown in parentheses.

a. Price Consciousness

	Problem 5.a		Problem 5.b	
	More Price Conscious	Less Price Conscious	More Price Conscious	Less Price Conscious
make trip	4%	6%	37.5%	13.6%
no trip	96%	94%	62.5%	86.4%

b. Shopping Enthusiasm

	Problem 5.a		Problem 5.b	
	More Shopping Enthusiasm	Less Shopping Enthusiasm	More Shopping Enthusiasm	Less Shopping Enthusiasm
make trip	8%	0%	17%	60%
no trip	92%	100%	83%	40%

c. Brand Innovativeness

	Problem 5.a		Problem 5.b	
	More Brand Innovativeness	Less Brand Innovativeness	More Brand Innovativeness	Less Brand Innovativeness
make trip	3%	14%	19%	25%
no trip	97%	86%	81%	75%

d. Self-Confidence

	Problem 5.a		Problem 5.b	
	More Self-Confident	Less Self-Confident	More Self-Confident	Less Self-Confident
make trip	2%	0%	19%	50%
no trip	98%	100%	81%	50%

e. Self-Designated Opinion Leader

	Problem 5.a		Problem 5.b	
	More of an Opinion Leader	Less of an Opinion Leader	More of an Opinion Leader	Less of an Opinion Leader
make trip	7%	11%	17%	11%
no trip	93%	89%	83%	89%

Problem Set 6

The sixth problem set is significant to the above discussion of relative and absolute price differences. Thaler (1980) hypothesized that consumers hardly exert more effort to save $15 on a $150 purchase than to save $5 on a $50 purchase. Problem Set 6 examined this proposition. Both parts of the problem show the same relative savings of 10 percent, but different absolute savings of $4 and $15. The results in Table 3 suggest that the frame of the problem was in the context of actual (absolute) dollar savings versus the cost of inconvenience. This further substantiates the decision making of the replication group in Problem Set 5. This outcome would not be interpreted as a refutation of the original study, but shows that different populations in different environments may frame choice problems differently, given the same decision parameters.

Of the five shopping behaviors, the price consciousness characteristic showed a strong effect on choice behavior. Those who were price conscious presented a stronger tendency to take the time to save $15, but did not show increased inclination to pursue a $5 savings. The less price conscious buyer showed a greater propensity to shop at the more convenient location (Store A) and forgo the savings of $15 and $5. The less enthusiastic shopper appeared to have framed the decision problem in terms of relative savings of 10 percent and acted consistently by choosing Store B to obtain the savings.

TABLE 3

	Problem 6.a	Problem 6.b
Store A	24%	72%
Store B	76%	28%
	N=51	N=57

a. Price Consciousness

	Problem 6.a		Problem 6.b	
	More Price Conscious	Less Price Conscious	More Price Conscious	Less Price Conscious
Store A	16%	35%	75%	82%
Store B	84%	65%	25%	18%

b. Shopping Enthusiasm

	Problem 6.a		Problem 6.b	
	More Shopping Enthusiasm	Less Shopping Enthusiasm	More Shopping Enthusiasm	Less Shopping Enthusiasm
Store A	21%	29%	81%	40%
Store B	79%	71%	19%	60%

c. Brand Innovativeness

	Problem 6.a		Problem 6.b	
	More Brand Innovativeness	Less Brand Innovativeness	More Brand Innovativeness	Less Brand Innovativeness
Store A	19%	43%	62%	58%
Store B	81%	57%	38%	42%

d. Self-Confidence

	Problem 6.a		Problem 6.b	
	More Self-Confident	Less Self-Confident	More Self-Confident	Less Self-Confident
Store A	24%	0%	69%	73%
Store B	76%	100%	31%	27%

e. Self-Designated Opinion Leader

	Problem 6.a		Problem 6.b	
	More of an Opinion Leader	Less of an Opinion Leader	More of an Opinion Leader	Less of an Opinion Leader
Store A	36%	21%	76%	74%
Store B	64%	79%	24%	26%

Problem Set 7

In a study of comparative price advertisements, Della Bitta, Monroe, and McGinnis (1981) did not find a statistical difference among the three similar situations presented in Problem Set 7. Whereas Problem Set 5 tested a situation where the relative price difference was different but the actual price difference was the same and Problem Set 6 examined the situation where the relative price difference was the same but the actual price difference was not the same, Problem Set 7 examines the framing of a question with relative and absolute price differences the same. The results (Table 4) tend to support a conclusion that when relative and absolute price differences are kept the same, variations in framing of information do not lead to preference reversal.

The less price conscious buyers were not affected as strongly by percent discounts to actual dollar differences and, therefore, showed stronger tendency to shop at the more convenient store (with the higher percent product). Buyers with less shopping enthusiasm were more inclined to forgo the sale price in favor of the more convenient store with a higher priced product when comparing regular and sale price without explicit information on percent discounts or dollar amounts off. When offered a percentage discount, less enthusiastic shoppers were overwhelmingly inclined to travel the additional distance to obtain the savings.

Hypotheses 2 thru 6

Problem Sets 5, 6, and 7 relate to the hypotheses operationalized from the taxonomy of shopping behaviors. When the data was partitioned into the five consumer characteristics, the only two characteristics to show movements away from the general sample, and in some cases reversals of choice behavior, were

price consciousness and shopping enthusiasm.

Since the results of the decision problem in Problem Set 5 did not have the reversal that Tversky and Kahneman (1981) found, it is difficult to clearly state definitive conclusions. It does appear from the analysis that more price conscious buyer show a greater tendency to reverse their preferences. Therefore, Hypothesis 2 is not supported. Hypothesis 3, representing shopping enthusiasm, is inconclusive. The data indicate differences in choice behavior, but the small sample of less enthusiastic shoppers precludes clear interpretation. The last three hypotheses (brand innovativeness, self-confidence, self-designated opinion leader) did not gain support since there were not any indications of differences between the subgroup data ad the general sample data.

TABLE 4

	Problem 7.a	Problem7.b	Problem 7.c
Store C	6%	12%	6%
Store D	94%	88%	94%
	N=35	N=41	N=31

a. Price Consciousness

	Problem 7.a		Problem 7.b		Problem 7.c	
	More Price Conscious	Less Price Conscious	More Price Conscious	Less Price Conscious	More Price Conscious	Less Price Conscious
Store C	0%	17%	0%	36%	0%	15%
Store D	100%	83%	100%	64%	100%	85%

b. Shopping Enthusiasm

	Problem 7.a		Problem 7.b		Problem 7.c	
	More Shopping Enthusiasm	Less Shopping Enthusiasm	More Shopping Enthusiasm	Less Shopping Enthusiasm	More Shopping Enthusiasm	Less Shopping Enthusiasm
Store C	0%	29%	14%	0%	7%	0%
Store D	100%	71%	86%	100%	93%	100%

c. Brand Innovativeness

	Problem 7.a		Problem 7.b		Problem 7.c	
	More Brand Innovativeness	Less Brand Innovativeness	More Brand Innovativeness	Less Brand Innovativeness	More Brand Innovativeness	Less Brand Innovativeness
Store C	11%	0%	11%	0%	0%	0%
Store D	89%	100%	89%	100%	100%	100%

d. Self-Confidence

	Problem 7.a		Problem 7.b		Problem 7.c	
	More Self-Confident	Less Self-Confident	More Self-Confident	Less Self-Confident	More Self-Confident	Less Self-Confident
Store C	6%	0%	11%	0%	4%	0%
Store D	94%	100%	89%	100%	96%	100%

e. Self-Designated Opinion Leader

	Problem 7.a		Problem 7.b		Problem 7.c	
	More of an Opinion Leader	Less of an Opinion Leader	More of an Opinion Leader	Less of an Opinion Leader	More of an Opinion Leader	Less of an Opinion Leader
Store C	10%	9%	10%	15%	8%	0%
Store D	90%	91%	90%	85%	92%	100%

SUMMARY

This research was motivated by the work being conducted on consumer decision making in the marketing literature and the complementary work on rational choice in the psychology literature. It is an initial attempt to empirically examine differences in subgroup and general sample decision making processes. In so doing, replication of Tversky and Kahneman's study (1981) was executed.

Specifically, systemic reversal of choice was evidenced for the general sample of 108 subjects. The reversals in the original study (Tversky and Kahneman, 1981) were strong and were conclusive with the use of descriptive statistics. It was thought a priori that the current research might show that decision makers with different shopping behaviors manifest different "levels of rationality" in their choice decisions. Of the five shopping characteristics identified, only price consciousness and shopping enthusiasts exhibited differences from the general sample.

The results clearly show that systematic reversal of preference when decision problems are framed in different ways. For Tversky and Kahneman's (1979) paradigm of prospect theory, this replication certainly lends support to their approach to rationality of choice (1981). Future research, however, must broaden the examination of rational behavior from its present operationalization by Tversky and Kahneman (1981) and seek alternative measurement methods.

By going beyond Tversky and Kahneman's investigation of choice behavior, this study, by isolating various shopping behaviors, has lent stronger support to relax the economic assumption of rational behavior. But, rather than debating the absolute issue of rationality, this research suggests that distinct shopping behaviors influence framing and result in different gradations of rationality in choice situations.

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APPENDIX

Problem Set 5:

5.a. Imagine that you are about to purchase a jacket for $15 and a calculator for $125. The calculator salesman informs you that the calculator you wish to buy is on sale for $120 at the other branch of the store, located 20 minutes drive away. Would you make the trip to the other store?

o Would make the trip
o Would not make the trip

5.b. Imagine that you are about to purchase a jacket for $125 and a calculator for $15. The calculator salesman informs you that the calculator that you wish to buy is on sale for $10 at the other branch of the store, located 20 minutes drive away. would you make the trip to the other store?

o Would make the trip
o Would not make the trip

Problem Set 6:

6.a. Imagine that you have decided to purchase a stereo headset player. One store, (Store A) within a 10 minute drive, has the product for $150. Another store (Store B) has the identical product for $135 but the store is a 30 minute drive away. Which tore would you drive to to buy the stereo headset player?

o Store A
o Store B

6.b. Imagine that you have decided to purchase a stereo headset player. One store (Store A) within a 10 minute drive has the product for $50. Another store (Store B) has the identical product for $45, but the store is a 30 minute drive away. Which store would you drive to to buy the stereo headset player?

o Store A
o Store B

Problem Set 7:

7.a. Imagine that you decided to purchase a 35mm camera. One store, (Store C) within a 10 minute drive, has the product for $295. Another store (Store D) has the identical product on sale for $265.50, but the store is a 35 minute drive away. Which store would you drive to to buy the 35mm camera?

o Store C
o Store D

7.b. Imagine that you decided to purchase a 35mm camera. One store (Store C) within a 10 minute drive, has the product for $295. Another store (Store D) has the identical product, regular price $295, on sale for 10% off, but the store is a 30 minute drive away. Which store would you drive to to buy the 35mm camera?

o Store C
o Store D

7.c. Imagine that you decided to purchase a 35mm camera. One store (Store C) within a 10 minute drive, has the product for $295. Another store (Store D) has the identical product, regular price $295, on sale for $29.50 off, but the store is a 30 minute drive away. Which store would you drive to to buy the 35mm camera?

o Store C
o Store D

INCOME LEVEL AND PRE-PURCHASE SHOPPING BEHAVIOR

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Abstract

The author searches for a connection between income level of the shopper and the number of product substitutes considered prior to purchase. Using a mailed questionnaire with a national probability sample derived from warranty card data, the study's design controls for rural/urban differences in product availability, attitudes toward selected product attributes, and prepurchase information sources.

Background

Income level and shopping behavior, especially as they relate to lower income consumers, have been the focus of much scholarly interest. A thorough bibliography documenting this interest is provided by Goldman (1976). Goldman and others cite numerous studies that suggest the lower income consumer may follow one of two shopping patterns: (1) shop close to home while considering few purchase choices and alternatives or, (2) spend a great deal of time searching and comparing numerous product alternatives.

The contrasting theories have been labeled the "restricted scope" and "wider scope" approaches, respectively. Briefly, the restricted scope theory argues that limited geographic and informational horizons constrict shopping behavior among the lower income. The wider scope model claims that greater than average economic incentive and low marginal opportunity cost for time encourage broader shopping activities for the low income.

One ambitious attempt at unravelling the income level-shopping scope connection is found in Goldman (1976). His general conclusion was supportive of the restricted scope theory.

But Goldman was not able to demonstrate that consumer shopping behavior varies across products. Further, he was unable to show that shopping scope was related to either purchasing experience or shopping motivation. Finally, he was unable to test the possible influence of informational differences across income levels on differences in shopping scope. Admitting to the complexity of the income level-shopping behavior relationship, Goldman tentatively concluded that income level alone is a predictor of shopping scope.

Much of the existing literature contains investigations of store-choice confinement. Studies in addition to Goldman that attempt to isolate the effect of income on the range of stores investigated prior to purchase include Berry and Solomon (1971), Gensch and Staelin (1972), and Haines, Simon and Alexis (1972). A second study by Goldman (1978) reported a lack of correlation between income and degree of store choice, even when the structure of the retail system was carefully controlled.

The Current Study

This paper summarizes the author's efforts to measure the relationship between income level and shopping behavior. In this study real income differences are compared with differences in shopping scope. Shopping scope is defined by the number of alternative product substitutes investigated prior to purchase. This dimension of shopping scope is known as product-choice confinement. The purpose of the current study was to learn if income differences are found among consumers that exhibit different behavior when comparing product substitutes.

Data for the current study were provided by a manufacturer of nationally distributed portable oil-fired forced air heaters. From warranty card files on purchases made during a recent twelve month period, a stratified probability sample was constructed. Total sample size was one thousand with a representative group selected from the major zip code regions of the United States. A two page questionnaire containing numerous classification items and items measuring shopping behavior was developed and pretested. Six hundred and ninety four usable questionnaires were returned within one month after mailing.

The author is aware of possible biases in the sample procedure. Those who return warranty cards may vary in some significant way from those who do not. Also it has been suggested that mailed surveys contain an education and age bias (Craig and McCann 1978). In this study education level was not measured. However, three age categories were identified, with roughly equal numbers of respondents in each group.

Measuring Shopping Scope

The number of product choices investigated was considered a measure of shopping scope and served as the dependent variable in this study. Appliances for bringing heat to normally unheated areas were the products under consideration in this work. Sample members had purchased a portable oil-fired forced air heater. The normal application for such a product is to conveniently bring temporary heat to a garage, work area, construction site, etc. The survey instrument sought to identify product substitutes which were also investigated prior to actual purchase of the fuel oil powered space heater. A forced answer choice format for identifying the alternatives was used on the instrument. Choices included electric forced air heaters, electric radiant heaters, infra-red heaters, woodburning heaters and an "other" category.

Measuring Income

Average yearly household income served as the independent variable. Income was reported in

six categories, later collapsed to three. Less than twelve thousand dollars, twelve to twenty-four thousand dollars, and more than twenty-four thousand dollars were the final categories used.

Description and measurement of the study's principal variables represented important refinements from earlier studies. Using product choice confinement as a measure of shopping scope adds another dimension to the concept of shopping scope, a dimension not included in earlier work. Also, using actual income data, instead of the usual income surrogates represents a deviation from earlier studies. Of course, self-reported income data is not without deficiencies, primarily the problem of exaggeration or absence (Craig and McCann 1978).

Findings

Tabulation of the shopping scope measure revealed very little product choice investigations on the part of all sample members regardless of income. Although the questionnaire provided descriptions of five product substitutes along with a sixth category left open for the respondent to describe additional product choices, only 15% of all sample members reported considering more than one additional product choice prior to buying the fuel oil powered space heater. Thirty-nine percent claimed to have investigated one other alternative only, and 46% reported considering no other product substitute. Twenty-four percent of the buyers reported incomes in the zero to $12,000 range, 48% in the middle range with the remaining 30% in the above $24,000 level. Comparisons of income levels with alternative shopping scopes are presented in **Table 1**.

TABLE 1
DISTRIBUTION OF INCOME LEVELS AND
DEGREE OF PRODUCT CHOICE-CONFINEMENT

Income Level	Considered No Product Substitute		Considered 1 Product Substitute		Considered 1+ Product Substitute	
	No.	%	No.	%	No.	%
Under 12,000	83	55%	51	34%	17	11%
$12-$24,000	152	45%	129	39%	53	16%
Over $24,000	88	42%	89	43%	32	15%

$X^2=4.7$ df=4 Sign. level = .36

The two left-most columns in **Table 1** suggest that the largest percentage of all three income groups were marked by product confined shoppers. In every income group more than 40% of all members reported having done no comparison shopping among product substitutes. A slightly smaller number of respondents claimed to have considered one other product choice. Again, this occurred in all income groups. Finally, the smallest percent in all income groups, ranging from 11% to 16%, reported more extensive prepurchase investigation of product alternatives.

While differences are not statistically significant at levels of .10 and above, **Table 1** data does point to a positive connection between income level and shopping scope. As income levels increase, product choice confinement tends to decrease. This inverse relationship is evident when looking at the magnitude of percentages across income classes. For example, in the left-most percentage column, as income rises the percentage of respondents reporting no consideration of product substitutes falls. Fifty-five percent of the low income members confess complete product choice confinement, while the percentage of similar confessions drops to 45% and 42% respectively as incomes rise through the middle and higher categories.

The same relationship is apparent within the group that considered only one product choice prior to purchase. As incomes rise, the proportion of respondents exercising this improved degree of product choice confinement also rises. Only thirty-four percent of the low income claimed to have investigated the additional product substitute. Middle and higher income groups claiming this degree of shopping scope numbered 39% and 43% respectively.

At the highest extreme of shopping scope, the difference between the low income groups and the other income levels still appears to exist. Eleven percent of the low income respondents possesses this broader measure of shopping scope, while 16% and 15% of the higher income groups report considering more than one product substitute. At this degree of shopping confinement, however, the difference between middle and higher income respondents appears to be very slight.

The general conclusion contained in **Table 1** is that for this group of consumers a difference between shopping scope across income groups does exist. Shopping scope, defined in terms of product choice confinement does widen as income levels rise. This relationship is more pronounced in the case of the group bounded by the $12,000 annual income ceiling. Sample members with an annual household income of less than $12,000 seemed to practice greater degrees of product choice confinement than their higher income counterparts. As income increased, the percentage of those considering more product substitutes rose. Strong statistical support for the conclusions generated by **Table 1** was not uncovered. Therefore, the possibility of a connection between income and pre-purchase shopping behavior resulting solely from chance cannot be completely dismissed.

The apparent connection between income level and shopping scope suggested by data in this study parallels the general conclusion reported in earlier research. In Goldman's work, for example, income level was also found to exert significant influence on shopping scope. Lower income groups exhibited more confined shopping scopes than other income classes. Goldman (1976) reported significant and positive correlations linking income level with shopping scope.

Explanation of Findings

Advocates of the restricted scope theory have been troubled by the role of purchasing experience in explaining their research findings. Goldman (1976) wondered if the time between his data collection and the respondents actual moment of purchase might influence his measures of shopping scope. Goldman's higher income sample tended to purchase products more often and more recently than lower income sample members. Might purchase experience differences explain shopping scope variances instead of income differences?

The question of purchase experience influencing shopping scope seemed to manifest itself in the present work in terms of product-choice availability. This author wondered if the availability of product substitutes might cloud the major issue of how income related to shopping scope.

It might be assumed that residents of rural areas have fewer stores and less conveniently reached shopping sites than urban or suburban residents. Such an assumption, if true, would at least partially describe the shopping scopes of residents in the alternative residential areas. Fewer product substitutes would be available to rural people than to others.

From residential descriptions provided by the respondents, three residential categories were identified: urban, suburban, and rural. Then, for each residential group, income levels were correlated with degree of product-choice confinement. Results of this analysis did show that rural residents exhibit higher degrees of product-choice confinement; i.e., considered fewer product substitutes before purchase, than either urban or suburban residents. But within all three groups, income and product-choice confinements patterns were similar. With declining income levels came higher degrees of product-choice confinement. For participants in this survey, differences in shopping scope among income groups cannot be explained away in terms of product choice availability.

Importance of Product Features

Another possible confounding influence on this study's outcome is the significance of alternative product attributes to different income groups. If selected product features or characteristics on any of the product choices were deemed unattractive or otherwise unacceptable to any specific income group, the connection between product choice confinement and income could be depreciated. For example, if low income buyers would not consider higher priced product substitutes or, if high income customers would not select products without warranty provisions, the ability to link product-choice confinement with income would be severely limited.

To isolate the impact attitudes toward product features might have on degree of product-choice confinement, a categorical scheme reminicent of the much discussed Copeland (1923) classification system was employed. A respondent who confessed to efficiency, purchase price or operational costs as the prime motivator behind his purchase choice was classified as a 'price conscious' buyer. If construction, safety, dependability, warranty provisions, or method or operation were identified as the underlying reasons for purchase, the buyer was called 'quality conscious.' Finally, if such product characteristics as ease of operation, ease of maintenance, portability or small size were mentioned, the purchaser was labelled 'convenience conscious.'

Data collection methodology allowed respondents to specify multiple reasons for purchasing. Most respondents exhibited aspects of all three motivational factors. But through tabulation and summary of the several motivational dimensions the most dominant motivational factor for each respondent was identified. **Table 2** summarizes the distribution of shopping motivations across income categories.

TABLE 2
INCOME LEVELS AND REASONS FOR BUYING

Reason for Buying	Income		
	Low	Medium	High
Price Conscious	41.7%	36.5%	33.5%
Quality Conscious	11.9%	11.4%	11.0%
Convenience Conscious	46.4%	52.1%	55.5%
Total Percentage	100%	100%	100%
Total Respondents	(151)	(334)	(209)

$X^2=3.24$ df=4 Sign. level = .58

Table 2 points to little difference among the three income groups in the percentages of respondents expressing alternative reasons for buying. Convenience-conscious purchasers are the biggest segment of all three income groups. The proportion of convenience-oriented, low income buyers is only nine percentage points less than the proportion of convenience-oriented, high income purchasers. Quality-conscious shoppers make up about 11% of all three groups, and the proportion of price-conscious consumers only varies approximately eight percentage points across income groups. These percentage similarities suggest that differences in product-choice confinement by members of different income groups don't appear to be explained by differences in attitudes about product features.

Prepurchase Information Sources

A final, rather intriguing issue is the one of different information sources used by consumers before purchase decisions are made. The question is, if the alternative income groups show a tendency to rely on different sources of information, might those differences themselves contribute to differences in shopping scope. Goldman (1976) cited Thorelli's research (1971) linking low income consumers with minimum awareness of specialized information sources, while Goldman himself raised the further issue of the

use of non-specialized information sources by low income consumers. Unfortunately, the Goldman work did not contain new data concerning income classes and sources of information. Goldman did concede, however, the possibility of informational differences affecting shopping scope.

Participants in the current study did provide data on informational sources. Each was asked to recall where first contact with information about the product had been made. [No broadcast media or advertising had been done.] Approximately one third of the sample members cited retail store display with first source informing them about the item. Another twenty percent reported actually seeing the product in use by a neighbor or friend as their first awareness. Somewhat smaller groups of sample members (eight to sixteen percent each) credited magazine, newspaper, and word of mouth advertising with providing the first information about the heating appliance.

To help clarify the possible link between information source and income level, percentages of respondents in each income group using each information source were tabulated. Table 3 contains those tabulations.

TABLE 3
INITIAL SOURCE OF INFORMATION AND INCOME LEVEL

Information Source	Income		
	Low	Medium	High
Magazines	11.9%	17.6%	19.1%
Word-of-Mouth	12.6%	14.1%	11.0%
Newspaper	7.3%	7.2%	11.0%
Store Displays	37.6%	36.8%	33.5%
Saw One in Use	25.8%	19.5%	20.6%
Other	4.9%	4.8%	4.8%
Total Percentage	100%	100%	100%
Total Respondents	(151)	(334)	(209)

X^2=9.45 df=10 Sign. Level = .48

Again, the general conclusion seems to be one of little difference among income groups regardless of type of information source. The biggest difference found in Table 3 is the approximately seven percent spread between high and low income groups regarding their use of magazines as an information source.

The importance of Table 3 data for the present work is as follows: since specific groups did not cluster around specific sources of information when selecting their product, product choice confinement does not appear to be a function of type of information source.

Conclusion

Income differences do seem to characterize consumers that exhibit different degrees of comparison shopping. As incomes rise, comparison shopping also rises. Product choice-confinement, i.e., the number of product substitutes considered before purchasing, is narrow among low income groups, broader among upper income groups. This study's conclusion adds additional support to the restricted-shopping scope theory. That theory claims low income consumers shop close to home while considering few purchase choices and alternatives.

Some caveats are necessary. Relating income levels to shopping scope is a complicated task. Conclusions of any study concerned with this topic are undoubtedly influenced by such research parameters as, how definitional concepts are operationalized; how sample designs are constructed and; how analytical techniques are selected. Results produced by this work pertain to only one product class and are derived from only one data sample. Even with adequate significance testing, results should only be generalized with care. Replicative efforts done on different populations across different product groups should be attempted.

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Abstract

An exploration of convenience and recreational shopping value orientations among men and women in various age categories was performed. Four hundred and eighty five consumers responded to a questionnaire requesting information about their shopping values. The findings suggest that, although men and women have similar values, there are differences when age category is considered. For example, it appears that older women more strongly value convenience factors, whereas older men are interested in the recreational aspects of shopping. The discussion includes some implications for retail marketing and future research.

Introduction

The factors that affect consumer shopping values have been described by a variety of authors. Demographic variables such as income, life cycle, social class, age, and gender have been studied and are presumed to have validity when used as segmentation factors (Berman and Evans 1986). It is the latter two variables, age and gender, which are the basic concerns of this investigation.

Basic values toward shopping are likely to effect the entire purchasing act from awareness and identification of need through postpurchase evaluation. Thus, many studies have identified consumer values and attempted to link segments of consumers with similar values to their purchasing behavior (Mitchell 1981; Shay 1978; Veltri and Schiffman 1984; Yankelovich 1974).

Several value orientations have been described in recent years and studies have investigated the relationships among these values, demographics, psychographics, and such purchase processes as store choice, shopping frequency, and patronage motives (Bellenger, Robertson, and Greenberg 1977; Crask and Reynolds 1978; Stephenson 1969; Williams, Painter and Nicholas 1978).

The research of Bellenger, Robertson, and Greenberg (1977) is of particular relevance to this investigation because they identified two value orientations among their affluent female responders. The convenience oriented shopper placed high importance on convenience and low prices and had a very low interest in shopping as a leisure-time activity. On the other hand, the recreational shoppers were interested in quality, variety, service, and were highly interested in shopping as a recreational activity.

Many years ago Martineau (1957) speculated that shopping is viewed by women in a recreational manner. He felt that women received power and prestige from the shopping act and enjoyed the flattery and mastery which came from this role. During this time period, women were primarily in subordinate roles both at home and in the economic system. If this view was valid for its time, does it remain valid today and to what extent? Bellenger, Robertson, and Greenberg's (1977) findings suggest that the recreational orientation is valid for a select segment of the female shoppers but not for all female shoppers.

The purpose of this research is to explore these two value orientations --- convenience and recreational --- as applied to both male and female shoppers. It is felt that historical changes in both women's roles and the influence of these changes upon men and their roles will reveal age specific value trends.

Methodology

Sample

An area stratified sample survey was conducted. Residential trading areas were identified and weighted according to population density. Street addresses were then randomly selected from within each area according to county maps. A total of 1250 households were contacted by the researchers. After introductions and an explanation of the study was performed, a self-administered questionnaire was left with the resident. Questionnaires could be returned via a prepaid mailer.

Four hundred and eighty five usable responses were received, representing a 39% response rate. Based upon census data, characteristics of the sample group were externally representative of the trading area. An overview of the survey participants is as follows: Males-29%, Females-71%; Median Annual Household Income was between $15,000 and $20,000; 60% of the sample were high school graduates or below; 71% were married and the ages ranged from 18 to over 65 years of age. The area was primarily rural and semi-rural.

Instrumentation

A self-administered questionnaire was devised to measure basic shopping values and selected demographics. The values were quantified by using Likert type statements. The respondent indicated his or her degree of agreement or disagreement with each statement on a 7-point scale. Recreational orientations were measured through such statements as "Shopping should be exciting and fun" and "I like to shop for and try new products". Statements such as "I shop for necessities" and "Convenient location is important" indicated a convenience orientation.

Results

A summary of the study findings are presented in Tables 1 and 2. The research objective was to investigate whether there were differences in shopping values among male and female shoppers. The t test findings suggest that, as a whole, males and females have similar shopping

values. The one exception is that males were more likely to agree that they shopped for basic necessities ($t = 3.15$, $p < .001$).

The differences in shopping values were then analyzed by age groupings. Analysis of Variance revealed that there were significant age differences for all three of the recreational values and for one of the convenience values --- convenient location.

Since shopping values were influenced by the age factor, it was reasonable to perform a cross sectional analysis of the shopping values by age groupings. The ability of the shopping values to discriminate male shoppers from female shoppers was tested separately for each of the three age groups --- (1) 55 years and over; (2) 35-54 years; and (3) 18-34 years. The selection criteria for the discriminant analyses was to maximize Rao's V.

In the age category of 55 years and older four variables discriminated between male and female shoppers at the $p < .05$ level, based on the change in Rao's V. Two of these were convenience classified and two were recreational classified. Interestingly, the convenience factors --- convenient location and economic considerations --- were more strongly valued by the female sample. In addition, the recreational values --- style and fashion conscious and like to try new products --- were more strongly valued by the male sample.

TABLE 1

RESULTS OF VARIANCE TESTS FOR DIFFERENCES IN GENDER GROUPS AND AGE GROUPS ON SHOPPING VALUES.

ORIENTATIONS		GENDER [a] (t SCORES)	AGE [b] (F SCORES)
CONVENIENCE	SHOP FOR NECESSITIES	1.90	.52
	CONVENIENT LOCATION	-1.36	2.61*
	ECONOMIC CONSIDERATIONS	3.25***	.93
RECREATIONAL	SHOPPING SHOULD BE EXCITING AND FUN	1.82	2.68*
	LIKE TO TRY NEW PRODUCTS	.22	3.21**
	STYLE AND FASHION CONSCIOUS	1.96	4.13***

a Analysis Method --- t tests
b Analysis Method --- Analysis of Variance
* $p < .05$
** $p < .01$
*** $p < .001$

TABLE 2

CROSS SECTIONAL RESULTS FROM DISCRIMINANT ANALYSIS

AGE 55 YEARS AND OVER

VARIABLE	WILKS' LAMBDA	SIGNI-FICANCE	CHANGE IN RAO'S V	SIGNIFICANCE OF CHANGE	COMPARISON OF MALE TO FEMALE SHOPPER
CONVENIENT LOCATION	.96	.008	.7169+001	.007	LESS IMPORTANT
STYLE AND FASHION CONSCIOUS	.93	.003	.5210+001	.022	MORE IMPORTANT
LIKE TO TRY NEW PRODUCTS	.90	.001	.5785+001	.016	MORE IMPORTANT
ECONOMIC CONSIDERATIONS	.88	.001	.3711+001	.050	LESS IMPORTANT

CLASSIFICATION MATRIX

ACTUAL	PREDICTED MALES	PREDICTED FEMALES
MALES 51	31 (61%)	20 (39%)
FEMALES 110	37 (34%)	73 (66%)

CORRECTLY CLASSIFIED: 65%

AGE 35 - 54 YEARS

VARIABLE	WILKS' LAMBDA	SIGNI-FICANCE	CHANGE IN RAO'S V	SIGNIFICANCE OF CHANGE	COMPARISON OF MALE TO FEMALE SHOPPERS
SHOP FOR NECESSITIES	.95	.004	.8358+001	.003	LESS IMPORTANT
SHOPPING SHOULD BE FUN AND EXCITING	.93	.007	.1870+001	.171	LESS IMPORTANT

CLASSIFICATION MATRIX

ACTUAL	PREDICTED MALES	PREDICTED FEMALES
MALES 43	17 (39.5%)	26 (60.5%)
FEMALES 106	21 (19.8%)	85 (80.2%)

CORRECTLY CLASSIFIED: 68.5%

AGE 18 - 34 YEARS

VARIABLE	WILKS' LAMBDA	SIGNI-FICANCE	CHANGE IN RAO'S V	SIGNIFICANCE OF CHANGE	COMPARISON OF MALE TO FEMALE SHOPPERS
SHOP FOR NECESSITIES	.86	.000	.2404+002	.000	LESS IMPORTANT
SHOPPING SHOULD BE FUN AND EXCITING	.83	.000	.6325+001	.011	LESS IMPORTANT

CLASSIFICATION MATRIX

ACTUAL	PREDICTED MALES	PREDICTED FEMALES
MALES 40	20 (50%)	20 (50%)
FEMALES 108	19 (17.6%)	89 (82.4%)

CORRECTLY CLASSIFIED: 73.7%

For shoppers aged 35-54 years, a different profile emerged. Two values -- shop for necessities and shopping should be fun and exciting --- were entered in the discriminant analysis but only the first step was significant at $p < .05$

level for change in Rao's V. Shopping for necessities was more important for females in this age group than for males.

In the final group, persons aged 18-34, shop for necessities and shopping should be fun and exciting were both significant discriminators of gender. Both values were more important for females than for males.

In all the age groups, the results indicated that shopper gender could be correctly classified with an accuracy rate significantly greater than that attributable to chance alone.

Discussion

The purpose of this study was to explore convenience and recreational value orientations among males and females in different age groups. The findings were revealing. Among the older consumers, the females placed higher importance on the convenient/economic factors whereas the males were more recreational in their orientation. In this sample, many of the males were either retired or considering retirement from their work roles. One interpretation may be that the men are influenced by decreased demands upon their time and a new interest in the recreational aspects of shopping activity (novelty, risk taking, etc.). The females in this population, however, remain tied to home and community chores and have less time and money than their male counterparts.

The younger group seems to have an orientation which combines both convenience and recreation. The females place a higher value on both economics and recreation than the males. This is also true, although to a lesser extent, among the middle group in terms of age. The shoppers aged 35-54 years were more similar to the younger group than to the older group of consumers.

These findings suggest that value orientations are different among males and females and that the specific differences are effected by age. This has important implications for retail marketing and management. For instance, retail firms could target the older male segment who, at least in this rural location, is interested in the adventuresome aspects of shopping. Fashion shows, new product demonstrations, and newsletters with information about style and new products could be distributed among this segment to enhance their perception of shopping activity. The older female, concerned about time and money, could be attracted to stores which emphasized their concern with her problems. Transportation, specials and discounts, time saving features might well be welcomed by this segment.

The younger female groups, who desire both fun and value, seem to require a combined approach. It appears important to design retail environments that are accessible, well-designed, and yet provide interesting atmosphere and variety. Media promotions could be developed to help the young female consumer recognize her needs, deliver product and purchase information, and hint at the enjoyment received from shopping.

It is suggested that future research investigate further the phenomenon of the recreationally oriented older male consumer to discover if this trend exists in other geographic locations. Also, it seems important to further study younger male shoppers. As women require equal support in the caretaker roles, it appears that more and more males will be shopping for general merchandise. This younger group needs further study.

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CONSUMER KNOWLEDGE OF FINANCE CHARGES ON CREDIT CARD PURCHASES

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Abstract

Over the last few years, interest rates offered by most lenders across industries have been gradually declining. One industry where no decline in finance charges has taken place is the credit card industry. An explanation for this may be the lack of sensitivity to interest rates by the borrowers. This paper examines the borrowers' awareness of finance charges by demographic variables.

Introduction

During the late 1970's, the banking, oil and retail industries were quick to raise finance (service) charges on their respective credit accounts in response to the increasing prime rate. Since then however, the prime rate has been steadily decreasing to around 9% in 1986; despite this reduction, institutions are still commanding the previously established higher service charges of approximately 21%. Public concern over these elevated rates is developing. For example, television networks in May, 1986, devoted considerable attention to the magnitude of discrepancy between the prime rate and finance charges, and polititians have used this discrepancy as part of their political platform. Researchers are seeking explanations for these elevated charges and are giving attention to the growing total dollar amount of retail credit.

The total outstanding consumer credit in the United States held by revolving charge accounts has been steadily increasing as credit cards have come of age (Strugatch, 1984). Presently, charge cards have replaced in-store accounting procedures as the prevailing means of granting consumer credit. According to a 1977 national survey, researchers found nearly 35% of all households used bank-backed credit cards and nearly 50% of those surveyed used store credit cards (Kinsey, 1981). Kinsey (1981) and Strugatch (1984) have predicted increased use of consumer credit cards in the future.

Given the increasing volume of retail purchases transacted using various credit cards and the continuing elevation of service charges, certain questions arise concerning the financial welfare of the consumer. Are consumers aware of the actual rates of finance charges? Does this awareness vary by demographics such as age, occupation, education, etc.? What attitudes do people hold toward credit in general? Should institutions be allowed to continue assessing such high interest rates? In light of these crucial issues facing present day credit card users, the following study was undertaken.

Hypotheses

Many consumers in today's marketplace carry charge cards, some of these consumers have multiple cards for convenience and others have them in order to gain a large credit base or to spread their debt around (Kinsey and McAlister, 1981). It is plausible that individuals holding a greater number of cards and given a situation where more than one card is accepted by a given retailer will prefer to use the card with the lowest finance charge or outstanding balance. It would be expected that as the number of cards in a consumer's possession increases, his finance charge awareness increases (Kinsey and McAlister, 1981). Thus, the hyposthesis stated in null form is:

H1. There is no significant relationship between the number of cards held and consumer finance charge awareness.

Consumers use credit at differing levels and for differing reasons. The awareness of finance charges is expected to be related to the usage level of a particular charge card. Expressed in null form the following is stated:

H2. There is no significant relationship between credit usage level and finance charge awareness.

Some individuals are credit averse, conversely, some are "credit hungry". It is hypothesized that credit averse people may not own or use credit cards; thus, they may not be aware of true costs or may even be inclined to perceive a higher than actual cost. Those with a favorable attitude toward the use of credit, however, may have a more accurate knowledge of credit costs (Kinsey, 1981). The hypothesis in null form is:

H3. There is no significant relationship between attitude toward consumer credit and finance charge awareness.

Consumer credit of the 1980's is centralized in younger to middle age groups (under 35). These are the people that have been most affected by the credit revolution and resultant change in the credit system from retail stores offering in-house credit accounts to these stores, oil companies, and lending institutions offering local and national credit card systems (Mandell, 1971; Durkin and Elliehausen, 1978; Kinsey and McAlister, 1981). Furthermore, some college students have several charge accounts, resulting from companies willing to give credit to the future leaders of the country. It can, therefore, be concluded this age group will have a high finance charge awareness.

[1]The author acknowledges the assistance of Ann Mitzelfelt and Brian Reed throughout the research project.

It is also probable that middle-aged consumers (35-54) have a high knowledge of finance charges as they have been using credit longer than younger groups. But it is expected those older than the midrange (55 and upward) would have a lesser knowledge of finance charges simply because of less exposure to today's consumer credit market (Durkin and Elliehausen, 1978); this tendency toward less exposure may be by choice due to an ability to pay cash over credit. Thus the hypothesis in null form is:

H4. There is no significant relationship between age and finance charge awareness.

The level of education of the respondent is expected to influence the awareness of finance charges. Members of the population attaining higher educational levels are expected to be more aware of the amount they are spending and the level of finance charges relative to purchases (Mandell, 1971; Durkin and Elliehausen, 1978; Kinsey and McAlister, 1981). Stated in null form:

H5. There is no significant relationship between education level and finance charge awareness.

The individual(s) in the household responsible for paying "the bills" is expected to possess more knowledge concerning interest rates paid on credit accounts than those not assuming this responsibility. Generally, male heads of the household still deal with the majority of budgeting and bill-paying procedures. Thus it is expected men should be more aware than women about interest rates on credit accounts (Kinsey and McAlister, 1981). Stated in null form:

H6. There is no significant effect of gender on finance charge awareness.

It is hypothesized, higher levels of income are associated with a greater propensity to hold credit cards (Mandell, 1971). People earning higher salaries or holding certain occupations may know more about the system of credit usage and issuance (due to their greater exposure). Stated in null form:

H7. There is no significant relationship between income level and finance charge awareness.

H8. There is no significant relationship between occupation and finance charge awareness.

Method

The study was based on a survey of the population of Peoria, Illinois, SMSA. Data were collected by a telephone survey of adult residents living in Peoria. Participants were selected from the 1985 Peoria telephone directory, using a table of uniformly distributed random numbers. A total of four hundred individuals were contacted resulting in 320 usable responses. Demographic characteristics of the respondents were compared to those in U.S. Census Bureau data for the area; comparisons revealed survey characteristics similar to those of the population.

The questionnaire was designed to measure attitudes and opinions toward use of credit. Survey questions related to frequency of card usage, unaided recall of interest rates, and demographic variables.

Results

The majority of people surveyed were in favor of possessing a credit card (69.1%), but prefer to use cash over credit by approximately a three to one ratio (48.7% to 18.4%). More than half (61.9%) felt card usage must be self-monitored to prevent financial problems. Furthermore, about one-quarter of those surveyed (26.9%) believed the cost of credit cards outweigh their benefits.

The relationship between finance charge awareness and the variables of interest was tested by cross tabulation. The accuracy of a respondent's knowledge of finance charges was coded into three levels of finance charge awareness: knowledge close to the actual rate (where the respondent reported the rates to be between 15 to 22%), above the actual charge (where the respondent indicated the rates to be above 22%), and below the actual charge (where rates were indicated to be below 15%). The findings were divided into three categories according to type of charge card: banking, oil and retail. Results are shown in Table 1.

TABLE 1
SIGNIFICANCE OF AWARENESS OF FINANCE CHARGES BY SELECTED VARIABLES*

Variables	BC**	OC**	RS**
Number of cards	.01	.00	.00
Usage level (within type of card)	.05	.00	.01
Attitude	.01	.02	.00
Age	.17	.05	.05
Education	.00	.26	.11
Gender	.05	.09	.05
Income	.02	.02	.00
Occupation	.03	.06	.92

*The vaules in the table refer to p values.

**BC-Bank Cards, OC-Oil Company Cards, RS-Retail Store Cards

The results in Table 1 are further summarized by hypothesis and discussed in the following section.

H1. Awareness by number of credit cards.
The relationship between the number of cards held and awareness of finance charges between the various charge cards was significant at $p < .05$ in each case. In general, the greater the number of cards, the higher the awareness.

H2. Usage and awareness.
There was a significant relationship between usage level of a particular type of credit (bank, oil, or retail store) and the interest rate for that card at $p < .05$. Awareness is greater for those with higher card usage for a given type of charge card.

H3. Attitude and awareness.
The relationship between attitude and awareness of finance charge was significant at $p < .05$. Individuals with a favorable attitude are more likely to be aware of maximum interest rates charged than those with an unfavorable attitude.

H4. Age and awareness.
The age variable was divided into six categories: under 25, 25 to 34, 35 to 44, 45 to 54, 55 to 64, and 65 and older. The relationship between age and awareness of finance charge was not significant for bank cards at $p = .17$, but relationships for oil company and retail store charge cards were significant at $p = .05$. Evidence suggests that consumers older than 45 are more aware of finance charges than those under 45. This finding is contrary to expectation and previous finding.

H5. Education and awareness.
The relationship between education and awareness of finance charges was significant at $p = .00$ for bank cards. The highest awareness was for college graduates (85%). This finding was not significant for other charge cards.

H6. Gender and awareness.
The relationship between gender and awareness of finance charges was significant at $p = .05$ for bank cards and retail store cards; however, it was not significant for oil company cards. The evidence indicates that a greater percentage of men than women are aware of finance charges.

H7. Income and awareness.
Income and awareness of finance charges are related for all types of credit cards at $p = .02$. Those in upper income categories (over $20,000) are more aware than those in lower income categories (under $20,000).

H8. Occupation and awareness.
The evidence relating finance charge awareness by occupation varied with the type of charge cards. The evidence indicates those in managerial positions had greater awareness of finance charges than individuals in sales, service, factory, or other occupations. This finding was significant for bank cards at $p < .05$. This relationship was not significant for retail store cards.

Discussion and Implications

The findings reveal all hypotheses were supported with the exception of age. It was determined that those using credit cards with a greater frequency, holding an increased number of charge accounts, earning upper level income, and having a favorable attitude toward the use of charge cards do have increased finance charge awareness. Overall, the percentage of people who are aware of finance charges ranges from 60% for retail store cards to 71% for bank cards. The implication of the study results follow.

An important issue directly affecting the consumer is the resistance of lenders in downward adjustment of credit card finance charges. One plausible reason supporting this resistance is that users are not really aware of finance charges, and as a result do not actively object to the high rates. However, the study results do not support lack of awareness by users and thus should not be considered a primary cause of high charges. An alternative supposition is that since the variation in rates charged by most lenders is small, the charge card holders do not have a choice in using less expensive form of credit. Thus what exists could be termed a credit card oligopoly. This explanation deserves attention.

Given the current economic problems of elevated unemployment and inflation rates, many consumers are facing a shortage of funds. With the temptation to use easy but expensive credit, these consumers often face more severe financial problems. Approximately 62% of respondents agree the use of credit cards needs to be monitored as it is easy to get into debt. Those card holders without financial problems are not placed in a "use or die" situation. These consumers may charge on their cards but clear the balance monthly, thus avoiding finance charges. It could be concluded, consumers in financial stress do not boycott the high rates for fear of a decrease in availability of easy credit, and consumers in financial health do not have a need to complain. However, the issue of high finance charges is "heating up" as seen by the recent increase in coverage of the topic over the media. In the future, lending institutions may be forced to alter their interest rates.

Lending institutions are aware of the financial benefits gained from high finance rates. Thus in an attempt to increase profits, consumers are bombarded daily through the media and mail with a goal of increased ownership of cards and usage of presently owned cards; however, owning and using a card are not synonymous. The findings indicate 69% agree "it is a wise thing to have a credit card," but only 18% prefer to use credit over cash. Approximately 40% of users indicate they use bank and retail charge cards often, 40% use cards some times and another 20% rarely. Regarding oil company cards, the percentages in each category were 32, 25 and 43 respectively. Lending institutions continue to strive toward an increase in card ownership but more importantly toward an increase in card usage.

Will lending institutions be allowed to continue charging unacceptably high interest rates, or will they be forced to lower their rates in response to mounting public concern? If the elevated rates continue, how will the consumer be affected? And if the rates are lowered, how will the lending institution be affected? Additional research on the subject may serve to bring additional attention to the problem, helping to bring lending institutions and the consumer to a common ground.

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AN EMPIRICAL EXPLORATION OF THE ALTERNATIVE EVALUATION STAGE OF THE EKB MODEL RELATIVE TO THE POLITICAL DECISION MAKING PROCESS

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Abstract

A report on an application of the EKB consumer decision process model to the 1984 presidential election. Voters utilize a decision process consistent with that of the model. Evaluative criteria used with presidential candidates are discussed and a demonstration of their value as predictors of election results presented.

Introduction

The Engel, Kollat, and Blackwell model is an attempt to theoretically simulate the decision making process of consumers. The model is logically persuasive and is presented in many texts dealing with consumer behavior. Empirical validations of the model are limited. Engel, Kollat, and Blackwell have applied their model to situations involving the purchase of laundry detergents and small cars. (Berkman, H.W., C.C. Gilson, 1978, p. 39). Zaltman, G., C.R.A. Pinson, and R. Angelmar (1973) indicate that though the model can be empirically operationalized, it has never been tested. Engel and Blackwell (1982, p. 689), addressing the problems encountered in applying their model, state that the function of models in explaining processes and identifying relevant variables and relationships is not invalidated by a lack of definitive empirical verification.

This research reports on an attempt to secure further empirical data on the model with specific attention to the applicability of the EKB model to voter behavior. (Some readers may also reference the Fishbein model 1967, 1975). Briefly, the EKB model postulates a decision process of five activities which occur over time.[1] The first activity is problem recognition wherein the individual becomes aware of a difference between the actual and desired situations which is sufficiently large to stimulate search. Relative to politics, problem recognition behavior may occur because economic, social service, or defense situations are not acceptable.

Information search follows problem recognition. It initially covers internal stored information and experience. This level of search is quick and largely unconscious and if there are fairly strong beliefs and attitudes, automatic or routine problem-solving behavior follows. If this is not the case, extensive probem-solving behavior leads to an external search. The individual may pay close attention to media news, articles, and editorials; candidate and party communications; and conversations with peer and reference group members.

The third stage is alternative evaluation. The individual uses evaluative criteria derived from underlying motives and information from the environment to evaluate existing alternatives. The individual's estimation of the degree to which a choice satisfies the evaluative criteria leads to the sequential development of beliefs, attitudes, and intentions. Intentions are affected by normative compliance (e.g. influence by friends), anticipated circumstances (e.g. many factors such as being out of state on election day), and unanticipated circumstances.

Choice is the next step followed by Outcomes which are posed as satisfaction or dissonance with search for information supporting the decision.

Political Decision-Making

An exploratory telephone survey was conducted during the summer of 1983 to determine the evaluative criteria voters use in making the voting decision relative to U.S. presidential candidates. A pilot survey using open-ended, non directive questioning, was used to generate a checklist of 22 common qualities that people look for in presidential candidates. (See Appendix A). The checklist was then used by telephone interviewers to simplify the recording of responses in the survey proper. Calls were made at random to residents of a metropolitan area and a small city (12,000)/rural area. In an open-ended question, interviewers asked, "What qualities do you look for in a presidential candidate in deciding how to vote?" and "Which of these is the most important in your reaching a decision?" It is unlikely that any evaluative criteria existing at a subconscious level were elicited. Three background questions concerned party affiliation, age, and sex. Ninety-nine usable responses were obtained. **Table I** shows the most frequently named decision criteria.

The criteria named the most important were generally also supported by the number of subjects listing these among their evaluative criteria. Only one evaluation criterion, beyond the twenty-two on the checklist, was mentioned with any frequency (integrity 3). Responses on the criteria named "most important in making a voting decision" were evaluated via t tests in a series of paired comparisons. Only the six criteria in **Table I** were selected significantly (.05 level) more frequently than the other checklist criteria.

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[1] James F. Engel and Roger D. Blackwell, Consumer Behavior (4th ed.; Chicago: The Dryden Press, 1982).

TABLE I
DECISION CRITERIA

Evaluative Criteria	Number Listing as an Evaluative Criterion	Number Listing as the Most Important Evaluative Criterion
Honest/fair/truthful	45	33
Similar values and points of view	34	17
Political skills and background	25	11
Decisive, consistent, dedicated to policies and beliefs	11	6
Well-informed/knowledgeable	11	5
Conservative	8	6

Given the limited number of evaluative criteria frequently named as most important in reaching decisions on presidential candidates by voters, a decision was made to use all six criteria in the second phase of the study.

In order to gain further knowledge of evaluative criteria cited as most important, analysis of variance (ANOVA) was used to compare party affiliation (Democrat, Republican, or Independent) with each of the twenty-three evaluative criteria. Differences among party affiliates significant at the .05 level were found relative to only two criteria: Decisive/consistent/dedication to policies and beliefs and honest/fair/truthful. More Independents than Republicans and no Democrats selected the former set, although no statistical test was applied to determine if the differences were significant among party affiliates. The latter criterion set was selected by almost half of the Democrats followed by Independents and Republicans. Curiously, significant differences were not found regarding party affiliation and the criteria liberal and conservative. The explanation may lie in the very limited numbers of subjects selecting these criteria and ambiguity concerning these two terms.

The sparsity of relationships between party affiliation and evaluative criteria suggest the universality of the six criteria and a logically necessary common decision-making process by voters.

Voter Evaluation of Candidates

A second telehpone survey was taken during the last three weeks of October 1984 just prior to the election in order to examine the extent of use of the evaluative criteria. A structured random sample was drawn with half of the responses coming from the Minneapolis/St. Paul metropolitan area and half from a smaller city of 12,000 population and the surrounding rural area. These proportions approximate the population distribution in the state. Four hundred and sixty-four (464) responses were obtained.

A reasonably good geographic balance was obtained with 53.5% of responses coming from the metropolitan area and 46.5% from the small city/rural area. While calling was done in both daytime and evening hours, female respondents made up 62.6% of the sample with 37.4% male.

The respondents classified themselves about equal in regard to party affiliation (Democrats 33.0%, Repub. 32.3%, Indep. 34.7%). They indicated their strength of support and commitment to the affiliation group on a scale of 1 to 5 (high) with the following results: 1 (12.8%), 2 (17.8%), 3 (33.9%), 4 (32.3%), and 5 (15.4%). Respondents were also asked to indicate on a scale of 1 to 5 (high) the interest and effort they had made to learn about the candidates. The percentages obtained were: 1 (2.8%), 2 (13.0%), 3 (36.4%), 4 (32.3%), and 5 (15.4%).

Evaluative Criteria

Table II brings together respondent ratings (i.e. beliefs) of the two major presidential candidates relative to the six criteria which the initial survey revealed were most frequently named as important to voters in their voting decisions.

Reagan was evaluated more favorably on five of the six evaluative criteria: political skills and background; values and points of view similar to the respondents; decisive, consistent, and dedication to policies and beliefs and conservative. The candidates were dead-even on the criterion of well informed and knowledgeable. It is interesting to note that the public thought the presidential debates were very close or had each candidate winning one of the two television debates which coincides with the research findings. Mondale's only advantage, and a slight one, was on the criterion of honest, fair and truthful.

Voting Decision

A final question on the interview asked the respondent: If the election were held tomorrow, who would you vote for? The voter decision favored Reagan by 50.4% to Mondale's 37.9%. (9.7% of the respondents said they would not vote for either candidate and 1.9% declined to answer the query.)

The voting decisions are in keeping with the evaluation of the candidates on the six evaluative criteria and the decision process outlined by the EKB model.

TABLE II

Evaluative Criteria	Candidate	Percentage Rating Low 1	2	3	4	High 5	Mean	Advantage on Mean	Mode
Political skills and background	Mondale	9.7	11.9	33.6	32.1	12.7	3.26		3
	Reagan	8.4	13.6	26.9	32.8	18.3	3.39	+.13	4
Similar values and points of view	Mondale	14.4	20.7	29.5	26.3	9.1	2.95		3
	Reagan	15.3	17.9	22.0	25.7	19.0	3.15	+.20	4
Honest, fair and truthful	Mondale	10.5	16.4	24.9	33.6	14.6	3.26	+.03	4
	Reagan	13.1	13.8	26.2	31.4	15.5	3.23		4
Decisive, consistent, dedicated to policies and beliefs	Mondale	10.2	16.0	30.1	32.9	10.8	3.18		4
	Reagan	9.3	11.9	24.8	35.9	18.1	3.42	+.24	4
Well-informed and knowledgeable	Mondale	7.6	10.8	28.1	39.3	14.3	3.42		4
	Reagan	9.9	12.1	23.5	35.4	19.0	3.42		4
Conservative	Mondale	18.3	23.9	26.1	22.8	8.9	2.80		3
	Reagan	6.8	13.7	24.4	32.2	22.9	3.51	+.71	4

TABLE III

Evaluative Criteria	Beta	Multiple R	R Square
Political skills and background-Mondale	-.06963	.41394	.171
Political skills and background-Reagan	-.00508	.46294	.214
Similar values and point of view-Reagan	.11272	.51181	.262
Similar values and point of view-Mondale	-.23511	.54735	.300
Honest/Fair/Truthful-Mondale	-.10153	.55603	.309
Honest/Fair/Truthful-Reagan	.06563	.55758	.311
Decisive, consistent, dedicated to policies and beliefs-Reagan	-.12000	.56179	.316
Decisive, consistent, dedicated to policies and beliefs-Mondale	-.00937	.56209	.316
Well-informed/knowledgeable-Reagan	.23601	.57544	.331
Well-informed/knowledgeable-Mondale	.02786	.57559	.331
Conservative-Mondale	-.15530	.58004	.336
Conservative-Reagan	-.13175	.58708	.345

The Evaluative Criteria as Predictors

The coefficients of correlation among the evaluative criteria are all quite high for both candidates (Mondale r's from .58 to .65; Reagan r's .56 to .69) with the exception of the evaluative criterion conservative where the coefficients range from .38 to .48 relative to Mondale and .42 to .51 for Reagan. The evaluative criterion conservative may play a different role in the decision making process than the other five criteria.

Table III provides a summary of the multiple regression results with the evaluative criteria as variables relative to the dependent variable of candidate choice in the voting decision.

The Beta column indicates that the evaluative criterion well informed/knowledgeable as applied to Reagan had the strongest predictor value to the election outcome. Political skills and background relative to Reagan had the least value as a predictor.

Multiple regression indicates that 34 percent of the variance in the voting decision is accounted for by the relationship with the six evaluative criteria. While regression findings do not permit us to talk of cause and effect, the relationship found is in keeping with the EKB model's third decision process stage alternative evaluation which describes the use of evaluative criteria in the formation of beliefs, attitudes, and intentions leading to the fourth stage of choice.

Cross Tabulations

Cross tabulation of the evaluative criteria with the voting decision produced the expected relationships. For example, on the evaluative

criterion political skills and background relative to Mondale, most of those checking high ratings of 4 and 5 voted for Mondale (72.7%). Those giving ratings of 1 and 2 tended to vote for Reagan (34.2%). The ratings of those who said they would vote for neither candidate closely formed a normal distribution centered on the median rating of three. In summary, those giving extreme ratings (a 1 or 5 on the 1 to 5 scales) gave a very high percentage of their votes in accordance with the rating.

Routine vs Extensive Problem Solving Behavior

The general effort made to learn about the candidates was approximately the same among those who indicated voting preferences for Mondale and Reagan. (See row percentages Table IV.) However, 69.2% of those who made the lowest (ranking of one) effort to learn about the candidates indicated a voting decision in favor of Reagan. This suggests the presence of routine or automatic problem solving behavior. This conflicts with Rothschild's view that voters in presidential elections have a high level of situation involvement. (Rothschild, M., 1979, p. 16.) These voters had stored information and experiences concerning the candidate (s) and beliefs and attitudes strong enough to make a rather routine decision as a result of the 1980 voting decisions and the President's first term in office.

The majority of those who made the greatest effort to learn about the candidates (ranking of 5) also stated that Reagan was their choice. In accordance with the EKB Model, we would assume that the evaluative criteria, motives, reference groups, personality, and other factors lead these people to their choice.

The EKB model says that a person with strong attitudes and beliefs relative to a choice problem will engage in automatic or routine problem solving behavior, tending to quickly choose a previously satisfactory solution. Automatic problem solving behavior was tested through the research data by comparing the position of those who indicated a high commitment to a given political party with their responses to the query regarding the effort made to learn about the candidates. Those who are strongly committed to a political group should make less

TABLE IV
Cross Tabulation of Voting Choice
and
Effort to Learn About Candidates

Row % Column %	Low 1	2	3	4	High 5
Mondale	1.7 23.1	14.3 41.7	32.6 44.5	36.6 43.8	14.9 37.7
Reagan	3.9 69.2	11.2 43.3	36.9 52.1	30.9 49.3	17.2 58.0
Neither	2.2 7.7	20.0 15.0	48.9 13.3	22.2 6.8	6.7 4.3

TABLE V
Cross Tabulation of Commitment to a Political Group
and
Effort to Learn About the Candidates

		Effort				
Row % Column %		Low 1	2	3	4	High 5
Low	1	12.3 53.8	19.3 18.6	31.6 11.1	24.6 9.8	12.3 10.3
	2	5.1 30.8	22.8 30.5	48.1 23.5	20.3 11.2	3.8 4.4
Commitment	3	1.3 15.4	12.6 32.2	41.7 38.9	33.8 35.7	10.6 23.5
	4	.0 .0	8.7 15.3	31.1 19.8	44.7 32.2	15.5 23.5
High	5	.0 .0	3.6 3.4	20.0 6.8	29.1 11.2	47.3 38.2

effort to learn about the candidates. The results did not prove this to be the case. Those who were highly committed to a political party (rating of five) also made a high effort to learn about the candidates. Over forty-seven percent of these respondents rated their effort to learn about the candidates at the highest level (see **Table V**).

This relationship was investigated independently for each of the three political affiliations. In each case a positive relationship was found between commitment to the political group and effort and interest made to learn about the candidates. The correlation was weaker among Independents than Democrats or Republicans.

This failure of the research data on political decision making process to correspond with the model may be due to the interest and responsibility of those highly committed to politics and political action serving as motivators for well-informed decision making even though strong attitudes and choices exist.

Limitations

The writer recognizes the considerable possibility of nonresponse bias, nonrepresentative samples, inadequate sample size, and the impact of ongoing political campaigns while data is being collected. A tradeoff was necessary between the number of responses collected and the duration of the collection. Preliminary general research was done the summer before the nominating and election year to obtain some isolation from individual personalities and to shorten the data collection period on the political decision making process.

Summary

The six evaluative criteria discovered in the initial survey are central to the political decision making process for presidential choices and appear to be operative within the alternative evaluation decision stage of the Engel, Kollat, and Blackwell model.

The research demonstrated that voters evaluated Reagan more favorably than Mondale and formed voting intentions on the basis of the six evaluative criteria used in the study It is thus possible to project election results by obtaining voter evaluations of candidates on the six criteria. Periodic research will be necessary to determine changes over time among the evaluative criteria used by voters.

The lack of automatic or routine problem solving behavior among those with higher levels of commitment to political groups indicates that political campaigns are effective with these people in changing or reinforcing past voting patterns.

APPENDIX A

Pilot Study Evaluative Criteria

I.	1.	Well informed/knowledgeable
	2.	Intelligent
	3.	Interpersonal communications ability
	4.	Political skills and background
	5.	Management, business, and economic skills
II.	6.	Decisive, consistent, dedication to policies and beliefs
	7.	Leadership
	8.	Believable/sincere
	9.	Self-assured, confident, risk taker
	10.	Energetic
	11.	Young
	12.	Inquisitive
	13.	Physically attractive
	14.	Practical, logical, common sense
III.	15.	Honest, fair, truthful
	16.	Ethics, morals
	17.	Caring/compassionate
	18.	Religious background
IV.	19.	Liberal
	20.	Conservative
	21.	Support for social/human services
	22.	Similar values and points of view
V.	23.	Miscellaneous responses

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IMPORTANCE OF BUYERS' CRITERIA FOR EVALUATING NEW TECHNOLOGY ATTRIBUTES

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Abstract

This paper focuses on the perceived importance of product attributes as buyers' criteria for decision-making. The conceptual framework of this study considers buyers' criteria for assessment of new products as a focal point to understanding the underlying factors and objectives for buying behavior. The objective criteria were measured using a direct rating scale composed of eight items associated with purchasing new agricultural technologies. The findings indicate that farm operators favorably perceived technologies that are reasonably priced, less costly to maintain, save time, reduce drudgery, with quick return on investment, bring more benefits, and require little reorganization of their enterprise. Understanding adopter criteria has vital implications for manager assessment of market opportunities.

Introduction

Current research on diffusion of innovations, as reflected in available literature, has not devoted enough attention to the importance of buyers' criteria for evaluating the attributes of new products or technological innovations. Recent studies suggested that future buyer perception-preference research should address the relative importance of types of product attributes and a host of other research issues (Glazen, 1984: Ostlund, 1974). Therefore, this present paper focuses on the perceived importance of product attributes as buyers' criteria for decision making. Diffusion research that determines adopters' criteria for perceiving and evaluating new products could influence the marketing manager's understanding of product needs and opportunities available in the marketplace.

Buyers use product attributes as evaluative criteria to differentiate among products by constructing an image of relative quality. It is necessary to understand not only how buyers use evaluative criteria, but also how they rank order criteria in terms of importance. Variations in perceived levels of importance of new product attributes may affect a buyer's choice among available new products. These variations appear to be product and person specific (Dickson, 1982).

An examination of each evaluative criterion and its relative level of importance as perceived by buyers of new products is likely to reveal implications for new product development and marketing. This paper discusses findings from a major survey that investigated criteria used by principal farm operators in purchasing new farm technologies in a midwestern state.

Conceptual Framework

Buyer decision-making is a process in which evaluative criteria are considered necessary for understanding purchasing motives (Engel, Blackwell, and Miniard, 1986). In the past, most consumer behavior researchers have investigated beliefs and attitudes rather than defining the critical product attributes used in the evaluation process (Gardner, 1983). Buyers' criteria for assessing new products are additional keys to understanding the underlying factors and objectives of individual buying behavior.

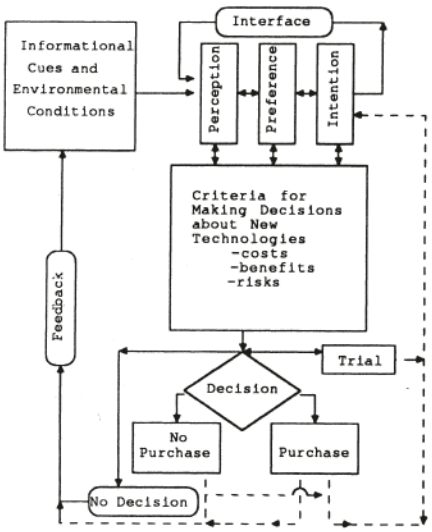
The potential buyer examines new products or technologies in the context of his/her past, present, and future situations. During this process the buyer rates and compares product performance based on his/her ranking of attribute importance (Bettman, 1979), and his or her expectations about the attributes of future substitute and/or complementary products (Scott, 1985). A buyers' evaluation of product attributes is, therefore, governed by criteria that form a cognitive, conative, and affective frame of reference (Engel, Blackwell, Miniard, 1986).

A buyer's decision-making criteria represent some combination of favorable and unfavorable attribute evaluations. These are considered by the buyer before the final purchase decision is made. The relative importance attached to each criterion probably varies from person to person. However, some groups of people, e.g. segments, select similar criteria for decision-making (Dickson, 1982). Complete understanding of how the purchase decision process is made cannot be accomplished without a reference to the buyer's criteria for decision-making. The final purchasing decision can be better predicted by knowing the buyer's reasons for acceptance or rejection of new products/innovations. The theoretical link, between the criteria for evaluation and the intention to purchase behavior, has been empirically tested and is well established in the behavioral literature (Miniard and Cohen, 1983; Ajzen and Fishbein, 1980).

Although the general focus of most diffusion research has been on understnding the final

[1]The authors wish to thank the anonymous reviewers for their useful suggestions and Ms. Mary E. Gannon for her secretarial support throughout this writing project. Also thanks are due to Adel Hassan and Rebecca Lindy for their graphical assistance.

adoption decision (Gatignon and Robertson, 1985), less attention has been paid to defining the steps in the decision process (Hassan, 1984). The focus of the present paper is the types and relative importance of criteria used in evaluating new agricultural technologies. Rogers (1983) argued that examination of the final adoption decision is not sufficient until the intervening processes--from awareness to final decision-making--are known.



A Model for Understanding Criteria for Making Decisions about Purchasing New Technologies[2]

Criteria for new technologies "purchase" decisions are depicted above. The model presents the contextual conditions that effect the formation and rank order of each criterion. The model also contains three cognitive processes that the buyer may use in choosing between different action alternatives. These three processes are: perception, preference, and intention to act. Glazen (1984) confirmed a cognitive interaction between the environment as it is perceived and the environment as it is acted upon with respect to product attributes and choice behavior. In this cognitive process buyers perceived environmental cues such as product information in order to differentiate among products, to assess the relative importance of each product, and to act upon purchasing the preferred product. Only environmental cues or product information that has been understood can influence buyers' criteria for choice (Engel, Blackwell, and Miniard, 1986; Engel, Warshaw, and Kinnear, 1987).

Perceived differences in the attributes of new technologies may lead to variation in the buyer's belief about their relative value. The agricultural technologies discussed in this present paper are discontinuous innovations as as defined by Robertson (1971). He suggested a continuum to classify innovations from continuous innovations (e.g. line extensions) to discontinuous innovations (e.g. new technologies). In assessing innovations, Rogers (1962, 1976, 1983) recommended a set of factors that include relative advantage, compatibility, trialability and observability. Robertson (1984) criticized these traditional set of variables because they may not apply uniformly for all innovations. A similar problem was suggested by Dickson (1982) due to variations in usage situations and their impact on individual preferences.

There are at least two ways of dealing with this issue in the diffusion context. First, one may specify an elaborated set of assessor factors as Robertson (1984) suggests. However, the five attributes suggested by Rogers have the advantage of being more robust across products; and this is important for theory development. Second, the five attributes (or some subset of them) may be used by considering an evaluation for the importance of each attribute by each person for each product. The evaluations are then used to weight the perceived importance of each product attribute. This approach was robust in two studies of new technological products (Scott, 1985; Scott et. al., 1987). Hassan (1984) demonstrated that an elaborated list of evaluative criteria was also effective in understanding the levels of perceived importance attached to new technology attributes.

The evaluative criteria used in this study (Table 1) were measured using a direct rating scale composed of eight items chosen from the literature to represent the factors associated with purchasing new agricultural technologies. The responses to each item were placed on a series of continuums reflecting respective degrees of importance for making evaluative decisions in a way similar to that used by Cohen, Fishbein, and Ahtola (1972).

Research Procedure

Since modern farm practices tend to place primary emphasis on improving farm operations and increasing productivity, farm operators will perceive and assess recommended farm technologies in terms of their importance to the achievement of these objectives. For example, a farm operator who is choosing among several types of farm machinery typically takes into account such considerations as the initial costs, extent of risk related to the entire farm operation, anticipated savings in time, reduction of farm operation, quick return on investment, and a variety of other issues that he/she anticipates will affect farm productivity (Hassan, 1984). Consequently, the farm operator's choice of agricultural technologies will be reflected in the importance of the criteria index to his/her farm operations. This criteria index measures farm operators' perceived importance of efficiency in operating contemporary agribusiness farms. Individuals who score highly on this criteria index are thought to

[2]This model was adopted with modification from Hassan (1984).

Table 1: Response Frequencies for Each Criterion Item as Ranked by Order of Importance

Scale Item	Possible Responses: Not Important 0	1	2	Somewhat Important 3	4	5	Very Important 6	7	8	No Response	Mean* $\bar{X}$	Standard* Deviation
1. Initial costs	6 (0.7)	5 (0.5)	6 (0.7)	14 (1.5)	56 (6.1)	61 (6.6)	171 (18.6)	119 (13.0)	444 (48.4)	36 (3.9)	6.80	1.57
2. Maintenance costs	9 (1.0)	5 (0.5)	12 (1.3)	21 (2.3)	55 (6.0)	92 (10.0)	205 (22.3)	152 (16.6)	330 (35.9)	37 (4.0)	6.48	1.66
3. Anticipated savings in time	6 (0.7)	5 (0.5)	11 (1.2)	28 (3.1)	70 (7.6)	95 (10.3)	205 (22.3)	153 (16.7)	300 (32.7)	45 (4.9)	6.38	1.65
4. Reduction in drudgery of farm operations	11 (1.2)	14 (1.5)	30 (3.3)	61 (6.6)	98 (10.7)	110 (12.0)	172 (18.7)	113 (12.3)	244 (26.6)	65 (7.1)	5.83	1.98
5. Extent of risk related to farm operation	18 (2.0)	18 (2.0)	31 (3.4)	61 (6.6)	83 (9.0)	132 (14.4)	178 (19.4)	101 (11.0)	227 (24.7)	69 (7.5)	5.71	2.04
6. Benefit to farm operations	19 (2.1)	16 (1.7)	25 (2.7)	70 (7.6)	96 (10.5)	140 (15.3)	198 (21.6)	104 (11.3)	184 (20.0)	66 (7.2)	5.57	1.98
7. Quick return on investment	26 (2.8)	14 (1.5)	40 (4.4)	47 (5.1)	104 (11.3)	146 (15.9)	168 (18.3)	84 (9.2)	196 (21.4)	93 (10.1)	5.51	2.08
8. Amount of reorganization of farming operations	34 (3.7)	17 (1.9)	44 (4.8)	64 (7.0)	114 (12.4)	174 (19.0)	157 (17.1)	97 (10.6)	142 (15.5)	75 (8.2)	5.20	2.09

*Mean and Standard Deviation were calculated with missing data equal to mean response for each item.

Note: Data presented as absolute frequencies and as Percentages in Parentheses (%) N = 918

place more emphasis on economic efficiency in making purchasing decisions. These farm operators should, therefore, perceive new technology favorably. Their favorable perception may come in part as a result of higher level of exposure to cues received from a variety of information sources, e.g., product ads in farm journals.

The data used in this present paper were collected as part of an extensive research project jointly sponsored by the Ohio Agricultural Research and Development Center, the Ohio Cooperative Extension Service, the National Institute for Farm Safety, and the Nationwide Insurance Company. The data were collected from study participants living in nine counties chosen at random from the extension districts in Ohio. A structured questionnaire was administered by trained interviewers. Ninety-five percent of the sample, (N=918), had actually completed an interview. There were no significant differences between the characteristics of the sample and the characteristics of the rural population of Ohio as found in the 1982 Ohio census.

The criteria index was operationalized by using a Likert-type scale. The scale measured the relative importance of efficiency factors in making decisions about purchasing new technologies. The reliability of the criteria index was assessed using the standardized item alpha. The standardized item alpha measures the internal consistency of multiple-item scales. The computation formula for the standardized item alpha is as follows:

$$\text{alpha (s)} = \frac{K\bar{r}}{1+(K-1)\bar{r}}$$

where K= the number of items in the scale

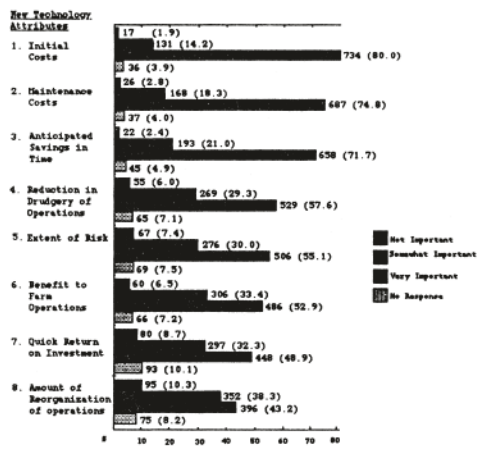
$\bar{r}$= the average correlation between items

The standardized item alpha for the criteria index is 0.83. This high coefficient (possible coefficients range from 0 to 1.0) indicates that the scale is very reliable and that the individual scale items can be used as a composite index.

Findings and Conclusions

Response frequencies and percentages for each of the assigned nine levels of perceived importance in evaluating new agricultural technology attributes are presented in **Table 1**. The nine levels of perceived importance (not important=0-1-2; somewhat important=3-4-5; very important=6-7-8) are then collapsed into the three major levels in order to summarize the data as shown in **Table 2**.

Table 2: Summary of Buyers' Perceived Importance In Evaluating New Technology Attributes



Note: Data presented as absolute frequencies and as Percentages in Parentheses (%) (N=918)

The rank ordering of the adoption criteria factors (see Table 2), according to their perceived importance, is informative since it provides insight into the weight the buyers place on each of the decision-making items. Each of the three top ranked items were perceived by seventy percent or more of the respondents to be very important. These criteria items, ranked by the order of their percentages, are (1) initial costs, (2) maintenance costs, and (3) anticipated savings in time. Approximately fifty-five percent of the respondents perceived each of the three other factors to be very important in making decisions about new farm technologies. These criteria factors in rank order are reduction in drudgery of farm operation, extent of risk related to entire farm operation, and benefit to farm operations. Quick return on investment and amount of reorganization of farming operations each were perceived to be very important by slightly less than forty-five percent of the respondents and were ranked seventh and eighth, respectively.

These finding suggest that initial costs, maintenance costs, and time saving are the most important factors in making decisions about purchasing new farm technologies. These high ratings for these three factors are not surprising since farmers know that most farm technology is very expensive and can be time saving. Quick return on investment was ranked lower than the other decision-making factors included in the index. Such rankings suggest that farm operators are concerned about the long-term return on investment in new technology.

The lower ranking of risk in the adoption of a new farm technology was expected because new agricultural technology nearly always is tested prior to its introduction by the manufacturer. This pretesting of new technologies often reduces the perceived risk. Therefore, farm operators may know what results to expect when the purchasing decision is made. Risk associated with purchasing was perceived to be at least somewhat important by a majority of farm operators.

Amount of reorganization of farming operations was ranked lowest in terms of its importance, even though it was perceived to be very important by a large minority and at least somewhat important by a majority of the respondents. This suggests that if the technology being considered for adoption satisfies the more highly ranked criteria factors as primary conditions, purchasing decisions will occur even if farming operations require some reorganization. It should be noted, however, that reorganization of farm operations was considered to be very important by a large minority of the respondents. This suggests that technologies which require significant reorganization of the farming enterprise will be more strongly resisted.

In essence, the findings indicate that farm operators evaluate farm technologies for purchasing in the context of their impact on the farm enterprise. Technologies that are reasonably priced, less costly to maintain, produce a savings in time, reduce drudgery in farm operations, bring more benefit to the entire farm operation, produce a quick return on the investment, and require little reorganization of the farming enterprise will be perceived more favorably than technologies that have other characteristics attached to them. The findings of this study indicate that farm operators when making decisions about the purchase of farm technologies typically take into account factors related to improving farm efficiency and increasing farm productivity. These objectives were measured by the adoption criteria index.

Implications

It was not the purpose of this paper to empirically utilize the criteria suggested in predicting adoption behavior. The purpose, however, was to demonstrate the existence of these criteria, its perceived importance, and its conceptual relevance to the decision process. The present paper has demonstrated that evaluative criteria can be used in future research as a tool to predict the pattern and timing of new technology adoption. However, as with macro studies of innovation diffusion that relied on personality variables to predict product adoption, an eclectic model is more predictive than a model composed only of product attributes or personality variables.

One's perception, preference, and intention are controlled in part by the cognitive, conative, and affective elements that impact on and result from the evaluation process. Because of this, evaluative criteria and their relative importance are modified by the person, product, and situation. Ongoing research has shown that an eclectic approach causing these elements is strongly predictive of adoption behavior (Brown, 1981; Hassan, 1984; Hassan, 1985; Hassan and Scott, 1987; Scott et. al., 1987). Further, research has also shown that the number of variables needed to predict adoption can be reduced with little loss of predictive power; providing those variables used in the model have been suggested by theory or by empirical testing for that category of products, a similar segment, and a similar situation.

In a broader context, these findings have implication for non-agricultural marketing managers as well. Because consumer behavior models are well developed, and have been applied to marketing action, it is likely that a marketing manager can create effective segmentation strategies based on an understanding of the criteria a given segment may use to evaluate his or her new products.

Summary

This present paper has demonstrated that people do use evaluative criteria in the decision process and that the relative importance assigned to those criteria are critical to the adoption of new technologies. Understanding those criteria, and their relative importance, provides in-

sight into the factors and objectives of decision making. Plotting the most important criteria for a given person (or segment), product, and situation and combining those criteria in parsimonious eclectic model will allow more accurate prediction of adoption patterns for new products. Evaluation of the criteria themselves will provide managerial insight into the wants and needs of consumers. That, in turn, may lead to the development and marketing of innovations to satisfy those wants and needs.

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AN APPLICATION OF THE CONSUMER INVOLVEMENT MATRIX OF A PRODUCT EVALUATION TASK

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Abstract

Although "involvement" has the potential of being an important mediator of consumer behavior, our current understanding of it is limited. What is involvement? How do we operationalize it? What impact does it have on decision making? This paper addresses these issues. Specifically, an application of the Consumer Involvement Matrix is presented to identify the impact of involvement on a product evaluation task.

Introduction

The concept of "involvement" and its effect on consumer decision making has been an expanding area of interest to marketers. Beginning with the work of Krugman (1965), its growing importance in consumer behavior is typified by Sherrell and Shimp (1982) who call it "one of the most scientific units in consumer behavior" and by Kassarjian (1981) who speculates that if "involvement" lives up to its potential, the concept should have the impact of altering our present conceptions of the consumer.

Even more significant than the voluminous number of studies directly addressing the involvement issue is the countless reference to and use of involvement in a wide variety of consumer related research. This is evident when one considers how the concept has been applied. An examination of the literature reveals that involvement has been applied to media (Krugman 1966), products (Bloch 1981), issues (Swinyard and Coney 1978), consumers (Newman and Dolich 1979), learning (Finn 1983), situations (Belk 1981), information processing (Stephens 1986), cognitive structures (Lastovicka and Gardner 1978), and services (Belonax and Crow 1986). The diverse application of the concept appears to suggest that there is no commonly accepted definition of involvement and thus no single direction that involvement research is taking.

The purpose of this study is to revisit the involvement concept, not to suggest a new definition, but rather to apply an empirically supported conceptualization to a new area: a product evaluation task. As Rothschild (1984) suggests, we don't need another definition of involvement, we need to apply what we have and then, in ten years, we may devise a better definition, if we need one.

Involvement

Attempts made by researcher to conceptualize and operationally define a variable are never easy and often times reflect a good deal of ambiguity during its gestation period. It appears that the concept of involvement has followed this path. Precisely, what is involvement? Antil (1984) identified eleven definitions of involvement. Parameswaran and Spinelli (1984) uncovered thirty conceptual and empirical operationalizations of involvement. Despite differences in emphasis and preferences among researchers, a consensus seems to emerge as to its generic definition. Involvement is an unobservable state of motivation, arousal or interest with drive properties. It is evoked by a particular stimulus (external, internal) or a situation. Its consequences are types of searching, processing, and decision making (Rothschild 1984). Perhaps, the empirically supported conceptualization offered by Houston and Rothschild (1978) best captures the multi-dimensional nature of this generic definition (Arora 1983). They suggest that the construct of involvement is made up of three separate types: situational involvement, eduring involvement and response involvement.

Situational involvement, a state, reflects the ability of a situation to elicit varying levels of concern, arousal or interest. Eduring involvement, a trait, reflects the strength of a product's relationship to individual needs, values and the prior experience an individual has had with the product. Response involvement refers to the complexity or extensiveness of cognitive and behavioral processes characterizing the overall consumer decision process. The exact form that response involvement takes will depend on the stage in the decision process: presearch, information search and acquisition, decision and post decision (Houston and Rothschild 1978).

The Consumer Involvement Matrix (CIM) was developed as part of the overall paradigm of consumer involvement suggested by Rothschild and Houston (1977; 1986). Based on an integration of Social Judgement Theory and Multi-Attribute Attitude Models, the CIM seeks to assess the response involvement in the presearch stage. Specifically, it reflects the cognitive structure of an individual with respect to a product class. The CIM has two major dimensions. First, it considers the multiattribute perspective on product choice by considering the attributes of a product used by a consumer as criteria for evaluating alternative brands in a product class. The second major dimension incorporates the notion of a latitude of acceptance from social judgement theory by considering the latitudes of acceptance for each salient choice criterion, i.e., product attributes. Combining the two dimensions, the vertical axis is the set of attributes used as choice criteria, while the horizontal axis is the width of the latitude of

acceptance across the attributes. A well developed cognitive structure is indicated by a long narrow matrix where many attributes are used as criteria and stringent requirements are placed on each attribute. A less developed structure is indicated by a short wide matrix where few attributes are used and less stringent requirements are placed on each attribute. Algebraically, the overall shape of the matrix is indicated by the ratio of the vertical size to the horizontal size. The following formula is used to measure the extensiveness of an individual's cognitive structure:

$$CIM = \frac{ATTRIB}{ACCEP/AVAIL}$$

CIM = extensiveness of cognitive structure
ATTRIB = number of salient attributes used as choice criteria.
ACCEP = total number of acceptance levels of all attributes included in ATTRIB
AVAIL = total number of attribute levels available in all attributes included in ATTRIB.

Overall CIM scores can be computed for an individual. More extensive cognitive development or greater involvement is indicated by higher CIM scores and lower involvement by lower CIM scores. For example, if an individual indicated usage of six attitudes and thirteen levels of acceptability, an involvement score of 6/(13)/(72) = 33 would be computed. If an individual indicated a lower level of involvement (i.e., one attribute with six levels of acceptability) an involvement score of 1/(6)/(12) = 2 would be computed. Given this conceptualization and empirical operationalization of involvement one question remains to be answered, "In what way will a consumer's decision process vary as a function of his or her involvement with a product class?" Chaffee and McLeod (1973) present a generalized model that conceptualizes the consumer as an information processor and decision maker. The consumer is seen as making a decision according to some decision rule which combines information about the brands on their respective attributes. For the purpose of this study, we are concerned with the impact of involvement on the construction of a decision rule and the importance of identifying the best brand before making a choice decision.

Hypotheses

Conceptually, the consumer decision process under varying levels of involvement should differ in a number of ways. First, consumers, in general, feel less certain that they can develop a rule to evaluate brands when the brands differ markedly in quality than when they differ very little (Bettman 1973). However, consumers who are more involved with a product class (high CIM scores) are likely to feel more certain about developing a rule than those who are less involved in the product class (lower CIM scores). The higher involved consumer must devise an evaluation rule that considers a large number of attributes each of which has a stringent requirement (narrows latitude of acceptance). Therefore, the information load the consumer faces should affect the rule used. As information load increases, the relative urgency of using a simplified strategy should increase. Given the heightened need to use a simplified rule, the highly involved consumer should feel more certain that such a rule can be developed.

Second, consumers, in general, feel it is more important to identify the best brand in a product class when the brands differ markedly in quality than when they differ very little (Belonax and Brogowicz 1983). However, consumers who are more involved with a product class (high CIM scores) are likely to feel it is more important to identify the best brand before making a choice than those who are less involved in the product class (low CIM scores). It has been postulated that satisfactory choice and best choice represent the minimal and maximum goal of an evaluation process, respectively. By nature of the individual's involvement, the highly involved consumer should feel more motivated to identify the best brand before making a choice than the consumer who is not highly involved with the product class. This line of reasoning leads to the following four hypotheses to be tested in this study.

H1 The uncertainty of constructing a decision rule to evaluate alternative brands within a product class increases as the brands differ markedly in quality.
H2 The uncertainty of constructing a decision rule to evaluate alternative brands within a product class is lower for consumers who are highly involved with the product class.
H3 The importance of identifying the best brand from among the alternatives increases as the brands differ markedly in quality.
H4 The importance of identifying the best brand from among the alternatives is greater for consumers who are highly involved with the product class.

Methodology

To test these hypotheses, two 2 x 3 factorial experiments were designed with product quality and involvement as independent variables. The reported uncertainty of developing a decision rule and the importance of identifying the best brand were the dependent variables. The data were analyzed using ANOVA. Before discussing the operationalization of the variables three preliminary design considerations will be discussed.

First, the product for which brand information was to be supplied had to be sufficiently complex to allow use of several evaluative criteria. A household appliance, microwave oven, met this criteria and was selected.

Second, to ensure that the participants would use the evaluative criteria when evaluating the alternative brands, a pretest was conducted.

Forty-eight respondents (home-economic majors) rated the importance of and perceived inter-brand differences for sixteen attributes. Using the "direct dual questioning" technique, six attributes were selected: browning uniformity, cooking precision, cooking uniformity, cooking versatility, oven capacity, and warranty protection. When presented to participants, the nature of each attribute was described in a short paragraph.

Third, participants for this study were 245 college students enrolled in an introductory course in food and nutrition. It was believed that these students would have some interest in evaluating a food preparation appliance.

Operationalization of Independent and Dependent Variables

Each participant in the study was exposed to six brand profiles of microwave ovens. Each profile contained the six previously mentioned attributes rated on a 12-point poor-to-excellent (excellent = 12) scale. The brands were identified only by a letter (A through F) to avoid a possible a priori bias elicited by the use of brand names.

The first independent variable product quality (i.e., treatment levels) was created by systematically changing the attributes ratings for each of the six brands. Within each treatment level, both the average level and the variability of brand quality were held constant by the use of "standard squares" (Kirk 1963). However, between treatment levels both the average level and the variability of brand quality were systematically manipulated to create three different levels of quality: $\bar{x}$ = 8.0, s2 = 5.9; $\bar{x}$ = 7.0, s2 = 8.4; $\bar{x}$ = 6.0, s2 = 14.0.

The second independent variable allowed for a priori determination of the level of consumer involvement. To operationalize the CIM matrix participants were asked to (1) indicate for each attribute whether or not s/he would use it in evaluating microwave oven brands - this was cross-checked by having them identify the relative importance of these attributes using a constant sum scale, and (2) the minimum rating on each attribute which an oven would have to receive to be evaluated as "acceptable." The latitude of acceptance was defined as the numbers of attribute levels between 12 (maximum possible rating) and the minimum rating assigned by the participant. Overall CIM scores were computed for each individual. The range of CIM scores was from a low of 2 (1 attribute, 6 levels of acceptability) to 33 (6 attributes, 13 levels of acceptability.). The average CIM score of 10 was used to place participants into either the high involvement group (greater than average CIM scores, n = 101) or the low involvement group (less than average CIM scores, n = 145).

The dependent variables were operationalized in the following manner. After examining the brand ratings the participants were asked to indicate, (1) how certain they were of constructing a decision rule on a twelve-point scale, from "extremely certain" 1, to "extremely uncertain" 12, (2) how important it was to identify the best brand before making a choice on a twelve point scale, from "extremely important" 12, to "not important" 1.

Results

Table 1 shows the mean level of uncertainty for the various conditions. An examination of the means show that, as predicted by Hypothesis 1, uncertainty increased as the brands differed markedly in quality. In addition, as predicted by Hypothesis 2, uncertainty was lower for high involvement consumers.

TABLE 1

MEAN LEVEL OF UNCERTAINTY FOR ALL CONDITIONS
PRODUCT QUALITY DIFFERENCES

INVOLVEMENT	SMALLEST	INTERMEDIATE	HIGHEST	TOTAL
HIGH	4.34	5.06	6.35	5.19
LOW	5.12	5.84	7.40	6.21
ALL	4.75	5.54	7.01	

Table 2 presents the results of the two-way univariate analysis of variance. Both main effects are significant while the interaction is not. The results confirm Hypotheses 1 and 2.

TABLE 2

UNIVARIATE ANALYSIS OF VARIANCE FOR UNCERTAINTY

SOURCE OF VARIATION	d.f.	MEAN SQUARE	F
Involvement	1	44.10	8.52 (p<.01)
Product Quality	2	99.48	19.22 (p<.01)
Interaction	2	.45	.09 (NS)
ERROR	239	5.18	

Table 3 shows the mean level of importance for the various conditions. An examination of the means shows that as predicted by Hypothesis 3 the importance of identifying the best brand increased as the brands differed markedly in quality. In addition, as predicted by Hypothesis 4, importance was greater for high involvement consumers.

TABLE 3

MEAN LEVEL OF IMPORTANCE FOR ALL CONDITIONS
PRODUCT QUALITY DIFFERENCES

INVOLVEMENT	SMALLEST	INTERMEDIATE	HIGHEST	TOTAL
High	9.34	9.97	10.42	9.87
Low	7.61	8.08	9.92	8.63
All	8.44	8.82	10.11	

Table 4 presents the results of the two-way univariate analysis of variance. Both main effects are significant while the interaction is not. The results confirm Hypotheses 3 and 4.

TABLE 4

UNIVARIATE ANALYSIS OF VARIANCE FOR UNCERTAINTY

SOURCE OF VARIATION	d.f.	MEAN SQUARE	F
Involvement	1	110.76	20.49 (p< .01)
Product Quality	2	72.03	13.32 (p< .01)
Interaction	2	11.41	2.11 (NS)
Error	239		

Discussion

The results confirm the view that consumers perceive greater uncertainty regarding their brand evaluation (decision rule) and believe it is more important to identify the best brand before making a choice when brands differ markedly in quality than when they differ little in quality. This suggests at least two observations.

First, because people appear to exhibit greater uncertainty suggests that more attention should be paid to this phenomenon when examining the process by which consumers evaluate brands. Although no model was fitted to preference orderings, it is likely that consumers anticipate using simplification heuristics in situation of perceived information overload. Unfortunately, the use of simplified rules in complex evaluations, although reducing the cognitive strain of decision making, may lead to a suboptimal choice.

Second, it appears that people perceive more painful penalties associated with a wrong choice and react by expressing a need to identify the best brand before making a choice. Even though this finding is not new it does suggest that firms continue the emphasis on the "best brand" in their promotional campaigns. In fact, it might be suggested that the greater the differen-tiation of brands in a product class, the greater the need to stress the "best" in promotional campaigns.

The results also confirm the view that highly involved consumers perceive less uncertainty than lowly involved consumers regarding the evaluation of brands. In addition, highly involved consumers believe it is more important to identify the best brand before making a choice, than do lowly involved consumers. This suggests two observations:

First, the latitude of acceptance component of the CIM offers a manager insight into positioning the firm's product on each relevant attribute. The number of acceptable attribute levels shows managers how careful they need to be when developing a new product or when developing copy for a new or existing product.

Second, the latitude of acceptance component suggests differential use of promotional media. When several evaluative criteria with narrow latitudes of acceptance exist (high-involvement) more extensive messages with precise information are necessary suggesting greater use of print media. When fewer evaluative criteria with wide latitudes of acceptance exist (low-involvement) less extensive messages with high repetition is suggested. Greater use of broadcast media would be more appropriate in this case.

Finally, the CIM has value as a segmenting variable. It is possible to segment the market on the basis of CIM scores. The differences in importance ratings and/or acceptance ranges for the attributes within a product class can be used as a basis for segmentation or a part of a market segment profile.

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THE ORGANIZATION OF MEMORY: ITS EFFECT ON THE RECALL OF ADVERTISEMENTS

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Abstract

The authors are attempting to explore the relationship between organization of attributes within an advertisement and the ability to recall the advertisement. The study applies memory theory to marketing with an experimental design manipulating the number of categories or chunks in the organization of an advertisement. Results confirm the earlier list learning experiments in the organization and memory literature.

Introduction

What makes us remember a particular advertisement? Recall of information from advertisements is a popular means of evaluating advertising effectiveness. There are many characteristics of an advertisement which may affect recall of information from the ad (Engel, Blackwell and Miniard 1986). This paper examines one such characteristic, the organization of information within the ad, and its effect on organization in memory. Before presenting hypotheses regarding the effects of organization on memory for an advertisement, the theoretical basis underlying these hypotheses is discussed.

One important aspect of the use of stored information is the accessibility of the stored or remembered pieces of information in memory. Craik and Lockhart (1972) introduced the notion of levels of processing. In this framework, an individual's ability to recall information from memory is in part dependent on how the information was acquired and initially processed. A "deeper" level of semantic processing results in better retention and better recall than "shallower" levels of processing. Craik and Tulving (1975) broadened the levels of processing framework to include elaboration, or "spread" of processing, finding that once semantic processing has occurred, greater degrees of elaboration produce greater levels of recall.

The levels of processing framework was further expanded by Bellezza and his associates (Bellezza, Richards and Geiselman 1976, Bellezza, Cheesman and Reddy 1977). Bellezza et al. (1976) proposed that optimal performance on recall tests results from a two stage processing system. The first stage is semantic processing, allowing the to be remembered material to be processed to the point of comprehension. Further processing, including simple elaboration, has a relatively small effect on improving recall. The second stage is organization, which relates the to be remembered items to one another using some subjective organization or mnemonic device. Under this formulation, semantic processing is viewed as a necessary but not sufficient condition for optimal recall performance. Beyond semantic processing, organization is a critical variable in increasing levels of recall.

The concept of organization as discussed and supported by Bellezza et al. (1976, 1977), Einstein and Hunt (1980), Bower (1972) and others is based upon Mandler's earlier work. Mandler (1967, 1968) performed a classic series of experiments in which he instructed subjects to organize a list of words into a varying number of categories or chunks (e.g. 2, 4, 6, or 8 chunks). Subjects were asked to sort cards containing the list words into a prespecified number of categories. The procedure was repeated until the subject sorted the words into identical categories on two successive trials. Subjects were then asked to recall as many of the words from the list as they could remember. The results of the study demonstrated Mandler's now classic category - recall function. Recall increased linearly up to about seven categories.

Subsequent research has generally supported the view that stimulus organization greatly affects retention (Bower, Clark, Lesgold and Winzeng 1969, Tulving and Donaldson 1972). Specifically, Bellezza et al. (1976) report evidence in support of their two stage processing system. In three experiments they demonstrated that organization improves memory performance above semantic processing alone in both immediate recall tests and delayed (24 hours) recall tests. Bellezza et al. (1977) and Einstein and Hunt (1980) replicate these findings, and also conclude that increased organization of information into categories led to better recall performance. And, when faced with a large number of categories, subjects apparently organize these into superordinate "categories of categories," thereby enhancing recall.

Based on the available literature in human memory, a consumer's mental organization of material from an advertisement would be dependent on two major factors:

(a) the organization of material in the ad itself, and
(b) the internal structure of consumers' memories (schema).

The current theoretical view of the interaction of these two factors (Tulving and Thompson 1973, Olson 1978, and Tulving 1972) is that the internal structure of memory defines the available set of organizational schemata which a person could use to organize the material, but only schemata which are activated during presentation of the material are important for later recall of the material (Jacoby 1974, Mathews 1977). Characteristics of the ad itself may determine which memory schemata get activated, and consequently influence a consumer's organization and subsequent recall of the material. Knowledge of variables relating to organization of material

within an ad and its influence on consumers' organization and recall of the material is of importance to marketing.

Hypotheses

The first hypothesis is based on the findings of Bellezza et al. (1976, 1977) Einstein and Hunt (1980) and Mandler (1967, 1969) which suggest that given the existence of semantic processing, increased organization of information into categories will result in increased recall.

H_1: Recall of the total number of attributes within an ad should continue to increase linearly up to 7 - 8 categories, and then decrease.

In addition, Bellezza et al. (1976) found that this effect held for both immediate recall and for delayed recall using a 24 hour delay. Since day after recall is often used in advertising research, this is a potentially important implication of memory research. Bellezza et al.'s (1976) finding provides the rationale for the second hypothesis.

H_2: Recall of the total number of attributes within an ad should continue to increase linearly up to 7 - 8 categories, then decrease, after a 24 hour delay.

Recall on these experiments is analyzed in terms of two component processes: category recall and recall of items within categories (Tulving and Pearlston 1966). Category recall corresponds to memory access to higher order chunks, and recall of items within categories reflects the amount of information retrieved within chunks of information. Usually the number of categories has opposite effects on the two memory processes. Given this to be true, there should be an optimal pattern for recall.

Variables that influence memory do so primarily by determining the number of items within a category that can be recalled (Cohen 1966; Patterson 1972; Tulving and Psotka 1971). The result of this is that individuals tend to forget entire brands before they forget attributes within a brand. Once a person recalls a category then he/she is likely to recall some or most of the attributes within the category. Hence, the literature suggests the following hypotheses:

H_3: The percent of categories recalled within an advertisement will decrease as the number of categories increases.

H_4: The percent of attributes recalled within a category will increase as the number of categories increases.

H_5: The recall patterns suggested in H3 and H4 will not change with twenty-four hour recall.

Methodology

Experimental Stimulus

The overall logic of the experiment was to examine incidental memory for information in an ad after subjects read the ad and rated it on a number of semantic dimensions (e.g., persuasiveness, readability). The number of organizational categories (1, 4, 8, or 16) served as the independent variable. The particular ad used in this experiment was a bogus ad for an automobile (The AMB Meteor). It should be noted that the ad was based on a real ad found in a consumer magazine. The copy, however, was changed for purposes key to this experiment.

In the one category ad, all 64 attributes were listed in random order in two columns across the page. In the 4, 8, and 16 category ads, the attributes were grouped in corresponding numbers of categories with an appropriate category label printed above the attributes belonging to each category (see Appendix 1 for an example of the 16 category format).

Experimental booklets were formed by inserting one version of the Meteor ad between two actual one page ads selected from magazines. The two real ads were included in the methodology to increase the ecological validity of the study. That is, a person would rarely read an ad by itself; thus, it was assumed more realistic memory data would be obtained if the experimental ad was presented in the context of other ads. A booklet also contained rating sheets following each ad in which subjects rated each ad on five semantic differential scales labeled with the following adjectives: informative-noninformative, persuasive-nonpersuasive, not helpful-helpful, readable-unreadable, and trustworthy-untrustworthy. These adjectives were chosen for the purpose of stimulating the subjects to read the ad, thereby engaging in semantic processing. Subjects were asked to "rate" the ads as well as to disguise the purpose of the study. Each booklet also contained an initial page with instructions and an example showing how to use the rating scales, and a final page requesting demographic data.

Procedure

Each treatment was randomly assigned to the subjects. Subjects were given an experimental booklet and were asked to read the instructions printed on the booklet. Once the subjects understood the instructions, they were allowed to complete the booklet (read and rate all three ads) at their own pace. The respondents were told to raise their hand when they completed their booklet. At that time the booklet was taken up and subjects were given a blank recall sheet containing the following instructions: "Now we are interested in seeing how much you can remember about the Meteor ad. In the spaces below, please write as many items as you can remember about the ad. Try to write the items as closely as possible to the way they were worded in the Meteor ad." When subjects indicated that they had completed their recall sheets, the sheets were collected and the subjects were asked to return at the same time the following day. Upon returning the subjects completed a second recall sheet.

Subjects

The subjects for the experiment were 113 undergraduates at a large state university who

participated in the experiment for extra credit in an introductory psychology course. The selection of students as subjects was sound from the standpoint of external validity given the objective of theory application (Calder, Phillips and Tybout 1981).

Scoring and Dependent Measures

The recall data were stored using a keyword method (Mathews 1977). One or more keywords were selected from each phrase (attribute) in the Meteor ad (e.g., the keywords "regular gas" were selected for the phrase "runs on regular gas"). Subjects were given credit for recall of an attribute only if their recall sheet contained the keywords for a particular attribute. That is, recall did not have to be verbatim, but the subject's response did have to contain the keywords (e.g., the response "uses regular gas" would be acceptable but "uses regular" would not).

Three recall measures are reported. Attribute recall is simply the total number of attributes from the ad which were recalled using the scoring procedures described above. Total recall was also divided into the two component measures, category recall and recall of attributes within categories, corresponding to the two memory processes associated with recall of organized lists. Category recall is scored by giving a subject credit for recall of each category from the ad that he/she recalls at least one attribute (Tulving and Pearlstone 1966). Category recall is assumed to reflect memory access to the overall memory structure (higher order unit) containing information about a given subset of attributes. The second measure, recall of attributes within categories, is derived by dividing the total number of attributes recalled by the number of categories a particular subject recalled. It is thus a measure of the average amount of information within a category a subject retrieves, once access to the category is made.

Results

The three recall measures are shown in **Table 1** as a function of the number of categories used to present the attributes in the advertisement. Total number of attributes recalled increased linearly with the number of categories used in the ad (see **Table 1**) up to eight categories, then dropped from eight to sixteen categories, exactly as predicted by Mandler's category recall function (Mandler 1967, 1969). The twenty-four hour recall shows the same pattern with the optimum category being the eight chunk category. **Figure 1** graphs the recall patterns of the same day recall and day after recall.

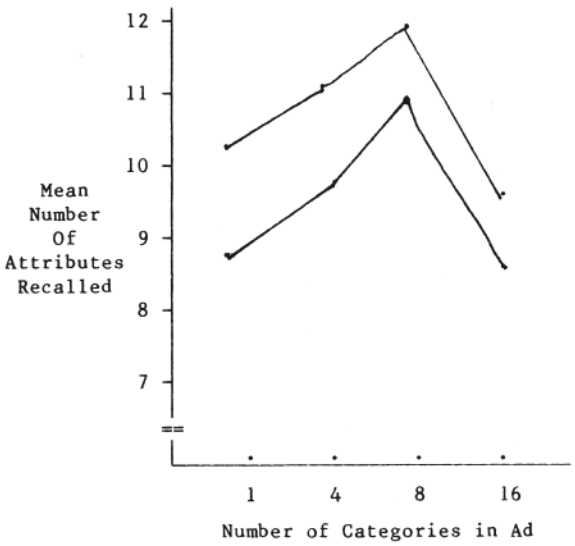
Analysis of variance adjusted for unequal cell sizes was used to test for differences in the recall measures due to the number of categories in the advertisement. The analysis of the total number of words recalled reveals no significant differences between treatments at the .05 level (see **Table 1**). However, by looking at the data it is obvious that there is a linear increase in the total number of words recalled up to eight categories. It is also possible that the total number of words recalled increases well beyond eight categories, with the peak number of words recalled falling between eight and sixteen categories. The same pattern also holds up for the day-after recall measure. The data, however, do not support H_1 and H_2.

TABLE 1
THE EFFECT OF NUMBER OF CATEGORIES ON RECALL OF ADVERTISEMENTS

Recall Test	Number of Categories 1	4	8	16
Immediate				
Sample size	28	28	28	29
Attribute recall	10.3	10.9	11.9	9.5
Category recall	N/A	.79	.63	.37
Attributes-within-categories recall	.16	.20	.29	.39
Day after recall				
Sample size	27	22	27	25
Attribute recall	8.9	9.6	10.7	8.5
Category recall	1.0	.81	.61	.34
Attributes-within-categories recall	.14	.17	.27	.38

Category recall decreased as the number of categories increased while the third recall measure attributes-within-categories recalled increased as the number of categories increased. The last two measures are critical in that they correspond to the two components of human memory.

FIGURE 1
ORGANIZATION OF MEMORY ADVERTISING RECALL



—— = Immediate Recall, — — — = Day-after-Recall

This graphic presentation of the data clearly supports Tulving and Pearlstone's (1966) proposition that category recall and recall within a category are independent. Furthermore, Mandler (1967) agrees that category recall and recall within categories are independent processes but suggests that they may follow the same size-recall function. That is, both measures follow a linear pattern as the number of categories increases. The data from this study clearly corroborate this hypothesis.

The analysis for the two recall measures corresponding to the components of the human memory reveal highly significant effects (see Table 1). That is, the analysis of the category recall data is significant ($F(3, 105) = 59.79$, $P > .0001$). Similarly, the analysis conducted on the attributes-within-category data reveals a significant effect on the number of categories ($F(3, 104) = 31.37$, $P > .0001$). This finding substantiates Cohen's (1966) notion that once a category has been recalled, "performance on the recalled categories appears to be invariant." On the other hand, Cohen (1966) indicated that if subjects do not discover or remember a category, then recall from that category will not follow the general mechanism apparent in category recall. This recall pattern appears to hold true in advertising suggesting the importance of a good headline or subheadline in activating a reader's memory. Therefore, the data support H_3 - H_5.

One interesting result was the significant differences found on the effect of sex on the dependent variable with $F(2, 105) = 3.54$, $P > .06$ (see Table 2). Similarly, the analysis conducted on the attributes-within-category data reveals a significant difference by sex, $F(1, 104) = 5.39$, $P > .02$. For all three recall measures there was a significant difference between males and females (see Table 2). The significant difference may be attributed to the nature of the ad itself. That is, the content of an automobile ad may be more familiar to males than females resulting in higher recall scores. It was also interesting to note that the pattern of recall depending on the ad seen did not vary by sex. The variance in recall by sex was only on total number of attributes.

There were no significant differences between immediate recall and day-after recall. Also, none of the interactions were significant at the .05 level. Thus, the effects of ad organization on recall can be seen more clearly when analyzing the two component measures of recall.

TABLE 2
MEAN RECALL SCORES BY SEX

Recall Measures	Sex	
	Male	Female
Attribute recall	11.79	8.12
Category recall	.72	.66
Attributes-within-categories recall	.27	.22
Immediate		
Attribute recall	12.54	8.52
Category recall	.72	.66
Attributes-within-categories recall	.29	.23
Day After		
Attribute recall	10.96	7.66
Category recall	.71	.66
Attributes-within-categories recall	.25	.21

Discussion

The findings from this study have several important implications for marketing communicators. First, the psychological literature on organization and memory can be applied to an advertising situation. In general, this literature suggests that the recall of organized material depends on (Mandler 1967): (1) the number of categories used, which determines the number of categories that will be recalled, and (2) the size of the recalled categories, which determines the amount to be recalled from each category. Therefore, when planning marketing communications it is important to realize that when the number of categories is small, a large proportion of the categories will be recalled and, when there are many categories, a relatively large amount per category will be recalled because of subcategorizing, thus increasing total recall (Mandler 1967).

The most important conclusion to be drawn from this experiment is that the organization of product attributes in an ad does effect recall, as in list learning experiments (Mandler 1967). The number of categories used to present the attributes in the ad had opposite effects on the two components of recall. As number of categories increased, the proportion of categories accessible in recall decreased. However, the proportion of information (attributes) retrieved from accessible categories increased as total number of categories increased (and, consequently, the number of attributes within each category decreased). Total number of attributes recalled, which is the result of the two component recall processes, increased from one up to eight categories in an ad; and was highest with eight categories.

Thus these results indicate that the category effect does occur in advertisements. Furthermore, these results show that this effect is obtained with meaningful materials (ads) in incidental memory tasks where subjects read the ads in a realistic way. As in list learning experiments, total recall was maximized with eight categories used in the ad copy.

Given that purchasing decisions probably depend more on what information one remembers about a product rather than total recall, the pooling effects of number of categories on the two components of recall could be very important for marketing. In devising a marketing strategy the following factors should be considered:

(a) Is it more important that a person has ready access to general information about the product in memory (category recall) or that specific product attributes are retrieved (recall of attributes within categories given recall of the category)?

(b) What cues will be available to facilitate retrieval at time of purchase decision? If a large number of cues are likely to be available (e.g., as when the decision is made "in store"), then one might wish to use ads containing large numbers of categories with relatively few attributes per category.

The results of this study may prove to be useful in the application of its research in learning and memory to marketing communications. The authors agree with Bettman (1979) that before such applications are made, experiments such as the present one are necessary to test whether previous findings from list learning experiments successfully transfer to tasks more similar to marketing conditions. This study found that eight chunks were optimal with recall decreasing somewhere between eight and sixteen chunks. Future studies may want to vary the number of chunks contained in an experiment, to confirm the true optimal recall level. Future research might also want to examine a chunking strategy with varying products. In this present experiment an automobile was used and sex differences were found that may have occurred because of the product chosen. Finally, it can be seen that the study of factors affecting the two component processes of recall and, especially, the relation of the two components of recall to purchasing decisions are important areas for additional marketing research.

Appendix

Attributes Arranged in the 16 Chunk Format

INTERIOR
...Deluxe AM radio...climate control air conditioning...tilt steering wheel...cruise control

BODY CHASSIS
...steel belted radial tires...swingup rear hatch...tinted windows...intermittent windshield wipers

COCKPIT
...vinyl upholstery...cut pile carpeting...deluxe instrument panel...form-fitting bucket seats

EXTERIOR
...twin sport mirrors...two-tone sport striping ...landau top...chrome wire wheels

GAS MILEAGE
...39 mpg highway...28 MPG city...highest MPG in class...700 mile cruising range per tank full

FUEL
...runs on regular gas...low price per gallon ...no knocking engine...no catalytic convertor

EASE OF SELF MAINTENANCE
...easy to follow owner's manual...simplicity of maintenance...easy to tune engine...quick and easy oil change

LONG RECOMMENDED SERVICE INTERVALS
...50,000 mile air filter...oil change needed only every 6 months...replace oil filter every 15,000 miles...lube every 6 months

OPTIONAL V-6
...a more powerful engine...dual exhaust... transverse-mount engine...refined coolant recovery

STANDARD ENGINE
...standard 4 cylinder engine...1.6 liter engine ...overhead cams...varijet 2 barrel carburetor

HANDLING
...rack and pinion steering...smooth quiet ride ...MacPherson struts...standard front stabilizer bar

EASE AND FUN OF DRIVING
...compact turning diameter...smooth shifting 5 speed...quick acceleration ...4 wheel disc brakes

AMERICAN MADE
...easy obtainable parts...over 3000 available dealers...9 out of 10 still on the road...proven transmission

WARRANTY
...24 month/24,000 mile warranty...50,000 miles on engine block...rust proof body...Delco Freedom lifetime battery

PASSENGER
...automatic seat belt retractor...padded dashboard...energy absorbing steering column... optional air-bag cushion

AUTO BODY SAFETY
...energy absorbing bumpers...brake failure warning system...collision proof gas tank... puncture proof tires

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References are available upon request.

THE MEDIUM IS NOT THE MESSAGE FOR ALL CONSUMERS

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ABSTRACT

Whereas managerial common sense proposes that there is an obvious relationship between perception of the media and perception of the advertisement, the present research proves this to be partially wrong. An empirical study on three professional magazines for farmers (N=337) shows that the relationship is not significant. However there is an important element of segmentation when the receivers' Locus of Control is used as a mediator variable: there is a positive relationship for the group of internally-controlled receivers and a negative relationship for the group of externally-controlled receivers. Advertisers are thus advised to differentiate their media strategy for these two publics. More studies are needed to probe this "obvious" relationship.

INTRODUCTION

It is generally considered by both academic and commercial researchers that there is a strong and almost obvious relationship between the medium and the message. Commercial researchers are tackling the problem of the contextual influence exercised by the medium on the perception of the advertisements.

It is generally admitted as a trivial evidence that the perception of the medium strongly influences the perception of the message. However, this evidence is not empirically based when we consider the particular relationship between credibility of the medium and perception of the advertisement.

This paper focuses on this question of particular importance for advertisers. In fact, advertisers choose media according to a number of quantifiable variables but also according to less easily quantifiable and almost qualitative variables such as the "image" of the medium. In other words, some media are more reputed, more prestigious than others and it is assumed that the "image" of the medium will enhance the acceptance of the advertisement. More clearly, it is assumed that the credibility of the message will induce the reader to accept more easily the content of the message. However this relationship does not seem to have been tested, but taken for granted.

This paper presents the results of an empirical study on readers of three competitive professional magazines This experiment shows that the relationship holds only for a restricted segment of readers those who are characterized by a specific psychological trait, i.e. an internal Locus of Control.

We used this psychological trait because previous researches showed that this variable significantly intervenes in similar processes, which are exposed in the literature review section.

LITERATURE REVIEW

Effects of credibility

As already stated, there does not seem to be any study relating the medium's image with the acceptance of the message. However, there is a number of non empirically-based statements on this relation, among which we have selected the following.

> "The reputation of the medium in terms of honesty or objectivity (also) affects the credibility of the advertising. Consumers often think that a medium they respect should not do advertising for products it did not "know" were good" (Schiffman and Kanuk, 1983:264).

> "Magazines such **Life**, **Reader's Digest**, **Good Housekeeping** and **Parents' Magazine**, which claim to exercise discretion as to what advertising is accepted, ..., are in effect, standing behind these products and recommending them in the capacity of a source" (Robertson, 1971:137).

> "If creative strategy seeks to inspire confidence or dispel doubt, a medium such as **Good Housekeeping** magazine with its highly respected editorial and Seal of Appraisal would be appropriate" (Sandage and Fryburger, 1971:429).

> "If people do not trust their media, they are likely to have less confidence in (your) advertisements as well" (Mc Grath, 1986:58; our emphasis).

One of the very few empirical researches show that magazines' credibility strongly and significantly affect attitudes toward advertisements (Fuchs 1964).

There is a very abundant literature on the relation between source credibility and message

acceptance. This literature is somewhat straighforward and is briefly reported here although it is relatively hazardous to transfer results on the source onto results on the medium.

However, it should be stressed that the distinction between source and media credibility is not even made at least in one major article of this literature: in their famous study on the effects of credibility upon immediate-versus-postponed changes of opinion, Hovland and Weiss (1951-52) consider the magazines studied as the source.

Previous research has consistently shown that credibility does enhance message acceptance. Trustworthiness and expertness, which, according to Kelman (1961) represent the cognitive component of source credibility, bring about more immediate attitude changes (Miller and Baseheart, 1969; Shulman and Worrall, 1970). Affective characteristics of the source, in particular attractiveness, have also been found to have positive effects on attitude change when there is a similiarity between source and receiver (Simons et al. 1970).

Effects of Locus of Control

Locus of Control (or LOC) is a psychological concept that refers to attribution of success and failure, rewards and punishments to internal (i.e. individual's volitional behavior) versus external causes (i.e. environment):

> "... an event regarded by some persons as a reward or a reinforcement may be differently perceived and reacted to by others. One of the determinants of this reaction is the degree to which the individual perceives that the reward follows or is contingent upon his own behavior or attributes versus the degree to which he feels the reward is controlled by forces outside of himself and may occur independently of his reactions (...) when the event is interpreted in this way (i.e. as a result of luck, chance, fate, as under the control of powerful others or as impredictable because of the great complexity of the forces surrounding him) we have labeled this a belief in **external control**. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in **internal control**" (Rotter, 1966).

Internally controlled individuals feel that they are in charge of their destinies whereas those who are externally controlled feel that they are at the whim of outside forces.

Several studies have established the relationship between LOC and persuasion: Chebat and Picard (1984), McGinnies and Ward (1974), Perreira and Austrin (1980), and Weigly (1977) have shown that externals are more persuasible than internals.

INTERACTIVE EFFECTS OF CREDIBILITY AND LOCUS OF CONTROL

Very few studies have focused on the interactive effects of LOC and credibility on message acceptance. Hester (1977) found that internally controlled individuals attribute significantly more credibility than externally controlled individuals to the source ($r=.84$; $df=178$; $p=.001$).

McGinnies and Ward (1974) showed contradictory results: whereas U.S. and Japanese externally controlled subjects are more influenced by highly credible source than internally controlled subjects, the reverse was true for Australian subjects.

It is reasonned that internals construct an integrated perception of the source and the message. Internals are assumed to be less sensitive to external pressure (such as the source's prestige, expertness, competence, trustworthiness) than externals: consequently highly credible source would enhance less defensive reactions form internals than form externals.

Taking into account this "de facto" vacuum on this relationship we shall test the "obvious" hypothesis that the credibility of the medium strongly affects the acceptance of the message. The rationale for this hypothesis is basically the general theory of dissonance: the more respected media are vehicles of messages which cannot be rejected without a deeper reflection on the part of the reader if they were published by lesser respected media; corrolarily, respected media cannot accept advertisements which would harm their images. This is about the same kind of reasonning which justifies the simplest results on the source's credibility-message acceptance relationship.

METHODOLOGY

Questionnaire

A three-section questionnaire was administered to respondents whose composition is analyzed in the "sample" section. The first part focuses on attitudes toward three agricultural magazines. Following Kelman (1961) in particular, respondents were asked to evaluate the magazines on two cognitive dimensions (competence and confidence) and two effective dimensions (prestige and identification). An average score was performed as a measure of media credibility. The second part is a set of measures of exposure attention, information and retention of randomly selected advertisements published in these three magazines. The third part contains various psychological tests, among which these is the Locus of Control scale (Rotter, 1966).

Each respondent evaluated ten advertisements; all the advertisements tested had the same physical size; they were rotated systematically so that no bias can be attributed to fatigue or learning. The questionnaire was previously pretested with a small subsample of thirteen readers of the three magazines.

Sample

The sample was drawn from the mailing list of the major regional agricultural association. The total list includes some 47 000 names. 371 names were randomly selected.

Three hundreds and thirty seven in depth interviews were completed by six trained marketing students of our University. Sixty three respondents had scores of Locus of Control beyond the fourteen threshold (externals) and seventy five below the six threshold (internals) on the twenty point scale of I.E.R. Locus of Control.

RESULTS

An analysis of variance (ANOVA/SPSS) was used to verify the direction and significance of the relation between acceptance of advertisements and credibility of media with Locus of Control as a mediator variable. Table 1 and Figure 1 show the results of the ANOVA.

TABLE 1

ANOVA: ADVERTISMENT CREDIBILITY BY
LOCUS OF CONTROL (LOC)
MEDIA CREDIBILITY (CRED)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIGNIF. OF F
Main Effects	0.219	2	0.110	0.078	0.925
LOCUS OF CONTROL (LOC)	0.002	1	0.002	0.001	0.971
CREDIBILITY (CRED)	0.218	1	0.218	0.155	0.695
2-Way Interactions	6.043	1	6.043	4.285	0.040
LOC X CRED	6.043	1	6.043	4.285	0.040
Explained	6.262	3	2.087	1.480	0.223
Residual	188.954	134	1.410		
TOTAL:	195.216	137	1.425		

172 Cases were processed.
34 Cases (19.8 pct) were missing.

Surprisingly, the media's credibility have **no main effects**. Similarly, Locus of Control have no main effects either. However, results show strong and **significant interactive effects** of the two variables. More precisely, as shown in Table 2 and Figure 1, for internally-controlled respondents there is a **positive** relationship between media credibility and message acceptance, whereas for externally-controlled this relationship is **negative**.

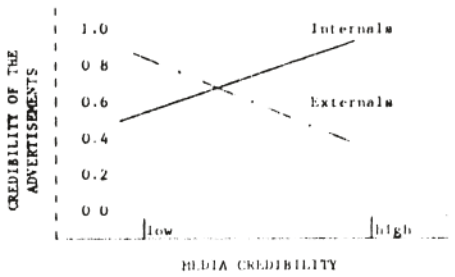

FIG. 1: Credibility of the advertisement as a function of Media Credibility and receivers' Locus of Control

TABLE 2

COMBINED EFFECTS OF MEDIA CREDIBILITY AND LOCUS OF CONTROL ON ACCEPTANCE OF ADVERTISEMENTS

	MEDIA CREDIBILITY	
LOCUS OF CONTROL	LOW	HIGH
	1	2
INTERNALS 1	0.52 (48)	1.00 (27)
EXTERNALS 2	0.83 (42)	0.43 (21)

DISCUSSION

It is quite interesting to point out that the seemingly "obvious" and "trivial" relationship does not hold: the medium's credibility has no main effects on the acceptance of the message. Advertisers cannot assume that there is a simple and straightforward transfer of credibility from the media to the acceptance of the message.

In fact, the relationship is strongly mediated by (at least) one psychological characteristic of the respondents, i.e. their Locus of Control. The positive and expected relationship holds only for the internally-controlled respondents but, very unexpectedly, the relation is negative for the externally-controlled repondents.

Under conditions of low credibility of the medium, advertisement' acceptance is higher for externals than for internals; conversely under conditions of high credibility.

Previous studies on a similar topic show similar results. Chebat and Filiatrault (1985) have found that Locus of Control has similar mediator effects between source credibility and message acceptance in the field of political persuasion. This result along with those by Hester (1977) and McGinnies and Ward (1974),

with their Australian sample and **not** with their American or Japanese samples) induce us to think that there is a **differential sensitivity** to credibility from internally-versus-externally controlled respondents. Internals tend to align their attitudes toward the message with the credibility of the source or the media as though they were in search for consonance. But externals behave as though they were more sensitive to external pressure: the consonance theory does not hold in their case: highly credible media seem to enhance defensive mechanisms. Sternthal et al., (1978:258) have found similar results; they show that "moderately credible source induced a more positive attitude toward the issue than the highly credible communicator". Respondents who feel external pressure on them would react defensively vis-à-vis a highly credible source; they would feel "less inclined to engage in this cognitive work to bolster support for a position advocated by the message" (Sternthal et al., 1978:259). It is assumed that externals, who are more sensitive to external pressure, would react more defensively toward a highly credible source and its message. On the contrary, internals would more likely align their attitudes toward the advertisement with attitudes toward the media.

CONCLUSION

LOC is an important variable to consider in segmenting markets. LOC is related to social characteristics (Kohn 1969; Furhham and Henry 1980; Hertz - Lazarowitz and Sharan, 1980) racial characteristics (Hendrix, 1980; Hinman and Bolton, 1980), religious characteristics (Geist and Bangham, 1980) and general political attitudes (Chebat and Filiatrault, 1984). The LOC profile of people exposed to various media can be inferred from such characteristics. Marketing strategies could then utilize a media-mix oriented specifically towards particular publics.

Advertisers should be well advised to take the Locus of Control into consideration when choosing their media-mix. Highly respected media can have very differentiated effects on consumers whether they are internally or externally controlled. For instance, using **Scientific American** can strongly enhance the acceptance of the message for internals, and have opposite effects for externals. The most adequate strategy would be to select credible media whose clientele would be mostly internals and lesser credible media to which mostly externals would be exposed. Fortunately for advertisers, this is a combination of media and publics which is likely to occur: highly respected media have an intellectual flavor which attracts more educated consumers, who in turn are more likely to be internals; conversely, less respected media are also those who are geared at a larger public of lesser level of education and SES, who in turn are more likely to be externally-controlled. However likely this reasonning is conjectural and does not relieve the advertising agencies from verifying the degree of adequation between media credibility and audience Locus of Control.

This study being one of the very few on this relation and the results being partly unexpected (although theoretically founded), it is strongly recommended that other studies be completed. Moreover, as the literature review shows, the mediating effects of the Locus of Control seem to be culturally-bound; consequently, comparisons between results from various cultures would be quite recommended for advertising purpose.

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A SCANDINAVIAN VIEW OF THE MANIFEST AND LATENT THEMES IN HOME VIDEO ADVERTISEMENTS

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Abstract

This paper uses a Scandinavian approach to analyze the content of Danish home video advertisments. The content analysis identifies manifest and latent themes incorporated into the advertisements. The paper also discusses the home video technology in Denmark in terms of the diffusion of innovations paradigm.

Introduction

Although the home video technology is a prominent feature in American society, countries in Western Europe have only recently witnessed the widespread adoption of this technology. Many reasons have stimulated the early adoption of the video technology by U.S. consumers. Among these reasons, two have great importance. First, Americans have a great fascination with new technology for the household, and second, households have greater available purchasing power compared to most countries. Americans are commonly regarded as eager to adopt an innovation that gives them greater control over their lives. In the case of home video, American households became more independent viewers and less dependent on regular TV programming and movie theaters for their entertainment.

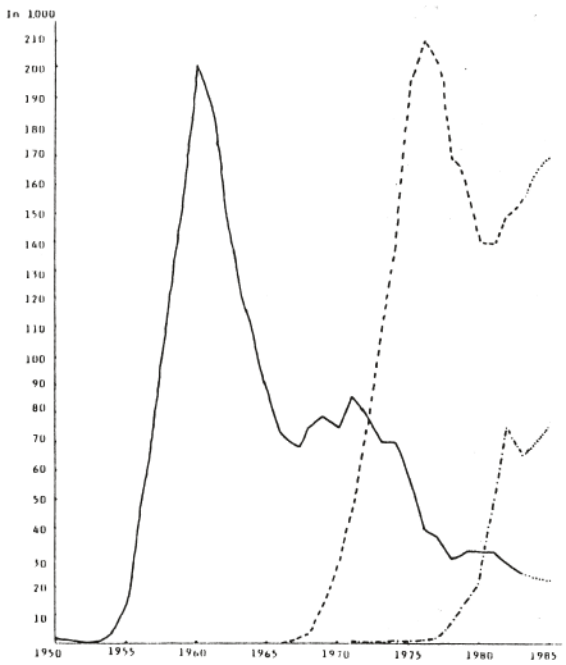
The experience of the Danish market with home video is different compared to the U.S. Because Denmark has a high standard of living, the casual observer would expect that the Danish household would have been likely to adopt video when first introduced. Such was not the case. In fact most of Europe was subject to sluggish adoption rates of this technology. If American business is to understand the nature of marketing in Western Europe, it is important to investigate case studies. This paper examines the diffusion of the home video technology in Denmark. Reasons as to why the typical Danish household rejected home video when first introduced are developed. A content analysis in the Danish tradition of video advertisements from 1980 to 1982 shows that different manifest and latent themes were used during this period to make the video technology seem more acceptable to Danish lifestyle. The paper concludes by giving the implications of the study to marketing.

History of the Home Video in Denmark

Video technology was first introduced in Denmark in the early 1970's. As a new medium to Danish society, it was sold as a supplement to the TV set and super 8 movie technology. This initial introduction, however, failed. Institutions rather than households were more eager to adopt this innovation. Through the 1970's many private firms, universities and public schools acquired video for their collection of AV equipment. The technology was mainly used for educational purposes and as creative medium in art and alternative communications. The semi-professional U-Matic system (not intended for household use) was preferred in the early period of video in Denmark. There were two principal reasons why the Danish consumers were not keen about this product. First, the lack of compatible software from video rental stores made this product less appealing. Second, color TV sets were owned by a minority of households in the early 1970's. As a consequence, consumers had to choose between two innovations; most chose to acquire a color TV set.

The beginning of the 1980's ushered in a new period for the media in Danish society and for Scandinavia and Western Europe as well. Dealers became more aggressive in promoting the benefits of home video. The conditions were now ripe for the widespread adoption of the home video. Two particular factors conditioned the 1980's as the ideal time for adoption of the home video. First, the sale of first generation color TV sets had reached its saturation point. Second, the fact that the video software market was now developed and continuing to develop also contributed to the favorability of the home video. The films released by the big American film companies served to attract consumers to this technology.

FIGURE 1
TV SALES VOLUMES FOR BLACK/WHITE, COLOR AND HOME VIDEO UNITS IN DENMARK 1950 TO 1985
——— b/w TV ----- color TV -.-.-. home video
(1984 and 1985 sales volumes are estimated.)



The video by this time became an integral part of the available visual media for household use. It was used for a host of uses including work and leisure, instruction and education, marketing and public relations and alternative uses demonstrated in video workshops. The initial popularity of this technology experienced in the fall of 1980 suddenly "boomed" in 1982. Throughout this period from the fall of 1980 to 1982, different promotion strategies were used. **Figure 1** compares sales volumes for black/white TV, color TV and home video. **Figure 2** provides the sales volume of home video units by years. **Figure 3** illustrates the evolution of the home video concept according to periods of development.

Special reports and sections appeared in two major newspapers drawing attention to the video concept and its benefits. In several newspapers, there was a standard Saturday section commenting on the latest developments in home video. Interviews with dealers and business spokesmen in this section offered impetus for the household to purchase a home video unit. Indeed, the home video technology had become an institution in Denmark.

The Classical Diffusion Paradigm

When an innovation is introduced to a society, it often evolves through a process of adoption by members in that society. An effective way to examine this societal adoption process is through the framework of diffusion analysis (Rogers and Shoemaker 1971, Robertson 1967, Zaltman and Stiff 1973). The diffusion process can be regarded as the process by which the acceptance of an innovation (e.g., home video) is spread by communication channels (e.g., mass media, salespeople, informal discussion) to members of a social system (e.g., Danes) over a period of time. Each element in this process can be examined to understand the nature of the video innovation. The section below provides a classical treatment of each of these elements in terms of the Danish society as a market.

FIGURE 2

SALES VOLUME OF VIDEO TAPE RECORDER TO HOUSEHOLDS

Year	Number sold	Cumulative number sold	% of households owing a unit
1971	0	0	-
1972	200	200	-
1973	300	500	-
1974	300	800	-
1975	600	1.400	-
1976	1.400	2.800	-
1977	2.000	4.800	-
1978	7.000	11.800	1
1979	15.000	26.800	1
1980	21.000	47.800	2
1981	50.000	97.800	4
1982	75.000	172.800	7
1983	65.000	237.800	10
Estimated development			
1984	70.000		
1985	75.000		

FIGURE 3

EVOLUTION OF THE HOME VIDEO CONCEPT IN DENMARK

The advertising campaigns for home video can be divided into 4 periods according to time as follows:

PERIOD 1: Pre-introduction (1970-1980), No mass appeal, expensive equipment, little movie software

PERIOD 2: Re-introduction (October 1980-fall 1981), Introduction of hardware as a new mass medium

PERIOD 3: Introduction of Video Software (Winter 1981- 1982), Ready made entertainment for home video

PERIOD 4: New systems, New technology (1982-present), lower cost units

The Home Video Technology as an Innovation

Categorizing the newness of an innovation like the video often times is difficult. Using a product oriented perspective, the video technology can be regarded as a dynamically continuous innovation. In effect, it combined features of the super 8 home movie innovation with the television. To most Danish consumers, the video represented an extension of the television. The dominant brand was the VHS, Betamax was the next preferred and the V2000 was the least preferred system. The three different systems were not software compatible. See Appendix 1 for a description of each system.

Product Characteristics of the Video

As a new product, the video was not received enthusiastically by Danish consumers. The factors that retarded the diffusion of the video can best be understood by focussing on five factors or product characteristics as identified by Rogers and Shoemaker (1971) and examined in other studies (Shiffman 1972, Ostlund 1975).

Relative Advantage. The video's relative advantage was its superiority over dependence on main TV programming. Because Denmark has only one TV network which is state controlled and about 60% of Danish households have access to two Swedish TV networks or two West German networks (also state controlled), Danish viewers often have little choice in their selection of programs. Hence, the home video offered a unique advantage to most households.

Compatability. The suitability of the video to the Danish mentality and way of life is a debatable point. Many households had only black and white TV sets when the video was first introduced in the mid 1970's. Color sets were becoming more popular at the time the video technology was first being promoted to the household. Furthermore, Danes do not regard TV watching as a productive way of spending one's time. An average Dane in 1981 and 1982, for example, spent one hour and 17 minutes per day in front of the TV. (Note that a typical American household spends almost 7 hours per day watching TV). Video offered a way for the household to select the most interesting movies for entertainment rather than being at the mercy of state programming. Nonetheless, the video was simply not viewed as a necessary product when first introduced.

Complexity. The video technology was easy to use and understand. Some Danish households, however, were concerned about access to video software if they purchased a unit. The infrastructure of video film supply shops was still undeveloped. As time unfolded , more shops sprang up which lessened the

complexity barrier. Most of these shops were organized into a voluntary system that pledged to observe specific rules such as the refusal to sell or rent sex movies to children. The fact that three video systems were available also created some confusion in the potential buyer's mind. Risk, therefore, was perceived (Donnelly and Etzel 1973, Sheth 1968, Popielarz 1967).

Trialability. Since Danish consumers could witness the operation of the device before purchasing it, they could easily try the product. Some stores even elected to offer an 8 day money back guarantee if the buyer was dissatisfied. Hence, this factor was not a barrier to adoption.

Observability. Like trialability, the Danish consumer could observe the operation of this device in a store or even in a friend's home. The product's benefits and attributes were easily conveyed to interested potential buyers.

The Danish Social System

Trying to qualify the aspects of a social system requires a cultural anthropological investigation. There are some basics aspects, however, that can be identified. Unlike Americans, Danish consumers have less fascination with novelty. Danish consumers are not in a continual search for the latest gadget or novelty introduced on the market. Another important factor is that Danish households do not have a high degree of discretionary income. Because tax rates can sometimes exceed 75% while 50% is the typical bracket for most individuals, less money is available for consumption of luxury products such as the video. As in most introduction periods of a new product, the early buyers of the home video in Denmark were upscale consumers (Feldman 1975, Pessemier, Burger and Tigert 1967, Taylor 1977, Robertson 1967). It was in this climate that business had to operate when first introducing the video technology to Danish households. The receptivity of the household to the home video technology was subject to change, however.

As the cost of the home video technology declined, more households could afford such an innovation. Mass advertising campaigns promoted different themes to the consumer during the early 1980's. The paper now turns to the advertising approaches used to position the video. It will become clear that these advertisements were intended to change the prevailing attitudes of the market and make them more congruent with the home video technology.

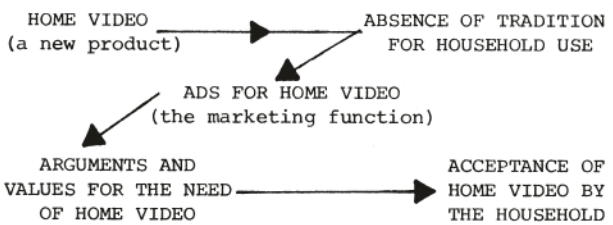
Methodology

Advertisements for home video were selected from Danish newspapers, magazines and special publications mailed or given to brand dealers. The advertisements were collected from the period October 1980 to December 1982. This 15 month period represents the greatest sales volume of purchases for the home video by households. Advertisements were grouped into two categories: 1) private video-recording by the household (these ads illustrated recording, use of the video camera, and editing) and 2) use of the home video for watching movies (these ads showed the recording of movies from TV and renting films). In general the first category of advertisements featured an active user of the product in contrast to the second category which depicted the user as a passive user of the home video unit.

The advertisements were content analyzed to detect the intended themes as expressed by ideologies, value systems, and fantasies. The metamorphosis of these themes were examined over the period selected for analysis. In effect, the analysis tried to identify the changing communication strategies of the dealers as the product diffused through society.

The content analysis approach used in this study may look peculiar and different to the way content analysis is practised in the U.S. and in advertising research. The content analysis method used here is qualitatively oriented in the tradition of German, English and Scandinavian theoretical inquiry. Such inquiry is based on qualitative techniques of phenomenology, structuralism, linguistics, and psychological theories and methods. This European tradition focusses on subjective interpretation of the content as a method for understanding a "text" (e.g., an advertisement, a TV progam) in its social, economic and historical context. The conventional approach used in the U.S. is a positivistic and "neutral" content analysis. The results of such studies are often only descriptive and essentially take an inventory of preestablished coding categories. The qualitative analysis in the European approach examines how manifest and latent arguments and values create associations between the product and socio-cultural characteristics of contemporary society. This approach is often used to explain the socialization of the recipients of these advertisements (i.e., viewers) according to their subjective experience.

This kind of selective analysis is particularly suitable for analyzing new products in society. It can explain how argumentation and value systems are developed by business and society to encourage the adoption of the product and hence its diffusion. In the case of the home video, the reception situation is characterized by the following:



RESULTS OF THE CONTENT ANALYSIS

The advertisements were typified into four themes representing the main argumentation (i.e., the manifest level of the themes in the advertisement). These manifest themes are as follows:

1) Video as an alternative to TV
2) Video as a new category of entertainment
3) Price of the video unit and its accessories (e.g., software)
4) Technological developments (i.e., new models)

The first category of advertisements were mainly used in the introduction period from the fall 1980 to the fall 1981. It was necessary to draw consumers' attention away from TV and to home video. However, the use of video was at the same time dependent on TV. The home video could be used for recording TV programs for later use. The second category of themes belongs to the period where the software market became an organized infrastructure. This was during the period winter 1981 to summer 1982. During this time, the dealers were able to promise consumers something special for home video in terms of the many American films that were available on video but could not be seen on TV.

The third and fourth categories occurred from fall 1982 to the present. An oversupply of video recorders for the market generated falling prices and aggressive competition between brands. Nonetheless, new models were continuing to appear encompassing the latest technological advances (e.g., more recording time, finger-touch controls, and remote control).

Of these four categories of manifest themes in advertisements, category one and two focussed on emotional aspects about the new video technology. A socio-cultural code was employed to tell the consumers something about how to apply or misuse their leisure time by watching video versus TV programming. Advertisements reflecting categories three and four emphasized economic and technological aspects about the new media. Hard facts and scientific evidence became part of the code in the advertising messages.

Latent Themes

Manifest themes were only one component in the video ads. Viewers of the advertisements also perceived other more subtle messages. These messages, referred to as latent themes, require the selective perception of the viewer. Hence, the receiver may perceive other underlying meaning between the text and picture which may not always be intended by the advertiser. Different meanings will be decoded dependent on individual factors of the perceiver such as age, sex, income and social background. Each receiver may discover slightly different meaning from the advertisement. Nonetheless, there are some common underlying themes dealing with a common socio-cultural code which describes a relationship among human beings. These meanings operate more at the latent level.

The latent themes were grouped into three categories as follows:

1) Slavery/freedom
2) Conflict/harmony
3) Boredom/excitement

The majority of advertisements used all three themes simultaneously while a minority of the ads used only one or two of the themes together. Each of the themes has substantial incidental meaning which must be viewed in the total context of the advertisement. Hence, it was too difficult to generalize about the incidental themes.

A main characteristic of these themes is the duality between negative and positive values. Slavery, conflict and boredom are used in advertisements characterizing the household situation before it acquired home video. In contrast, freedom, harmony, and excitement were used to characterize the household after it acquired video.

The slavery/freedom theme relates to media consumption, that is people's bad conscience about watching too much TV. Examples of such a theme are: "Slave of TV? Sony Betamax gives you back the lost freedom" and "Sony Betamax gives you back time as you enjoyed before TV".

The conflict/harmony theme deals with realistic everyday problems that involve family confrontation over the choice of TV channels. Exemplars of this theme are found in the following advertising slogans: "The family does not have to collide because two TV channels do" and "Why program family life after TV programming". The underlying meaning in this theme is that TV causes problems but home video can resolve this dilemma and create harmony.

The boredom/excitement theme is a subtle criticism of Danish television as being boring and not entertaining. Video is shown in these advertisements as an "exciting alternative" giving the consumer a new kind of experience and entertainment. Slogans exemplifying this theme are: "Why does a Monday evening in front of the TV have to be boring" and "Go to the cinema tonight with the whole family". Since Monday evening is often dull for many households, these advertisements try to resolve this conflict by suggesting that the home video is equivalent to the cinema.

Conclusions

This analysis did not identify specific buyers of the home video recorder. Its contribution was to show that different levels of meaning are contained in the advertising messages about new products such as home video units. Consumers look at video advertisements in different contexts (e.g., family context, leisure context, entertainment context). The common values of harmony, freedom, and excitement dominated the thematic expressions of the advertisements introducing video to Denmark. These themes serve as appeals with which consumers can identify how to satisfy their needs by buying products.

Socio-cultural codes, therefore, are used by advertisers to introduce a new product to society. After using the same codes during the two year introduction process, the home video had become accepted by society and as a part of the media structure and every day life in Denmark. The advertisements of other new products should be explored in the same way.

Appendix 1

Home video tape systems

BETAMAX -- On the market in Japan and USA in 1975 and in Europe 1978.

VHS -- (Video Home System) Introduced at the same time as Betamax.

System 2000 -- Introduced in 1979. The cassette can be turned for long playtime.

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AN ANALYSIS OF DISCREPANT HUSBAND-WIFE DATA

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Abstract

The paper examines the measurement properties and variable structure underlying husbands' and wives' responses relating to their perceptions of relative power in a joint decision making situation. Findings indicate that each spouse's perception of relative power should best be treated as a distinct construct.

One of the most criticized methodological problems in the existing family decision making research is the reliance on the response of one family member - in most cases, the wife. Safilios-Rothschild (1969) succinctly described these studies as "wives' family sociology". The justification for the selected view of family process has typically been cost, accessibility, or the assumption of basic agreement among family members (Larson 1974). While there is certainly support for the first two arguments, the assumption of interpersonal agreement within the family system has been largely unsubstantiated. Rather, disagreements between spouses were found on numerous subjects ranging from the frequency of coitus to relative influence in economic decisions (Booth and Welch 1978; Turk and Bell 1972; Davis 1970; Safilios-Rothschild 1969; Scanzoni 1965).

While the majority of researchers believe that perceptual disagreements between spouses must be regarded as family reality, some (Davis 1970; Scanzoni 1965; Wilkening and Morrison 1963) attributed the observed differences to random measurement error. They propose that researchers should develop more concrete questions as well as increase the use of other methods such as laboratory and observation techniques in order to overcome perceptual differences.

Irrespective of what the reasons are, there is sufficient evidence that disagreements in spouses' responses do exist, and they present serious difficulties in assessing the validity of any one spouse's view of family life. Thus, a more pressing problem facing researchers appears to be what to do with the discrepant views obtained from both spouses. In the past, some researchers expressed reluctance to deal with such disagreements. For instance, Scanzoni (1965) indicated that inclusion of husbands in the sample merely serves to reveal variation. On the other hand, Bagozzi and Van Loo (1981) used the average of spouses' responses as a measure of a single "couple" construct. Others such as Fried and Udry (1979) incorporated the views of both spouses as separate constructs in explaining family phenomena.

Following up on this issue of whether to treat the revealed differences in spouses' responses as measurement error or true differences in opinion, Neal and Groat (1976) proposed a distinction between "couple" variables and "individual" variables. For example, husband-wife discrepancies in reports of contraceptive use (couple variable) reflects low levels of communication and consequent measurement error; whereas discrepancies in reports of desired family size (individual variable) is viewed as differences in opinion between the spouses. Although there is no clear theoretical basis for this distinction, in empirical research, greater discrepancies have been found between partners' reports of assumed "couple" characteristics and behaviors (Card 1978; Neal and Groat 1976).

More recently, Thomson and Williams (1982) presented an approach to empirically ascertain if a particular construct better represents characteristics of a couple or of an individual. In investigating the relationship between the couple's utility of another child and their childbearing expectations, they tested two competing models on the basis of their goodness of fit to the observed covariances. The first model specified the couple's utility of another child as a "couple" construct, and both spouses' responses were assumed to measure this underlying concept. In the second model, each spouse's utility of another child was specified as a separate construct. In both models, childbearing expectation was assumed to be a "couple" construct. The model testing results showed that the latter specification incorporating individual constructs produced a significantly better fit, implying the need to differentiate the wife's utility of another child from that of the husband. Although the authors draw primarily from research on marital fertility, this method could be applied to a wide range of husband-wife data dealing with many different aspects of family life.

The purpose of this paper is twofold. The first is to test a theory that the husband-wife relative influence on a purchase decision outcome is a function of their perception of relative power over the decision situation. The second is to examine the disagreements between spouses in their perception of relative power. Following a procedure similar to the one used by Thomson and Williams (1982), the study will investigate the following specific issues relating to the couple's perception of relative power:

1. Is there a need to differentiate each spouses's perception as a separate construct?

2. The relative amount of measurement error in each spouse's responses.

3. Is one spouse's perception more reliable than the other in predicting their relative influence over the decision outcome.

Conceptual Model

Power has been a central concept to researchers studying group process such as family decision making. The fundamental assumption 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). Among the various conceptions of power (Wolfe 1959; Emerson 1962; Blood and Wolfe 1966; McDonald 1980), this study adopts a resource theoretical definition of power, i.e., power is the potential ability or capacity to influence others. With this definition, one's power can be measured by identifying possessed resources (an attribute or a possession) useful to a particular decision situation.

Regardless of which definition one may espouse, conceiving power as a social system's property is well agreed upon (Cartwright 1959; Sprey 1975). It is commonly viewed as a relational concept involving the ability to influence the direction or outcome of a joint course of action. As Rollins and Bahr (1976) have suggested it is a characteristic of social interaction between two or more individuals. As a result, it is not permissible to speak of power as some absolute attribute of a single agent; one must speak, implicitly at least, of the power of O over P (Cartwright 1959, p.196).

Further, it has been noted by French and Raven (1959), Wolfe (1959), and Rollins and Bahr (1976) that for power to be applied it requires perception by the other. Potential influence requires recognition by one person that another has superior power that can be exercised. Rollins and Bahr (1976) go even further to state that social power is not independent of the perception of the participants in the social interaction. Thus, in a marital relationship, it is each spouse's perception of his/her relative power rather than some absolute personal attributes of the spouses that is the phenomenon of interest.

Whereas power was defined as potential ability to influence, control denotes a behavioral outcome, or more specifically, the actual behavioral modification of an individual brought about by another. For instance, according to Cartwright (1959, p.195), "if the direction of P's behavior is modified so as to conform to the direction intended by O, then O has control over P's behavior." The substantive issue on which this study focuses is the relationship between each spouse's (or couple's) perception of relative power and their relative control over the decision outcome. It is proposed that the relative control each spouse attains over the decision outcome is directly affected by his/her (or couple's) perception of relative power specific to the decision making situation.

Method

To achieve the objectives stated earlier, this study tested two versions of a casual model depicting the relationship between perception of relative power and relative control The first is a "couple" model which specifies each spouse's relative control is affected by couple's perception of relative power. In the second version, each spouse's perception of relative power is specified to independently affect the relative control over the decision outcome. It is assumed that perception of relative power and relative control are unobservable variables, reflected by the observed responses of wives and husbands. In order to estimate and control for measurement error, multiple indicators of each latent variable are used.

The data for this study come from in-home personal interviews of 101 couples recruited from two Mid-Western cities. The interview included both paper and pencil tests and observation of couple's decision making process in a hypothetical family automobile purchase situation. Included in the self-report questionnaire were four 7-point Likert scale measurement items for the individual spouse's perception of relative power (Table 1). The contents of these items encompass elements associated with one spouse's potential ability to influence the other in an automobile purchase decision making situation. Namely, the extent to which each spouse possessed product knowledge, decision making authority, and the expected level of each spouse's involvement in the purchase situation were presumed to reflect his/her potential ability to influence the decision outcome.

TABLE 1
DESCRIPTION OF MEASURES

Construct	Variable	Content	Scale Type
H's (W's) perception of relative power	H1(W1)	My wife (husband) knows more about automobiles than I.	Strongly disagree to strongly agree, 7 point Likert scale.
	H2(W2)	Buying a family automobile is basically the wife's (husband's) task in my family.	
	H3(W3)	My wife (husband) will be more involved in the purchase of this automobile than I will be.	
	H4(W4)	It is my wife (husband) who has the right to make the final decision regarding what to buy.	
Relative Control	Q1	How would you assess the amount of influence each spouse had on the final choices they jointly made in the decision areas where they initially disagreed on the most desirable choice?	7 point scale ranging from 1=the wife had all the influence to 7=the husband had all the influence.
	Q2	In the decision areas where the couple initially had disagreements regarding the most desirable choice, the final choices the couple made, in your opinion, reflect:	7 point scale ranging from 1=all of what the wife wanted to 7=all of what the husband wanted.

In the couple's hypothetical decision making task, each spouse was first asked to independently determine his/her most preferred choices for the selected automobile related subdecisions (Table 2). Only the couples who differed in three or more subdecision areas in terms of their most preferred choice qualified as research subjects and proceeded to the next task. 29 of the 130 initially recruited couples did not qualify and were screened in this stage. In the next phase, the qualifying couples were asked to participate jointly in the decision task of selecting the best choice from the available alternatives for each of the subdecision areas. In the case of disagreement regarding the most desirable choice, they were told to freely discuss and resolve differences in order to reach a joint decision. Upon the completion of the joint decision making task, the interviewer provided an independent evaluation of the relative control each spouse attained in relation to the other in the subdecision areas where there were preference discrepancy initially. The measurement of relative control on the decision outcome was obtained on two items using 7-point scale (Table 1).

TABLE 2
AUTOMOBILE-RELATED SUBDECISION PRODUCT FEATURES

Subdecision (Attribute)	Alternative Features
1. New or Used	New Used
2. Price Range	Below 1,000 5,001- 6,000 10,001-11,000 1,001-2,000 6,001- 7,000 11,001-12,000 2,001-3,000 7,001- 8,000 12,001-13,000 3,001-4,000 8,001- 9,000 13,001-14,000 4,001-5,000 9,001-10,000 Above 14,001
3. Size	Subcompact Full Size Compact Full Size, Luxury Car Intermediate
4. Method of Financing	Pay Cash from Savings Bank Loan Personal Loan from a Relative or Friend Auto Company's Loan Service Cash from Savings + Bank Loan Cash from Savings + Personal Loan Cash from Savings + Auto Company Loan
5. Basic Exterior Color	White Red Green Silver Black Blue Purple Brown Yellow Orange Beige
6. Make	American Motors Oldsmobile Buick Chevrolet Mercury Pontiac Lincoln Cadillac Dodge Ford Datsun Plymouth Volkswagen Toyota Honda Mazda
7. Body Style	Sedan, 2-door Specialty/Sports Car Hatchback, 2-door Sedan, 4-door Small Van Hatchback, 4-door Station Wagon Pickup Truck
8. Transmission	Manual Transmission, Gearshift level on Steering Post Manual Transmission, Gearshift level on the floor Automatic Transmission, Gearshift level on Steering Post Automatic Transmission, Gearshift level on the floor
9. When to Buy	Within 1 week Within 3 months Within 2 weeks Within 6 months Within 1 month After 6 months

Analysis and Results

The measurement items for each spouse's perception of relative power listed in Table 1 were worded in such a way that they all meausre one spouse's perception of the other's relative power. Thus, by reversing the scale values, it is possible to obtain each spouse's self-perception of his/her own relative power. If only the scale values that correspond to the husband's responses were reversed, then responses on all eight items (H1 to H4 and W1 to W4) will be indicators of the husband's relative power perceived by both the husband himself and his wife. It should also be noted that relative power can be defined as either the husband's power relative to the wife's or vice versa. In the present analysis, it will denote the husband's power relative to the wife's. By the same token, relative control is defined as the husband's control relative to the wife's over the decision outcome, and was measured by the observer on two items (O1 and O2).

The first in the series of analysis concerns the variable structure of the husband's and wife's perception of relative power as predictors of relative control. In order to determine if the two spouses' responses regarding their perception of relative power are indicators of the same inderlying construct or indicators of two independent perceptions, two competing models are tested. First, Figure A presents the "couple" model which specifies that both the husband's and wife's responses are all imperfectly measured indicators of a single construct - the couple's perception of relative power. Since relative power was defined as the husband's power relative to the wife's, the couple's perception of (husband's) relative power can be measured by the wife's responses on the items, W1, W2, W3, and W4, and by the husband's responses on H1, H2, H3, and H4 with their scale values reversed. H1*, H2*, H3*, and H4* will denote the scale reversed items H1, H2, H3, and H4. Table 3 contains correlation coefficients among these and two indicators of relative control.

FIGURE A
COUPLE'S PERCEPTION OF RELATIVE POWER AND THEIR RELATIVE CONTROL

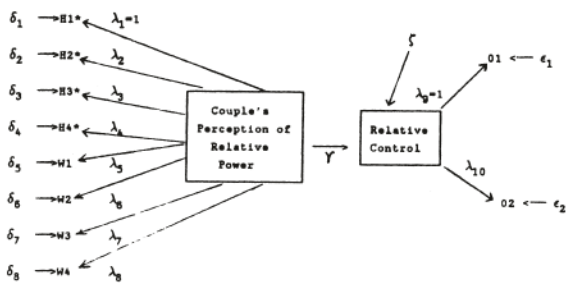

TABLE 3
CORRELATION MATRIX

	01	02	H1	H2	H3	H4	W1	W2	W3	W4
01	1.000									
02	.871	1.000								
H1*	-.020	-.029	1.000							
H2*	.000	-.034	.619	1.000						
H3*	.083	.002	.357	.583	1.000					
H4*	.140	.111	.416	.424	.345	1.000				
W1	.093	.050	-.002	-.131	-.055	-.079	1.000			
W2	.279	.225	.027	-.131	.025	-.158	.442	1.000		
W3	.147	.101	-.038	-.243	-.005	-.130	.371	.690	1.000	
W4	.143	.044	.117	-.198	-.083	-.076	.336	.467	.460	1.000

The couple model was estimated using LISREL (Jöreskog and Sörbom 1981). The goodness of fit statistic for the model yielded χ^2_{35} = 157.27 (p = .000), and the goodness of fit index (GFI) = .736. Clearly, this model provides a poor fit to the data. Based on these results, one may strongly suspect that the couple model is misspecified and the husband and wife perceptions may need to be specified as separate constructs.

FIGURE B
HUSBAND'S AND WIFE'S PERCEPTION OF RELATIVE POWER AND THEIR RELATIVE CONTROL

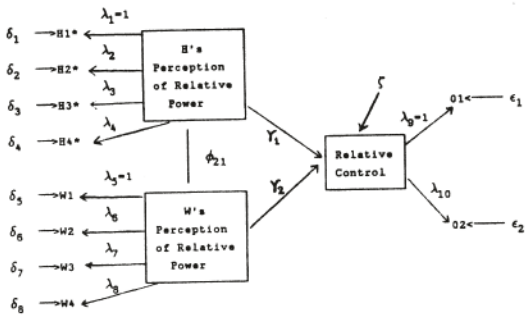

Figure B presents the husband-wife model which specifies that relative control is a function of the two independent perceptions of relative power. When estimated, this model produced good fit indications (χ^2_{33} = 41.77, p = .141; GFI = .931). LISREL estimates of parameters for the husband-wife model are presented in **Table 4**. Since the couple model assumes a perfect correlation (ϕ_{21} = 1) between the two latent constructs, it is nested in the husband-wife model. Thus, a test of equivalence between the two models can be performed using the χ^2 statistic. The χ^2 difference between the two models is 115.5 for the difference in the degrees of freedom of 2. As easily expected, this is highly significant (p = .000), implying that the husband-wife model represents a significant improvement in fit over the couple model. These findings strongly suggest that each spouse's perception of relative power should best be treated as a distinct latent construct.

TABLE 4
LISREL ESTIMATES OF PARAMETERS FOR THE HUSBAND-WIFE MODEL

Parameter	Estimate	Standard Error	T-Value
λ_1 [a]	1.000	-	-
λ_2	1.650	.272	6.076*
λ_3	1.273	.232	5.483*
λ_4	.983	.224	4.382*
λ_5 [a]	1.000	-	-
λ_6	2.645	.553	4.785*
λ_7	2.464	.518	4.754*
λ_8	1.620	.402	4.031*
λ_9 [a]	1.000	-	-
λ_{10}	.923	.052	17.746*
γ_1	.128	.183	.703
γ_2	.454	.194	2.339*
ϕ_{11}	.419	.123	3.394*
ϕ_{22}	.478	.193	2.481*
ϕ_{21}	-.090	.056	-1.600
σ^2_ζ	1.156	.166	6.956*
$\sigma^2_{\delta 1}$	.539	.092	5.846*
$\sigma^2_{\delta 2}$	.172	.136	1.258*
$\sigma^2_{\delta 3}$	1.103	.178	6.185*
$\sigma^2_{\delta 4}$	1.330	.198	6.723*
$\sigma^2_{\delta 5}$	1.410	.213	6.624*
$\sigma^2_{\delta 6}$	1.131	.394	2.873*
$\sigma^2_{\delta 7}$	1.712	.399	4.287*
$\sigma^2_{\delta 8}$	2.681	.416	6.443*
$\sigma^2_{\epsilon 1}$ [b]	.000	-	-
$\sigma^2_{\epsilon 2}$	.339	.048	7.071*

[a] constrained
[b] constrained to zero to prevent the estimation of negative variance
* Significant at p = .05

The reason for the poor fit shown by the couple model becomes evident when one examines the correlation coefficients between the wife's indicators (W1 to W4) and the husband's indicators (H1* to H4*) of the couple's perception of relative power. The majority of the correlation coefficients are negative and weak. Interestingly, there is almost no relationship between the husband's perception of his own relative power and the wife's perception of her husband's relative power (r_{W1H1*} = -.002; r_{W2H2*} = -.131; r_{W3H3*} = -.005; and r_{W4H4*} = -.076). The estimated covariance between the two latent constructs (husband's and wife's perception of relative power) reflected the lack of relationship between the husband-wife responses (ϕ_{21} = -.09). Thus, the assumption of congruence in the couple's perceptions of relative power is apparently unfounded in this data.

Several assumptions regarding the variable structure of the husband-wife model can be tested using the LISREL technique. The first is the equivalence of factor loadings between the husband's indicators and the wife's counterpart indicators of perception of relative power. That is, $\lambda_1=\lambda_5$, $\lambda_2=\lambda_6$, $\lambda_3=$

λ_7, and $\lambda_4 - \lambda_8$. Equivalent factor loadings would indicate that the scales for the husband's indicators are in the same ratio to one another as the scales for the wife's indicators. On the other hand, nonequivalent factor loadings indicating otherwise would imply that husbands and wives may have different interpretations of the questions relating to the perceived power. (Thomson and Williams 1982). The husband-wife model that incorporates this constraint yielded χ^2_{36} = 47.91 (p = .089), GFI = .922. The covariances implied by this model are not signficiantly different (p > .05) from the observed covariances. Also, this model is statistically equivalent to the previous one including no constraint on its parameters. As a result, the assumption of equivalence of factor loadings between the two sets of indicators is supported. This finding suggests that the observed husband-wife perceptual disparity was unlikely caused by different interpretations of the questions.

The second modification of the model involves an assumption that error variances of the husband's indicators and the wife's counterpart indicators are equal. This assumption can be stated as $\sigma^2_{\delta 1} = \sigma^2_{\delta 5}$, $\sigma^2_{\delta 2} = \sigma^2_{\delta 6}$, $\sigma^2_{\delta 3} = \sigma^2_{\delta 7}$, $\sigma^2_{\delta 4} = \sigma^2_{\delta 8}$. For this model, χ^2_{37} = 95.77 (p = .000), GFI = .857. These results indicate that the model does not provide a good fit to the observed covariance structure of the data. Thus, the assumption should be rejected. To pursue the question whether one spouse's indicators have different levels of reliability from those of the other, one needs to further examine the latent variable variances (since reliability is defined as the true variance divided by the total variance). Subsequently, the assumption of equal latent variable variances (i.e., $\phi_{11} = \phi_{22}$) was tested. For this model, χ^2_{34} = 41.84 (p = .167), GFI = .931, implying a good fit. These findings indicate that the spouses' responses on the same item contain different amounts of error variance but an equal amount of latent variable variance. Therefore, it can be concluded that each spouse's responses are unequally contaminated by measurement error and produce different levels of reliability.

Analysis thusfar have dealt with measurement and structure of the independent latent variable(s). A summary of the results from these analyses is presented in Table 5. The final investigation concerns the structural effects of each spouse's perception of relative power on relative control assessed by the observer. As shown in Table 4, between the two structural coefficients (γ_1 and γ_2), only the wife's perception of relative power had a significant effect on relative control (γ_2 = .454, p < .05). This indicates that, at least in this sample, only the wife's perception of relative power is a reliable predictor of the observed relative control on the decision outcome. Although the assessment provided by the observer may not be construed as an accurate reflection of the decision outcome, one may easily expect more objectivity in it than in those of the spouses who were the participants in the decision making process.

TABLE 5
INDICATIONS OF GOODNESS OF FIT FOR COUPLE AND HUSBAND-WIFE MODELS

Models	χ^2	df	p	GFI
1. Couple Model	157.27	35	.000	.736
2. Husband-Wife Models				
2A. Least Restrictive	41.77	33	.141	.931
2B. $\lambda_1=\lambda_5$, $\lambda_2=\lambda_6$, $\lambda_3=\lambda_7$, $\lambda_4=\lambda_8$	47.91	36	.089	.922
2C. $\sigma^2_{\delta 1}=\sigma^2_{\delta 5}$, $\sigma^2_{\delta 2}=\sigma^2_{\delta 6}$, $\sigma^2_{\delta 3}=\sigma^2_{\delta 7}$, $\sigma^2_{\delta 4}=\sigma^2_{\delta 8}$	95.77	37	.000	.857
2D. $\phi_{11}=\phi_{22}$	41.84	34	.167	.931

Summary and Conclusion

This study investigated the variable structure underlying the husband's and wife's perceptions of relative power and their relative control on the decision outcome using a hypothetical family automobile purchase situation. The following is a summary of the findings:

1. Each spouse's perception of relative power should best be treated as a distinct construct. It was demonstrated that the couple model incorporating couple's perception of relative power measured by both spouses' responses did not fit the covariance structure of the data. On the other hand, the husband-wife model produced good fit indications.

2. The correlation between the spouses' responses on the four perceptions of relative power measurement items ranged from -.002 to -.131. These coefficients are much smaller than most of those reported in previous studies dealing with other aspects of family life and decision making contexts. The first finding discussed above was mainly due to this high level of discrepancy in the spouses' perceptions.

3. Equivalence of factor loadings between the spouses' counterpart indicators suggests that their interpretations of the questions are likely to be the same. This indicates that the observed husband-wife perceptual discrepancy was not likely to have resulted from different interpretations of the questions.

4. Responses of each spouse had different amounts of error variances when compared to their counterparts. However, the latent variable variances did not differ significantly. Based on these results, it

was inferred that each spouse's responses are unequally contaminated with measurement error.

5. Between the two perceptions of relative power, only the wife's perception was a reliable predictor of the relative control each spouse attained on the decision outcome.

The results of structural model testing renders some support for the power theoretical approach in explaining relative influence each spouse exerted in a specific decision outcome. It was shown that the relative power assessed by the wife had a significant relationship with the relative control on the decision outcome assesed by the observer. Traditionally, the primary interest of family researchers in sociology has been focused on the general power structure of the family. By measuring the average score for each spouse's relative influence in various decision items, families were labeled as husband-dominant, wife-dominant, or somewhere between (for example, see Blood and Wolfe 1960; Centers, Raven and Rodrigues 1971; Fox 1973). In addition, much effort was devoted to identifying the factors which may influence the shaping of particular power structure. In these studies, marital power was measured inferentially on the basis of the subject's self-report of relative influence on decision outcomes. Thus, the concept of power was not differentiated from the concept of control (or relative influence). Rather, control provided a measure of power.

However, neither the general family power structure nor its determinants can provide adequate explanations for the variability in each spouse's control across specific decision making incidents. In the present study, the concept of power was conceptually differentiated from control. By adopting the resource theoretical view of power, each spouse's relative power pertaining to an automobile purchase situation was measured by his/her perception of the relative extent of resources possessed.

In investigating the couple's role determinancy, in contrast to most of the existing studies that depended on the subject's recollection of the past product purchase, this study used observation of couple's decision making in a hypothetical purchase situation. It is expected that any data based on historical recall would be affected by forgetfulness and/or conscious or unconscious distortion of these experiences. An observation technique such as the one used in this study presents a viable alternative in dealing with these problems.

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NONSYNCRATIC DECISION PROCESSES ACROSS SYNCRATIC PRODUCTS AND SYNCRATIC COUPLES

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Abstract

In this paper, some new interactive procedures are used to elicit husband-wife roles at various decision stages and substages regarding buying/consumption behavior. It was shown that apparently syncratic aggregate behaviors may have underlying nonsyncratic processes at the disaggregate level. The paper provides some evidence against the hypothesis that responses of one of the spouses are representative and reflective of both spouses. The findings favor an interactive approach to future research in family decision-making.

Introduction

Consumer purchase and usage decisions are mostly group decisions. Most of these are family related. Consumer behavior research on family purchase-use decisions has taken three major directions thus far:

a) it is product-related: that is, researchers have studied family decisions regarding specific products or groups of products (Cunningham and Green 1975, Davis and Rigaux 1974, Kenkel 1961, Munsinger, et al. 1975, Woodside and Motes 1979).
b) it is process-related: that is, researchers have focused their attention not so much on the what of purchase decisions as on the how; not so much on outcomes of decisions as on their processes (Davis 1976, Davis, et al. 1986, Granbois 1971, Miller, et al. 1986, Sheth 1974, Spiro 1983, Szybillo, et al. 1979).
c) it is prediction-oriented: that is, researchers have tried to explain why families purchase the way they do, and hence tried to predict the outcomes (Davis, et al. 1986, Hempel 1977, Rigaux 1978, Shuptrine and Samuelson 1976, Woodside 1975).

This paper combines all the three directions with a view to working out some linkages between them. Two products were chosen wherein husband-wife interactions are presumably syncratic: the family TV and a second car for family use. These are assumed to be "high-involvement" products. The focus of this research is not so much on brand choice or store choice, but on the entire choice process from need recognition to need fulfillment. This research effort investigates a-syncratic elements in the decision processes involved. This particular emphasis has obvious promotional and advertising implications for marketing practitioners.

Earlier studies concentrated on the structure of marital roles in decision-making (Burges and Locke 1960, Parsons and Bales 1955, Ferber 1949). Later studies have concentrated on role specialization as a function of years in married life (Clavan 1969, Wells and Gubar 1966, Murphy and Staples 1979). Recent marketing research efforts have analyzed role specializations as a function of family-development (Ferber 1973, Davis 1970, Davis 1976, Curry and Menasco 1979, Spiro 1983, Miller, et al. 1986, Seymour and Lessne 1984).

The research reported in the family decision-making suffer from the following limitations:

i. they are based on individual self-reportings;
ii. they are predominantly outcome-related, and not process-descriptive;
iii. they involve mostly inter-product comparisons or inter-brand choice studies, and not inter-process analyses.

Methodology

This study has been designed to continue the research tradition in this field and hence utilizes the typology of spousal dominance (Herbst 1952) to study role specializations. The concept of dominance revolves around four types: 1) autonomic: where equal number of decisions are made by each spouse; 2) syncratic: where equal influence is exerted by each spouse at each decision stage; 3) husband-dominance: where the male spouse dominates the entire decision process; and 4) wife-dominant where she takes over. This typology is used in family research (Davis and Rigaux 1974, Davis, et al. 1986, Woodside and Motes 1979), even though the exact content of the concepts underlying this typology is not fully specified (Zaltman and Wallendorf 1983).

This study identifies three members: the husband, the wife, and "others", who include the remaining members of the family. Various ways of breaking down the decision-making stages have been offered in the literature. Davis and Rigaux (1974) and Szybillo and Sosanie (1977) suggest 3 stages: problem recognition or purchase initiation, information search, and final purchase. Following Mascarenhas and Kesavan (1984, 1985a, 1985b), we will decompose the decision process into four main stages: problem recognition, information search and processing, the actual purchase or shopping, and the post-purchase phenomenon of usage-disposal. Within these four main stages, there are fifteen substages distinguished.

Forty-four married couples who had purchases a color TV and a second family car during the last 36 months were qualified to participate in this research. They were all aged 24 to 36, employed full-time with or without working spouses, and belonged very much to the same social class.

[1]Both authors made equal contributions to this paper. The listing of authors is arbitrary.

Assuming that these two products would generate syncratic decision processes (Bonfield 1978, Rigaux 1974), the following hypotheses seemed relevant and verifiable given the research methodology: 1) Male spouses dominate the decision processes as judged by their overestimated individual self-reported role estimations; 2) Female spouses accordingly seem to underestimate their individual self-reported role estimations at each decision substage; 3) Spousal interactions bring about significant interactive effects on role estimations.

Some evidence for the above hypotheses could be gleaned from Filiatrault and Ritchie (1980), Safilios-Rothschild (1970) and Wilkening (1958). In fact, we have some evidence to the contrary (Burns and Hopper 1986).

Results and Discussion

Table 1 provides a brief attribute-profile of the two anchor-products used for this study. The two products seem to be uniformly situated among the respondents so that major product differences would not significantly affect individual or joint role estimations across respondent couples.

TABLE 1A
SUMMARY PRODUCT FEATURES

Statistic	TV for Family Use (N=44)	
	Price	Months Old
Mean	486.09	24.82
Std. Dev.	259.22	29.50
Median	497.00	9
Mode	300.00	4
Min.	150.00	1
Max.	1800.00	112

TABLE 1B
SUMMARY PRODUCT FEATURES

Statistic	Second Car for Her Use (N=44)	
	Price	Model Year
Mean	8259.52	82.79
Std. Dev.	4447.64	2.72
Median	8000.00	84
Mode	9000.00	85
Min.	800.00	76
Max.	18000.00	85

The following variables were defined to aid in hypothesis testing:

HH = husband's self-estimated percentage role estimation for a given substage
HW = husband's percentage role for a given substage as estimated by his wife
HJ = husband's percentage role for a given substage as jointly estimated by both spouses

WH = wife's percentage role for a given substage as estimated by her husband
WW = wife's self-estimated percentage role estimation for a given substage
WJ = wife's percentage role for a given substage as jointly estimated by both spouses

OH = others' percentage role for given decision-substage as estimated by the husband
OW = others' percentage role for a given decision-substage as estimated by the wife
OJ = others' percentage role for a given decision-substage as jointly estimated by both spouses

Hypothesis One

Based on self-reportings, the decision process is male-dominant. Across both the products and at an aggregate level as judged by Hotelling T^2 statistic, as well as judged by t and p values at each of the decision-substages, husbands seem to dominate decision processes.

Hypothesis Two

Female spouses underestimate their decision-making roles. Based on the data analysis, female role-underestimations occur in the following ways:

a) her self-estimations (WW) were low
b) she jointly accepted a lower role (WJ)
c) she overestimated her husband's role (HW)
d) she jointly enhanced his role (HJ)
e) and, finally, she overestimated "others'" role in the family (OW)

Hypothesis Three

Spousal interactions significantly did affect mutual role estimations. His self-estimations were quite different from joint estimations of his role. HH was affected by interactions and was different from JH; similarly, WW was different from WJ. Though joint estimations were consistently different from self-estimations for both spouses, the changes were not statistically significant for all decision substages.

However at an aggregate level, that is, all decision substages taken into consideration, joint interactions seemed to significantly differ from individual role estimations. Table 2 presents the aggregate results. (HH-HJ) was different statistically at 95% confidence level for both the TV and the car. Similarly (WW-WJ) was statistically different at 90% confidence level for the TV and 98% confidence level for the car.

TABLE 2A
AGGREGATE SPOUSAL ROLE PERFORMANCE

	TV		CAR	
	Mean	Std. Dev.	Mean	Std. Dev.
HH	53.053	4.446	56.936	5.719
HW	49.162	4.601	48.489	5.183
HJ	50.238	2.582	52.634	5.192
WH	44.673	10.825	40.366	5.561
WW	46.856	2.967	49.576	4.688
WJ	45.117	2.011	44.383	5.950
OH	2.489	1.514	1.893	1.170
OW	2.494	1.373	1.994	1.318
OJ	2.611	1.374	2.094	1.651

TABLE 2B
AGGREGATE SPOUSAL ROLE PERFORMANCE

	TV		CAR	
Difference between 2 means	t-value	Sig-nif-icance	t-value	Sig-nif-icance
HH-HW	2.434	0.050	4.381	0.001
HH-HJ	2.191	0.050	-2.260	0.050
WH-WW	-0.777	-	-5.065	0.001
WH-WJ	2.186	0.050	-1.973	0.100
HH-WH	2.865	0.020	8.308	0.001
HH-WW	4.641	0.001	3.981	0.005
HJ-WJ	6.260	0.001	4.179	0.001
WW-WJ	1/880	0.100	2.655	0.020

Thus what was evident at the aggregate level does not look to be apparent at the disaggregate level of individual products or of decision process substages.

If joint interactive role estimations are more difficult to obtain from respondent couples, precisely because they mean more work and discomfiture, then researchers could possibly predict joint role estimations from individual and mutual role estimations separately obtained. However, there could be loss of information that results because of interactive effects.

Conclusions

This paper introduced some new interactive procedures for eliciting spousal role performances involved at the various decision stages and substages of buying behavior. In general, group interactions are difficult to obtain, and still more difficult to measure (Rudd and Kohout 1983). In the past, researchers have conveniently assumed that responses of one of the spouses are representative and reflective of both the spouses (Davis 1976, Granbois 1971, Park and Iyer 1981). This was not the case here. As far as TV purchase-use was concerned, correlation between female self-estimations (WW) and her husband's estimation of her role performance (WH) was a low of 0.054. Similarly, correlations between HH and WW, and HJ and WJ were -0.202 and -0.304, respectively. Besides collecting data from both spouses separately, one may have to collect data jointly with built-in interactions. We also strongly advocate disaggregate analysis across purchase-decision substages. Apparently, syncratic aggregate behaviors may have underlying nonsyncratic processes.

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THE EFFECTIVENESS OF SOCIAL INFLUENCE AS A NEGOTIATION STRATEGY IN BUYER-SELLER INTERACTIONS

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Abstract

This paper presents the results of a study that evaluated the effectiveness of using information on prices paid by others in influencing the level of concession generated from opponents in buyer-seller interactions. Sixty undergraduate business students in a major southern university bargained with another student-confederate over the purchase (or sell) of a used car. Half of the student-subjects bargained as buyers and the other half as sellers. Both the buyer and the seller groups were divided into an experimental and a control group. The confederate used past price information in bargaining with the subjects in the experimental group only. A comparison of the levels of concession obtained in the experimental and the control groups revealed that significantly more concession was generated when the past price information was used, especially on buyers.

Introduction

According to Woodside (1983) two of the major issues that deserve attention in studies of buyer-seller interaction or exchanges are: the influences of process variables like verbal and nonverbal communications of both parties on the outcome of negotiations; as well as the outcome of the negotiations. A major objective of much of the verbal and nonverbal communications between a buyer and seller is to persuade one another to accept terms or outcomes of the negotiations that, in most cases, favor the persuader more than they favor the persuadee.

The purpose of this study is to investigate the effectiveness of a major persuasion technique that could be used by either buyers or sellers to influence the outcome of negotiations. This technique is known as (Indirect) informational social influence.

The use of (indirect) informational social influence as a compliance technique is relatively widespread. For example, insurance salespeople may provide prospects with a list of other policy subscribers, textbook publishers may furnish professors with a list of new textbook adopters, telethon organizers may announce the names of contributors to a charity drive or people may be asked to add their names to a petition (Kernam and Reingen 1983). Given its widespread adaptability in both business and prosocial contexts, the little attention that has been devoted to the study of the effectiveness of (indirect) informational social influence (social influence) is surprising.

This paper also seeks to contribute to what Cialdini, Bickman and Cacioppo (1979) call consumeristic social psychology. According to Jacoby (1979) and Nader (1976) there is the need for those investigating consumer-related issues and settings to provide data as well as results that are not only in the direct interests of business and related organizations but also serve the interest of consumers. The conceptual framework used in this study considers the buyer as an important participant in the buyer-seller interaction dyad and also looks at the dyadic relationship as a mutual influence process. It is expected that the results of a study such as this, will help improve consumer sophistication in the marketplace by providing information on the effectiveness of social influence as a persuasion technique.

Background and Hypotheses

Whether they are viewed as integrative (Schurr and Ozanne 1985) or distributive behavior (Raiffa 1982) or a combination of the two (Morley 1978) buyer-seller interactions usually are characterized by negotiations. Persuasion represents a principal tool employed by negotiators to manipulate (or influence) each other's expectations. Miller (1980) defines persuasion as noncoercive attempts by one party to shape, reinforce or change the responses of another party by means of messages.

The model of persuasion discussed by Kernan and Reingen (1983) has several characteristics: (1) the power, credibility and status differentials among participants are negligible, (2) the emphasis is on one-to-one rather than one-to-many communication contexts, (3) persuasion is considered a process (a series of events) rather than a single, isolated event, (4) emphasis is on changes in behavior.

Persuasion and Negotiation. Woodside (1983) suggests that while negotiating the purchase (or sale) of some products, buyers and sellers develop three pre-negotiation price levels--like-to-sell (buy), expected and "fall back" prices (see also Holmes and Glaser 1984; Raiffa 1982). The "fall back" price is the lowest (highest) price that a seller (buyer) would accept in a negotiation. The expected price represents the "fair" price from the points of view of both the buyer and seller while the like-to-sell (buy) prices are the initial offers made by both parties.

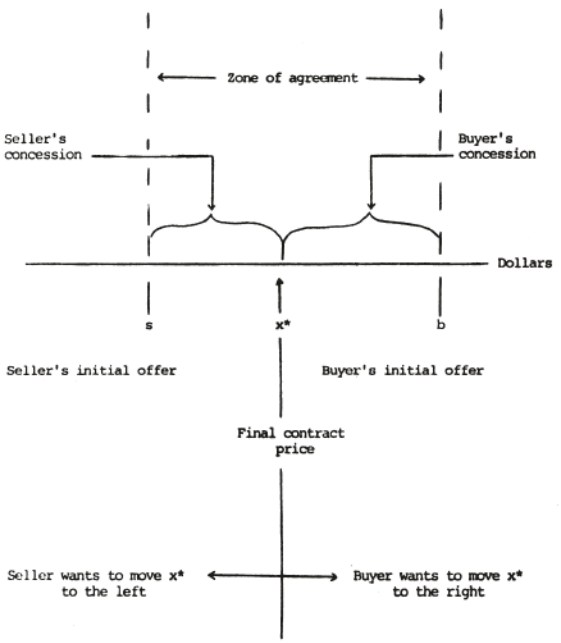
How are these price levels determined? According to Woodside (1983), the buyer will ascertain an alternative source from which she/he could buy a similar product while the seller will try to locate an alternative buyer. For the seller, the price available from an alternative buyer will represent his fall-back price. Any offer below this will be unacceptable to him since he has the option of turning to the other buyer. Similarly, for the buyer the price available from an alternative seller will represent the highest he will be willing to pay for the prod-

uct. However, both parties are not just content to ask for these minimum (maximum) prices at the beginning of the negotiation. Where bargaining is the norm, they usually exaggerate their positions in their initial offers. The buyer's initial offer will be below his fall-back price, while for the seller his initial offer will be above his fall-back price.

Besides establishing their pre-negotiation prices, negotiators also give thought to persuasion strategies that will enable them to "win" over their opponents. As viewed by Raiffa (1982) much of the communication between the buyer and the seller centers around the issue of concession. Granted that both parties begin the bargaining by taking almost diametrically opposite stands in their initial offers, a final contract (sale) price when it is arrived at must lie somewhere in the continuum between the initial offers (see **Figure 1**). The price concessions are the differences between the initial offers and the contract price.

FIGURE 1

THE GEOMETRY OF DISTRIBUTIVE BARGAINING



Source: Adapted from Howard Raiffa (1982), The Art and Science of Negotiation, Cambridge, Massachusetts: The Belknap Press of Harvard University Press, p. 46.

Price information is one of the persuasion techniques that either the buyer or the seller can use as part of his negotiation strategy to obtain a bigger concession from his bargaining opponent. Using information regarding the prices paid (or charged) by other buyers (or sellers) of similar products is considered more likely to get a bigger concession from the bargaining opponent. Deutch and Gerard (1955) have suggested that people may use the behavior of others in determining their own action. Similarly, King (1975) has shown that the probability of informational social influence is enhanced as more people agree on a given behavior and as uncertainty increases.

According to Cialdini (1984) we are likely to use the actions of others to decide on proper behavior for ourselves, especially when we view those others as similar to ourselves.

> Hypothesis: A bargainer who uses indirect informational social influence in his negotiation strategy will obtain a bigger concession from his bargaining opponent than one who does not.

Method

The hypotheses proposed in this study were tested through the use of experimental and control groups (see **table 1**). Social influence was operationalized in the context of students buying and selling used cars and using the information on prices charged or paid by other students as a persuasion technique. Subjects playing the role of either buyers or sellers bargained with a confederate who played the opposite role and used the social influence techniques on the subjects (if they were in the experimental groups) or did not use it on them (if they were in the control group).

TABLE 1

EXPERIMENTAL DESIGN AND CELL SIZES

	STRATEGY SOURCE (Confederate as)	
	Buyer	Seller
GROUPS		
EXPERIMENTAL (Indirect Informational Social Influence)	A (n = 15)[a]	B (n = 15)
CONTROL (No Persuasion Technique)	C (n = 15)	D (n = 15)

[a]Cell sizes represent number of bargaining sessions during which the confederate negotiates with the subjects using (or not using) the persuasion technique.

Subjects. Sixty undergraduate business administration majors at a major southern university participated in the experiment. The students were told that they would be participating in an experiment aimed at finding out how students bargain with one another. Male volunteers were solicited and each participant received five bonus class points for his efforts. The subjects ranged in age from 19 to 32 with both the mean and the modal age being 22 years.

The Confederate. A twenty-four year old beginning male MBA student was recruited as a confederate for the experiment. The use of a confederate was judged necessary in order to conceal

the true purpose of the experiment from the subjects as well as to ensure proper and uniform use of the technique on the subjects.

As part of the bargaining scenario, the confederate was given the following instructions:

1. As a seller, he should strive to get as high a contract price as possible in the bargaining.

2. As a buyer, he should strive to get as low a contract price as possible.

3. He should always get the subject to make the first offer.

4. His initial counter offer should always be $1000 less than the seller's initial offer and $1000 more than the buyer's initial offer. This procedure guaranteed that the dyad always had a bargaining room of one thousand dollars ($1000).

5. As a seller, it is his responsibility to get both parties to sign the bill of sale.

In order to train the confederate on the use of the techniques and to work out any bugs in the technique, the confederate bargained with ten students before the bargaining of the experiment. This session was also used to determine an appropriate concession strategy for the confederate. The confederate's concession strategy was structured after the independent action hypothesis (see Yukl 1974). That is, the confederate was instructed to concede some predetermined fixed amount irrespective of the magnitude of the subject's concession.

Game Overview. Thirty students played the role of seller and thirty others played the role of the buyer. Subjects playing either of the roles bargained with the confederate who played the opposite role. The bargaining task for both the subjects and the confederate was to obtain the best deal while negotiating either the sale or purchase of a used Chevrolet Camaro (with a V8 engine). The task involved cycles of offers and counteroffers. The confederate was instructed to always lead his bargaining opponent to make the initial offer. The bargaining ended when either the subject accepted the confederate's offer or the confederate, unable to get further concessions from the subject, accepted his offer.

Procedures. Upon arrival at the reporting station a subject was randomly assigned the role of either buyer or a seller in the experimental or control group. He was then given some confidential information appropriate for his role. The confidential information provided the subject with some background about the experiment--the nature and condition of the car he was about to bargain for, the existence of an alternative buyer or seller (as well as how much he would pay or accept for the car), the nature of some previous communication that supposedly had gone on between him and his bargaining opponent as well as what was expected of him during the bargaining. A subject playing the role of a seller in the experiment also received pictures of the car which he was supposed to show to his buyer-opponent (the confederate) during the bargaining.

After the confidential information briefing, the subject was then led to the bargaining room where he met his "opponent" (the confederate). Here the experimenter introduced the bargaining parties and also reminded them of their roles. Permission was also obtained from both parties to have the bargaining session recorded on a cassette tape. Subsequently, the experimenter left the room.

Experimental and Outcome Variables. There are two variables that must be operationalized in this experiment--social influence (experimental) and its effect (outcome). A list of four fictitious students and the prices they paid (for buyer-subjects) or charged (for seller-subjects) were developed as operationalization of the social influence construct. As discussed earlier, it was important that those who paid (or charged) the prices be similar to the subjects. The various prices used were crosschecked with local used car dealers as to their appropriateness.

The effect of the social influence technique was measured by the amount of concession obtained by the confederate when he used it (in the experimental group) as opposed to what he obtained when he did not use it (in the control group).

Results

A review of the tape-recorded bargaining sessions indicated that the technique was appropriately applied. Analysis of post-experimental interviews also indicated that the social influence technique registered on the experimental subjects.

The major hypothesis proposed in this study was that the use of indirect informational social influence as a persuasion technique in bargaining would result in a bigger level of concession than without it. Table 2 shows that buyers in the experimental group on the average conceded $758 as opposed to $627 for the buyers in the control group. For the sellers, the mean concessions were $697 for the experimental group and $693 for the control group.

TABLE 2
MEAN AND STANDARD DEVIATION OF THE LEVEL OF CONCESSION FOR ALL SUBJECT GROUPS

	Mean		Std. Deviation		Number of Cases	
Groups	Buyers	Sellers	Buyers	Sellers	Buyers	Sellers
Social Influence	758	697	169	166	15	15
Control Group	627	693	213	165	15	15

To test the major hypothesis, comparisons of the mean levels of concession for the two experimental groups against the respective control groups were performed using the student t-test. For

buyers, the mean of concession for the experimental group is significantly higher than for the control group ($p < .05$). The sellers' level of concession was also higher for the experimental group than for the control group although it was not statistically significant ($p = .47$).

Discussion

Findings. The major hypothesis tested in this study was statistically supported for buyers but not for sellers. The result from this study also suggest that buyers concede more as a result of social influence than sellers. A comparison of the levels of concession for both buyers and sellers in the experimental groups show that buyers conceded $758 on the average as opposed to $697 for the sellers.

Results obtained by Chertkoff and Conley (1976) indicating that sellers usually emerge "better off" than buyers in situations where the objective opportunities for both are equal, also agrees with this finding. Sellers are generally more aggressive and have higher aspiration levels than buyers (Roering, Slusher and Schooler 1975).

Limitations. Any conclusions drawn from this study must be balanced against various limitations. Two of the most pertinent limitations are now discussed.

Although students generally buy and sell used cars on their own, the issue of their representativeness of the entire population of used car buyers and sellers must affect the external validity of this study.

It must also be acknowledged that the nature of the experimental payoffs did not adequately provide the competitive atmosphere present in a true bargaining situation. The allotment of equal bonus points for all subjects who participated in the experiment may have underrepresented the economic payoff/loss that a concession generates.

Implications. The results from this study suggests that using a list of previous buyers or sellers and the prices they paid or charged may be an effective way of persuading bargaining opponents during negotiations. Although the study dealt specifically with prices paid or charged by previous buyers or sellers other information that could be provided may be level of satisfaction with the purchased product.

Sellers, typically, use the list price information to persuade buyers on the value of products. Sellers that do this need to incorporate not only the list price of the present products that they are negotiating on but also the list prices of other comparable products. Some buyers also do comparative shopping although most of them that do only compare prices of products within the same establishment or store. Comparative shopping could be advantageous to buyers especially if they shop several stores and compile a list of prices charged at various stores for comparable products and use them as part of their bargaining strategy.

Directions for Future Research. Kernan and Reingen (1983) outlined five other behavioral influence techniques, apart from indirect informational social influence, that may have some usefulness in buyer-seller interactions. These are labeling, legitimization of paltry offers, door-in-the-face, foot-in-the-door and low-balling. Research similar to the present one need to be conducted on the effectiveness of these techniques in buyer-seller interactions.

Another issue that may interest future researchers concern the integration of two or more techniques into one negotiation strategy. It is apparent that such is the case in practice. For such considerations, researchers must consider the compatibility or noncompatibility of the various techniques.

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WORKING WIVES AND TIME-SAVING DURABLES: USAGE PATTERNS FOR THE MICROWAVE OVEN

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Abstract

Working wives face increasing demands on their time due to the pressures of employment as well as household needs. Accordingly, they are expected to adopt strategies which save time, such as the purchase of durables like dishwashers and microwave ovens. Previous research, however, has not demonstrated this association. This paper proposes that the actual usage of the durable, rather than its ownership, is more likely to vary with working wife status. When the case of microwave ovens is considered, a survey of households in southern New Jersey indicates that usage similarly does not vary with wife's participation in the labor force.

Introduction

Working wives face increasing demands on their time due to the pressures of employment as well as household needs. Accordingly, they are expected to adopt strategies which save time, such as the purchase of durables like dishwashers and microwave ovens. For instance, Reilly (1982) argues that "one result of the wife's employment would be an increase in the use of convenience foods and greater incidence of time-saving durable ownership (p. 407)."

Previous research, however, has not demonstrated the association between working wives and strategies to save time. In one frequently-replicated study, Strober and Weinberg (1980) initially proposed that working women are likely to adopt one or all of the five time-saving strategies in adjusting their work and home schedules. Two of their five strategies are directly-related to the ownership or use of durables; they propose that working wives:

> Substitute capital equipment for their own nonmarket labor, holding constant total quantity and quality of household production.
>
> Reduce the quality or quantity of household production and/or use own labor more intensively or efficiently when engaging in such production.

In testing whether these strategies actually do occur, previous investigators have focused on either ownership versus non-ownership or the amount of expenditure on categories of goods labeled as "time-saving." This study instead proposes that usage behavior, rather than ownership, underlies the two relevant strategies. Ownership merely qualifies a household to adopt durable use as a strategy, but neither its possession nor the amount spent to purchase a durable may be related to its actual use in saving time. Thus the present study distinguishes between ownership as an indicator of consumption and usage as an indicator of consumption.

Beyond choosing to own certain time-saving durables, households also choose how frequently those durables are used to prepare food in the home. Their choice is likely to be related to the time constraints which they face. In arguing that food preparation style affects consumer behavior, Roberts and Wortzel (1979) propose that a hierarchy of effects model can be used to relate food shopping goals and behavior. A similar approach, adapted for the present study, relates food preparation choices and subsequent food preparation behaviors. That is, households choose certain ways of preparing food which match their time, skills, and personal preferences. In effect, they choose to own certain food preparation appliances, such as microwave ovens. If the purchased appliance is found to satisfactorily meet the household's needs, frequent use of that appliance is likely to result.

Background To The Problem

As described by Becker (1965), Lancaster (1966), and others, households combine time and market goods to produce commodities; their choice of combinations is likely to improve the productivity of production time, thereby increasing household satisfaction. Accordingly, substitutions are made between time and goods; for instance, capital goods, such as appliances, can be used to reduce the human capital required of husband and wife (Beutler and Owen 1980).

The perspective adopted above considers the household to operate both as a production unit as well as a consumption unit (Grashof and Dixon 1980). Thus the household selects and combines available time, information, skills, income, and goods to produce commodities for their consumption. When the amount of available resources becomes limited by changing household circumstances, however, the members choose production functions which match their needs and constraints as well.

One change in current household resources results from the increasing numbers of wives who have chosen to enter the workforce. As their commitments to employment use up a sizeable proportion of their time, the time available for household efforts is considerably reduced. The approach described above suggests that households with employed wives will change their production functions somewhat to compensate for the additional demands on the wife's time due to her work schedule. That is, entry into the labor force brings with it a loss in home production time. As a result, the wife encounters a decline in both leisure and in work at home (Gronau 1977).

Strategies have been suggested which operationalize the theoretical choices which can be made from available household resources. Some have proposed that households are more likely to purchase time-saving durables when they are time-constrained (Strober and Weinberg 1980; Schaninger and Allen 1981; Reilly 1982; Nichols and Fox 1983). Others have argued that expenditures on the durables are likely to increase as well (Strober and Weinberg 1977; Weinberg and Winer 1983).

The approach taken here instead argues that some time-saving durables are common stock of both non-working wife as well as working-wife households. Consumer behavior differences instead may occur in the frequencies and methods of using those durables across households. Researchers, however, have not investigated whether variance exists in the usage of those durables, when ownership is held constant.

Interestingly enough, research hypotheses in prior studies were stated in terms of ownership and expenditure as well as usage. For example, Weinberg and Winer (1983) propose that "economic theory suggests that WW and NWW families with the same total amount of income should differ with respect to purchases of time-saving goods and services . . . WW families should tend more often than NWW ones to substitute time-saving goods for home production (p. 259)." This study considers variation in usage as an additional part of Strober and Weinberg's strategies.

Problem Statement

This paper extends the work of Strober and Weinberg (1977, 1980) by testing an alternative interpretation of their strategies. In this case, it is hypothesized that the use of a time-saving durable will be greater with increasing labor-force participation of working wives. Specifically, usage differences are examined rather than the more common ownership or expenditure levels of households.

Ownership can result from motivations other than purchase in order to save time in household production. For instance, appliances are acquired through home or apartment design, thus being chosen as part of a "package." Additionally, some appliances such as microwave ovens and blenders are frequently received as gifts or as promotional items accompanying larger purchases. From another perspective, some durables, such as stoves and refrigerators, are associated with a generally-accepted standard of living, and are acquired as part of a set of standard household equipment. Finally, as products like microwave ovens become commonly-owned durables and market prices decline, features which enhance usage are likely to influence purchase decisions. Accordingly, ownership decisions may center on "which product to buy" rather than "whether to buy or not." Consumers are thought to establish priority schemas in acquiring home appliances; empirical evidence has supported the notion that common patterns of durable preferences occur in populations (Clarke and Soutar 1982; Dickson, Lusch, and Wilkie 1983).

Usage, in contrast, represents a process for combining inputs to reach a goal, in this case, the goal of food preparation and consumption. In a psychographic study, "working wives tended to have a greater dislike for food shopping and cooking that seemed to stem primarily from time considerations (Jackson, McDaniel, and Rao 1985)." These findings suggest that actual food preparation behavior is likely to vary with wives' employment status.

One particular durable associated with time savings, the microwave oven, is selected for study. Both ownership and usage patterns will be compared and contrasted across households. While microwave ovens are generally thought to shorten the cooking process, the argument can be made that other aspects of microwave use actually increase cumulative food preparation time. Hassan (1982) illustrated this point by claiming that different cooking techniques, changes in utensils, and frequent cleaning add to the time-intensiveness of microwave ovens.

Two hypotheses will be tested in the present study. The first proposes that employment of the wife is not useful in discriminating between owning and nonowning households:

Hypothesis 1: Ownership of microwave ovens is not expected to vary with wife's labor force participation.

The second hypothesis instead proposes that usage behavior differs across households when wives are grouped by employment participation, ranging from non-employment, part-time work, and full-time work.

Hypothesis 2: Reported microwave usage patterns are expected to vary directly with reported amount of wife's labor force participation.

The analysis of usage, rather than ownership, provides pertinent information for both manufacturers of microwave ovens themselves as well as manufacturers of auxiliary goods. Corporations producing the microwave oven can analyze usage patterns to learn which features are used most frequently, as well as to estimate probable wearout rates and needs for repair. Auxiliary industries, such as those producing microwaveable dishes, utensils, and frozen foods, can design appropriate products to be used with the microwave. In-depth analyses of the ways that consumers prepare their foods in microwave ovens are likely to suggest which auxiliary items are preferred by consumers.

Methodology

The study was conducted by students in an undergraduate consumer behavior class at a university in southern New Jersey. A systematic sampling procedure was used. Each student was assigned to administer a quota of ten questionnaires, starting at a designated location and contacting every fifth household. For the purposes of this research, the Census definition of household was adopted; that is, both related and unrelated persons who occupied the housing unit were eligible. No restrictions were placed on the respondents with respect to marital status, age, or employment. Overall, 490 self-administered questionnaires were distributed, with 454 completed and returned, yielding a response rate of 92%.

Sixty-four percent of the sample households were married with both spouses present, with 65.9% assigning cooking tasks to the wife or female head of household. On a ten-point scale, the women's attitude toward cooking indicated a mean of 6.25, while the men's attitude toward cooking was found to have a mean of 3.58. In contrast to Strober and Weinberg's 1980 sample, in which 13% of the households owned microwaves, the ovens were owned by 51.5% of the present sample. Thirty-two percent were childless, with 46% of the households averaging either one or two children. On a twelve-point income scale, the mean range was $30,000 to $34,999. The mean age of women in the households was 41 years of age. When only the married couples were considered, employment measures revealed that 35.1% of the wives were unemployed, 19.6% worked part-time (no more than 25 hours per week), and 45.4% were working full-time. Additionally, out of 291 eligible households of married couples, 58.4% (170 households) owned microwave ovens.

Results

The research hypotheses were tested via SPSSX. First, Hypothesis one tested the variation of microwave ownership with wife's employment participation. Multiple discriminant analysis was used to model the effects of wife's employment, wife's age, husband's attitude toward cooking, wife's attitude toward cooking, number of children, and household income on the ownership of the microwave oven. The responses of 226 households were used. While all the variables entered the discriminant function generated, the ability of the function to correctly classify ownership was quite weak. Whereas the prior probability for each group is 50% the percent of groups correctly classified by the function increased only slightly to 53.54%. The classification table is given in Table 1 below.

TABLE 1
CLASSIFICATION TABLE ON NON-OWNERSHIP VERSUS OWNERSHIP OF MICROWAVE OVENS BASED ON WIFE'S EMPLOYMENT, WIFE'S AGE, ATTITUDES TOWARD COOKING, NUMBER OF CHILDREN, AND INCOME

Actual Group	N of Cases	Predicted Membership	Actual Membership
Non-owners	91	54 (59.3%)	37 (40.7%)
Owners	135	68 (50.4%)	67 (49.6%)

Note: The discriminating power of the predictor variables was determined by computation of Wilk's lambda. In this case, the predictors were found to have little discriminatory power, as Wilk's lambda was found to be 0.9663, where Chi-squared equaled 7.57, p. < .2710.

In testing the second hypothesis, initial inspection of the married subsample characteristics revealed that some variation of usage patterns exists among microwave owners. While the mean usage rating was found to be 6.757, some consumers reported little or no use of the appliance.

In order to test whether some of the variation in usage was due to wife's employment, an analysis of variance was conducted on 136 of the married couples who owned microwave ovens (sample sizes vary slightly due to missing values). Table 2 presents the MANOVA results for microwave usage broken down by three categories of wife's labor force participation: no employment, part-time employment, and full-time employment. Other household variables, wife's age, husband's and wife's attitudes toward cooking, number of children, and income, were included as covariates in the analysis. The F-test is not signficiant for wife's employment, however, indicating that microwave usage does not vary with the labor force participation of the wife. It is interesting to note that the covariates similarly had no effect on explaining the usage pattern reported by the household.

TABLE 2A
CELL MEANS FOR USAGE OF
MICROWAVE OVENS BY
WIFE'S EMPLOYMENT PARTICIPATION

Wife's Labor Force Participation	Mean Usage of Microwave	N of Cases	Std. Dev.
Not employed	6.40	40	2.64
Part-time employment	7.23	26	2.41
Full-time employment	6.81	70	2.63
Entire subsample	6.77	136	2.59

TABLE 2B
ANALYSIS OF VARIANCE RESULTS

Source of Variation	Sum of Squares	Df	F	Sig. of F
Within cells	857.82	128		
Regression	34.98	5	1.04	.395
Constant	252.27	1	37.64	<.001
Wife's labor force	6.96	2	.519	.596

Discussion

This study has replicated and extended the work of Strober and Weinberg by offering an alternative interpretation of two of their proposed strategies regarding the working wife's adoption of time-saving durables. Like prior studies, the present effort found no difference among part-time, full-time, and non-working wives the ownership of a specific durable, the microwave oven. Beyond ownership of the durable, the actual frequency of usage was expected to vary with increased labor force participation of the wife. However, while variance does exist in the usage of the microwave, the usage frequency was not influenced by the wife's labor force participation.

Several implications for future research are suggested by the present study. The first alters the present methodology to investigate more fully the types and frequencies of microwave usage. Secondly, the conceptualization of working versus non-working wife may be too limited in assessing the varieties of demands faced by today's households. Finally, other variables such as cooking preferences can also be considered. Each of these implications will be discussed below.

One possible reason for the lack of significance may be the level of specificity in the questioning about microwave usage. That is, the respondents were only asked to report usage in general, without indicating what types of usage were employed, such as meal preparation, defrosting, or reheating. Time savings, however, is likely to motivate microwave use for meal preparation, while defrosting use can be part of a complex production function which involves further non-microwave preparation. Likewise, reheating foods in the microwave may be selected to maintain food quality, rather than to obtain time-savings. The purpose of using the appliance relates to the production function chosen for meal preparation and is likely to indicate whether or not the appliance is being used in order to save time. Future research should analyze usage more carefully.

Secondly, current households face a variety of demands simultaneously. While many wives are entering and maintaining positions in the labor force, both spouses are also spending considerable time on education, hobbies, volunteer work, and "popular" leisure pursuits such as athletics. Possible working wife status is only one of several time constraints which affect the amount of time which households devote to activities such as food preparation. Perhaps a broader conceptualization of the consumer's time budget is also needed to empirically investigate when time-saving durables are likely to be used. Such a conceptualization includes concepts such as training time, leisure time, and non-employment obligatory time, as well as employment time.

Finally, as Reilly (1982) notes, "the ownership of time-saving durables may be motivated by considerations other than work-load reduction (p. 416)." Similarly, patterns of usage may be related to other factors, such as cooking skills and types of food prepared. Households which prefer oven-roasted meals to TV dinners are less likely to use the microwave oven for food preparation, regardless of the wife's employment status. Further research is needed to identify the factors which are responsible for the usage variation patterns found, but not explained, in the present study.

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SELF-PERCEIVED SEXUAL IDENTITY: A FUNCTIONAL CONSUMER MODEL

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Abstract

This paper proposes a multidimensional biologically determined functional model for self-perceived sexual identification as masculine/feminine. Prior research in marketing based on personality and androgyny theories adopted from psychology is reviewed. Development of this model in accordance with certain extra-personality variables suggested by both age and sex researchers is discussed. The utility of direct self-assessment by the respondent in undisguised form is suggested to elicit information. Relationships between biological sex and perceived sexual identity are considered. Hypotheses are generated for future testing of the model.

Introduction

Researchers in social science disciplines have extensively studied the relationships between biological gender, sex traits, and sex roles in order to learn more about the interaction of personality, social organization, and life change in individuals. In the past twenty years, and especially since 1974, this research area has captured the interest of marketers bent on exploring the possible usefulness of sexual identity as a dimension of consumer behavior. Marketing research has produced a body of provocative, although often conflicting, findings which seem to indicate a need for a new direction in research. The purpose of this paper is to propose a new multidimensional, biologically-based model for assessing self-perceived sexual identity. Operationalization is suggested based on undisguised direct questioning of respondents as to how they identify themselves along a masculine/feminine continuum.

This paper first presents a summary of self-perceived sex role measures previously used in marketing and consumer behavior studies. A sexual identity model is then proposed based on prior sex role research as well as analagous subjective age research. Lastly, hypotheses for empirical testing of the model are put forth.

Prior Sex Role Research

The influence of biological sex dominated sex role research prior to the 1970's. This research assumed that biological gender was the major determinant of sex-related behavior, and "healthy" individuals were those who conformed to the sex role appropriate to their gender and manifested only those traits socially approved for that gender (Constantinople 1973; Robinson and Green 1981). Masculinity and femininity were assumed to be unidimensional bipolar opposites on one continuum, correlated with biological sex, and constrained by concepts of societally-determined stereotypical "correct" behaviors for men (masculine) and women (feminine).

The dynamic changes which took place in American culture in the 1960's affected sex role stereotyping, and called these traditional assumptions into question (Bem 1974; 1977; Robinson and Green 1981). The women's liberation movement and the rapid entry of women into institutions of higher learning and the workforce led to the observation that sex roles, biological sex, and sex-related personality traits may not necessarily be either immutably fixed or identical. Once external sex roles were questioned as a result of women becoming active participants in the world outside the home, and men to a lesser extent becoming partners in homemaking and child-rearing, the status of interior sex trait polarities also had to be re-examined.

Bem developed a new theory based on masculinity and femininity as separate, orthogonal constructs, not biologically-based, and able to coexist in varying degrees within the same individual (1974). Her theory is based on the hypothesis that individuals may be "both masculine and feminine, both assertive and yielding, both instrumental and expressive - depending on the situational appropriateness of these various behaviors" (1974, p. 155). The individual who shows both traits is labeled "androgynous," and judged "healthier" because his/her freedom from rigidly sex-typed behavioral constraints enables the necessary flexibility to adapt to a wide variety of situations.

Measures Used in Marketing Research

Marketers have shown interest in sex role self-concepts because of their imputed relationship to product images (Sirgy 1982). Self-concept theory generally refers to the study of an individual's global self-attitude: the conscious judgments s/he makes about the nature and relationship between his/her actual, ideal, and social self (Sirgy 1982). An individual's perception of him/herself as masculine or feminine can be interpreted on an importance spectrum ranging from sexuality as one among many dimensions of self-concept, some of which are not sex-linked (Locksley and Colten 1979), to sexual identity as a near equivalent to total self-concept (Gentry and Doering 1977; Gentry, Doering and O'Brien 1978; Golden et al. 1979).

Three scales have been most commonly used to measure sex role self-concept in marketing research. In order of chronological development, they are the California Psychological Inventory - Femininity Scale (CPI-Fe) published in 1952 (Gough), the Bem Sex Role Inventory (BSRI) published in 1974 (Bem), and the Personality Attributes Questionnaire (PAQ), also published in 1974 (Spence, Helmreich, and Stapp).

The CPI-Fe was designed to measure the masculinity or femininity of respondents in terms of "favorable and positive" personality traits. The scale treats masculinity and femininity as bipolar opposites on one continuum. It is a 38-item subscale of the California Psychological Inventory (Gough, 1952), in which respondents are asked whether self-descriptive statements are true or false.

CPI-Fe has been used alone in four early marketing studies (Aiken 1963; Fry 1971; Morris and Cundiff 1971; Vitz and Johnston 1965) and with the PAQ in two later studies (Gentry and Doering 1977; Gentry, Doering, and O'Brien 1978). This scale has not been used in marketing studies published since 1978.

The Bem Sex Role Inventory (BSRI; Bem 1974) provided research in psychology with a new theoretical framework for measuring, scoring, and combining traits judged to be masculine or feminine self-concepts. It is a self-descriptive survey instrument relying on a 7-point true-untrue scale to measure respondents' identification with characteristic qualities expressed as adjectives or adjective phrases, and viewed as socially desirable sex-related personality descriptors. A respondent's identification with the sex-related qualities provides insight into his/her self-perception as feminine or masculine. The BSRI originally categorized respondents in a three-group typology, but was later revised to recategorize respondents into four groups:

Feminine (High Femininity, Low Masculinity)
Masculine (High Masculinity, Low Femininity)
Androgynous (High Masculinity, High Femininity)
Undifferentiated (Low Masculinity, Low Femininity)

Most of the recent BSRI based sex research (e.g. Bem 1977; Bem 1979; Robinson and Green 1981; Taylor and Hall 1982) has used the four-group typology, with particular emphasis on androgyny, hailed as a contemporary solution to problems implicit in older bipolar assumptions.

The long version of the BSRI has been used in five marketing studies (Golden, Allison, and Clee 1979; Allison et al. 1980; Martin and Roberts 1983; Kahle and Homer 1985; Coughlin and O'Connor 1985). A shortened version has been used in one study (Barak and Stern 1986). It has never been used in combination with other sex-role self-concept measures, and has been in marketing research use only since 1979.

A third scale, the PAQ, (Spence, Helmreich, and Stapp 1974; 1975) was first developed to remedy the deficiency in Bem's three-group typology. The version used by marketers is a 55-item self-report survey instrument using a 5-point scale to measure respondents' identification of themselves and a "typical college male/female" in terms of adjectives and phrases describing socially desirable clusters of sex-related personality traits.

For a short time before Bem revised her typology (1977), there was an interim period when marketing research used the PAQ: 1976-1978 (Burns 1977; Gentry and Doering 1977; Gentry, Doering, and O'Brien 1978; Tucker 1976). Since 1978, however, only one study has used the PAQ (Gentry and Haley 1984). It seems fair to conclude that the scale of choice is now the BSRI, both in short and long versions, because of the number of investigators using it.

Thus, the relationship between gender, sex roles, and self-concept has been studied in marketing and consumer behavior literature only to a limited extent, in three periods distinguishable by the different measures used: 1963-1971 with CPI-Fe; 1976-1978 with PAQ; 1979-present, with BSRI-Long and BSRI-Short.

Before the mid-1970's, researchers followed the general tradition of viewing sex roles as a bipolar construct (Aiken 1963; Fry 1971; Morris and Cundiff 1971; Vitz and Johnston 1965). The findings were not uniform: three studies found product-related behavior to be consistent with sex role self-concept (Aiken 1963; Fry 1971; Vitz and Johnston 1965), but one did not (Morris and Cundiff 1971).

Since 1976, marketing studies have generally found that:

1. Biological sex is at least as good an explanatory variable as, if not better than, sex-role self-concept, for product use, brand choice, media use, product perception, product sex-typing, attitudes towards women business owners, and advertising recall (Allison et al. 1980; Gentry and Doering 1977; Gentry, Doering, and O'Brien 1978; Gentry and Haley 1984; Golden, Allison, and Clee 1979; Kahle and Homer 1985; Martin and Roberts 1983).

2. High masculinity explains more than typological combinations in terms of family decision-making, reactions to women's roles in advertisements, and a variety of consumer behavior varialbes (Barak and Stern 1986; Burns 1977; Coughlin and O'Connor 1985).

Controversy over the meaning, nature, and very existence of androgyny as a construct has characterized post-1974 research in both psychology (see e.g. Taylor and Hall 1982) and marketing (Barak and Stern 1986; Gentry and Doering 1977). Bem's typology, whatever its merits may be in psychological research, seems to be inappropriate in a consumer behavior context. The BSRI trait index of femininity has not been found useful for marketing purposes, for it seems relatively independent of consumer behavior variables (Barak and Stern 1986). Androgyny shows few differences from masculinity, since masculinity appears to be the "active" ingredient (Adams and Sherer 1982). The androgynous individual does differ from the feminine one, but the difference seems to relate less to the presence of high femininity than to the presence of high masculinity (Barak and Stern 1986; Taylor and Hall 1982).

Furthermore, the apparent strength of biological sex as an influence which is more significant than sex-role self-concepts across a wide range of product and attitudinal choices has led to a call for abandonment of sex role research in marketing as unproductive and probably pointless (Roberts 1984). In the light of this serious request, it seems fair to note that marketing research inherited the problems along with the tools of psychological inquiry. A new direction may be found in a model which departs from the trait inventory concept and researcher labeling, and moves towards a more holistic definition of sexual identity based on direct undisguised questioning of respondents about both personality and extra-personality characteristics.

Direct Self Assessment

Sirgy (1982, p. 297) suggests that personality inventories such as the CPI and PAQ may not tap self-perceptions; rather, they appear to elicit "hidden, covert, nonconscious" personality traits, and thus seem inadequate for measuring the "'totality of the individual's thoughts and feelings having reference to himself as an object.'" Multitrait inventories generally disguise the researcher's intention of measuring sexual identity: they rely on a variety of descriptive adjectives, phrases, or statements applied to the self by a respondent, and then used by the evaluator to assign the respondent to a sexual category (see Marsh and Myers 1986). Self-assessments, on the other hand, offer a more direct means of measuring sexual identity: the consumer is openly asked how s/he rates him/herself as masculine/feminine. Self-reported identification allows respondents to reveal their "own opinion about the personal meaning of the constructs" of sexuality (Myers and Gonda 1982 b, 520).

The value of self-assessment as a measure of sexual identity was first noted in an early study of a number of personality traits, including femininity (Hase and Goldberg 1967). The CPI-Fe scale was used, and the conclusion was that "Femininity ratings were best predicted by self-ratings (r = .46), with no scale or set of scales even approaching this level of validity" (1967, 245). In the 1970's, research interest turned away from self-ratings to the inventories associated with androgyny theory. In the 1980's, however, there has been renewed interest in self-assessment as a potentially different and useful type of measure, an outgrowth of dissatisfaction with trait inventories, considered incomplete methods of tapping salient self-concepts about sexual identity (Myers and Gonda 1982 a,b: Jackson 1985). These studies have elicited open-ended definitions to acquire currently meaningful information about the constructs. It is evident that self-identification relies upon subjective appraisal by the individual, who makes judgments on whatever idiosyncratic evidence s/he considers germane. The assumption is that researchers can find out the sexual label respondents self-select by directly questioning them in undisguised form.

Self-perception of sexual identity appears to be both complex and multidimensional in functional terms: it includes both personality and other characteristics. In fact, a theory implying the multidimensionality of sexual identity can be extrapolated from a number of studies. The seminal work by Constantinople (1973) provides a potentially useful model of sexual identity, in a listing of probable components of self: "appearance, reproductive capacity, social and/or occupational role" (391). Locksley and Colten (1979) postulated a "person prototype," a global human self that incorporates "physical appearance, occupation, [and] social prestige, as well as behavioral dispositions and characteristics" (1023). Myers and Gonda developed and tested four categories for self-evaluation (1982, a,b): Gender Reference, Physical Reference, Personality or Behavioral Characteristics, and Societal or Biological Reference. Deaux and Lewis also identified four components of gender stereotypes: "personality traits, physical characteristics, role behaviors, and occupations" (1983, 4). These prior conceptualizations all suggest the likelihood of self-perceived sexual identity as multidimensional, and point the way to a functional model.

Analogies in Age Research

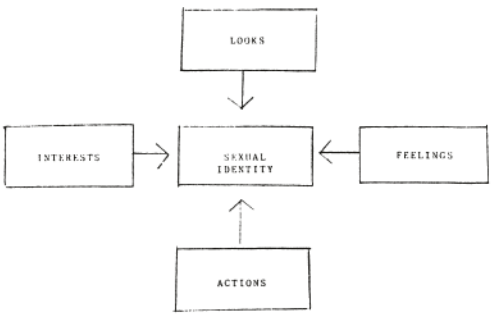
Since both age and sex are deeply felt salient human role identities (Burke and Tully 1977), critical determinants of one's self-concept, concepts from one area may illuminate the other. Interestingly, the area of age research provides a useful theoretical base and empirical support for an analagous model of functional self-perceived sexual identity.

In 1972, Kastenbaum et al. identified four domains of what was named "personal age": "the individual's self-report of his age status: how old he seems to himself" (200). These dimensions were drawn from functional areas of the self: biological (looks), psychological (feelings), social (actions), and cognitive (interests). They were operationalized in a measure called "The Ages of Me" Interview, by requiring the respondent to assess his/her age status in terms of: feel age - the age s/he feels, look age - the age s/he things s/he looks, do age - the age s/he perceives s/he acts, and interest age - the age s/he perceives characteristic of his/her interests. Respondents are asked to identify themselves categorically in reference to chronological comparisons between themselves and others ranging from "younger" to "older than most people my age" (Kastenbaum et al. 1972, 202). The operationalization was subsequently modified to yield a continuous, quantitative measure of subjective age called "Cognitive Age," tested in large sample populations (see e.g., Barak and Stern 1986).

The rationale for the functional model of sexual identity here presented is the striking correspondence between the dimensions from "The Ages of Me" Interview and ones also suggested by sex role researchers. These generalized relationships of functional areas to sexual identity are conceptualized as follows:

Physical/Biological - Look/Sex
Personality/Emotional - Feel/Sex
Societal/Occupational - Act/Sex
Cognitive/Intellectual - Interest/Sex

Functional Model of Sexual Identity



The model can be operationalized analagously to the age instrument by asking respondents how they perceive their looks, feelings, actions, and interests on a bipolar biological continuum ranging from masculine to feminine. Three hypotheses have been generated to use the model in testing the relationship of biological sex to sex-role self-concepts in a consumer framework.

H1: Masculine (feminine) self-identification is likely to characterize males (females).

The apparent strength of biological sex as a significant influence across a wide range of product and attitudinal choices indicates that a respondent's tendency to assign actual sexual self-image in a biologically-determined way may be the most relevant effect on purchase behavior. Self-perceived sexual identity elicited directly would then be an effective mode of tapping information about the way a respondent views him/herself as an object (see Sirgy 1982) in order to study the impact on consumer behaviors.

H2: Females are more likely to self-report masculine identifications than males to report feminine ones.

High masculinity also appears to be the most salient consumer behavior variable, implying a power imbalance in the sexual dichotomy. This is not surprising, since masculinity has long been considered the socially valued trait for both sexes (see e.g., Bernard 1980), and role changes for women have made it more acceptable for them to self-categorize as masculine than for men to do so as feminine. Males can be expected to show significant differences from females in terms of less willingness to depart from the biologically appropriate end of the continuum: the price of male identification as non-masculine still seems high.

H3: Sexual self-identification is likely to correlate with consumer variables within sex.

Within-sex variations in accordance with Gender Schema Theory have been suggested as important for advertising recall (Gentry and Haley 1984). It seems likely that males and females will show variability in self-identifications, although females will probably feel freer to depart from their biological camp. The dimension of looks is expected to correlate quite highly with biological sex, both on the analagous age model (Kastenbaum et al. 1972), in which it showed a strong relationship to chronological age, and the imputed importance of this external "face" to the self-concept. The interest/action dimensions, on the other hand, may show significant variation within sex, since both economic pressures and role rethinking have caused men and women to behave in less stereotypical fashion now than in the past.

Thus, while the search for a useful model of sexual identity seems ongoing, the preliminary development of a functional model shows promise for usefulness in consumer behavior that the trait inventories have not provided. The functional model has been shown useful in age research, since it can be linked to consumer variables and provides information of value to marketers, especially advertisers (Barak and Stern 1985). It is hoped that this model will prove useful in marketing research and give rise to empirical testing which can shed light on the link between self-ascribed sexual identity and purchase behavior. While the relationship between personality and consumer action is still somewhat mysterious, the direct elicitation of one's own sexual self-image may help explain the proverbial wisdom, "You are what you buy."

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SELF-ENHANCEMENT: A NEGLECTED DIMENSION OF SELF-CONCEPT THEORIES

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Abstract

This study points out the two important dimensions of Self Theory -- maintenance and enhancement as the fundamental constructs of self-concept theories. It suggests that self-enhancement has been unduly neglected by the self-concept theorists in consumer research. Self-enhancement is insinuated as an additional construct of self-concept theories. This position has also been empirically demonstrated in the study.

Introduction

The proposition that self-concept relates to buying behavior is well supported by research (e.g., Howard 1977, p.90; Landon 1974). To a large degree, it is probably accurate to conclude that the emerging interest in self-concept by consumer researchers was due to the influential writing of Levy (1959) -- "symbols for sale." The essence of his unorthodox thought is that consumer can not be accurately considered as an "economic man." The consumer, as viewed by Levy (p.118):

> is hardly an economic man -- especially since there is considerable evidence that he does not buy economically. Indeed, he is often vague about the actual price he pays for something; he has few standards for judging the quality of what he buys, and at times winds up not using it anyway!

Significant to consumer research, the offshoot of Levy's article is the now accepted view of multi-attribute products or the view that products have images. As stated by Landon (1974, p.44), "The notion that products have dimensions beyond functional utility is, perhaps, a singular contribution to consumer behavior." Apparently, the self-concept theories are mostly rooted in Carl Rogers' (1951) self-theory (Sirgy 1982, p.289). Rogers is probably one of the most influential self-theorists. As cited by Birdwell (1968, p.77), Rogers' theory of personality has been considered by Wroe Alderson (1958, p.19) as "the most useful synthesis to date of psychological theory for marketing and advertising." This is evident in most of the earlier work in consumer self-concept (e.g., Birdwell 1968, Dolich 1969, Grubb and Grathwohl 1967, and Grubb and Hupp 1968). Unfortunately, as the area developed, the adaptation of Rogers' ideology in consumer research turned out to be rather inappropriate. Moreover, it is saddening to witness the theoretical and empirical development in self-concept of the earlier scholars being ignored by the contemporary researchers. The purpose of this study is to point out a fundamental but unfortunately neglected dimension of self-theory -- self-enhancement.

Theoretical Development

Self-Theory

In order to have proper framework to evaluate self-concept it is necessary to go back and examine some of Rogers' important propositions. Based on the review by Epstein (1980), Rogers (1951) concluded that the individual has a basic tendency to "actualize, maintain, and enhance the experiencing organism." According to Rogers, an individual's behavior depends significantly on his/her "judgement of what is appropriate with respect to self-maintenance and enhancement." Self-concept theories as evolved from his thought are essentially that the consumption is related to the consumer's self-concept. That is, one's choice of a specific product or of a specific brand is pretty much a function of the person's perception of his/her self. In particular, following Rogers' view, the rationale behind a consumer's buying behavior is both to <u>maintain</u> and to <u>enhance</u> his/her self.

Unfortunately, self-concept theories in consumer research do not accurately follow Rogers' thought. Instead, most self-concept theorists in consumer psychology only view buying behavior as the maintenance of self. Specifically, most self-concept studies in consumer research are placing too much emphasis on the self-concept/-product-concept congruity paradigm (for extensive review of congruity models, see Sirgy 1982). This focus is incomplete -- more consistent with Rogers' position, consumption should <u>also</u> be viewed as a way people enhance themselves. In fact, most consumption in a prosperous society such as ours may be more for self-enhancement than for self-maintenance. That is, it appears that we are struggling more to meet our "wants" than our "needs." In Levy's (1959, p.117) words, "we move further and further from grubbing for subsistence." However, it would be as wrong to postulate that consumption is the mean to enhance one's self alone, as, it is wrong to postulate that consumption is only to maintain one's self. A better logic, following Rogers' position, is that buying behavior is influenced by <u>both</u> motives.

Self-Enhancement

In order to test the enhancement perspective, a more explicit construct of self-concept is needed. Conceptually, the proposing measure may be considered as the outgrowth of the need for achievement concept ("n Ach"). As reviewed by Landon (1972), the need for achievement was traditionally conceptualized as "competition with a standard of excellence." Essentially, as Landon concluded, "Individuals with a high n Ach score, in the presence of cues from their environment, will focus attention on the goal and behavior related to goal attainment." Accordingly, in order to operationalize self-enhancement, the self-concept is conceptualized in the manner parallel to that of the n Ach concept. In other words, behavior is also viewed as the consumer's attempt to equalize his/her actual-self with that of his/her ideal-self.

A similar concept--"self-actualization" has been coined by Hamm and Cundiff (1969). In their paper, the relationship between self-actualization and product perception was investigated. The findings generally support their major hypothesis that consumers with different levels of self-actualization will have different product perceptions. It should be noted, however, that Hamm and Cundiff use a Q-sort technique (i.e., subjects describe self-concept by products) whereas the current study measures self-concept by using adjectives.

Hypotheses

Parallel to the propositions provided by Rogers' self-theory and consistent with the general perspective of self-theorists in consumer research, the following fundamental hypothesis is formulated:

(H1) Ideal-self and actual-self are related to ideal-product.

Although this proposition is generally well supported by past self-concept research, it is nevertheless included here for completeness -- that is, to retest the self-maintenance aspect of Rogers' ideology.

The main objective of this study is to point out that self-enhancement is also an important dimension of self-concept theories. Therefore, in light of Rogers' ideology, the central hypothesis of this study is that:

(H2) Product preference is related to self-enhancement.

This position, as discussed above, is well supported by the personality theory and is the focal inquiry of this study.

Methodology

Data Collection

The respondents for this study were undergraduate business students at a southern university in the United States. The self-administered questionnaires were distributed during the regular class periods. Out of the 70 sets of questionnaires distributed, 65 sets are usable. The usable sample consists of 34 males and 31 females with more than 90 percents in the upper-level classes. Although the use of convenient sample will limit the generalizability of the finding somewhat; following the position of Calder et al. (1981), the author beliefs the sample is valid for the primary concern of this "basic" study. In other words, because the nature of this study is what Calder et al. termed "theory application" rather than "effects application."

Self-Concept & Product-Concept Measurement

The instrument consists of four separate sections. The first three sections are devoted to the measurement of actual-self, ideal-self, and ideal-product concepts respectively. The last section consists of questions concerning personal and classification data. Seven-point semantic scale was adopted for concepts measurement. In particular, the scale items used to measure the two types of self-concepts and to measure the product-concepts were the final 15 scale items developed by Malhotra (1981). The scales were judged to be appropriate because they are the result of a very thorough validation. Like Malhotra's (1981) study, and in light of the nature of the respondents, the product selected for this study is also automobile.

Operationalization of Enhancement & Preference

As discussed previously, self-enhancement is conceptualized in the manner parallel to that of the n Ach concept. Accordingly, for this study, self-enhancement was operationalized as absolute difference, scale by scale, between respondent's ideal self-concepts and his/her perceived actual self-concepts. That is, following the mathematical representation in self-concept literature, the proposed measure can be represented as:

$$\left| IS_{ij} - AS_{ij} \right|$$

where IS_{ij} = ideal self-concept (i) of individual (j),

AS_{ij} = actual self-concept (i) of individual (j).

The operationalization of product preference is quite similar to that of self-enhancement. It was operationalized as absolute difference between respondent's ideal product-concepts and his/her actual self-concepts. That is, consistent with the self-enhancement measure, "product-concept" was assessed as the discrepancy between what a consumer "would like to have" (i.e., ideal product-concept) and his/her present state (i.e., actual self-concept). As mentioned previously, the product selected for this study is automobile. The construct of product preference can be represented as:

$$\left| IP_{ij} - AS_{ij} \right|$$

where IP_{ij} = ideal product-concept (i) of individual (j).

It should be pointed out that the above absolute-difference models should be considered as the most basic form for measuring the proposed self-enhancement and product preference. Future research should also try out other variations of the model. For example, alternate functions of the proposed concept could very well parallel to those of self-concept/product-concept congruity model suggested by the traditionalists. Some of these models, as reviewed by Sirgy (1982), are difference-squared models, simple-difference models, Euclidean-distance models, and so on.

Data Analysis

In light of the nature of this study, canonical correlation technique was adopted to analyze the data. The technique was deemed appropriate because this study consists of both multiple dependent and multiple independent variables. In addition, the hypotheses testing involves evaluating relationship between the two sets of variables (see, for example, Alpert and Peterson 1972, p.187; Hair et al. 1979, p.181).

Results and Discussion

Three separate canonical analyses were conducted in this study. The first two analyses were geared at the testing of Hypothesis 1 by relating ideal product-concepts with actual self-concepts and with ideal self-concepts respectively. The third analysis was devoted to the testing of Hypothesis 2 by relating the product preference (absolute difference between ideal product-concept and actual self-concept) with self-enhancement (absolute difference between ideal self-concept and actual self-concept). For all three analyses, the multivariate test statistics (Wilks' Lambda) are significant at well below .05 level. Therefore, at the overall level, all relationship derived from the analyses can be meaningfully interpreted. The results of these analyses are reported and discussed next.

TABLE 1
CANONICAL ANALYSIS
IDEAL PRODUCT WITH ACTUAL SELF-CONCEPT

Variables	Canonical Weights		
	1	2	3
IDEAL PRODUCT-CONCEPTS:			
rugged-delicate	-.0318	-.0944	-.0770
excitable-calm	-.0904	.2795	-.3709
uncomfortable-comfortable	-.0658	-.3591	.1319
dominating-submissive	.1658	-.0763	.0355
thrifty-indulgent	-.0500	-.2145	-.3321
pleasant-unpleasant	.2175	.1406	.3765
contemporary-noncontemporary	-.4500	.2491	.0497
organized-unorganized	.0437	.0455	.2780
rational-emotional	.1218	.2994	-.1244
youthful-mature	.3058	-.2970	.0651
formal-informal	-.0885	-.3601	-.6636
orthodox-liberal	.6016	.5477	-.0171
complex-simple	.5498	-.1633	-.1125
colorless-colorful	.0444	.2820	.4135
modest-vain	.3166	-.5568	.5364
ACTUAL SELF-CONCEPTS:			
rugged-delicate	.5490	-.1482	-.3018
excitable-calm	.1297	.5757	-.0986
uncomfortable-comfortable	-.1789	.0555	-.0619
dominating-submissive	.0892	-.2474	-.1247
thrifty-indulgent	.1335	-.4592	-.1127
pleasant-unpleasant	.5297	-.2972	.0648
contemporary-noncontemporary	-.4323	.2865	-.3970
organized-unorganized	.2652	.1477	.7816
rational-emotional	-.3857	.7047	-.1326
youthful-mature	-.0283	-.3511	.1874
formal-informal	.0630	-.4337	-.5109
orthodox-liberal	.5376	.7345	-.0867
complex-simple	.2373	.0263	.3869
colorless-colorful	.1563	-.2429	.5934
modest-vain	.2067	.0798	-.1610
Canonical Correlation	.8577	.7923	.7502
Canonical R-Squared	.7356	.6278	.5628
F Statistic	1.4526	1.2748	1.1626
Prob > F	.0006	.0231	.1210

Testing of Hypothesis 1

Table 1 summarizes the canonical analysis of the fifteen ideal product-concepts with the fifteen actual self-concepts. Only the statistics that relate to the first three roots are included in the table. Based on the canonical correlation values along with their respective statistics, we can conclude that, as a whole, the ideal product-concept is related to actual self-concept structure. As shown in the table, the first two canonical correlation indices are significant at .0006 and .0231 level respectively. A closer examination of canonical weights of the first root between the two sets of concepts, scale by scale, indicates a somewhat weaker relationship. That is, only a few "high-loading" weights matched. A couple of concepts that show high loading on both ideal product-concept and actual self-concept are "orthodox -- liberal" and "contemporary -- noncontemporary." Nevertheless, we can conclude that a significant degree of "congruity" does

exist between ideal product-concept and actual self-concept. Due to the purpose of the study and the space constraint, detail interpretation of the relationship between the profiles will not be given.

TABLE 2
CANONICAL ANALYSIS
IDEAL PRODUCT WITH IDEAL SELF-CONCEPT

Variables	Canonical Weights		
	1	2	3
IDEAL PRODUCT-CONCEPTS:			
rugged-delicate	.0369	.2456	.0601
excitable-calm	-.3011	.4057	-.0414
uncomfortable-comfortable	.0115	-.0878	.1486
dominating-submissive	.0744	.1210	.4844
thrifty-indulgent	-.2083	.2136	-.5263
pleasant-unpleasant	.3237	-.0682	.1336
contemporary-noncontemporary	-.3605	.0228	.4751
organized-unorganized	-.1569	.0298	.1705
rational-emotional	-.0442	-.0672	-.5630
youthful-mature	.3683	-.4070	-.1031
formal-informal	-.3907	-.0057	-.2551
orthodox-liberal	.4094	.6351	-.0320
complex-simple	.0313	.3840	.1147
colorless-colorful	.2616	.0440	.1402
modest-vain	.3473	-.1784	.2540
IDEAL SELF-CONCEPTS:			
rugged-delicate	.1516	.3627	-.4233
excitable-calm	-.0493	.2268	.0246
uncomfortable-comfortable	.1924	.3157	.4280
dominating-submissive	.0420	.0797	.1855
thrifty-indulgent	-.2552	.1567	.1911
pleasant-unpleasant	.3116	.7402	.4058
contemporary-noncontemporary	-.3957	-.0567	.2407
organized-unorganized	.0070	-.5173	.1343
rational-emotional	-.1383	.1212	-.5495
youthful-mature	.3968	-.2653	-.4094
formal-informal	-.2680	.0586	-.3170
orthodox-liberal	.4674	.2287	.1802
complex-simple	.0399	.1836	.0548
colorless-colorful	.2913	-.1521	.3586
modest-vain	-.1806	.1191	.2491
Canonical Correlation	.8752	.8140	.7185
Canonical R-Squared	.7659	.6627	.5162
F Statistic	1.3498	1.1271	0.9666
Prob > F	.0048	.1626	.5953

Table 2 shows the result of canonical analysis of ideal product-concepts with ideal self-concepts. For this analysis, only the first root is significant with canonical correlation equal to .8752. As a result, at the outset, we can conclude that the ideal product-concept is generally related to ideal self-concept. A closer examination, scale by scale, indicates some similarity to that of Table 1. In this analysis, the pairs of concepts that show high-loading on both profiles are also "orthodox-liberal" and "contemporary-noncontemporary."

Based on the result of the first two canonical analyses above, Hypothesis 1 is accepted. The conclusion, consistent with the general perspective of the contemporary self-theorists, is that ideal-self and actual-self are related to ideal-product. To put it differently, the finding is agreeable with those of the congruity modelists in that consumer behavior could be viewed as the attempt to maintain or express one's self.

Testing of Hypothesis 2

Table 3 shows the canonical analysis of actual and ideal-product deviance with actual and ideal-self deviance. As discussed previously, the construct actual/ideal product deviance represents the profile of the "need" for product. The predictor set (i.e., actual/ideal self deviance), as discussed in detail earlier, is the operationalization of self-enhancement. As we can readily see from the result provided in Table 3, the relationship between the two profiles is stronger than those of the previous two analyses (Table 1 & 2). In this analysis, the total of three canonical roots are significant. Their correlation values are: 0.8950, 0.8667, and 0.7618 respectively. Therefore, we can generally conclude that product preference is related to self-enhancement.

TABLE 3
CANONICAL ANALYSIS
ACTUAL/IDEAL PRODUCT DEVIATION
WITH ACTUAL/IDEAL SELF DEVIATION

Variables	Canonical Weights		
	1	2	3
ACTUAL/IDEAL PRODUCT DEVIATION:			
rugged-delicate	.1398	.9605	.1017
excitable-calm	.1158	-.2615	-.1026
uncomfortable-comfortable	.5119	.0368	-.7084
dominating-submissive	.1055	-.2026	-.1712
thrifty-indulgent	-.0297	-.0732	-.1554
pleasant-unpleasant	.2394	.4337	.4362
contemporary-noncontemporary	-.2174	.0399	-.3557
organized-unorganized	.3171	-.5722	.3547
rational-emotional	-.0476	.2386	-.0323
youthful-mature	-.1974	.0855	.2022
formal-informal	.2146	-.1864	-.5122
orthodox-liberal	.2511	.6531	.2748
complex-simple	.0702	.2985	-.0962
colorless-colorful	.1693	-.4329	.5347
modest-vain	.0473	.1344	.2999
ACTUAL/IDEAL SELF DEVIATION:			
rugged-delicate	-.0735	-.0607	-.2947
excitable-calm	-.1374	-.1139	.6673
uncomfortable-comfortable	.5977	.0999	-.9271
dominating-submissive	.1301	-.0690	.0893
thrifty-indulgent	-.1825	.1275	.1398
pleasant-unpleasant	.1227	.3232	.0225
contemporary-noncontemporary	-.2074	-.2282	-.3216
organized-unorganized	.4985	-.6490	.3236
rational-emotional	-.2456	.2797	-.0279
youthful-mature	-.1185	.0299	.0201
formal-informal	.2458	.0291	-.4600
orthodox-liberal	.0046	.4047	.4800
complex-simple	.3640	.3417	.2837
colorless-colorful	.1495	-.0677	.1693
modest-vain	-.0625	.2941	.2333
Canonical Correlation	.8950	.8667	.7618
Canonical R-Squared	.8010	.7512	.5804
F Statistic	1.8266	1.5729	1.3368
Prob > F	.0000	.0001	.0120

However, the information provided by the canonical correlation values alone is inadequate for any accurate testing of the relationship posited in Hypothesis 2. More rigorously, the test of Hypothesis 2 should be conducted through the item for item examination of canonical weights between the two profiles. These weights are also summarized in Table 3. As can be seen, for

the first canonical root derived, two items have high loadings and at the same time match across profiles. These items are "uncomfortable-comfortable" and "organized-unorganized." The other two significant roots summarized in the table also show some degree of correspondence as well. Accordingly, Hypothesis 2 is also accepted. In particular, we conclude that product preference is related to self-enhancement. That is, as the result suggested, there is also a pattern of congruity between consumer preference and the need for self-enhancement.

In general, the empirical evidences support Rogers' ideology in its totality. The result clearly pointed out that the partial adoption of self-theory by contemporary self-concept theorists is, in fact, improper. Appropriately, consumer behavior should not be viewed only as self-maintenance but should be viewed as self-enhancement as well. In other words, the implication of Rogers' proposition is clear, behavior is both to maintain and to enhance self.

Conclusions and Implications

According to Sirgy (1982), the self-concept research is still in its infancy. His critical review suggests that the area is pretty much "fragmented, incoherent, and highly diffuse." Few would disagree--it is true that the adoption of self-theory by many consumer researchers has been relatively unruly. In fact, this is the typical flaw of personality research in consumer behavior area where personality variables were linked to behavior and no clear relationship was found. That is, as the review by Kassarjian (1971) and Kassarjian and Sheffet (1981) revealed, the number of studies that found strong relationship is pretty much balanced out by the no-relationship ones. This was suggested to be the result of invalid application of measuring instrument adopted from Psychology.

Concerning the self-concept research in particular, as our literature review suggested, the flaw is also at the application of theory itself. That is, the self-concept theorists seemed to have neglected a very important dimension of Rogerian self -- self-enhancement. This shortcoming has been empirically demonstrated in this study. Therefore, as the evidences suggested, it may be more fruitful to reexamine our interpretation of the self-theory and hopefully come up with a more potent self-concept/product-concept theory for consumer research. As can be implied from the study result, enhancement is another dimension that should be explicitly incorporated into self-concept theories.

For future research, it would be interesting to compare the relative salient of the two motives. The logic may be that if one's actual self-concept is close to or equal to one's ideal self-concept, the person is more likely to maintain than to enhance (through his/her consumption). On the contrary, if one's actual-self is vastly different from one's ideal-self, the person is more likely to enhance than to maintain his/her actual-self. In addition, it is intriguing to also focus on variables such as: product types, culture, socio-economic, social involvement, and so on as covariates in future studies. Knowledge about the roles of these variables in self-theories will be beneficial to self-concept scholars as well as to the practitioners.

In a sense, Sirgy (1982) is probably right to conclude that the self-concept research is still in its infancy. Although a large amount of research has been carried out by consumer researchers in this area, the research development has been relatively unruly. And even worse, as pointed out by this study, our adoption of self-theory has been less than accurate--the self-concept research was largely atheoretical and is continuing in pretty much the same fashion. It is not until recently that some consumer researchers started to theorize the concept (see, e.g., Schenk and Holman 1980, Sirgy 1982). These theoretical undertakings should be welcomed. However, until we can come up with a more appropriate and agreeable conceptualization, any testing of the theories recently suggested will not be meaningful.

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PRODUCT DISPOSSESSION: A CONCEPTUAL APPROACH

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Abstract

Long neglected, the field of product disposal is gaining recognition. The need for conceptual clarification is immediate if the area is to merit further inclusion in the literature on consumer behavior. The concepts of dispossession and its velocity are developed within the context of overall consumption activity. Exploratory research provides empirical evidence of the ideas presented.

Introduction

A household has been likened to a physical input-output system that allocates energy to six general areas of activity: work, play, mental and spiritual development, acquisition, consumption/usage, and dispossession (Burke, Conn, and Lutz 1978). Typically the realm of consumer behavior, and therefore marketing, has been viewed as restricted to acquisition, usage, and dispossession. These three activities, together, form a type of chain that depicts overall consumption.

Recently, growing concern has been expressed (Hanson 1980; Jacoby, Berning, and Dietvorst 1977) about the dearth of research on the various facets of consumer disposal behavior. Consumer behavior literature, rather, has appeared to focus on acquisition and usage behavior. While understanding acquisition and usage behavior is indeed an important step in understanding overall consumption, it is only part of the picture. A thorough investigation and understanding of disposal behavior is paramount to a complete understanding of the entire consumption process.

Admittedly few in number, the studies that have been undertaken in the area of product disposal have also suffered from being limited in scope. Primary attention appears to focus on the disposal of nondurable goods. Various researchers (Hollander 1978; Rathje and Hughes 1978; Wallendorf and Reilly 1983) have utilized analyses of the physical remains of consumption activity to track overall consumption patterns. This approach, which at times has incorporated searches through garbage cans as a research methodology, has proven enlightening with respect to understanding the consumption patterns of primarily nondurable items, albeit somewhat distasteful for the researchers.

Other research focusing on product disposal has focused on its effects on the environment (Rathje, Harrison, Hughes, and Jernigon 1976; Rathje and Hughes 1978; Zigmund and Stanton 1971). This vein of research has been primarily concerned with the effects of product disposal from a normative perspective, questioning the societal impact of the behavior.

While existing research represents an important beginning to a complete understanding of product disposal and thus overall consumption activity, there are a number of issues that continue to require attention. Careful definition and delineation of the multiple concepts involved is, most logically, the place to begin. It appears that currently, however, the issue of what product disposal is and its role in overall consumption remains unclear.

Definition and Delineation of Product Disposal Concepts

While the consumer behavior discipline has been lean in research on the topic of product disposal, there also appears to be a lack of rigor in the usage and delineation of the concept. The issue may have gone beyond the point of mere semantics, to a position where clarity of meaning is at stake.

Jacoby and his associates (1977) spearheaded thinking on the taxonomic development of the area of product disposal by presenting a taxonomy for describing consumer "disposition" (their word) behavior. They list the three main components of disposition as:

1. keep the product;
2. permanently dispose of it; and
3. temporarily dispose of it.

This taxonomic formulation suggests that Jacoby and his colleagues include consumption/usage (as reflected by category 1 as part of what they call disposition. Others have followed the same tack. DeBell and Dardis (1979) consider disposition (of disposed appliances) to cover categories of: dealer removal; gave away; used elsewhere in the home; sold; donated; and traded in. All of these refer to outright disposal with the exception of "used elsewhere," which really belongs in the category of goods that continue to provide utility to the household. Burke, Conn, and Lutz (1978) also tend to lump storage along with outright disposal decisions. In their investigation, with the sole exception of storage of product, all the disposition decision options were oriented to getting rid of the item permanently--namely, discard it; sell it; donate the item to charity; give it to a friend or to a relative; and trade it in on a newer model.

In retrospect, these researchers, as well as Hanson (1980) seem to have used the term disposition to cover both outright disposal and cases of continued usage. At other times, however, they have employed the term disposition to mean outright disposal. Consequently, disposition has not always been delineated to encompass product usage; rather, it appears to be specified as a separate (though related) activity. For example, Jacoby (1976) defines consumer behavior as the "acquisition, consumption, and disposition of goods, services, time and ideas by decision-

making units." In a similar vein, Hanson (1980) has identified the three domains of consumer behaviors as: (1) acquisition, (2) consumption, and (3) disposition. He has presented a paradigm of disposition in the development of which he has reviewed and integrated concepts from acquisition and consumption that may "aid" in the understanding of disposition processes.

In summary, it would appear that confusion has resulted from using the term disposition variously to refer to either the whole of post-acquisition household decision making or only a part of it, i.e., disposal.

Another problem presents itself. The idea has crept into the literature that products that are rented or loaned out (Jacoby 1976) or even stored (Burke, Conn, and Lutz 1978) are disposed of. This would present the paradox that the item is still on the household inventory and presumably produces utility, but at the same time is considered disposed of.

Yet another difficulty arises when disposal is linked automatically to replacement. Thus, disposal has been defined as "the action taken by the owner when he decides to replace an appliance, regardless of the motive" (DeBell and Dardis 1979, p. 384). Product disposal does not necessarily have to be contingent upon replacement; indeed, as indicated later in this paper, this symmetry of decisions is not always the case.

With a view to sharpening future research of product end-processes, it would be well to reserve the term disposition to refer to post-acquisition activities of: (a) keeping the product (either by way of usage, storage, or other temporary disengagement such as rental or loan); and (b) permanent disposal with no thought of recouping the item. Further, in order to minimize indiscriminate identification of the term disposition with outright disposal, the term dispossession is suggested here to cover the latter. To dispossess literally means to put out of possession. Thus, a commodity that is dispossessed is that which no longer in any way adds to the total utility of the household. Conversely, if a product or service contributes to aggregate household satisfaction, it is still part of the household and has not been dispossessed.

Dispossession

In the dispossession mode, households dispose of inventories of products that have been at least partly consumed or that are no longer required. This activity takes several forms, ranging from the process of bequeathal and gift to other households or organizations, to outright sale or discarding of product as unusable waste. Obviously, products that are waste for one household may still be capable of generating utility for other persons. Thus, a cascade of demotion assigns products from one household to another until inevitably the item becomes completely unusable and is trashed.

Dispossession is not an empty or trivial function. From the household's point of view it brings its own feedback and reward in the shape of different modes of monetary, space, alternative form, and even psychic utility. It would be easy to minimize the role of dispossession. Compared, for example, to the commonly recognized utility generated through acquisition and usage, it might be tempting to look upon dispossession as solely a residual effect. This view would certainly be justified if the dispossession process of the household were entirely automatic in the sense that some fixed proportion of inventory is got rid of in any time period. Many physical energy systems are of this kind. The fact remains, however, that decisions to dispose of products need not be the simple reverse images of the original decisions to acquire them. Dispossession has a logic of its own.

The Velocity of Dispossession

Dispossession decisions naturally engage the household in determination not only of what to dispossess but also at what rates. The velocity of dispossession (Vd) is the rate at which goods are disposed of and services discontinued. Obviously, different products have different rates of dispossession. A family may turn over its main automobile every three years, but its "good china" (at a twentieth of the cost of a car) may last the entire life of the household and will then probably fall into the heirloom category. Dispossession rates will also vary depending on the household's stage in the life cycle, as well as on the pertinent demographic factors. In the first few years of the new household's existence, the greater part of consumption has to do with maintenance goods--food, clothing, fuel, etc.--from which there is a fairly recognizable waste.

As mentioned earlier, past studies of product disposal have focused primarily on these types of products (i.e., nondurables). The concept of velocity, however, expands focus to the disposal of all products acquired. Dispossession is inevitable; it is only its varying rate that distinguishes products. For example, during the household's early years, durables are being acquired and consumed. Gradually, some of the durables also begin to wear out and have to be replaced.

Clearly, then, different products have differing rates of dispossession, and, in turn, within each product category the rates will no doubt differ among consumer segments. There will be some quite pronounced effects on marketing strategy. Firms will be considered passive followers of the household disposal processes if they merely utilize their knowledge of existing dispossession rates to update and strengthen their marketing strategies. They could, on the other hand, be considered active agents for change if their promotional activities actually result in changes in the velocity of dispossession. Very little marketing effort seems to be directed at changing Vd rates directly, though if manufacturers really do build obsolescence into certain products, there may be some case for revising this view.

The Problem of Measurement

If we are to progress to quantification of dispossession velocities it is important to specify operational definitions. Macrodispossession rates present a somewhat intractable problem. Gross rates are available in the reported rates of auto scrappage and hulk collection, for example, but for most if not all other durables household scrappage rates are an unknown quantity due primarily to the absence of official registration data. If one scraps an automobile the act becomes an official statistic, but this is not true for any other durable, to our knowledge. This field of measurement is practically untouched.

For microsegments (including the household itself), recourse will have to be made to the evolving, new operational definitions in primary and exploratory research. Some of this work will open new fields. We have, for example, a great deal of information and expertise concerning consumers' intentions to buy particular durables, but very little on peoples' intentions to hold, particularly for big-ticket items like homes and automobiles. To measure these, new scales have to be devised. Furthermore, if intended dispossession was the simple motivational or attitudinal obverse of intended acquisition, there would be no problem, but this may be so for very few commodities outside the maintenance category. Differences in rates of intended dispossession will signal pronounced future changes in household and national inventories.

To anticipate these rates of intended dispossession, an appropriate measure of anticipated Vd will be an attitudinal measure based on stated intentions of consumers to hold particular commodities. An additional measure will be required for analysis of actual dispossession. Vd may be defined in this case as the rate at which the product is dispossessed by the household during a specified time period, e.g., one year; then, for repetitive purchases, Vd will be represented by the simple frequency of dispossession in the stated time period. For large durables and less frequently purchased items, the rate will be represented by a fractional quantity on a yearly basis. For example, a consumer who anticipates holding a product for ten years and then dispossessing of it would be represented by an anticipated annualized velocity of dispossession of .10. A consumer who did, in fact, dispose of a product in ten years would be represented by an actual annualized velocity of dispossession of .10.

An Exploratory Attempt to Measure Velocity

Recognizing the measurement problems delineated, an exploratory effort to measure the velocity of dispossession using the processes described above was undertaken. The objective of the empirical undertaking was to assess the velocity of dispossession for different products.

Methodology

The data were collected by means of personal interviews conducted in a major southern California metropolitan area. By design, the total sample of 258 subjects was comprised of women actively engaged in homemaking. Generally accepted randomization processes were used throughout. The majority (60%) lived in single-family residences, and the remainder in apartments or condominiums. The sample was almost evenly split between renters and owners.

The questionnaire solicited information on three durables--food processor, vacuum cleaner, and automobile--the respective products being components of the consumer's kitchen, household cleaning, and transportation inventories. The food processor was selected as indicative of a relatively "new" durable available to the consumer, as contrasted with an old standby like the vacuum cleaner. The interview contained a series of questions for each product; specifically:

- -- Whether the respondent currently owned the product;
- -- How it had been acquired;
- -- Its price (if purchased);
- -- Reasons why it was purchased;
- -- How long the respondent thought she would keep the item;
- -- Whether the respondent had previously owned the product, and if so, how it was acquired, its price, whether she still had it and the reasons for retaining it, how long she had kept it, and how and why it had been disposed of;
- -- The respondent's overall attitude to the product in terms of its disposability, obtained by means of a semantic differential listing of product attributes.

Findings

Persons owning the product previously were considered to constitute that segment of the sample that had had the potential for making actual dispossession decisions. A total of 322 possible, and 256 actual, dispossession decisions resulted:

	Food Processor	Vacuum Cleaner	Auto
Potential dispossession decision (#)	13	123	186
Actual dispossession decisions made (#)	9	88	159
Actual as percentage of potential	69	72	86

Persons currently owning the product were considered to constitute the segment of the sample that could accurately anticipate a dispossession decision.

	Food Processor	Vacuum Cleaner	Auto
Presently owned (number/percent)	86/33	205/79	230/89

The anticipated as well as the actual dispossession velocities have been computed and listed in Table 1.

TABLE 1
DISPOSSESSION VELOCITIES
(ACTUAL AND ANTICIPATED)

	Annualized Velocity				
	.05 or less	.051 to .10	.101 to .20	.201 to .333	.334 to 1.0
	(Reported in Percentages)				
Food Processor					
Anticipated	15	39	37	4	5
Actual	0	0	20	30	50
Vacuum Cleaner					
Anticipated	11	41	28	8	12
Actual	3	28	38	18	13
Auto					
Anticipated	2	25	39	19	15
Actual	0	9	20	36	35

In most instances, consumers expect to keep a food processor, a vacuum cleaner, or an automobile for 5 to 10 years before disposing of it. On the other hand, particularly in the cases of food processors and automobiles, actual dispossession occurred in a much shorter period of time (generally 1 to 5 years).

The exploratory findings suggest that consumers may think they will own something longer than they actually will in many instances. This finding would have implications for product design as well as promotional strategies.

Summary and Conclusions

In this paper a detailed attempt has been made to position the consumer dispossession function in the total household management process. It was shown that the term disposition has been used in consumer behavior literature to denote some generalized area of household decision making (usually consisting of consumption and disposal), and at other times to refer only to the particular subset of outright disposal activity. To eliminate confusion and help establish a more secure terminology for future research, the term dispossession was offered to be used solely for irreversible disposal activity, leaving the term disposition for use with the broader area of post-acquisition household decision making generally. Further, the concept of dispossession was based on the traditional theory of utility. The utility approach has helped obviate some of the difficulties of classification of product end-processes that have beset other studies.

A beginning has been made on providing operational statements and measures of the main quantity involved, which is Vd, the velocity of dispossession, both actual and anticipated. The work has fitted well into a continuing effort to fill the blanks in the methodological base that should lie behind a complete and general theory of consumer behavior. In this regard, viewing the household as a throughput (input-output) mechanism may prove to be helpful in putting the various flows of goods and services into perspective. The work begun here, with its emphasis on the product inventory decision that households make, may get us closer to this generality.

Dispossession decision making has been largely ignored in the literature, partly because the decisions at the other end of the consumption chain, i.e., to acquire a product, seem so much more positive and fruitful, and partly because of the notion that decisions to dispossess are simply a mirror image behaviorally of the original decisions to acquire. We have tried to establish that this is not so and that dispossession is a behavioral set in its own right.

Much remains to be done to put flesh on the bones of dispossession theory. Future research will undoubtedly propose more sophisticated measures of velocity. Choice of mode and stated rationale for dispossession behavior need investigation. Considerable efforts must be directed at understanding the factors (acquisitional? product perception? demographics?) that account for variance in dispossession velocities.

This paper is meant as an invitation to others to begin attacking this important consumer behavior area in an effort to better understand it. The exploratory research reported here is meant to suggest that the concept does in fact offer sufficient merit to pursue investigation.

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HOW DOES VARIETY SEEKING AFFECT PRODUCT USAGE?

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ABSTRACT

An experiment was conducted to determine if consumers purchased products with many more functions than they actually used, and if so why. It was found that, in the case of calculators, the higher the variety seeking drive of the consumer, the higher his level of anticipated usage of functions in the future, and hence higher the number of functions purchased. It was also found that the actual number of functions used by a consumer relative to the total number of functions available in a product increased rapidly for a short time following purchase, and then stabilized. Further, the disconfirmation with product usage was found to decrease over the life of the product. The implications for future research have also been discussed.

INTRODUCTION

It has been observed that consumers spend significantly more time and effort as "consumers" (ie on consumption of a product after purchase), than as "buyers" (ie on pre-purchase activities). Yet, most research has been directed towards their pre-purchase and purchase activities (Belk, 1984). Post-purchase consumption phenomena, such as the extent or degree of product usage, and the search for information on newer or more efficient uses of the product, are equally important in understanding consumption behavior, but have received little attention from researchers. The study of consumption activities after purchase is of particular importance due to the proliferation of "multi-functional" products which provide consumers with a much greater variety in usage. Typical "multi-functional" products include the personal computer, the video casette recorder (VCR) and the microwave oven. By using a combination of the multiple functions available in each of these products, consumers are able to find newer uses for the product over and above their day-to-day needs.

In general, since consumers are highly involved (ie spend a large amount of time and effort) in purchasing these multi-functional products, one would expect that they use the multiple functions at least to the extent which their needs are satisfied. Yet, we often observe that once the initial charm of the new product wanes, they are less willing to spend time or effort in learning how to use the newer functions available in the product. This raises an interesting question:

Do consumers utilize most of the functions/features available in products or do they use only a small portion of those features?

This in turn raises several issues: By providing more and more sophisticated product features which consumers rarely use, are marketers wasting resources and creating social waste? Why do consumers buy sophisticated products paying more for additional features they will not need for their routine usage? What proportion of the available functions in a product do they actually use for routine task requirements? Are there significant differences between consumers who use more functions of a product and others who do not? How does a consumer's current product usage and skill levels in using the product relate to his future anticipated usage?

Product Usage And Its Determinants

A consumer's degree of product usage is dependent upon his task requirements for solving his problems. While tasks can result from their situational disposition, new tasks could be created by the consumers themselves. The degree of usage of the multi-functional products can be divided into the frequency of usage and multi-functional usage. The frequency of usage (FU) is more likely to be related to just individual task requirements. The degree of multi-functional usage or Variety of Usage (VU), on the other hand, is dependent not only on task requirements, but also on the level of operational skill of the consumer, and on the consumer's Variety Seeking need (Hirschman, 1980).

However, past researchers have consistently looked at only the frequency of usage and have neglected Variety of Usage (Zaichkowsky, 1985) when measuring product usage. Even in the context of variety seeking, product usage has been measured in this limited fashion (Price & Ridgway, 1983).

The objective of this research is to examine the link between this variety seeking drive of consumers with their consumption/usage of multi-functional products, taking into account situational differences and consumer input differences which could also affect usage.

Variety Seeking in Consumption: Broadening the Concept

Past literature has classified variety-seeking behavior into three types: (1) Exploratory Purchase Behavior (2) Vicarious Exploration and (3) Use Innovativeness (Hoyer & Ridgway, 1984; Price & Ridgway, 1983). Whereas the

first two components refer to variety seeking in purchase, use innovativeness refers to variety seeking in consumption. Most studies have focused on exploratory purchase behavior (for example, McAlister, 1982, Raju & Venkatesan, 1980), and this stream of research has examined brand-switching and innovating behavior. Vicarious exploration refers to variety-seeking by acquiring information about the product without actually purchasing it (Hirschman, 1980; Raju, 1980).

In this study, we will focus on the third construct: use innovativeness. The concept of use innovativeness was first developed by Hirschman (Hirschman, 1980). According to Hirschman, when a consumer used a previously adopted product to solve a novel consumption problem, that consumer was being use innovative. Price & Ridgway expanded the concept from a single new use of a previously adopted product to multiple new uses (Price & Ridgway, 1983). They also established use innovativeness as being distinct from exploratory purchase and vicarious exploration (Price & Ridgway, 1983).

The domain of Variety Seeking in Consumption (VSC) has unfortunately been restricted to current usage of the product in new or novel ways. Part of this problem has come about from using the term "innovativeness" (in Use Innovativeness) to denote variety seeking. Innovativeness refers to the actual act rather than just the willingness to adopt (Rogers & Shoemaker, 1971; Midgley & Dowling, 1978). Variety Seeking, on the other hand can be in the form of vicarious experience or even just a mental exploration of possible new uses of the product. Innovativeness is related to the notion of relative precedence to others in adopting a product (Rogers, 1962). However, a consumer seeking variety need not be one of the earliest to use the product in new or unusual ways. He could well observe how someone else is using the product and decide to "imitate". By using the term innovativeness, we tend to limit ourselves to newer uses of the product in the present time frame. Yet, variety seeking could also be in the form of anticipated usage, ie new ways in which the consumer expects to use the product in the future. For example, consumers who purchase a personal computer may do so not only because of the new uses of the PC they can immediately enjoy but also because of the new uses available to them in the future (such as trying new software). In this sense, a product has stored variety-seeking value for the customer for future consumption. The domain of VSC, therefore, needs to be expanded beyond past and current usage of the product (in new ways) to include anticipated usage.

Variety Seeking in Multi-functional Products

In products with fewer functions/features (generally non-durable goods), consumers are able to satisfy their variety seeking drive by switching brands and/or product classes quite easily. The replacement rate of the product is high, and risks involved in the trial of newer substitutes are low.

However, in products with multiple functions/features (typically durables and semi-durables), consumers go through a more elaborate variety- seeking process commencing even before purchase (See **Figure A**). A consumer faced with several stimuli (such as multiple functions/features of the product) attempts to obtain more information about available substitutes. He makes his choice based on both his task requirements and his need for variety.

Going one step further, the consumer considers not only his present task-requirements and variety-seeking need, but also caters to his future task needs and variety needs. Thus, the pre-purchase evaluation (Stage A) is based on both current requirements and future expectations. Following the actual purchase of the product, the consumer learns the basic functions required for his routine tasks (Stage B). This learning process takes place in a very short period following the purchase, and the consumer improves his skills in using the learnt functions with task repetition. The consumer may also seek variety by learning to use newer functions any time after the purchase (Stage C), and the exact timing of this stage depends on the consumer's use innovativeness (Hoyer & Ridgway, 1984). For highly use innovative consumers, Stage C may begin simultaneously with Stage B (learning task functions); for those consumers with low use innovativeness Stage C may start much later than Stage B. In any case, after the short initial learning period, consumers seek a lower and lower proportion of total available functions to satisfy their variety seeking. This variety-seeking process discontinues when the product provides stimulation below the optimal level for the consumer, who then begins the search for a more viable product substitute (Stage D).

The foregoing discussion of VSC leads to the following hypotheses regarding multi-functional products.

Hypothesis 1

The higher the use innovativeness of a consumer, the more likely he is to:
(a) purchase a product with higher number of functions;
(b) have a higher percentage of in-use functions (current usage);
(c) have an operating knowledge of a higher percentage of functions;
(d) anticipate using a higher percentage of functions in the future (anticipated usage);
(e) find more new uses for the product.

Hypothesis 2

The actual number of functions used by a consumer relative to the total number functions available in a product, increases rapidly for a short time period following purchase after which it increases very slowly and stabilizes.

We already observed that, in the case of a multi-functional product , the consumer learns most uses of the product in a short initial period following the purchase. A consumer's expectations about product usage (number of functions used) also vary with time. Due to the rapid learning process in the early stages, the consumer expects to learn at the same pace and use a very high number of functions over time. However, the rate of learning declines and does not keep pace with consumer expectation. Hence, the actual usage lags behind usage expectations.

Hypothesis 3

Disconfirmation with product usage is lower in the earlier periods following purchase than in the later periods.

METHODOLOGY

The multi-functional product used in the experiment was the electronic calculator. 284 undergraduate students were used as subjects. Sixteen of these subjects were dropped from the analysis either because they did not own a calculator or because they did not complete the experiment. The experiment was conducted in two stages. In time period 1, the subjects were given a questionnaire that contained the following sections:

1) A 44-item Use Innovativeness Scale developed by Price & Ridgway (1983)
2) Measures for product usage (copy of questionnaire available on request)

They were asked to fill the questionnaires without referring to their calculators.

An attempt was made to improve the measures for variety seeking as follows:

(1) Not only were the number of functions purchased and the number of in-use functions measured but also the number of would-be-used functions (anticipated usage).

(2) The time period for which calculators had been owned was determined, so that individual differences in variety seeking could be compared controlling for period of ownership.

(3) Respondents were not asked how often they tried new things on their calculator or how long they used it (Price & Ridgway, 1983); instead, they were asked for the actual number and type of new uses to which they put their calculators.

(4) Respondents were also measured on the number of functions that they could operate over and above task requirements since this would be linked to their variety seeking drive.

When the respondents had completed the questionnaires, they were asked to bring their calculator at time period 2 to help complete the experiment.

In time period 2 (a few days later), the subjects were given a questionnaire that contained only measures on variety seeking. The respondents were asked to refer to their calculators and answer the questions. This was intended to give respondents an "objective" way of providing information on calculator usage patterns. This would also provide a way of checking for differences, if any, between this method and the self-reporting method used in time period 1 (when respondents could not refer to their calculators).

RESULTS

The Use Innovativeness Scale developed by Price & Ridgway (1983) was found to be quite reliable. The reliability of the scale items was estimated for each of the dimensions of use innovativeness (See Appendix 1). Except for Risk Preferences and Multiple Use Potential, the Cronbach's alpha was highly comparable to that obtained by Price & Ridgway (1983). A factor analysis was conducted to estimate the dimensionality of Use Innovativeness. Four factors emerged as significant, and Appendix 1 provides a comparison with the structure obtained by Price & Ridgway (1983).

Hypothesis 1

Hypothesis 1 was supported in full. The Scale developed by Price & Ridgway (1983) was used to measure the Use Innovativeness of the subjects. A summary of the results is shown on the next page.

Hence, Variety Seeking in Consumption (VSC) was shown to be related to not only current usage but also anticipated usage.

It was also found that no significant differences existed between the reports made by the subjects with and without looking at their calculators. For example, they reported using currently 75% of their calculator functions (looking at the calculator) versus 76% current usage (without looking at the calculator).

Hypothesis 2

It was found that people who had owned their calculators for 3 months had learned about 69% of the total functions on the keyboard. While those who had owned it for more than 3 months (up to 70 months), knew about 76% of the total functions. These two groups were significantly different in their operational knowledge ($t = 2.23$; $p < 0.03$).

This provides evidence to support that consumers go through a rapid learning process soon after purchase, but this declines rapidly and stabilizes. Consumers also seem to buy a much higher number of functions than they actually use.

PRODUCT USAGE ASPECTS

Aspect of Usage	Mean	Correl. with U.I.	Stat. sig.
1. No. of function keys purchased	35.9	.14	p<.05
2. No. of keys used	26.9	.15	p<.01
3. No. of keys known to operate	27.6	.13	p<.05
4. No. of keys expected to use in future	6.7	.10	p<.10
5. No. of uses to which calculator was put	2.4	.19	p<.01
6. No. of times manual was referred to	6.1	.14	p<.05

GROUP DIFFERENCES ON ASPECTS OF PRODUCT USAGE

Aspect of Usage	U.I. groups low	medium	high	F value	Stat. sig.
1.	33.4	34.8	39.4	3.1	p<.05
2.	23.8	26.7	30.2	4.5	p<.05
3.	25.0	27.8	30.0	3.2	p<.05
4.	6.0	6.9	7.2	0.3	**
5.	2.2	2.2	2.8	8.2	p<.01
6.	5.6	4.3	8.3	3.3	p<.05

** : statistically insignificant

Hypothesis 3

All subjects were asked whether they currently used less functions than expected. In other words, the subjects' disconfirmation in product usage (the difference between perceived expectation and actual usage) was measured.

The subjects were then divided into two groups: people who had owned their calculators for three months or less (Group 1) and people who had owned their calculators for more than three months (Group 2). (Three months was used for the cut-off since it was established that beyond this point, very little consumer learning took place).

Since the subjects were considered homogeneous in all respects for the purpose of analysis, the disconfirmation levels of Group 1 and Group 2 were treated as representative of the change in disconfirmation of subjects over time. It was found that the disconfirmation level of Group 1 was significantly lower than that of Group 2 ($t = 2.28$; $p < 0.03$). In other words, the subject had a lower level of disconfirmation in product usage during the early period following purchase (ie. first three months), and this increased significantly thereafter.

DISCUSSION

The Use Innovativeness Scale needs some modification. As can be seen, while the dimensionality of the factor structure is quite similar to that obtained by Price & Ridgway (1983), the Creative Reuse items loaded on the Creativity/Curiosity factor than on the Voluntary simplicity factor. Also, some of the Creativity items loaded on the Risk preference factor. This seems to conform with the suggestion of Price & Ridgway (1983) that perhaps Creativity is a major general factor and several smaller second-order factors exist. The Multiple-Use potential factor continued to perform poorly, with the lowest item-total correlations and coefficient alpha (0.44), and will have to be revised.

The Operationalization of consumer's expectation of both product performance and product usage was not feasible in a cross-sectional study of this kind. Consumer expectation varies over time, and hence needs to be measured at different points in time using a longitudinal study.

Replication of the study needs to be done across several sophisticated multi-functional products (such as microwave ovens, personal computers, stereo systems) to verify if disconfirmation in usage increases over time, and if consumer learning peaks early and tapers off subsequently.

It needs to be established, across several multi-functional products, whether consumers consistently buy more functions than they use, and if this type of purchase provides intrinsic satisfaction. It is also important to assess whether consumer needs change during the ownership period since this may affect the consumption and satisfaction. The marketer then needs to weigh the social cost of providing the consumer more and more functions against the consumer's psychological cost of dissatisfaction from not obtaining product value in the form of "expected usage".

Past research has looked predominantly at Variety Seeking in the Purchase Context. Research in Variety Seeking in Consumption offers excellent promise, especially because the consumption- satisfaction link can be explored in the context of variety seeking.

APPENDIX 1

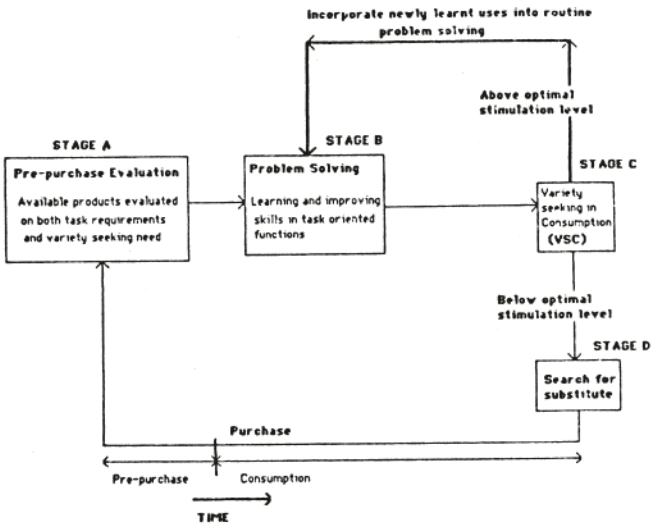
Comparison of Cronbach's alpha for UI Scale Items

UI dimensions	Price/Ridgway(1983)	Current Study
Creativity/Curiosity	0.86	0.85
Risk Preference	0.70	0.59
Voluntary Simplicity	0.64	0.63
Creative Re-use	0.82	0.80
Multiple Use Potential	0.56	0.42
Total Scale	0.91	0.90

Comparison of Factor Structure Obtained

	Factor 1	Factor 2	Factor 3	Factor 4
Price & Ridgway (1983)	Creativity/ Curiosity	Risk Preference	Voluntary Simplicity/ Creative Reuse	Multiple Use Potential
Current Study	Creativity/ Curiosity/ Creative Reuse	Risk Pref./ Creativity	Voluntary Simplicity	Multiple Use Potential

Figure A
Product Usage and Variety Seeking
in Multi-Functional Products



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A LONGITUDINAL STUDY OF THE STRUCTURE OF BELIEFS IN SOCIAL MARKETING: A CROSS COMPARISON OF YOUTH ATTITUDES TOWARDS ALCOHOL, TOBACCO, AND MARIJUANA IN CANADA

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Abstract

In the past decade, the Canadian Government has become increasingly involved in social marketing in the health area. Programs advocating the responsible use/nonuse of alcohol, tobacco, and marijuana target key youth segments. Recently, the authors explored the belief structures held by young people towards these drugs. Hypothetical models of the beliefs were developed to explain the patterns and nature of their evolution. This led the authors to conclude that social ideas may have a life cycle which should be viewed from a consumer perspective first. Some strategic implications are discussed.

Introduction

Much has been written on consumer behavior in the context of social marketing (Kotler and Zaltman 1971, Rothschild 1979, Ajzen and Fishbein 1980, Kotler 1982, Sheth and Frazier 1982, Hudson and Bloom 1985). Most marketers agree that it is not easy motivating people to take actions which they do not necessarily want to do. The social behavior advocated often creates much frustration and self-denial, being unpleasant and requiring permanent change to be effective (Lovelock and Weinberg 1984).

Despite the many challenges (Bloom and Novelli 1981), the Canadian government has successfully implemented marketing programs promoting family planning, energy conservation, physical fitness, anti-smoking and prevention of alcohol and drug abuse, to name a few (Ahmed 1984).

The purpose of this paper is **not** to examine the effectiveness of such social programs. Rather, the main objective is to explain the internal structure and evolution of beliefs over three years concerning the way young Canadians think about alcohol, cigarettes, and marijuana.

Study Background

Health and Welfare Canada has a far reaching mandate, but simply put this ministry encourages Canadians to adopt life-styles consistent with good physical and mental health (Mintz and Garceau 1986). Three major programs aimed at the teen to young adult markets advocate taking action against smoking cigarettes and marijuana, and promote responsible use of alcohol. All programs carefully delineate the target groups with special emphasis on high risk drug users.

Methodology

The researchers had access to the Canadian Gallup Poll data banks for the annual surveys conducted in 1983, 1984 and 1985. In-home interviews were carried out all across Canada using a self-completion questionnaire.

Sample Design

Each year part of the sample was obtained from the Gallup National Omnibus conducted among adults aged 18-29. A complementary survey provided an augment sample of 18-19 year olds as well as the 12-17 age group.

A modified probability sample was used in centers over 1,000 and a quota sample in areas under 1,000. Samples were weighted due to the slight over-representation of 12-17 year olds and differences in age and sex from the census data. The actual sample sizes were 2,212 for 1985, 2,224 for 1984 and 2,131 for 1983.

Data Analysis

Two basic types of statistical analyses were conducted. The first was a principal components analysis using a varimax rotation. The analysis was limited to factors accounting for at least 10% of the total variance. The second technique was a discriminant analysis based on a stepwise selection using minimization of Wilk's Lambda with a F-to-enter and F-to-remove fixed at 2.0. Classification power with estimated prior probabilities was used as an indicator of the effectiveness of each discriminant function.

Level of consumption as measured initially by frequency, was later refined into a three group dependent variable within the discriminant analysis: light, medium, and heavy for alcohol and cigarettes; not at all, occasional, and regular for marijuana.

The principal components and discriminant analyses were performed on two batteries of questions. The first involved statements about general opinions on behaviors related to alcohol, cigarettes, and marijuana. The second set of questions dealt with beliefs concerning the specific effects of using these drugs. The statements analyzed are listed in Table 1.

Although most statements were constant over the three years, a few were added, eliminated or slightly reworded from one year to another. Consequently, we verified the internal consistency of all the dominant factor groupings to make sure that these discrepancies did not significantly affect the results. In addition, a careful examination of the compatibility of the content revealed problems with the scaling which necessitated standardizing the data (5 versus 7 point scales). Based on these steps

TABLE 1
GENERAL OPINION AND SPECIFIC EFFECTS
STATEMENTS ANALYZED

General Opinion Statements

Have/would stop seeing friend using it*
Should/would prevent driving after use*
Have driven after use
Nonuser should insist no use in home
Should not use around young people
Should feel free to use wherever
Have/would help friend to quit*
Should accept if offered to me
* Two separate statements in questionnaires

Specific Effects Statements

Affects reaction time/Slows you down*
Makes it harder to concentrate
Helps nervousness
Makes you part of a group
Makes you feel less shy
Pleasant experiences
Is habit forming
Dangerous to drive car/bike
Increases risk of heart disease
Harms unborn babies
Causes lung cancer

taken, and considering the confidence level calculated by Gallup Poll of over 95%, we are confident that the results can be reliably projected to the parent population under study.

Using an integrative approach developed from the principal components analysis, in conjunction with the discriminant analysis, we constructed a final explanatory model.

Data Interpretation and Modelization

Alcohol Belief Structure Model

Alcohol beliefs and experiences are perceived as a very basic dichotomy, **positive** or **negative.** This creates a perceptual opposition in the consumers' mind. The main conflict pertains to how drinkers deal with issues of social responsibility and social experience (refer to **Table 2**).

TABLE 2
ALCOHOL DISCRIMINANT ANALYSIS

Specific Effects		**General Opinions**	
1- Social Experience		1- Social Responsibility	
2- Types of Negatives		2- Social Behavior	
Classification Power		**Classification Power**	
1983	65.4%	1983	67.1%
1984	63.2%	1984	68.9%
1985	62.3%	1985	63.7%

On the **positive** side, benefits are short-term, classified into two categories: the so-called "health benefits" or social remedy, meaning reduction of shyness, and the "social experience" which is usually pleasant. The three **negative** aspects are: the "short-term effects" such as impaired motor skills and perceptions, the "social unacceptability" of drinking which relates to over-indulgence and irresponsible behavior (driving after drinking), the "long-term effects" of drinking which are of genuine concern only to long time drinkers.

The differences by frequency of consumption stem from how the "positive effects" and the "loss of control" elements are perceived. Light drinkers (61% prior probability) enjoy the social aspects (drinking is pleasant) and agree that it does reduce some social shyness, but a drink is not needed to have a good time. Medium drinkers (33%) have a similar profile but they place somewhat more importance on alcohol as a "social remedy". Heavy drinkers (6%) rely on alcohol to guarantee pleasant social experiences.

Given that heavier drinkers consume more, on more occasions, they have greater likelihood of experiencing short-term negatives. These "loss of control" effects are directly linked to social behaviors (alcohol affects motor skills/perceptions). This factor is also connected with the social unacceptability aspect. The more (amount and frequency) one drinks the more likely others will disapprove (family members, peers, or society). Negative attitudes towards overdrinking seem to change from 1983 to 1985, becoming more pronounced (see **Table 3**).

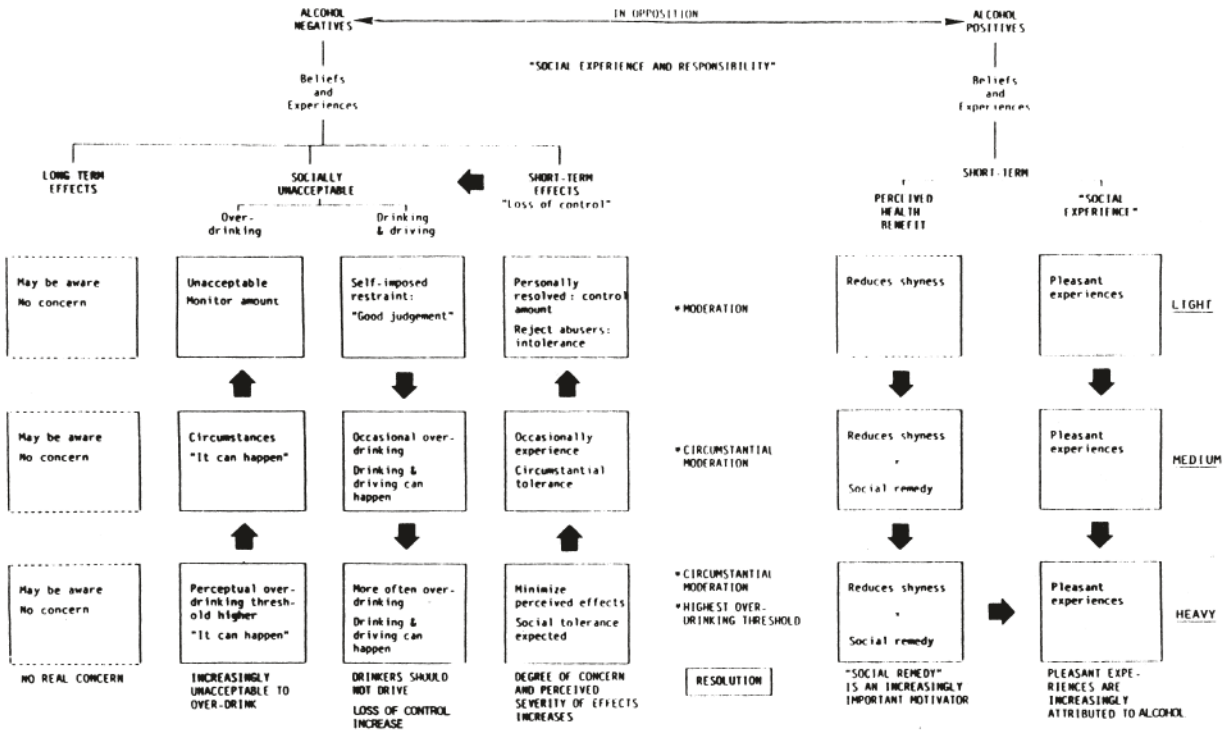
TABLE 3
ALCOHOL PRINCIPAL COMPONENTS ANALYSIS

Factors (Description)	**Variance (%)**		
	1985	1984	1983
Specific Effects			
Short-term negative effects	21.5	21.2	26.1
Social positives - "fit in"	11.3	11.3	12.0
General Opinions			
Behavior towards overdrinkers	25.0	25.4	25.5
Personal moderation	16.1	18.0	12.8
Drinkers' real experiences	13.3	13.7	11.3

The consumers must resolve the internal and external conflicts experienced when drinking alcohol. All groups intrinsically acknowledge **moderation** as the solution but the definition of this concept varies: light drinkers internally and externally adopt a position of moderation, as the frequency and amount of drinking is strictly monitored. There are few internal conflicts. Medium drinkers believe in moderation but are more likely than the lighter segment to overdrink and drive. A sort of circumstantial interpretation of moderation seems to be adopted. Finally, heavier drinkers face more behavioral and attitudinal inconsistencies as their perceptual overdrinking "threshold" is higher. For instance, when lighter users feel that "he has had too much", the heavier drinker probably still feels very much "in control".

From this analysis, one might conclude that the more an individual **needs** to drink in social situations, the more the pleasant social

FIGURE 1
ALCOHOL BELIEF STRUCTURE MODEL



experiences may be attributed to the alcohol. For heavy drinkers, the "social remedy" factor takes on proportionately more importance. Also, the degree of concern and perceived severity of the short-term, loss of control effect **decreases** the more an individual drinks. For a complete summary we refer the reader to **Figure 1**.

Smoking Belief Structure Model

The **positive and negative** aspects of the "social responsibility, behavior, and social norms" of cigarette smoking are in conflict (see **Table 4**).

TABLE 4
SMOKING DISCRIMINANT ANALYSIS

Specific Effects		**General Opinions**	
1- Social Norms		1- Social Behavior	
2- User Experience		2- User Experience	
Classification Power		**Classification Power**	
1983	73.2%	1983	74.0%
1984	71.1%	1984	73.1%
1985	69.1%	1985	73.4%

The **positive** factors are extremely short-term and are defined as: the instant "social normalization" or perceived acceptance by individuals, groups, or society and "health benefits" which are defined differently by amount consumed. Accordingly, nonsmokers see smoking primarily as a "me too" behavior, admit that cigarettes may help people control nerves, but reject it as an appropriate justification.

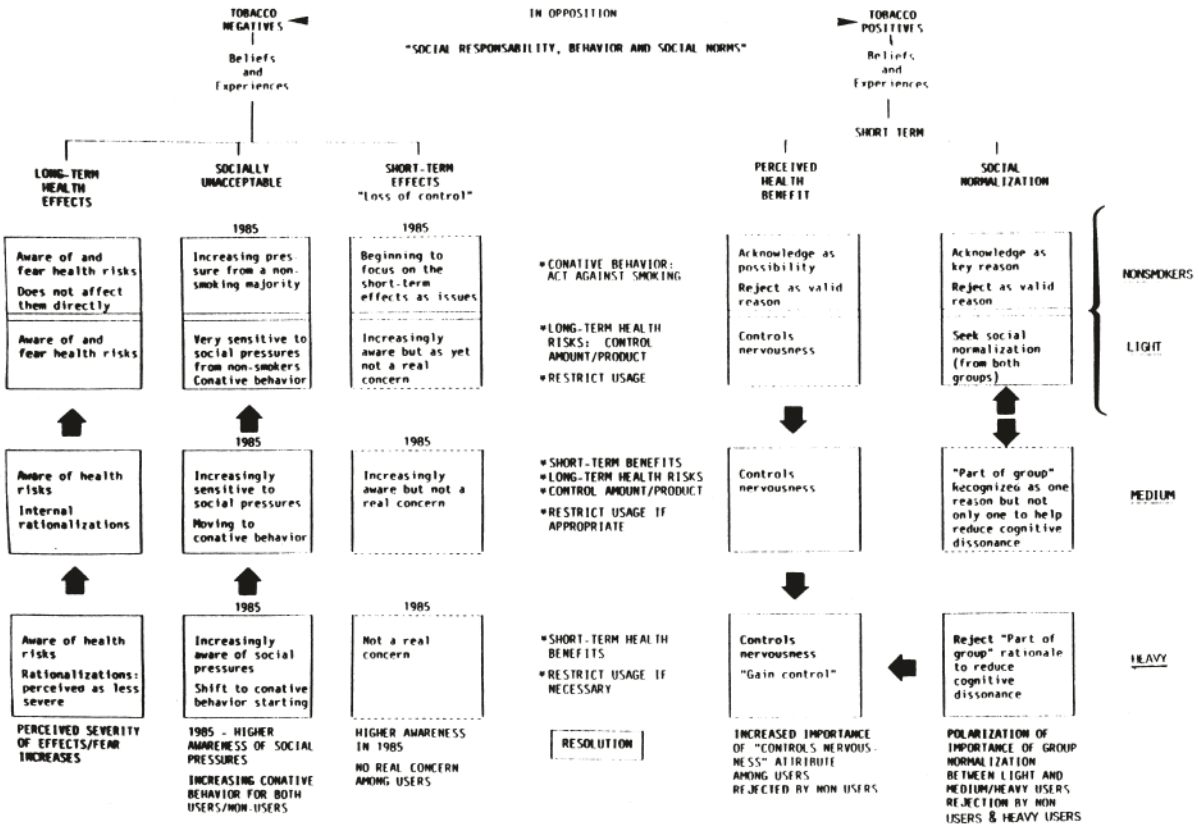
At the other end of the axis, heavy smokers (no more than 4%) reject that they smoke to "be part of a group" and see smoking as a way to "gain control", to ease their nervousness. Light smokers are a unique group as they seek social normalization from both smokers and nonsmokers.

The **negative** factors are both short and long-term. "Long-term health effects" are of key concern to smokers, with lung cancer being the major fear. All smokers are aware of potential risks but there is a sense of immortality, "it couldn't happen to me". "Short-term effects" of smoking include a mix of physical, psychological and social aspects. The problems could include headaches and irritability for smokers, and even nonsmokers due to secondary smoke inhalation.

Also short-term, is the "social unacceptability" of smoking which seems to have increased over the three years analyzed. Nonsmokers are pressuring smokers, suggesting stronger personal and social support of restricting usage (i.e. nonsmoking areas). Refer to **Table 5**.

The way the individual **resolves** the considerable internal and external conflicts varies. The health risks are feared by all and are used to justify the position of nonsmokers (do not smoke, restrict usage of others) and also by light smokers who control the frequency, amount and product smoked. Light users are also willing to restrict usage. In this way they are able to gain (perceived) acceptance from both smokers and nonsmokers. Moderate smokers (prior probability of 26%) are in a middle-of-the-road group using rationalizations and exhibiting

FIGURE 2
SMOKING BELIEF STRUCTURE MODEL



behaviors typical of both extremes to justify their position.

TABLE 5
SMOKING PRINCIPAL COMPONENTS ANALYSIS

Factors (Description)	**Variance (%)**		
	1985	1984	1983
Specific Effects			
Social/physical negatives	17.1	12.2	13.3
Health Negatives: long-term	12.0	16.5	18.8
Medicine: help nerves, shyness	10.0	10.8	10.7
General Opinions			
Social behavior vs smokers	22.6	23.2	18.7
Restricted areas for smokers	14.7	12.1	10.3
Offer cigarettes to nonsmokers	13.4	15.7	----
Support friend: help to quit	11.8	11.1	----

Finally, heavy smokers rely on the "short-term health benefits" to solve the considerable conflicts created by smoking (controls nerves). As social pressures increase the heavier smoker will adopt compromise behaviors in his/her social environment. Figure 2 summarizes the entire belief structure model.

Marijuana Belief Structure Model

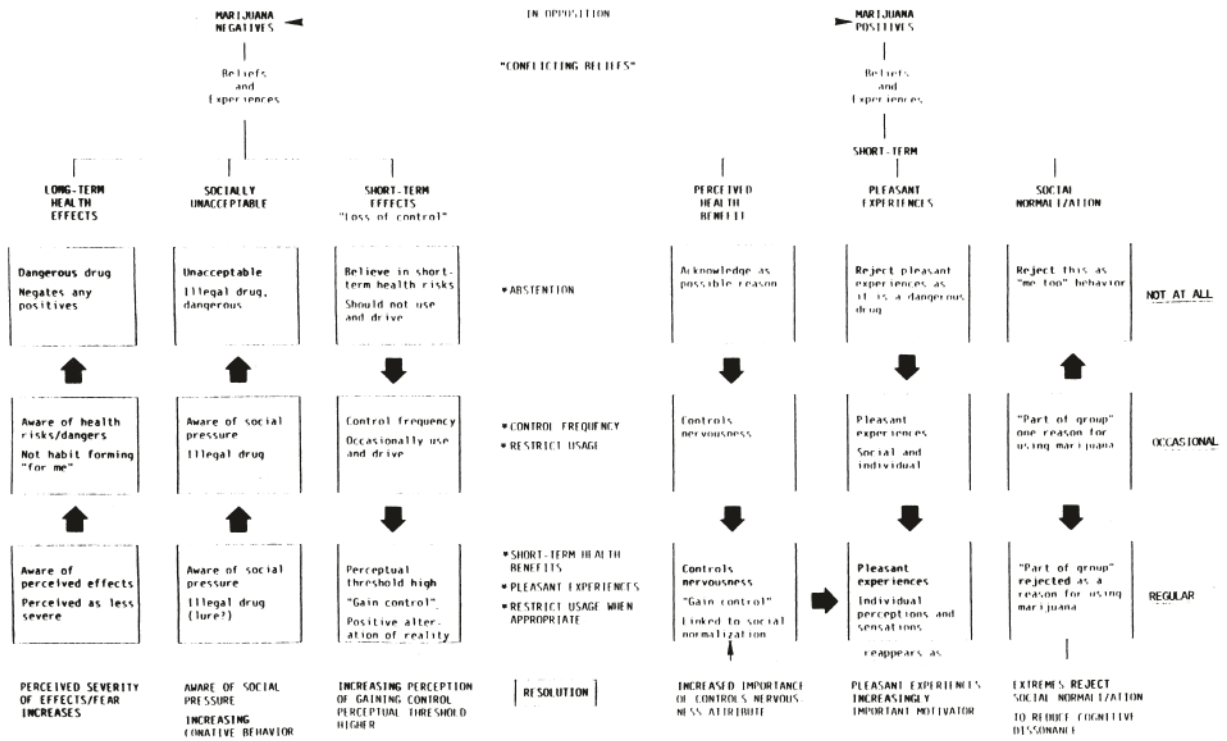
The **positive and negative** beliefs about marijuana are in conflict in the minds of young Canadians. Indeed, the discriminant functions labelled "conflicting beliefs" and "user experiences" have a correct classification rate of 84% to 87% reflecting the controversial, black and white nature of this subject. Moreover, in 1985 and 1984 there were only two main factors that account for over half of the explanatory variance within the general statements (see Table 6).

TABLE 6
MARIJUANA DISCRIMINANT ANALYSIS

Specific Effects	**General Opinions**
1- Conflicting Beliefs	1- Conflicting Beliefs
2- User Experiences	2- Usage Behaviors
Classification Power	**Classification Power**
1983 87.3%	1983 87.6%
1984 84.4%	1984 85.8%
1985 86.0%	1985 85.1%

On the surface, regular (4%) and occasional (12%) users smoke marijuana for the "pleasant experiences". However, they differ in terms of how they justify using an illegal drug. Regular smokers reject the "social normalization" and instead claim that it helps nerves which is a way to gain control. Not unlike heavy drinkers, regular users are more likely to link smoking marijuana with "good times". Occasional users recognize the "physical" positives but are more sensitive to "belonging to a group".

FIGURE 3
MARIJUANA BELIEF STRUCTURE MODEL



The three groups of **negative** are: the long-term health effects which include lung cancer in addition to many other potential hazards, the short-term health effects associated with the loss of control and actual physical and psychological problems, and the "social unacceptability" in terms of disapproval of family, friends, and society (see Table 7).

TABLE 7
MARIJUANA PRINCIPAL COMPONENTS ANALYSIS

Factors (Description)	**Variance (%)**		
	1985	1984	1983
Specific Effects			
Short/long-term negatives	25.4	24.6	29.1
Social/health benefits	12.9	12.7	13.2
General Opinions			
Free to use? opinions on use	33.1	32.4	26.9
Social behaviors: usage aspects	17.5	17.7	12.5

Regular users **resolve** internal conflicts by minimizing the negative aspects and focusing on the short-term positives. The key rationalization seems to be that controlling nervousness allows them to enjoy the pleasant social experiences and physical/psychological sensations. In their minds, the pleasant individual experiences are the most important motivators on a conscious level. And in order to alleviate social pressures against using marijuana, smokers will restrict usage when necessary. Occasional users, more sensitive to the health risks and keenly aware that marijuana is not accepted by a large part of society, solve their conflicts by controlling frequency/occasion of consumption. The findings are summarized in **Figure 1**.

Summary and Conclusions

Based on the belief structure models, we have seen that usage patterns and attitudes studied are very similarly perceived in terms of a basic positive and negative dichotomy. There is a further breakdown by short and long-term health and social issues which have both benefits and negatives. However, each drug has a different emphasis based on its' very nature (legal versus illegal, socially acceptable as a behavior by few, some, or all of society, very harmful health effects through use or misuse, and so on). Consequently, the internal problems encountered by individuals depend on a variety of interrelated factors such as amount and frequency of use, the perceived severity of the negative consequences (health and social), and the trade-off between all the benefits and problems. Finally, the degree of individual self-esteem or worth seems to play a very important role, because much use/misuse of these drugs seems to be related to social conformity.

Interestingly, the "beliefs" have evolved over the three years as there were shifts for alcohol and cigarettes but none for marijuana. For instance, in 1985 there was more pressure from a nonsmoking majority and more willingness on the part of smokers to restrict usage. Safer use of alcohol seems to be more acceptable in 1985 as consumers may be realizing that drinking

and driving do not mix. This does not mean that it is a permanent change however.

On this basis, we hypothesize that increased acceptance of these ideas may follow a life cycle, and that the behaviors are in different stages of growth. We are not the first to suggest that product life cycle can be adapted to the evolution of social ideas and causes. Cameron (1966) proposes that once a cause takes hold it has a life cycle with no set pattern. Kotler (1971) explains that causes go through growth stages called crusading, popular cause, managerial, and bureaucratic. Finally, Crompton and Bonk (1978) suggest that product life cycle can be useful to nonprofit organizations.

Although social change involves the individual, government, business, and social trends, we suggest that life cycle should be viewed from the consumer perspective **first.** Consequently, assuming that a marketing strategy must be tailored to fit the specific characteristics of each stage, tracking the evolution of consumer beliefs is essential. In fact, the focus on "evolving beliefs" is very similar to the position of Tellis and Crawford (1981) who propose a "Product Evolutionary Life Cycle".

Referring back to the belief structure models, smoking seems to have reached a stage where behavior is shifting, people are quitting, smoking is no longer the norm or "in" thing to do. Information is aimed at the values of individuals in terms of personal freedom rather than using "fear appeals" often used to begin raising consciousness. Personal and social pressures manifest themselves in the form of restricting smoking at home, in the restaurants, or in the workplace. In the case of alcohol, social marketers are trying to promote responsible actions like safe driving or drinking in moderation. Individuals must accept a definition of moderation that is socially responsible. The phase of the alcohol life cycle seems to be that specific behaviors are becoming real issues and effective programs use fear appeals on a social rather than individual level, not unlike the approach taken for smoking some years ago. Finally, marijuana seems to be in the early growth stages where usage is becoming a public issue. In this case, marketers are very careful not to provoke curiosity about the drug and information techniques used are often low key, which is a major difference from the strategies taken for drinking and smoking.

The analysis was very descriptive in nature. As in any research there are some shortcomings. We would have liked to examine the primary target groups separately, yet we were forced to consider the 12-29 year olds as a group. As we worked with a pre-established data base, there was no control on questionnaire content and structure which indeed limited the depth/type of analysis. Lastly, a longitudinal analysis of only three years makes it difficult to identify any trends with great accuracy. Despite these limitations, we feel that the evolution of internal beliefs merits further research, as there is much to learn about the "idea life cycle".

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A COMPARISON OF THE ATTITUDES TOWARDS AND USE OF DIRECT MARKETING CHANNELS BY BLACKS AND WHITES

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Abstract

Direct marketing channels usually create more types of risk for buyers. In this study the concentration is on the difference in the willingness of blacks and whites to assume the greater perceived risk connected with the use of direct market channels.

The findings seem to indicate that Blacks are less likely to use direct marketing channels than Whites but there is no significant difference between the attitude of these two groups towards the use of direct marketing channels and the frequency of use of this type of channel.

Introduction

The concept of perceived risk has been a topic in the consumer behavior literature since 1960 when the term was used by Bauer (1960). Bauer claimed that much of consumer behavior involved the risk of unpleasant consequences which are difficult to anticipate (1970). Besides the risks connected with all purchases, buying by mail or telephone creates several other perceived risks such nonreceipt of the product, misleading advertising, or the inability to get satisfaction if something is wrong with the product. Thus, if the traditional buying process produces perceived risks, using direct marketing channels usually creates more perceived risk.

Since the use of direct marketing channels usually creates more types of risk in the mind of the buyer than traditional channels of distribution, it will be assumed that most consumers perceive the use of direct marketing channels to be more risky than the use of traditional channels. One author concluded that persons who bought products by mail or over the telephone perceived the risk in using these channels of distribution to be low (Gillett 1976). Peter Gillett in a study of in-home shoppers found them to be of a higher socioeconomic class than the rest of the population. Unfortunately Gillete included in-home in-person buying through catalogs (direct selling) and in-person purchases from the catalog department in a retail store (1976). Cox and Rich concluded that perceived risk is an inhibitor to consumer use of direct marketing channels. Specifically, the study was of female users and nonusers of telephone ordering services for local department and specialty stores (1964). It is the contention of the authors that ordering from local stores, whose personnel can be dealt with face-to-face and from whom a remedy can be obtained with the assistance of such local resources as the local better business bureau and local small claims court, is not as risky as dealing with a firm by telephone or by mail in another state or a distant location within the same state. Also, the environment which exists today is very different than it was in 1964. People are better educated, the percentage of married women who work is larger, people are more affluent, and communications have improved substantially, among other factors.

Cunningham and Cunningham concluded that total active home shoppers had a higher total family income than inactive home shoppers (1973). The study was also limited to women shoppers. This maybe a weakness of any study which only include females.

Reynolds concluded that catalog buyers express more confidence, have a higher family income, are younger, and are more venturesome than buyers that do not use this type of distribution (1974). The respondents were all female. Mailorder catalog buyers and females may have different attitudes toward the use of direct marketing channels of distribution than users of noncatalog direct marketing channels and males.

According to Census bureau statistics, a greater percentage of blacks as compared to whites had family incomes below $10,000 in 1981 (38.3% to 14.7%) and had a lower percentage of families with incomes of $25,000 and over (23.1% to 46.5%) (Harrell 1986).

Blacks tend to be less educated than whites. 43.7% of blacks 25 and over had less than a high school education in 1983, while 26.7% of whites had less than a high school education. Only 21.7% of the blacks 25 and over had some college education in 1983, while 36.8% of whites 25 and over had some college education (Harrell 1986).

In 1983, over half of the black families had only one parent living with the family. On the other hand, less than 20% of white families had only one parent living at home. A greater percentage of blacks tended to be employed in blue collar occupations. 63% of the blacks were employed in blue collar and service occupations, while 44% of whites were employed in blue collar and service occupations in 1983 (Harrell, 1986). Thus, blacks tend to be of a lower social class as a group. Pierre Martineau found that the lower social class was interested in security, while the middle class was willing to take risks (1958). Thus, one would expect that blacks would not tend to want to incur the risks involved with purchasing goods by mail or over the telephone.

In this study we are looking at the perceived risk factor in direct marketing as it relates to black consumers. Black culture here refers to that group of Afro-Americans who number 28,609,000, which is 12.1% of the total popula-

tion of the United States (Hoffman 1986). Often this subculture is equated with the lower income groups; a factor which has changed significantly during the past 30 years.

Literature Review

In several studies, it was found that choice processes of blacks and whites do not show dramatic differences except where circumstances (such as non-availability of quality retail offerings) create or cause differences. Basically, the black consumer is a practical and economical shopper first and foremost and "black" second (Evans 1968).

Black subculture is no longer conforming to previously defined characteristics. An important element is that culture is learned. An important point is that culture is reflected in values which play a fundamental role in guiding consumer behavior within a society.

The overall findings seem to indicate that blacks react like their white counterparts socially, economically and in other areas. The perception of these risk differs among consumers based in part on the past experience and the lifestyle of the consumer. Thus, perceived risk is considered a consumer characteristic rather than a product characteristic. This is particularly true in how social risks associated with a purchase are viewed by consumers in different social classes (Hisrich 1972). Blacks, for example, were originally considered to be a distinct and important consuming subculture. Recent evidence indicated fewer important product consumption differences between blacks and whites.

Hypotheses

Donald Sexton (1972) concluded that much black buyer behavior is due to an individual's income rather than race. That is, much behavior which is associated with black subculture is due to the relatively low income and low social class of most blacks (Harrell 1986).

According to Feldman and Star (1968), blacks are less likely to shop by phone or by mail. If this difference is based upon black subculture rather than some other characteristic that blacks have more or less of than the rest of the community, there should be no other factor that predisposes one group of blacks from being willing to use direct marketing channels than another group of blacks. The factors that will be tested here are income, age, both husband and wife work, education, and occupational status (blue collar, white collar and retired). Thus, the hypotheses that were tested are:

H1: A person's use of direct marketing channels is independent of the individual's race.

H2: A person's attitude toward the use of direct marketing channels in general is independent of an individual's race.

Methodology and Results

Questionnaire. A questionnaire was used to determine peoples' attitudes towards and their experiences with direct marketing channels. It is not the intention to discuss, or report on all aspects of the project. Only those aspects of the project connected with the relationship between race and the willingness of a person to purchase goods through direct marketing channels and the relationship between race and a person's attitude toward direct marketing will be discussed in this paper. A respondent's willingness to use direct marketing channels was assessed by asking him/her; "Have you purchased any products through the mail or by telephone from companies located outside your metropolitan area in the past 2 years?" The reason that the phrase "outside of your metropolitan area" was included in the question was that it was felt that buying from Sears or J. C. Penney by mail in areas where these firm's operate was not risky because of the ability to return the products purchased to the local catalog department. Respondents were also asked how many times a month, on the average, they use direct marketing channels to purchase products. Respondents were also asked to associate a word or a phrase with purchasing products by mail or by phone. The latter was included in order to determine the respondent's attitude toward direct marketing.

Survey. A survey of 217 persons 18 and over was conducted in three shopping centers in the South Hampton Roads, Virginia area. Each shopping center was selected from its customer profile. The first shopping center is a large upscale shopping center whose clientele has an above average level of household income, education and occupation. A second shopping center who's clientele is average to below average in family income, below average in the level of education, and below average in occupational level. The third shopping center has a clientele whose family income is average to above average, whose level of education is above average, and is above average in occupational level. The clientele of the third shopping center were not as above average as the first shopping center.

Interviews were conducted at each shopping center. The purpose of the overall survey was to determine peoples' attitudes toward utilizing direct marketing channels. The questionnaire was self-administered except for the first question. The first question was a word association question which was interviewer administered to assure that it was answered first. Previous experience has shown that word association questions are answered last even when respondent is instructed to answer it first.

There are certain biases connected with shopping center surveys (Sudman 1980). Since shopping centers are usually frequented by those types of persons living in the area which surrounds the shopping center, the types of persons living in

the area in which the shopping center is located will be overrepresented in the sample. The use of three different shopping centers, each with a different profile should help offset this to some extent. A second type of bias tends to be created by the fact that different groups of people tend to frequent shopping centers at different times. For instance, persons who work during the day tend to shop at night, while people who work at night tend to shop during the day, during lunch hour, on the weekend. The survey was conducted on a weekday afternoon, Friday night, and on Saturday. A third type of shopping center bias can be created if one location within the shopping center is used to conduct a survey. A location near a variety store catering to lower middle class persons will tend to attract a different type of individual than a location near a department store which caters to an upscale clientele. This can be offset by conducting the survey at various locations within the mall. The management of one shopping center required that the interviews be conducted in one location. This location was the busiest in the mall. This bias tended to be offset by conducting the survey in different shopping centers. Another type of bias found in shopping center surveys is connected with the fact that a person who shops in a shopping mall more often has a greater chance of being selected for the survey than a person who less often frequents a shopping center (Akker and Day 1986).

Sample. The sample size for this study was 217 persons. The median family income of the respondents was $24,505; the mean age of the respondents was 32.5 years; the respondents had an average of one child and had a median of about 13 years of formal education. About 64 percent of the sample were white, 33 percent black, and about 3 percent were of other races. About 49 percent of the respondents were female and about 51 percent were male. About 51 percent of the respondents were married, about 44% were single, and about 5% were divorced. About 52% of the respondents who were married came from households where both husband and wife worked and about 48% of the respondents who were married came from households where both marriage partners do not work.

Statistical Results. The chi-square test of independence was used to test the relationship between race and the use of direct marketing channels with the two year period prior to the survey. The test was significant at the 5% level (chi-square = 4.55, with 1 degrees of freedom, and p = 3.28%). 33.8% of the blacks answering the question and 51.2% of the whites answering the question used direct marketing during the two year period prior to the survey. Thus, for the population studied, whether an individual uses direct marketing channels is probably dependent on a person's race.

Another indication of how members of each race utilize direct marketing channels is the average number of times per year that an individual purchases products through direct marketing channels. The chi-square test of independence was used to test the relationship between race and the number of times per year respondents utilized direct marketing channels. The result was not significant at the .05 level (chi-square = .005, 1 degree of freedom, p = 94.4%). Thus, for the population studied, race is probably independent of the number of times a year an individual who utilizes direct marketing channels, uses this type of channel. Of the 60 whites answering the question, 60% used direct marketing channels 2.5 times or less per year, and 40% utilized direct marketing channels 3 or more times per year. Of the 17 blacks answering the question, 64.7% utilized direct marketing channels 2.5 times or less per year, and 35.3% used direct marketing channels 3 or more times per year.

Each of the responses to a word association question was classified as to whether it reflected a positive, neutral, or negative attitude towards the use of direct marketing channels. 32.1% of the 53 black respondents answering the question and 38.5% of the 109 white respondents answering the question had a positive attitude to the use of direct marketing channels, in general. 59.3% of the black respondents answering the question and 55.3% of the white respondents answering the question had a negative attitude toward the use of direct marketing channels, in general. The chi-square test of independence was used to test the relationship between a person's race and his/her attitude towards the use of direct marketing channels in general. The null hypothesis was rejected at the .05 level (chi-square = 2.687, degrees of freedom = 4, and p = .261). Therefore, for the population studied, a person's race and his/her attitude towards the use of direct marketing channels are probably not related.

Another indicator of a person's attitude towards purchasing products through direct marketing channels, is the limit that an individual places on expenditures on products that he/she is willing to spend for products purchased over the telephone or by mail from a firm without an outlet in the metropolitan area that one lives. The chi-square test of independence was used to test the relationship between a person's race and whether an individual generally has a limit on products purchased through direct marketing channels. The test was not significant at the .05 level (chi-square = 1.904, 1 degree of freedom, p = .168). Thus, there probably is no relationship between race and whether or not an individual generally places an expenditure limit on individual purchases through direct marketing channels for the population under study. 71.4% of the black respondents answering the question and 48.5% of the white respondents answering the question had a general limit on the amount of money that they would spend on products purchased through the mail or over the telephone.

The chi-square test of independence was used to test the relationship between race of an individual and the dollar limit one generally places on purchases made through direct marketing channels. The test was not significant at the .05 level (chi-square = .384, 1 degree of freedom, p = 53.5%). Thus, the race of an individual is probably independent of the dollar limit that a person generally places on each purchase made

through direct marketing channels. 53.8% of the black respondents and 39% of the white respondents who reported a dollar limit had a limit of 25 dollars or less. 46% of the black respondents and 61% of the white respondents answering the question had a dollar limit of more than 25 dollars.

Discussion and Conclusions

It should be noted that these results are not generalizable to the population as a whole because all the respondents came from three shopping centers in one metropolitan area. However, they do give a possible indication of what effect race has upon the relationships which were tested in this study.

The results of this study demonstrate that there might be a tendency for black subculture to affect an individual's use of direct marketing channels to purchase products. It also demonstrates that there may be a tendency for black persons and white persons to have a similar attitude toward the use of direct marketing channels.

When it comes to action, the white respondents were significantly more likely to use direct marketing channels than the black respondents. This difference probably is not due to demographic and economic variables. Tests of significant differences of some demographic and economic characteristics between the black respondents and the white respondents were all not significant. The variables tested were income, education, occupation, whether both husband and wife worked, and age. The results are given in Table 1.

TABLE 1
CHI-SQUARE VALUES FOR DEMOGRAPHIC DATA

Variables	Chi-Square	Degrees of Freedom	p
Income and Race	4.59	3	20.4%
Education and Race	6.16	3	10.4%
Occupation and Race	2.36	5	79.7%
Both Partners Work and Race	.03	1	86.2%
Age and Race	2.29	4	68.2%

None of the above are significant at the .05 level.

What then are possible explanations of this difference in the use of direct marketing channels? Black consumers as a group tend to be brand name conscious, brand loyal, buyer of a relatively disproportionate share of self-indulgence products, and products which are representations of self-esteem (Martin 1985). Direct marketers usually do not sell generally recognizable brand name products. (Of course, there are the discount mailorder name brand discounters for computers etc.) Thus, a group of consumers who are more brand name conscious are less likely to use direct marketing channels. A consumer interested in self-esteem is more likely to be more conscious of the image of the merchants from whom he/she purchases products. Although some mail order merchants have a prestigious image, most do not. Therefore, black consumers, who as a group are more interested in self-esteem than white consumers as a group, are more likely to choose to make their purchases in stores rather than buying products through the mail or over the telephone. As pointed out above, purchasing products through the mail or over the telephone from an organization without an office in the metropolitan area in which one lives is, on the average, probably more risky than purchasing products in a store. Since less secure and less self-confident persons are less likely to be willing to take unnecessary risk, black consumers as a group are probably less likely to be willing to use the more risky direct marketing channel.

Limitations and Future Research. Since this study is not conclusive, a field study should be performed to verify the results. Also research on the effect of self-confidence and security on a person's willingness to use direct marketing channels should be performed. There is also a need to do more research on the effects of mitigating variables which might exist and which might lead to a conclusion that subculture is a cause of certain types of consumer behavior. Since many of the studies on black subculture are old, more replication studies need to be performed on the topic of black subculture.

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NORMS VERSES EXPECTATIONS IN EXPLAINING CONSUMER SATISFACTION

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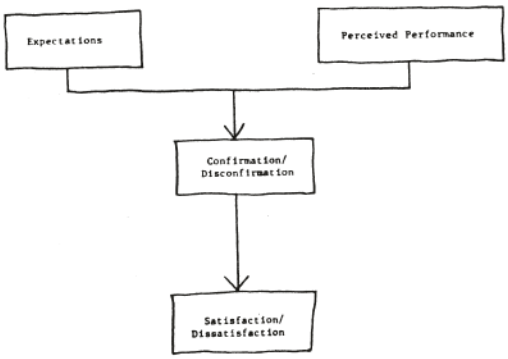
INTRODUCTION

In recent years, consumer behavior and marketing researchers have shown an increasing interest in research that exp;ains the consumer satisfaction process. The focal point of this research has been the disconfirmation paradigm (**Figure One**) (Churchill and Suprenant, 1982; Oliver, 1981; Swan, 1977). In this paradigm, the consumer brings into the pruchas process a prediction of future brand/product performance (expectation). After using the brand/product, the consumer uses the expectation as a standard of comparison in comparing perceived performance with the expectation. The expectation is confirmed or disconfirmed. Confirmation occurs when the perceived performance level of the brand/product matches the level of the expectation. It can be thought of as a point between degrees of positive and negative disconfirmation. When the perceived performance level of the brand/product does not equal the level of the expectation, disconfirmation occurs. Positive disconfirmation results when the level of perceived performance is greater than the level of performance while negative disconfirmation results when the perceived performance level is lower than the level of expectation (Churchill and Suprenant, 1982; Swan, 1977). Satisfaction results from confirmation or positive disconfirmation while dissatisfaction results from negative disconfirmation (Woodruff, Cadotte and Jenkins, 1983; Oliver, 1982).

Recently, researchers have suggested a modification to the standard of comparison (Woodruff, Cadotte, and Jenkins, 1983). In addition to using expectations, or predication of future performance, consumers use experience based norms as the standard of comparison. This modification is shown in **Figure Two**. Norms can be based upon the consumers experience with the product, brand, brand item or best brand.

Figure One

Disconfirmation of Expections Paradigm



The first objective of this study is to determine if disconfirmation of each of the three types of norms: product, brnad, or best brand can explain levels of consumer satisfaction. Secondly if disconfirmation of the norms explain consumer satisfaction which standard of comparison best explains the variance in levels of consumerr satisfaction. The third objective of this study is to determine whether disconfirmation of norms or disconfirmations are better explainers of consumer satisfaction.

Current Research

Much evidence has been presented by researchers showing and existence of a disconfirmation of expectations and satisfaction (Churchill and Surprentant, 1982; Oliver, 1981; Swan, 1977). However, correlations have been in the low to moderate range.

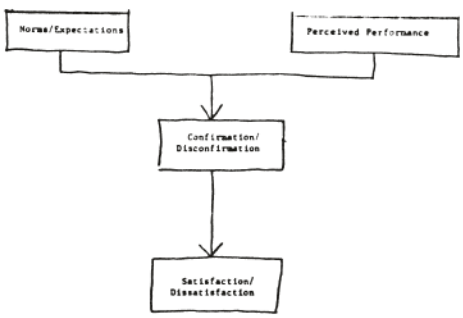
There have been conceptualizations of the concept of normative standars in the consumer satisfaction process (Cadotte , Woodruff and Jenkins, 1983). Norms are conseptualized as being experience-based standars of performance a product, brand, or competing brands. These standars, which express consumers' beliefs concerning how a product should perform, can be used as the base for comparison in the disconfirmation process. Normative standars involve what a consumer <u>should</u> receive from a purchase. They differ from expectations in that expectations involve what a consumer <u>will</u> receive from a purchase.

LIttle empirical research has been conducted on this issue. Cadotte, Woodruff and Jenkins (1983) found that norms and expectations are part of the satisfaction process.

Further research is needed to verify the existence of norms and expectations. Additional research on the role of norms and expectations in the satisfaction process is indicated.

Figure Two

The Disconformation Paradigm



HYPOTHESES

In order to examine the issues presented in this study, the follwoing five hypotheses were developed. The first objective of this study examines the relationship between disconfirmation of the types of norms/expectations and consumer satisfactions. The first five hypothese examine this relationship.

H1 -- There is a significant positive correlation between disconfirmation of expectations and satisfaction.

H2 -- There is a significant positive correlation between disconfirmation of brand norms and satisfaction.

H3 -- There is a significant positive correlation between disconfirmation or product norm and satisfaction.

H4 -- There is a significant positive correlation between disconfirmation of best brand norms and satisfaction.

The second and third objectives of this study are concerned with determining whether disconfirmation of norms or expectations are better explainers of consumer satisfaction. Also, if there are significant differences in the four disconfirmation measures in explaining the variance in the levels of satisfaction. These objectives will be examined in hypotheses five.

H5 -- The correlations between measure of the four types of disconfirmation measures and satisfaction are significantly different.

Each measure of disconfirmation will be correlated with satisfaction. By deermining if the ocrrelations are significantly different, objective three will be examined. It can be determined if disconfirmation of norms are better explainers of satisfaction than disconfirmation of expectations. It can be also determined disconfirmation of the various norms differ from each other. By rank ordering the correlations, it can be determined which disconfirmation standard is the best explainer of the variance in consumer satisfaction.

RESEARCH DESIGN

Setting

In order for consumers to have experience upon which they could use to form normative standards and expectations, a product or service was needed that would be familiar to potential respondents. A fast-food hamburger type restaurant was selected as the setting for this study. These restaurants have wide appeal and many consumers have experience dining at this type of restaurant. The consumer's experiences are utilized in the formation of norms and expectations. Prior experience with all fast-food restaurants are used to form standars with the product norm. Experiences with the restaurant chain are used to form brand item normative standards. The respondent will be asked to predict performance for the restaurant used in the study. This is the respondent's expectation.

A national fast-food hamburger chain restaurant located in a southeastern city was used as the setting for this study. This restaurant appeared to be extremely busy during periods of observation.

Sample

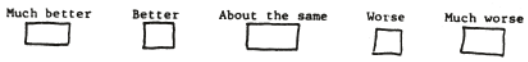
A sample of consumers from the relevant trading area of the restaurant was obtained for this study. Ninety-six residents of the area were utilized as the research sample. Over ninety percent of the sample had dined at a restaurant of the chain utilizedin the study within the three months prior to the study. Therfore, the sample members had sufficient experiences upon which to form norms and expectations.

Measurement of Variables

In this study measures needed to be obtained disconfirmation and satisfaction. Various measures of disconfirmation were obtained. The perceived disconfirmation measures best explained the variance in the levels of satisfaction and therfore will be used in this study.

After dining at the restaurant respondents were asked if their norms or expectations were disconfirmed on a five point equal appearing interval scale. The question for disconfirmation of the best brand norm is:

> Compared to the one fast-food restaurant you liked the best, how did this restaurant rate?



Similar questions were asked for the product morm, brand norm, and expectation. This type of scale has the characteristics of an interval level scale and statistics that assume interval level measurements can be utilized in data analysis (Osgood, Suci, and Tannenbaum, 1957). Satisfaction was also measured on a five point equal appearing interval scale.

STATISTICAL TESTS

Hypotheses one through four attempt to determine whether significant positive correlations exist between the various disconfirmation measures and satisfaction. Pearson's correlation coefficient (r) was used to determine the correlations and the level of significane of the correlations.

Hypothese five attempts to determine if significant differences exist between the correlations. In order to determine if significant differences exits between the various correlations a t-test with n-3 degrees of freedom is utilized. McNemar (1967) gives the following formula for the t-test

$$t = \frac{(r_{ij}-r_{ik})\sqrt{(n-3)(1+r_{jk})}}{\sqrt{2(1-r_{ij}-r_{ik}-r_{jk}+2r_{ij}r_{jk}r_{ik})}}$$

If the t score is significant, it may be concluded that a significant difference exists between the two correlations (r's) (McNemar, 1967).

FINDINGS

The findings for the first four hypotheses are shown in Table One. As indicated, all four disconfirmation measures are shown to be significantly related to satisfaction. Hypotheses One, Two, Three, and Four are accepted. While the relationships are significant, the r squares are in the low to moderate range. These findings are consistent with the existing research base.

Table One also shows the rank ordering of the corrlations. Disconfirmation of the best brand and product norms were the best explainers of the variance in the levels of satisfaction. Disconfirmation of expectations and brand norms were least able to explain the variance in the satisfaction levels.

Table Two shows the significance of the differences between the correlations of the disconfirmations measures with satisfaction. None of the corrlation differences were significant at the .05 or .10 level. However, the differences between brand and norm with obth product norm and best brand norm approach the .10 level. Therefore, it appears hypothesis five is rejected. In a fast food hamburger restaurant situation it appears that statisfaction can be explained more from specific brands or brand items. In a low involvement purchase the standards for the product class may apply since brands or brand items with product class may be perceived to be similar. If the consumer is not satisfied with a particular brand item, they can choose a different alternative with relative ease.

Table Two

Correlations Between Disconfirmation and Satisfaction

Standard of Comparison	N	Pearson's R	R Square	Level of Significance
Best Brand Norm	95	.580	.336	.0001
Product Norm	96	.577	.333	.0001
Expectation	96	.465	.216	.0001
Brand Norm	96	.425	.181	.0001

TABLE THREE: Significance of Differences in the Correlations between Types of Norm/Expectation Measures with Satisfaction

	Best Brand Norm	Brand Norm	Expectation	T Value of Difference in Correlation	Level of Significance
Product Norm	.003			.041	.969
Product Norm		.152		1.632	.112
Product Norm			.112	1.269	.204
Best Brand Norm		.155		1.588	.115
Best Brand Norm			.115	1.259	.209
Brand Norm			.040	.562	.619

None significant at .05 level or better.

Even though none of the differences were significantly different, the fact remains that some of the differences did approac significane. This is an indicaton that this issue should be examined in future studies. In different situations disconfirmation of the various norms/expectations may make a significant difference in the ability to explain satisfaction.

CONCLUSIONS

Additional validation evidence has been provided for the disconfirmation paradigm. Evidence of criterion related validity has been provided that consumers use disconfirmaton of norms in the satisfaction process. In addition to using disconfirmation of expectations in studying satisfactions, researchers should examine disconfirmation of normative standards. Generally, discriminate validity is not indicated between the four disconfirmation measures with satisfaction. Disconfirmation of best brand norm and product norms were the best explainer of norms.

Additional research is indicated for the concept of norms. Evidence for the concept has been provided. A deeper understanding of the concept is needed. As suggested above the use of the appropriate norms may be a function of the similarity of the brands within a product class. Researchers need to determine under which situations consumers utilize norms and when expectations are used. Also when is the disconfirmation of the different norms utilized. Research on normative standars will privide additional insights into the consumer satisfaction process.

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AN EXPLORATORY INVESTIGATION INTO VARYING PATTERNS OF AFFECT

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Abstract

Recently, there has been a considerable amount discussion concerning the role of affect in shaping consumer behavior. This discussion has resulted in a second look at some multiattribute attitude models. This paper investigates the theoretical aspects of a model which suggested consumer affect for a product attribute may vary depending on the amount of the attribute being evaluated.

Introduction

Recently, there has been a considerable amount of debate over the relationship between affect and cognition (Breckler 1984; Lazarus 1984, 1982; Tsal 1985; Zajonc 1984, 1980; Zajonc and Markus 1985, 1982). The traditional view of the multiattribute attitude model holds that before emotions can be experienced a person must first comprehend. Since comprehension requires cognition, cognition must always precede affect (Lazarus 1985, 1982; Tsal 1985). Zajonc (1984, 1980) has countered this view by arguing that while affect and cognition usually act in concert, they also are independent and separable processes. Therefore, there is no reason why affect could not occur before or even without cognition taking place.

Both sides of the debate offer evidence which makes the primacy of affect versus the primacy of cognition moot. Rather than reiterate many of the same arguments the question of the independence of affect will be assumed. Given this assumption, the concept of an affect pattern advanced by Athola (1975) deserves another look since it may hold important theoretical implications.

Background

Athola's (1975) attitude vector model showed promise of providing an improvement over the then existing forms of the Fishbein (1963) and Rosenberg (1956) expectancy-value models for analyzing and predicting consumer brand preferences. The main point of the vector model was that it explicitly recognized that the consumer does not always view, and thus emotionally respond, to the attributes of a product as if they were totalities. Instead, the model postulated that the consumer might view some of the attributes as totalities while viewing others as consisting of some number of component categories. In addition, the model recognized that the consumer's affect for product attribute might depend upon the category of the attribute evaluated.

Athola's (1975) model requires that the consumer's affect for each component category of an attribute be measured. The resulting scores produced what Athola called an "affect curve" which described the relationship between the measured affect and the various component categories of the attribute. Athola (1975) asserted that this curve probably differs among individuals, attributes, and choice situations.

The presence of an affect curve has been suggested by a number of researchers (Anderson 1970; Chaffee and McLeod 1973; Fishbein and Ajzen 1975; Green and Wind 1973). Empirically, Mazis, Athola, and Klippel (1975) found that for some consumers and for some attributes, the consumer's affect might remain constant regardless of category of attribute considered. This affect pattern suggests that no one attribute category is considered to be any better than any other category. Hence, the consumer would be described as evaluating the attribute as a totality.

Mazis, Athola, and Klippel (1975) also suggested that a linearly increasing relationship between affect and attribute amount might exist. This relationship would reflect a feeling of "more is better" about the attribute. The opposite, linearly decreasing or a "less is better" relationship, also might exist.

Information on how a consumer's affect might vary with the amount of the attribute evaluated was provided by Lehmann (1971). He concluded that the consumer always seems to prefer the maximum amount of the attributes included in the study. This indicates a "more is better" feeling which represents an increasing monotonic relationship between affect and attribute amount.

Although the relationship between level of affect and the amount of an attribute evaluated varies in a constant, increasing or decreasing linear, or increasing monotonic pattern, questions concerning what types of affect patterns might be associated with the component parts of a partitioned attribute and how frequently such patterns might occur have not been addressed. The purpose of the present study was to investigate those questions.

Methodology

Pretests

Several pretests were performed before collecting the evaluative judgments necessary for determining the frequency with which different types of affect patterns exist. The subjects used in the pretests were drawn from the student population of a large western university. Drawing samples from the relatively homogeneous student population was deemed appropriate since the present study involved theory testing (Calder, Phillips, and Tybout 1981).

The first pretest was used to identify a set of products that the population had knowledge of corresponding attributes. Eighty subjects evaluated 15 frequently consumed products in terms of how much difference existed between brands within each product class and how much risk of consumption dissatisfaction might result from buying and consuming an unknown brand. These factors were used to evaluate the products because they had previously been shown to be good indicators of a consumer's degree of involvement in purchase decisions (Brock 1977). Of the 15 products, four (beer, shampoo, pain relievers, and deodorant), were identified as being high involvement products for the population and were retained for further testing.

A second pretest was designed to identify the product features and/or consumption outcomes (positive or negative) associated with consuming each of the four products previously selected. Each of 192 subjects considered two of the four products and responded to the question "for each of the products listed; what features, qualities, and/or results of buying and using would you like to have or avoid?" Responses were content analyzed and grouped into attribute categories by expert judges.

A Repertory Grid technique was used with between 10 and 20 additional subjects for each product as a supplement to the free response question (Frost and Briane 1967). Individually, the subjects were first asked to eliminate all unfamiliar brands from a set of locally available brands. Next, the subjects were asked to select the two most similar brands out of the groups of three presented for their consideration. Following this selection, the subjects were asked why the two brands selected out of each triad were more similar to each other than they were to the third brand. At the end of each interview, subjects were asked to describe what several attributes meant to them and then to describe each of the three brands most familiar to them in terms of several specified attributes. Expert judges also content analyzed these responses which were added to the previously determined attribute categories.

Seven attributes for shampoo, ten for deodorant, and eight for pain relievers were identified in this pretest. Beer was eliminated from further consideration because the Repertory Grid interviews indicated that only a few people knew enough about the product category to adequately evaluate its attributes.

A third pretest was used to partition the categories of each of the identified attributes. Two hundred subjects were requested to: (1) first identify three brands of each of two of the three products; and (2) describe in nonevaluative terms each of the self-identified brands using the attributes identified in the second pretest. Self identified brands were used to minimize the likelihood that the subjects would not be familiar enough with prespecified brands to adequately describe them. A Repertory Grid interview provided supplemental information on how the sample perceived the dimensions and component parts of the attributes retained for the study.

Information on the semantic properties of the adjectives identified by Myers and Warner (1968) and Mittelstaedt (1971) was used to verbally describe the component parts of the attributes. The attributes for each product had been reduced to six when one of the shampoo attributes was dropped because it was categorical and an attempt to maintain a balance between the products, the number of attributes associated with deodorant and pain relievers were also reduced to six. The deodorant and pain reliever attributes that were eliminated were those that were categorical or infrequently mentioned.

The Study

The sample consisted of 148 university students and 150 non-student adults. The subjects were run in small groups and were asked to complete three parts of a questionnaire. The respondents were given a small reward for participating in the study.

The first part of the questionnaire was used to assign each subject a product for the balance of the study. This minimized the bias inherent in asking people to evaluate unfamiliar products. Each subject was asked to evaluate the degree of product involvement, frequency of product consumption, and degree of familiarity with various brands of shampoo, deodorant, and pain relievers. To be selected for a subject, a product had to be high in involvement and consumption. Demograhpic information was collected in the second part of the questionnaire. The third part of the questionnaire asked the subject to evaluate on a seven-point Likert-type scale how good or bad each component category of each of the attributes was for their assigned product.

Results

Thirty-two subjects were dropped from the analysis because they gave incomplete responses. This left 1,596 sets of evaluations (266 subjects times six attributes) for further analysis. **Table 1** contains the coding scheme used by expert judges to categorize these evaluations into various affect patterns. This coding scheme was developed from a review of the literature and pretest results.

Table 2 summarizes the number of response sets that were best described by each of the eight affect patterns. The data indicated that evaluative response patterns are varied and complex. Even though the increasing monotonic pattern was the most common (40.8%), none of the other patterns can be ignored. For example, the convex quadratic patterns was the second most frequent one (23.1%) when the products were combined but it was the most common one (34.5%) for shampoo. The difference between patterns associated with the attributes was significant (χ^2 = 146.71, df 14, $p < .005$).

Table 3 presents the results of classifying the sets of evaluative responses on a product by attribute basis. Each of the eight affect patterns were elicited at least once by at least 10%

of the subjects. This suggests that affect can vary from product to product and individual to individual.

A more detailed analysis of the monotonic affect pattern in Table 4 indicated that consumers differ in how they emotionally respond to the same attribute. It was found that the monotonic patterns elicited had several different shapes. Some were asymptotic while some looked quadratic for some attributes if those attributes' continua had been extended far enough. Other sets of responses had a substantial plateau (constant magnitude over several attribute levels) before becoming monotonic. A few of the monotonic patterns were linear, but all of them had a slope of less than one. The slope of these linear patterns may have been less than one because none of the attribute continua had as many levels as the number of intervals used on the evaluation scale.

The analysis of affect patterns classified on a product basis also found that the product an attribute is associated with influences the pattern that will be elicited. For example, the price level attribute was evaluated for all three of the products. There was a significant difference in affect patterns associated with price level due to the product (χ^2 = 25.22, df 14, p < .05). The difference in affect patterns elicited for the strength of fragrance attri-bute associated with shampoo and deodorant also was significant (χ^2 = 70.24, df 7, p. < .005).

Discussion

The results of this study highlight a problem faced by the researcher who does not consider differing patterns of affect. How does one predict what the affect score might be for some attribute category given an affect rating on another attribute category? A visual inspection of the affect patterns presented in Table 3 provides some insight into this question. For example, the constant affect patterns appears to represent a lack of interest in the attributes it is associated with. Even though steps were taken in conducting this study to have the subjects evaluate only attributes of a product that they had some knowledge of, it was apparent that some attributes were just not important to some subjects.

Conversely, the binary affect pattern seems to imply that for some consumers there might be a threshold level of acceptability associated with certain attributes. This relationship was apparently reversed for those attributes (e.g., the stinging or irritating properties of deodorant) that represent a possible negative consequence of consuming the product with which they were associated.

For 11 of the 18 attributes evaluated, the convex quadratic pattern represented the feelings of a large number of subjects. This pattern indicates that some middle level(s) of attributes involved was considered to be better than either a minimum or a maximum amount. There was thus an ideal amount of some attributes for some consumers. However, many subjects felt that "more is better" or "less is better" (the monotonic patterns) or whose feelings were better described by some other pattern of affect. This result does not supply much help in predicting the outcome of the affect pattern. Additional research is necessary to integrate the affect pattern concept into current specifications of the multiattribute attitude model.

The evaluative reactions elicited for the price level attribute were also interesting for their apparent reflection of a price-quality relationship. The significant difference between products seemed to show that those who had evaluated pain relievers had a greater concern for the price-measured quality of the product than did the other subjects. This was evident in the increasing mono-tonic or increasing binary patterns elicited by 44.9% of the respondents who evaluated pain relievers. The increasing monotonic pattern implies that a higher priced pain reliever is better than a low priced one while the increasing binary pattern suggests that there was a price determined threshold of pain reliever acceptability. The impact of the large percentage of subjects who elicited increasing monotonic or increasing binary patterns was even greater when compared to the number who elicited the same patterns for the price level attribute associated with shampoo (224.5%) or deodorant (21.5%).

From a theoretical perspective, the results of the study indicate that much remains to be learned about the role of affect in purchase decisions. Further investigation of Athola's (1975) attitude vector model may provide valuable insight into how the current conceptualization of affect and cognition, and their determination of consumer behavior, is viewed.

Conclusion

This study demonstrated that different affect patterns exist. Furthermore, the affect pattern associated with a given attribute was influenced by the product. As a limitation, this study did not consider different choice situations. Hence, the influence of the choice situation on the consumer's feelings about different categories of an attribute cannot be commented on. However, Athola (1975) did claim that the choice situation could influence the affect patterns that would be elicited. The results obtained in this study did suggest that it was impossible to predict at this time how a consumer will react to some category of a given attribute associated with a given product considered in a given choice situation. There appears to be just too much variation among consumers to measure the relationship between the category of the attribute as a totality. Therefore, it is suggested that the consumer's affect toward each of the consumer-determined component parts of the attributes salient in a specific choice situation be measured. Even though this will create more work for the researcher, it will help improve one's capability to predict the consumer's overall evaluation of the social

objective involved and to understand why the consumer feels a certain way.

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TABLE 1
AFFECT PATTERN CODING SCHEME

1. Constant Affect: The consumer feels that each category of the attribute is equally good or bad.
2. Concave Quadratic Affect: The consumer feels that both extremes of the attribute continuum are more favorable than some middle level(s).
3. Convex Quadratic Affect: Both extremes of the attribute continuum are considered to be less desirable than some middle level(s).
4. Increasing Monotonic Affect: The consumer feels that more of the attribute is better than less.
5. Increasing Binary Affect: A special form of the increasing monotonic pattern in which affect is constant until some apparently critical level is reached. At this point, the consumer's affect jumps to a higher plateau.
6. Decreasing Monotonic Affect: The consumer feels that less of the attribute is better than more.
7. Decreasing Binary Affect: A special form of the decreasing monotonic pattern that is just the opposite of the increasing binary affect pattern.
8. Random Affect: The consumer's evaluative responses did not fit any logical response pattern. Instead, the responses elicited appeared to have been a random function or, possibilty, a cubic function of attribute level.

TABLE 2
AFFECT PATTERNS BY PRODUCT

Affect Pattern	Shampoo	Deodorant	Pain Relievers	Combined Products
Constant	8.8%	3.8%	6.6%	6.6%
Concave Quadratic	4.1	1.5	1.1	2.3
Convex Quadratic	35.4	17.5	14.6	23.1
Increasing Monotonic	25.7	48.7	50.3	40.8
Increasing Binary	4.8	6.3	6.6	5.8
Decreasing Monotonic	11.2	15.4	11.6	12.6
Decreasing Binary	3.4	3.0	3.2	3.2
Random	6.6	3.8	6.0	5.6
Number of Evaluation Sets	588	474	534	1,596

TABLE 3
AFFECT PATTERNS BY ATTRIBUTE

HAIR SHAMPOO

Affect Pattern/ Attributes	Cleaning Power	Number of Conditioners	Dandruff Control	Strength of Fragrance	Mildness	Price Level
Constant	1.0%	8.2%	13.3%	12.2%	4.1%	14.3%
Concave Quadratic	1.0	3.1	14.3	0	4.1	2.0
Convex Quadratic	34.7	19.4	20.4	51.0	42.9	43.9
Increasing Monotonic	52.0	49.0	23.5	6.1	3.1	20.4
Increasing Binary	5.1	10.2	6.1	3.1	0	4.1
Decreasing Monotonic	2.0	4.1	10.2	17.3	25.5	8.2
Decreasing Binary	1.0	4.1	2.0	7.1	3.1	3.1
Random	3.1	2.0	10.2	3.1	17.3	4.1
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

N = 98

UNDERARM DEODORANT

Affect Pattern/ Attributes	Duration of Control	Wetness Control	Odor Control	Strength of Fragrance	Stinging Properties	Price Level
Constant	0%	1.3%	0%	2.5%	2.5%	16.5%
Concave Quadratic	2.5	1.3	0	1.3	1.3	2.5
Convex Quadratic	2.5	17.7	10.1	25.3	6.3	43.0
Increasing Monotonic	78.5	56.9	78.5	57.0	3.8	17.7
Increasing Binary	15.2	3.8	6.3	8.9	0	3.8
Decreasing Monotonic	1.3	5.1	0	2.5	68.4	15.2
Decreasing Binary	0	0	1.3	0	15.2	1.3
Random	0	13.9	3.8	3.8	2.5	3.8
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

N = 79

PAIN RELIEVERS

Affect Pattern/ Attributes	Effectiveness	Duration	Taste	Side Effects	Speed of Relief	Price Level
Constant	0%	0%	28.1%	0%	0%	11.2%
Concave Quadratic	1.1	1.1	2.3	1.1	1.1	0
Convex Quadratic	7.8	32.6	1.1	3.4	9.0	33.7
Increasing Monotonic	82.0	60.6	40.4	2.3	83.1	33.7
Increasing Binary	3.4	1.1	22.5	0	1.1	11.2
Decreasing Monotonic	2.3	2.3	4.5	55.0	2.3	3.4
Decreasing Binary	0	0	1.1	14.6	0	3.4
Random	3.4	2.3	0	23.6	3.4	3.4
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

N = 89

MALE AND FEMALE FASHION INNOVATIVENESS AND OPINION LEADERSHIP: A RESEARCH NOTE

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Abstract

This paper assesses the relationship between self-reported fashion apparel innovativeness and opinion leadership, as well as these two traits' association with a wide variety of consumer variables for both male and female samples. Evidence was found that fashion innovativeness and opinion leadership function differently in male and female populations. Also, within each sex a wide variety of differing correlate traits were established for both innovativeness and opinion leadership.

Introduction

Innovativeness is a construct related to yet distinct from opinion leadership. The latter refers to a consumer's serving as an important source of personal influence on purchase behavior in a manner which involves face-to-face communication interactions between opinion leader and follower (see Childers 1986). Innovativeness reflects a consumer's inclination to adopt novel products, no matter if those are ideas, goods, or services. A more direct operational definition is Rogers and Shoemaker's (1971, p. 27), it is "the degree to which an individual is relatively earlier in adopting an innovation than other members of his social system." Rogers (1983) found in his extensive review of opinion leader research that leaders, while more "innovative" than followers, are not necessarily "innovators," they are more likely to be "early" rather than "first" adopters.

A major school of thought in fashion theory considers consumers (rather than the fashion industry) to be "the chief initiators and propagators of what will become fashionable" (Sproles 1981, p. 118). In fashion diffusion theory both the innovativeness and opinion leader constructs are seen as closely related and worthy of special study.

Prior to the 1980's, numerous studies were conducted in which researchers sought to determine correlate traits of both fashion innovativeness and opinion leadership (Baumgarten 1975; Darden and Reynolds 1974; Katz and Lazersfeld 1955; Reynolds and Darden 1971; Summers 1971). While most studies found fashion opinion leaders to be innovative, others such as Hirschman and Adcock (1978) claimed contrary evidence and called for replication studies to clear up the issue. The present study is a response to this call, Hirschman and Adcock's research is replicated in terms of scales used (see Appendix A), as well as renewed assessment of (and search for) innovativeness and opinion leadership correlate traits.

The Study

In 1985 a convenience sample of 338 men and 339 women in the greater New York Metropolitan area completed a 11 page questionnaire. Undergraduate and graduate marketing students distributed and collected the questionnaires. An age and sex quota sampling procedure ensured a balanced representation of men and women ranging in age from 20 to 80 with a mean age of 48.35.

Because of the contradictory findings reported in prior research no specific hypotheses were formulated. The study set out to determine (a) if fashion innovativeness and opinion leadership (as self-reported) differ for either men or women, (b) how fashion innovativeness and opinion leadership are related, (c) identification of the two study constructs' association with selected variable sets, and (d) establishment of correlate traits.

Questionnaire

Appendix A describes the scales (and scoring method employed) for the dependent study variables. Independent variables selected fell into seven category sets: (1) Perceived Age, (2) Social Self Imagery, (3) Leisure Time Activities, (4) Media Utilization, (5) Recreation, (6) Fashion Specific Variables, and (7) Demographics. Single item scales relying on Agree/Disagree response categories were dichotomized, and then treated as dummy variables.

I. Perceived Age Variables: Perceived Age had been found to be an opinion leadership correlate (Barak and Stern 1985/86), and this led to selection of three perceived age variables, all measured in years. (1) Cognitive Age (Barak and Stern 1985) is a measure of personal age identity in terms of four age dimensions: Feel/Age, Look/Age, Do/Age, and Interest/Age. (2) Ideal Age is measured through responses to the question "If you could be any age, what age would you most like to be?" (3) Societal Age is determined by answers to the question, "How old do most people think you are?" Cognitive Age represents an "actual" age-role self-concept, Ideal Age an "ideal" age-role self and Societal Age a "social" age-role concept (for an excellent discussion of "actual, ideal, and social" self-concepts see Sirgy 1982). Societal Age, as a measure of the age image a respondent perceives others to hold of him or herself, seems particularly appropriate in a fashion apparel study.

II. Social Self-Imagery: Six social imagery traits are employed in this study: (1) Femininity and (2) Self-Assurance (previously Masculinity), both of which rely on summation of ten self-ascribed trait items, scored from 1 (never

true) to 7 (always true) by the respondent, with all items taken from Bem's (1974) BSRI scale. Sample trait items are "tender" and "warm" for Femininity, and "aggressive" and "forceful" for Self-Assurance (Barak and Stern 1986). The other four trait scales rely on the summation of five-point agree/disagree Likert items. (3) Public Self-Consciousness containing seven statements (e.g., "I am concerned about the way I present myself") and (4) Social Anxiety containing four items (e.g., "It takes me time to overcome my shyness in new situations"), are both established social behavior research scales (Burnkrant and Page 1982; Fenigstein, Scheier, and Buss 1975). (5) Self-Confidence containing four items (e.g., "I think I have a lot of personal ability") and (6) Homebodyness containing three items (e.g., "I am a homebody"), are both frequently employed AIO traits (Wells and Tigert 1971).

III. Leisure Time Activities: Six leisure time variables were employed. Respondents were scored numerically in terms of their answers to the question, "About how many times, in the last month, did you engage in the following activities?" (1) Go to a Health Club, (2) Go to a Bar, (3) Play Trivial Pursuit, (4) Dance, (5) Run/Jog, (6) Swim.

IV. Media Utilization: Media utilization considered the amount of time spent. Three assessments took place: (1) Weekly newspaper reading, calculated in terms of minutes, (2) Daily radio listening, expressed in hours, and (3) Weekly television viewing, assessed in hours.

V. Recreation: These were the following three variables: (1) number of subscription magazines received, (2) number of books read in the past six months, and (3) number of movies seen in a theatre in the past six months.

VI. Fashion Variables: The three fashion variables employed were scored as dummy variables. (1) Fashion Consciousness (based on a single Likert item, "I feel self-conscious when I am first to wear a new fashion"), with "Agree, Strongly Agree" = 1, all other responses = 0; (2) Fashion Follower (based on response to the statement, "I am likely to be influenced by the kind of clothing fashions my friends buy), with "often, sometimes" = 1, "seldom, never" = 0; (3) Fashion Magazine Usage (based on the statement, "I am likely to look through fashion magazines"), with "often, sometimes" = 1, "seldom, never" = 0.

VII. Demographics: Four demographics were selected, two as continuous variables and two as dummy variables. (1) Chronological Age, scored in years; (2) Education, scored in years; (3) Employment Status outside the home, with "Full-Time" = 1, all other responses = 0; and (4) Marital Status, with "Married (first time) and Remarried" = 1, all other responses = 0.

Research Procedures and Results

Reliability tests. All multiple-item scales in the study were sufficiently reliable: coefficient alpha ranged from a low of .62 for Self-Confidence to a high of .94 for Cognitive Age.

T-tests. Among the 339 women the mean score for innovativeness was 8.34 (St. Dev. = 2.58); among the 338 men the mean score was 6.97 (St. Dev. = 2.62). A t-value of 6.87 (d.f.=675) showed innovativeness to differ ($p < .000$) for each sex. The mean score for opinion leadership was 4.41 (St.Dev.=1.82) for women and 3.24 (St.Dev.=1.53) for men. A t-value of 9.04 (d.f.=675) showed that self-reported opinion leadership also differed ($p < .000$) for each sex.

Pearson correlations. Correlations between innovativeness and opinion leadership were significant ($p < .000$) and differed for each sex: in the female population this correlation was .36, among male respondents it was .48.

Multivariate Multiple Linear Regression Procedures. These regressions allow consideration of each of the variable set's effects upon the two criterion variables. Table 1 shows the joint impact of each of the seven sets' variables on fashion innovativeness and opinion leadership combined. Table 2 also provides evidence, in terms of R-SQUARE and significance, of the joint impact of each set's variables on the criterion variables in an independent manner. Tables 2 and 3 show significant relationships between innovativeness and opinion leadership and consumer traits, within each of the seven variable sets, for women and men respectively.

Forward Stepwise Regression. Tables 2 and 3 illustrated which traits were significantly related to the criterion variables within each of the seven variable sets. These traits could then be utilized as independent study variables (their intercorrelation was low enough to avoid collinearity problems) in four separate forward stepwise multiple regressions. Table 4 presents these functions, established for innovativeness and opinion leadership, in both male and female samples. The profiles of these male and female regression functions are noticeably different in this composition. They exhibit how innovativeness and opinion leadership seem to be perceived by the two sexes in a different manner.

Discussion

The t-tests showed that a product category such as fashion apparel is not perceived and related to by both sexes in a similar manner. This is evident from women's greater willingness to try new fashions, reflected by a significantly higher mean innovativeness score. A similar pattern could be observed for women's self perception of having others turn to them for fashion advice, i.e., opinion leadership. The conclusion drawn is that men and women should be studied separately for product categories which are more involving to one group than to another.

Variable sets in both gender samples tended to have a combined impact on the joint criterion variables. The exception to this phenomenon, indicated by the results (Hotelling's trace) shown in Table 1, were media utilization for both sexes and recreation for women. It is interesting to note here that whereas media utilization

TABLE 1

VARIABLE SET IMPACT ON INNOVATIVENESS AND OPINION LEADERSHIP

HOTELLING'S TRACE:	WOMEN		MEN	
VARIABLE SET	d.f.	F	d.f	F
Perceived Age	6,594	4.70*	6,618	3.16*
Social Self-Image	12,608	8.05*	12,624	2.17*
Leisure Time	12,578	2.87*	12,598	2.67*
Media Utilization	6,490	1.96	6,494	1.15
Recreation	6,630	1.03	6,644	3.34*
Fashion Variables	6,660	10.13*	6,654	13.05*
Demographics	8,642	2.36*	8,650	2.39*

UNIVARIATE F TESTS WITH MULTIPLE R SQUARES:		WOMEN			MEN		
VARIABLE SET	CRITERION	d.f	r^2	F	d.f.	r^2	F
Perceived Age	Innovative	3,299	.05	5.23*	3,311	.04	4.89*
	Op Leader	3,299	.06	6.93*	3,311	.01	1.60
Social Self	Innovative	6,306	.14	8.38*	6,314	.04	2.26*
	Op Leader	6,306	.19	12.20*	6,314	.06	3.40*
Leisure Time	Innovative	6,291	.08	4.22*	6,301	.04	2.14*
	Op Leader	6,291	.07	3.39b	6,301	.09	4.68*
Media	Innovative	3,247	.03	2.63*	3,249	.00	.15
	Op Leader	3,247	.01	.94	3,249	.02	2.13
Recreation	Innovative	3,317	.00	.55	3,324	.01	.91
	Op Leader	3,317	.01	1.51	3,324	.06	6.49*
Fashion Vars	Innovate	3,332	.06	18.48*	3,329	.14	18.15*
	Op Leader	3,332	.14	6.85*	3,329	.12	14.99*
Demographics	Innovative	4,323	.05	4.45*	4,327	.02	1.81
	Op Leader	4,323	.02	1.45	4,327	.04	3.08*

* = p < .05 ; * = p < .01 ;* = p < .001

TABLE 2

INNOVATIVENESS AND OPINION LEADERSHIP REGRESSION COEFFICIENTS (WOMEN)

	INNOVATIVENESS		OPINION LEADERSHIP	
COVARIATES	BETA	t	BETA	t
Perceived Age				
Cognitive Age	- .235	- 1.85	- .423	- 3.36*
Ideal Age	+ .072	+ 1.07	- .018	- .27
Societal Age	- .021	- .16	+ .221	+ 1.77
Social Self-Imagery				
Femininity	+ .029	+ .52	+ .181	+ 3.37*
Self-Assurance	+ .130	+ 1.89	+ .186	+ 2.80*
Public Self-Conscious	+ .223	+ 3.95*	+ .178	+ 3.25*
Social Anxiety	- .144	- 2.25*	+ .078	+ 1.22
Self-Confidence	+ .109	+ 1.60	+ .178	+ 2.72*
Homebodyness	- .034	- .63	- .033	- .63
Leisure Time				
Health Club	+ .096	+ 1.47	- .006	- .09
Bar	+ .184	+ 2.81*	+ .174	+ 2.63*
Play Trivia	+ .068	+ .92	+ .046	+ .61
Dance	+ .113	+ 1.82	+ .166	+ 2.65*
Run/Jog	- .011	- .17	- .064	- .99
Swim	- .095	- 1.26	- .078	- 1.03
Media Utilization				
Newspaper Reading	+ .166	+ 2.63*	+ .003	+ .04
Radio Listening	+ .015	+ .24	+ .101	+ 1.59
TV Viewing	+ .039	+ .61	+ .034	+ .53
Recreation				
# Magazines	- .018	- .32	+ .20	+ .36
# Books	- .011	- .19	+ .086	+ 1.53
# Movies	+ .069	+ 1.23	+ .073	+ 1.31
Fashion Variables				
Fashion Conscious	- .103	- 1.90	- .195	- 3.75*
Fashion Follower	+ .029	+ .53	+ .130	+ 2.49*
Fashion Magazine User	+ .221	+ 4.12*	+ .309	+ 6.05*
Demographics				
Chronological Age	- .122	- 1.78	- .109	- 1.56
Education	+ .106	+ 1.75	+ .006	+ .10
Employment	- .119	- 2.15*	- .008	- .14
Marital Status	- .017	- .26	- .034	- .51

* = t-value significant at p < .05
* = t-value significant at p < .01
* = t-value significant at p < .001

TABLE 3

INNOVATIVENESS AND OPINION LEADERSHIP REGRESSION COEFFICIENTS (MEN)

	INNOVATIVENESS		OPINION LEADERSHIP	
COVARIATES	BETA	t	BETA	t
Perceived Age				
Cognitive Age	- .385	- 2.70*	- .190	- 1.31
Ideal Age	- .098	- 1.47	+ .046	+ .68
Societal Age	+ .324	+ 2.36*	+ .054	+ .39
Social Self-Imagery				
Femininity	- .034	- .56	+ .001	+ .01
Self-Assurance	+ .014	+ .20	+ .076	+ 1.10
Public Self-Conscious	+ .156	+ 2.71*	+ .203	+ 3.57*
Social Anxiety	- .053	- .86	+ .021	+ .34
Self-Confidence	+ .065	+ 1.01	+ .055	+ .87
Homebodyness	- .087	- 1.56	- .041	- .75
Leisure Time				
Health Club	- .034	- .54	+ .061	+ 1.00
Bar	+ .032	+ .49	- .008	- .13
Play Trivia	+ .018	+ .30	+ .099	+ 1.67
Dance	+ .198	+ 2.82*	+ .258	+ 3.77*
Run/Jog	- .004	- .06	- .017	- .28
Swim	- .059	- .92	- .095	- 1.51
Media Utilization				
Newspaper Reading	+ .018	+ .27	+ .093	+ 1.47
Radio Listening	+ .032	+ .50	+ .135	+ 2.14*
TV Viewing	+ .018	+ .29	+ .006	+ .10
Recreation				
# Magazines	+ .054	+ .92	+ .105	+ 1.82
# Books	+ .027	+ .47	+ .005	+ .09
# Movies	+ .045	+ .77	+ .182	+ 3.17*
Fashion Variables				
Fashion Conscious	- .139	- 2.67*	- .069	- 1.31
Fashion Follower	+ .085	- 1.64	+ .059	+ 1.12
Fashion Magazine User	+ .352	+ 6.85*	+ .339	+ 6.51*
Demographics				
Chronological Age	- .078	- 1.17	- .014	- .20
Education	- .048	- .84	+ .011	+ .19
Employment	+ .092	+ 1.58	- .040	- .69
Marital Status	- .083	- 1.22	- .167	- 2.47*

* = t-value significant at p < .05
* = t-value significant at p < .01
* = t-value significant at p < .001

TABLE 4

INNOVATIVENESS AND OPINION LEADERSHIP (FORWARD STEPWISE REGRESSION FUNCTIONS)

I. WOMEN — INNOVATIVENESS FUNCTION

STEPS	Independent variable	BETA	t
One	Fashion Magazine User	+ .308	+ 5.03*
Two	Bar	+ .164	+ 2.62*
Three	Newspaper Reading	+ .166	+ 2.74*
Four	Social Anxiety	- .166	- 2.60*
Five	Public Self-Conscious	+ .155	+ 2.35*

R SQUARE = .21; F Value = 12.15*; d.f. (5,219)

II. WOMEN — OPINION LEADERSHIP FUNCTION

STEPS	Independent variable	BETA	t
One	Self-Assurance	+ .172	+ 3.02*
Two	Fashion Magazine User	+ .255	+ 4.81*
Three	Bar	+ .168	+ 2.98*
Four	Femininity	+ .219	+ 4.01*
Five	Cognitive Age	- .141	- 2.41*
Six	Fashion Conscious	- .121	- 2.29*

R SQUARE = .29; F Value = 18.86*; d.f. (6,270)

III. MEN —— INNOVATION FUNCTION

STEPS	Independent variable	BETA	t
One	Fashion Magazine User	+ .278	+ 5.23*
Two	Cognitive Age	- .119	- 2.13*
Three	Fashion Conscious	- .227	- 4.13*
Four	Dance	+ .201	+ 3.55*
Five	Public Self-Conscious	+ .146	+ 2.69*

R SQUARE = .21; F Value = 15.62*; d.f. (5, 299)

IV. MEN —— OPINION LEADERSHIP FUNCTION

STEPS	Independent variable	BETA	t
One	Fashion Magazine User	+ .273	+ 5.17*
Two	Public Self-Conscious	+ .160	+ 3.07*
Three	Dance	+ .143	+ 2.72*
Four	Marital Status	- .119	- 2.26*

R SQUARE = .18; F Value = 17.30*; d.f. (4,313)

* = significant at p < .05
* = significant at p < .01
* = significant at p < .001

did not impact on the combination of innovativeness and opinion leadership, when considered independently (Table 2 and 4) one of the media utilization variables, newspaper reading, turned out to be highly significant to women's innovativeness, while no association whatsoever could be detected between this media variable and women's opinion leadership!

As many diffusion researchers pointed out, evidence concerning a link between innovativeness and personal influence is of an equivocal nature. The data provided by Tables 2 through 4 showed the way in which women interpret the study's criterion variables differently from men. According to Table 4, two characteristics associated both with female innovativeness and opinion leadership were fashion magazine usage and bar attendence. There were more common correlates with innovativeness and opinion leadership in the male sample: fashion magazine usage, dancing and public self-consciousness. When female and male innovativeness are compared the traits which correlate with each were fashion magazine usage and public consciousness, while there is only one common correlate for opinion leadership: fashion magazine usage. All four functions in Table 4 have only that one variable in common, i.e., fashion magazine usage. This would seem to support the truism that innovators and opinion leaders are highly involved consumers who will attempt to read about their product category of interest. Why newspaper reading appeared to be an innovativeness correlate among women is not clear, but if future research would uphold this finding it might mean that newspapers could become the medium of preference to fashion marketers after fashion magazines. The activity that correlated most with both innovativeness and opinion leadership in the female population was bar attendence, while among men dancing turned out to be the correlate activity. Seemingly women have a greater tendency to preen when going to bars while men seem to be more fashion innovative and likely to function as opinion leaders when they dance frequently. This ought to be of interest to men's clothing manufacturers since there are as yet few new choices in dance clothing available to men. Another factor prominent in the four functions was public self-consciousness. High scores in this trait imply greater self-awareness in the public eye, and in the present context confirmed previous findings that this variable reflects a perception of self as a public object (Fenigstein, Scheier and Buss (1975). Moreover, innovative women, tend not to be uncomfortable in the presence of others, as reflected by the negative correlation with social anxiety. When it comes to women's opinion leadership, it was fashion consciousness which correlated negatively; it is not surprising to note that female opinion leaders do not worry about being the first to wear a fashion (more surprising that fashion consciousness did not relate to innovativeness, see Table 2). On the other hand, fashion consciousness turned out to be a correlate of men's innovativeness, not of the opinion leadership.

Cognitive age was another consumer trait which correlated with female opinion leaders as well as male innovators (It is worthwhile to point out here that chronological age did not relate significantly with both criterion variable in either sex, see Tables 3 and 4); a younger age perception seems to imply a greater likelihood of female opinion leadership and male fashion innovativeness. Only among men did a demographic variable turn up as significant: single men seem more likely to become opinion leaders.

The relatively low R-SQUARES reported in this study, even for the final regression functions shown in Table 4, are indicative of the problematic nature of measures of innovativeness and opinion leadership. Yet these R-SQUARES are sizable enough to be meaningful and they also clarify how innovativeness and opinion leadership function among men and women. Moreover, the study findings also helped establish gender's role as a moderator variable of both fashion innovativeness and opinion leadership. In addition, this study will hopefully have shed further light on the two traits' interrelationship. They are likely to function as psychographic traits, not to predict behavior but rather to provide a greater understanding of the nature of consumers who are typically the first to adopt socially visible products such as fashion apparel.

APPENDIX A

MEASUREMENT OF INNOVATIVENESS AND OPINION LEADERSHIP WITH ASSIGNED SCORES

Fashion Innovativeness = Question A + Question B + Question C.

Score range: 3 - 12

Fashion Opinion Leadership = Question D + Question E*.

Score range: 2 - 8

I am likely to ....

A. try new ideas in clothing fashions.
Often 4 Sometimes 3 Seldom 2 Never 1

B. buy something new in next season's clothing fashions.
Often 4 Sometimes 3 Seldom 2 Never 1

C. be among the last to try new clothing fashions.
Often 1 Sometimes 2 Seldom 3 Never 4

D. have others turn to ME for advice on fashion and clothing.
Often 4 Sometimes 3 Seldom 2 Never 1

Please indicate your level of agreement or disagreement...

E. Friends and neighbors often come to me for advice about buying clothes.
Strongly Agree 4 Agree 3 Uncertain 2 Disagree 1 Strongly Disagree 1

Reliability (Cronbach's Alpha): Fashion Innovativeness = .69
Fashion Opinion Leadership = .78

* Question E was asked in the middle of the questionnaire (p. 6), the other questions in the last page (p. 11).

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THE IMPACT OF ADVERTISED SALE DURATION ON CONSUMER PERCEPTIONS

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Abstract

This paper explores the effects that advertisements for sales of limited duration have upon consumers' perceptions. An experimental approach is used to test the relative impact of advertised sales of one, three and five day duration along with a control group. Psychological reactance theory is used as a guiding framework. The results tend to indicate that the advertised duration of a sale is capable of affecting consumer perceptions. Specifically, advertised sales of shorter duration appear to be capable of arousing incremental attraction. Directions for future research are also explored.

Reactance Theory

Reactance theory (Brehm 1966, 1972; Brehm, Stires, Sensenig and Shaban 1966; Clee and Wickland 1980; Hammock and Brehm 1966; Henion and Batsell 1976; Lessne and Notarantonio 1986; Mazis, Settle and Leslie 1973; Venkatesan 1966; Wicklund 1974) is a social-psychological theory concerned with how individuals react when their freedom to choose is limited. According to reactance theory, when an individual's freedom to engage in a specific behavior is threatened, the threatened behavior becomes more attractive. Put differently, "...the consumer whose decision alternative is blocked (partially or wholly) by a barrier should become increasingly motivated to obtain that alternative" (Clee and Wicklund, 1980).

A study by Mazis, Settle and Leslie (1973) illustrates the appropriateness of reactance theory in a consumer behavior context. Detergents which contain phosphates were banned in Miami as of 1972. Very few nonphosphate detergents were available at the time, so the ban significantly restricted Miami residents' freedom of choice. According to reactance theory, the phosphate ban as a barrier should have resulted in Miami residents becoming more attracted to phosphate detergents. The study's results support the reactance theory perspective. Compared with individuals in Tampa where phosphate detergents were allowed, Miami residents considered phosphate detergents to be more effective.

Brehm et al. (1966) investigated the effects that product unavailability has on product attractiveness. Participants in the first stage of the study listened to and rated four phonograph records. A record was offered as an incentive to participate in the study. At the second session participants were told that they were going to listen to the same four records, rate them again, and then select one to keep. Prior to hearing the records in the second session, one group of participants was informed that one of the records was no longer available because it was missing from the shipment. The record that was made unavailable was the one that was rated third during the first session. As reactance theory predicts, the third-rated record increased in attractiveness as a result of becoming unavailable. Sixty-seven percent of those participants who had their third choice eliminated raised their evaluation. Only forty-three percent of those who did not have their third choice eliminated raised their evaluation.

Lessne and Notarantonio (1986) explored the effects that advertised limits (e.g., "limit two per customer," "limit four per customer") have upon consumers' perceptions. As reactance theory predicts, limits were found to be capable of increasing consumers' attraction to advertised products. However, a "sour grapes" effect existed when the limit became very restrictive ("limit two"); consumers' interest in the product was diminished by a very restrictive limit. The general conclusion of this study was that advertised limits, if used carefully, can serve to increase consumer attraction.

Hypotheses

The present research invokes reactance theory to explore the effects that advertisements for sales of short duration have upon consumers. According to reactance theory, the erection of barriers serve to increase the attractiveness of the restricted item. The barrier in the present case is the result of the time constraint imposed by a sale of short duration. According to reactance theory, consumers' reactions to products will be enhanced if they are part of a sale of short duration.

The following are the research hypotheses:

H_1: The shorter the advertised duration of a sale, the higher the perceived intent to purchase.

H_2: The shorter the advertised duration of a sale, the higher the perceived level of savings.

Methodology

Subjects consisted of 52 undergraduate business majors who were randomly assigned to one of four groups. The study was administered at two different times to two classes to diminish the possibility of contamination. Each individual was given an advertisement for a 19" color television on sale for $169.88 as part of a booklet which also contained the questionnaire and the following instructions:

> In what follows we are seeking your <u>true reactions</u> to a situation that you might

actually confront. Please respond to the questions asked of you in a natural manner -- in the way you believe you would actually react.

Assume that the advertised sale on the next page came to your attention while you were looking through the Sunday newspaper. After looking at the advertisement, please respond to the questions which follow.

The top line of each advertisement was the same, "SALE!". The advertisements for the three experimental groups had one of the following as additional information: "ONE DAY ONLY, WEDNESDAY," "THREE DAYS ONLY, TUESDAY, WEDNESDAY, THURSDAY" or "FIVE DAYS ONLY, MONDAY THROUGH FRIDAY." The control group advertisement did not impose a limit on the duration of sale.

The dependent measures were three 7-point scales. The first item asked the respondent to indicate how likely s/he was to purchase the advertised television. The range of responses provided on the questionnaire was from "very high" to "very low." The other items were Likert scale items: "The television at the advertised price is a bargain" and "You can save a lot of money at this sale."[1]

Results

The "one day only" and "three day only" treatments had thirteen respondents each. Sample sizes for the "five day only" and the control group were twelve and fourteen, respectively. Table 1 presents the ANOVA results and the cell means. A discussion of the results for each dependent measure follows.

TABLE 1

ANOVA RESULTS

Variables	F Value	Significance	Means 1 Day	3 Day	5 Day	Control
Purchase Likelihood	2.88	.046	4.61	5.54	5.67	6.07
Bargain	1.49	.229	3.00	3.15	3.83	4.00
Savings	3.37	.026	3.23	3.15	4.67	4.14

Notes: Significant one-tailed t-tests are indicated by the brackets. Brackets above the means ( ) indicate that the comparison is significant at p = .05. Brackets below the means ( ) indicate that the comparison is significant at p = .01.

All items were scored on a "one" to "seven" scale with "one" being the most favorable response.

[1] Other measures were taken which measure the participants' level of involvement as well as the participants' perception of the product's quality and attractiveness to others. These variables have not yet been analyzed and may be reported in a later paper.

Purchase Likelihood

The F-value for this analysis is 2.88 (p = .046) indicating that the advertised duration of the sale had an impact upon the participants' stated purchase intentions. Examination of the ordering of the means provides support for the first hypothesis. As the duration of the sale decreases, the likelihood of purchase increases. The most striking difference between means is the "one day only" treatment ($\bar{x}$ = 4.61) and the control group ($\bar{x}$ = 6.07). This difference is significant with p = .003 (one tailed).[2] The "three day only" and "five day only" treatments do not have differential impacts upon purchase likelihood. Additionally, they are not significantly better at increasing purchase likelihood than the control message which makes no statement about the sale's duration. Finally, the data indicate that the "one day only" treatment is superior to both the "three day only" and "five day only" messages. These data are generally supportive of the first hypothesis although the only treatment found superior to the control message was "one day only."

Bargain

While the ordering of the means are supportive of the second hypothesis the F-value (1.49) is not significant (p = .229). It should be noted, however, that the contrast between the "one day only" treatment ($\bar{x}$ = 3.00) and the control group ($\bar{x}$ = 4.00) is significant. However, in light of the nonsignificant F-value it is inappropriate to conclude that the first treatment is superior to the control.

Savings

The F-value (3.37, p = .026) indicates that the advertised duration of the sale had an impact upon participants' perceived savings. The "one day only" treatment's effect ($\bar{x}$ = 3.23) is not significantly different from the "three day only" treatment's effect. Both the "one day only" and the "three day only" treatments are superior to the "five day only" treatment (p = .01), which is generally supportive of the second hypothesis. It is somewhat surprising that the "three day only" treatment was superior to the control group (p = .05) and the "one day only" was not. These data do, therefore, provide limited support for the second hypothesis; the shorter the advertised duration of a sale, the higher the perceived level of savings.

Summary and Limitations

This paper represents the first attempt at studying the effect that advertised sales of short

[2] Because the a priori comparisons between means are based upon established theory, it was not considered necessary or appropriate to use any statistical adjustments that are commonly used with nonorthogonal contrasts (e.g., Newman-Keuls test).

duration have upon consumers' attitudes. It should, therefore, not be surprising that the results are not conclusive. The data are, however, sufficiently supportive to encourage further exploration in this field. The results of this study basically show that the advertised duration of a sale impact consumers' attitudes. Based upon this study alone one cannot conclude that sales of the shortest duration have the most positive effect. Indeed, there is research that supports the notion that barriers can become too strong and result in decreased attraction. This "sour grapes" effect (Clee and Wicklund 1980, Hammock and Brehm 1966) needs to be explored in future research which investigates sales of even shorter duration (e.g., 6 hour, 1 hour). The present study provides some support for the idea that a five day sale is not capable of arousing psychological reactance. Further research is clearly needed in this area.

Research which investigates the impact of sale duration needs to be conducted with different types of products and services. Additionally, the effects of sale duration needs to be explored among various market segments. For example, elderly individuals who are less mobile may be less motivated by sales of short duration because of their limited mobility. Perhaps less experienced shoppers are effected differently than more experienced shoppers. In any event, it is inappropriate to presume that sale duration has the same effect upon all individuals.

A limitation of the present study is that the dependent measures were not actual purchase data but just "paper and pencil" responses. A true field experiment, while resulting in decreased control, would allow one to use actual sales as the dependent variable.

It is hoped that the present research will serve as a first step in a stream of research that will continue to explore the effects of advertised sale duration.

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CONSUMER LOGISTICS: THE COMMUNICATION SUBSYSTEM

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Abstract

This paper provides a conceptual treatment of the process by which consumers engage in marketing-related communication. Taking a different approach from previous conceptualizations of this process, this treatment considers communication from the standpoint of consumer logistics. Consumer logistics concerns the participation of consumers in the process of distribution in a manner complementary to the performance of the business logistics system. Considering marketing-related communication from the viewpoint of the Communication subsystem of the consumer logistics system provides new insights into the consumer communication process.

Introduction

Considerable research has been directed toward providing an understanding of the process by which marketers can and do communicate with their markets. In particular, work in the area of consumer behavior has developed a number of conceptual schemes and paradigms to aid our understanding of this communication process. For the most part, these conceptual developments have drawn from research in the behavioral sciences, primarily psychology.

Helpful as these contributions have been, they have nonetheless focused on only narrow aspects of the communication process at issue. Yet marketers can better plan their attempts to communicate in the marketplace if they understand the larger context within which individual communications take place. This paper presents a rather novel portrayal of the consumer communication process, one that positions marketing communications in their larger context. Such a wholistic view should be more useful to understanding the communication process because it provides a reference point that gives greater meaning to individual communications events.

The mechanism used here for modelling consumer communication is the recognition that consumers are active participants in the physical distribution of goods and services in their economy. Physical distribution has been defined as "the movement and handling of goods from the point of production to the point of consumption or final use" (Taff 1978). Yet, by and large, scholars in the field of logistics (alternatively, physical distribution or marketing logistics) have looked at distribution as an entirely commercial process. Their portrayals of the logistics process have concentrated on the activities of business entities that distribute physical products (and in some few cases, governmental or other non-profit organizations that perform the same functions).

To be sure, the complex set of activities that constitute <u>commercial</u> distribution of physical products in our economy is an important function, one that employs millions of workers. However, the flow of consumer goods does not depend entirely on the efforts of those who are paid to provide movement and handling to these goods. Nor are physical products the sole object of consumption. Rather, consumers themselves play an important part in the distribution of both products and services.

The objective of this paper is to provide a conceptual framework for understanding consumer communication as a part of the larger process by which consumers participate in the distribution of products and services. Drawing upon concepts developed in research into business logistics, this paper presents an integrated portrayal of the communication process for consumer logistics. This presentation of an integrated process relies upon the conceptual development of communication as one of the five areas of activity that constitute consumer logistics (hereafter, CL).

A Systems Basis For The Study Of Communication Activities

To provide a conceptual basis for integrating communication activities with the other activities necessary to effect distribution, this study draws on concepts developed by systems researchers. A system is a collection of objects (e.g., persons and their artifacts) with relationships among the objects and their attributes. Characteristically, systems are portrayed in terms of their structure and their process. Their structure is the network of relationships that connects these objects and gives them a meaningful organization. The process of the system is the sequence of activities that it conducts as it performs its characteristic functions. The interested reader is referred to the comprehensive treatment of the nature of systems provided by Miller (1978), who characterizes communication in terms of the processing of information.

Based on systems concepts, the CL system has been previously defined as comprising five subsystems: Inventory, Transportation, Location, Handling and Storage, and Communication (name of author withheld). This set of categories was adapted from the set used to refer to the generalized business logistics system by Bowersox (1978), and it is representative of those used in conceptual work in the field of business logistics. In the present context, communication deals with those activities that pertain to logistics operations as they are performed by the other four subsystems. For example, a discussion among household members about who will have the use of the family car involves communication in support of the transportation subsystem. Asking a realtor about the proximity of shopping areas to a house under consideration for purchase links communication

to the location subsystem. Polling household members about clothing items needed in future weeks relates communication to the inventory subsystem. A discussion concerning whose hats will be placed on the crowded hatrack illustrates a similar relationship with the handling and storage subsystem.

The Nature Of Communication In Consumer Logistics

This section deals with the various types of information transfer and usage that occur in support of consumers' participation in distribution. The discussion deals with three aspects of communication: (1) the basic purposes for which information is processed by the Communication subsystem in support of decision making; (2) the means by which CL is supported by this information; and (3) the standards for evaluating the CL system.

Basic Purposes for the Processing of Information

Borrowing from business logistics, it will be useful to consider the information that supports decision making by referring to its uses for strategic planning, operations, and control activities.

Information that supports strategic planning lays the groundwork for decisions having relatively long-term implications, and relating to a relatively broad scope of system activities. In business, perhaps the most important information input is the forecast of demand for the company's products and services. In the context of CL, a forecast at some degree of formality will specify the required quantities and location of products, plus any product and delivery specifications necessary to meet the needs of household members.

Examples of other information useful to strategic planning in CL include an adult's estimate of how long a time his job will require/allow him to remain in a town, an important information input to the location decision on what type of dwelling to acquire. Similarly, information on the reliability of a car offered for sale by a friend of the family would have broad implications for the decision on whether to incorporate this car into the household's transportation subsystem.

Inputs to decision making for operations support decisions having relatively short-term, narrowly-defined, or day-to-day implications. For example, information on the space available in the hall closet where coats are stored will aid a boy's decision on where to place his garment. When a girl tells her mother the level of facial tissues in a box is low, she aids an inventory decision on how much and when to purchase this product.

Communication related to control decisions involves determining the perception of what is being accomplished and matching it with what was stated as desirable during the planning process. As an illustration of control, a woman may decide how many facial tissues her household needs under normal operations. She then monitors the rate of use. When she discovers a discrepancy, she acts to control the inventory level for this product by telling her family they are using too many tissues. As another example, she controls the storage operation when she notes the hall closet is filled with unused winter clothing and asks family members to remove their possessions in preparation for placing their summer garments in the limited space available.

Thus, the planning-operations-control paradigm provides one, rather general, view of the communication process in support of CL. Another way to study this process involves an examination of the way that communication supports each of the other four subsystems that constitute the system.

Communication as Support for CL Subsystems

This section first introduces examples of settings where information is needed for CL decision-making, then concludes with an illustrative listing of specific information that would be required. Household inventory decisions specify the quantity of goods to purchase and when to purchase them. These decisions require information on the current level of stock, future requirements for the product, and certain costs that are incurred in acquiring and storing the product. In a formal sense, three costs should be determined and used in the decision process: acquisition, carrying, and stockout costs (Bowersox, Closs and Helferich, 1986).

Household decision makers seldom, if ever, seek optimal inventory decision rules, yet they somehow balance the three types of costs to provide at least satisfactory service to the household. Less formally and perhaps more irrationally, they assess the costs of: (1) making an effort to acquire the required good; (2) devoting money and scarce storage space to hold it in stock; and (3) undergoing the inconvenience of not being able to supply to the item when desired.

Location decisions provide the appropriate position in time and space for consumption activities, and can be treated as falling into three categories. First, a relatively permanent location decision might involve selecting a dwelling. Here, consumers must gather information about the relationship between the location of the dwelling and the access it will give to consumption activities such as shopping and recreation. Second, a relatively temporary location decision might involve the choice of a place to perform such consumption-related activities as shopping. Here, given their place of dwelling, consumers will seek information about such alternative points for consumption as fast-food restaurants. Third, a very temporary location decision might involve the points on the route taken to a place of temporary location. Here, consumers might want to know the relative advantages and disadvantages of routes to use when travelling to points of consumption, such as their scenic features and amount of traffic congestion.

Transportation decisions involve the selection and allocation of means of transportation to such CL activities as carrying goods home and conveying

persons to points of consumption. The choice of a mode of transport, whether to acquire a vehicle for the household, and which vehicle to purchase or lease may turn importantly on consumption needs. If a vehicle is acquired, the household must balance expected benefits against the costs of acquisition and assignment to determine for what purposes it will be used and at what times. Many of these costs may be more obvious than others mentioned in this section. For example, the price of a ride on the bus and the purchase price of an automobile are readily determinable. Such issues as the costs of waiting for a bus and the benefits of rapid transportation are not so obvious.

Handling and storage comprises those activities that convey goods through space and time exclusive of transportation by vehicle. Proper design and layout of the dwelling and its handling and storage aids thus depend on information about distances and elapsed times. For example, a kitchen designer can plan a more efficient layout for a kitchen if she anticipates her homemaker's patterns of movement as she works in her kitchen. On this basis, she can plan proper design and placement of handling aids such as counters and storage aids such as cabinets. More generally, knowing a family's consumption patterns will help a professional house designer provide a layout that will save consumers time by providing the proper relationship between doors of entry to the dwelling, counters where goods are usually placed for sorting and allocation, and the points where goods are stored.

This description of the settings where information is needed suggests specific examples of the types of information that will be useful for decisions to support CL activities.

Requirements for goods in terms of their number, timing, and specification;

Current stock on hand of required items;

Available alternative sources for acquiring items not in stock;

Substitutes acceptable to household members if the desired items cannot be acquired.

Members' acceptance of products and services used previously;

Such marketing information as attributes, prices, and other terms of sale useful to the household "purchasing agent."

Expected flow of goods into the CL system, by quantity and type;

Benefits provided by alternative types of facilities and CL equipment and their costs of acquisition, operation, and maintenance;

Availability of CL facilities, equipment, and personnel for transport, handling, and storing of goods:

Need to adapt the form of acquired goods to fit the CL system.

The foregoing discussion has suggested that information is needed to provide a trade-off between the benefits provided for consumers by the CL system and the cost of providing these benefits. The following section investigates this issue in greater detail.

Benefit and Cost Trade-Offs in Consumer Logistics

Just as the business logistics system serves customers, so too does the CL system. In this case, the customers are members of the household that operates the specific CL system in question. If they are to judge the effectiveness and efficiency of their system, they need standards for evaluation. Many of the standards used for evaluation in business decision making can be referred to the CL system.

Two leading standards for logistics performance use measures of time: (1) mean time from making a request for replenishment until it is filled; and (2) variance about the mean for this "lead time." A low figure for both measures is desirable. Thus, a good CL system is one that is prompt in filling requests, and is consistent in the time taken to fill them, as measured by the mean and variance for lead time.

Another useful standard is the extent to which the products/services supplied meet customers' specifications. They should be supplied in the specified condition and should perform as expected. Ability to meet specifications can be measured, for example, by the percentage of items that are the correct brand, that possess the correct features such as size and performance capability, and that are free from from defects.

Customers also judge performance of a system by the extent to which they can participate in various aspects of distribution when desired; for example, through their ability to communicate with their suppliers. Somewhat abstractly, ability to communicate can be assessed in terms of the percentage of discrete distribution activities whose performance can be influenced and/or monitored. More concretely, they want to enter their requests into the system easily, and be informed about the status of their orders when desired. And they want to be able to voice complaints when performance of the CL system doesn't meet their expectations.

Ultimately, the system will be evaluated in terms of its effectiveness and efficiency. In the case of effectiveness, consumers will judge the CL system by how well their expectations are met by that portion of the benefits of consumption that is due to CL activities. Abstractly, they could assess what portion of their satisfaction was gained because of the CL system. In these terms, concrete measures of effectiveness could be obtained by such items as those used in attitude scales. In the case of efficiency, a ratio of benefits received to the costs expended for CL would be the appropriate abstract standard for evaluation. Benefits would reflect the receipt

of desired attributes of products/services. Again, direct measurement of benefits using attitudes scales would be appropriate. Costs would reflect contributions to the system in terms of monetary, time, energy, and information inputs. The concrete assessment of these costs would be difficult at the present state of knowledge.

The foregoing discussion has suggested various types of information useful for managing the CL system. One means of organizing these concepts comes from scholars who have investigated the business logistics system and have concentrated on two basic flows through the organization. First, the order processing segment of the Communication subsystem deals with requests for goods and services. Second, the data management segment deals with information useful to management of the system itself. Each of these two segments of the Communication subsystem will be treated in turn.

The Order Processing Segment

The communications involved with order processing can best be treated by following the course of an order through the generalized CL system and noting interchanges of information that attend its processing. To provide a focal point for illustrating the nature of a Communication subsystem, the following material relates to the example of a hypothetical American household. We will assume the adult woman of the household acts as the primary household manager ("homemaker"). References to other CL subsystems will be underscored to emphasize their interaction with the Communication subsystem.

First, the homemaker has planned a trip to a large shopping center, and has asked for requests from household members to guide her actions as purchasing agent for the household. Over time, she has established a format for these requests, whereby the requesting person specifies such details as allowable substitutes in size and brand. Second, household members must check the stock of products currently in storage to determine what must be purchased. (If the requested item is held in inventory, no further action may be required.) Third, based on the search through current inventory, she calculates what items and quantities are needed to meet requests and replenish the stock on hand. Fourth, she consolidates items requested and those she has otherwise deemed necessary into a shopping list.

Fifth, the shopping trip is planned. The shopper should monitor the status of the other four subsystems to ensure they can support her expedition (e.g., whether the car is in proper working order, and whether someone will be available to help her transfer her purchases to a distribution point within the dwelling when she returns). If the woman needs any help with the acquisition and transportation phase of her shopping trip, at this point she may assign these CL tasks to other household members.

Sixth, the shopping trip is begun in the family automobile, and the woman now processes information relevant to operation of the Transportation subsystem. For example, she may listen to the radio for information about the condition of the roads she plans to travel. Seventh, she reaches the location of the shopping center and begins the materials handling portion of her logistics activities. She asks store personnel for help in transferring bulky items from the store to her vehicle. Eighth, when she has completed her attempts to acquire the items needed by her household, she again operates the Transportation subsystem to transfer them to the location of her dwelling.

Ninth, she arrives home, and handles the items purchased as necessary to disperse them to various places of storage and consumption within the dwelling. In the case of those items placed in inventory, she makes a (most probably mental) correction to her inventory records. Tenth, if she could not acquire requested items, she operates the Inventory subsystem for a further sequence of activities. She may talk with the person who requested the unavailable item to determine what action is now appropriate; e.g., whether to continue her search for unavailable items. If so, she determines whether she should substitute another item on the next shopping list. If not, she learns whether the person who placed the request agrees to her placing a backorder with the supplier, and notes the appropriate alternative.

Eleventh, following shopping trips when a backorder has been placed, she continues to monitor the progress of the supply process. If necessary, she then keeps inventory records of outstanding backorders, and continues to communicate with her supplier(s). She also informs the person who requested the item about her progress (or lack of progress) in acquiring the item.

This illustration suggests a number of communications interchanges, both within and without the boundaries of the CL system. This limited example has suggested the nature of the involvement of the CL system with order processing to support consumption, and has mentioned some of the information it requires for proper operation. Of course, considerably more information is processed by the subsystem in the concrete world.

The Data Management Segment

The previous discussion has repeatedly referred to decisions made to select the activities that constitute the process of the CL system. Decision making depends on information inputs, and this information must be communicated from its source to the point within the system where it can be used. This section once again draws upon the contributions of scholarly work into the nature of the business logistics system. It deals with two aspects of the process of managing this flow of the data that are useful to decision making--data acquisition and data maintenance.

Data Acquisition

Information for decision making can be acquired

from numerous sources that lie outside the boundaries of the CL system. One useful categorization of these sources states whether they are commercial or non-commercial. To begin this discussion, the commercial sources include the sub-categories of electronic, print, personal, and other sources of information.

Commercial electronic media communicate via radio and television messages. Communications from these sources can provide information relevant to decisions for all five of the CL subsystems. For example, a grocery store may advertise a case-lot sale that provides substantial savings to those who will carry a larger inventory in storage. Automobile dealers promise many transportation benefits to those who purchase the cars in their ads. Similarly, the ads for various shopping centers proclaim the attributes of the sponsored center, asking all within electronic reach to visit their location during shopping trips.

One or more of the tenants of this shopping center may use electronic media to invite prospective customers to visit their stores. Their appeals may state that their helpful personnel will assist shoppers in handling large packages (e.g., provide free delivery). Or, a bank may promote its drive-up window as a means of speeding transactions (in the handling of their output, money). Finally, the manufacturer of portable radios with lightweight headsets can use a radio commercial to promote a product that can be used to receive communication in support of CL.

The same messages can be communicated via print media, although some elements of the appropriate strategies for receiving these communications may differ. For example, print media may require more overt search on the part of the Communication subsystem. Similarly, personal sources of commercial information use two-way communication can provide information useful to the operation of the five subsystems.

Non-commercial sources supply generally non-biased (although often largely inaccurate) information useful to management of the CL system. For example, a neighbor may warn a consumer to stock up on (increase her inventory of) items she has learned will be in short supply in the coming year. A work associate who recently purchased his main transportation vehicle may recommend a car dealer. A friend may influence a decision maker to move his residence to a location closer to a recreation area adjacent to the homes of several of his friends. A relative may demonstrate a new shopping cart for handling parcels that is both lightweight and durable. And, a neighbor may invite a homemaker to join in a mid-morning coffee group whose communications regularly discuss and evaluate commercial sources of products.

Beyond external sources, from within the system itself household members can provide a wide variety of internal data that are specific to the decision making needs of their CL system. They can give advice on how to improve the operation of the system, communicate what amount to status reports on the system, and translate information they have imported from outside the boundaries of the system.

Sources of information for decision making need not be human. Calendars, notebooks, and even electronic computers can be used to store data that will be later retrieved for use in planning, operations, and control activities. In turn, these data can be used to generate new forms of information. For example, programs have been created for personal computers that help the homemaker make proportionate changes to the ingredients in a basic recipe to adjust for the required number of servings.

Data Maintenance

Data maintenance in the case of the household differs greatly from that in even the smallest businesses. In its current unsophisticated state of organization, household management has not demanded any sizeable flow of information for longer term decision making purposes. Thus, there has been little recognition of the need to store and maintain data for periods longer than what can be served by human memory.

Nonetheless, the illustrations to this point suggest a number of examples of data storage. A shopping list stores information on items to be acquired in the near future. A bulletin board holds notes to remind household members to perform their duties related to CL. Programs have been specially developed for personal computers to use in maintaining a record of the items held in household inventory (F1 Software 1984). Special record books are published for keeping maintenance records for the family transportation vehicle. A small letter holder on the desk of the household manager can be used to hold of communications to the household; e.g. unpaid bills.

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CONSUMER LOGISTICS: THE HANDLING AND STORAGE SUBSYSTEM

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Abstract

This paper presents the portrayal of the handling and storage subsystem of the consumer logistics system. It introduces concepts useful for understanding the subsystem, and relates these concepts to both strategic and operational decisions involved in management of the subsystem. This basic portrayal of the subsystem is intended to stimulate further research into the structure and process of the consumer logistics system. To this end, the paper presents a variety of research topics suggested by the conceptual portrayal.

Introduction

Despite the considerable attention that has been given to various aspects of consumer behavior in the past two decades, one important set of related consumer activities has received piecemeal attention, at best. These activities are those in which consumers complement the work of the business logistics system. Here, consumers perform a variety of distribution tasks necessary to complete the movement and handling of goods from the point of production to the point of consumption or disposal. What has been called "consumer logistics" involves the movement and handling of goods from the point of their acquisition from the commercial distribution system until their consumption or other disposition.

Consumer logistics features five subsystems: inventory, location, transportation, communication, and handling and storage. These subsystems mirror the set proposed by Bowersox (1978) as appropriate to study of the business logistics system. This paper investigates the structure and process of the handling and storage subsystem. It adapts concepts developed from the study of handling and storage in the business segment of the distribution system to a portrayal of handling and storage (hereafter, H&S) as performed by consumers. As the conceptual center of consumer activities, the household is taken as the focal point for this study of the part played by consumers in the logistics aspects of distribution. This report considers the various H&S operations performed by consumers to support the consumption process.

While the ultimate goal of this project is to provide prescriptions for efficient consumer behavior, the present state of knowledge means that current research must work at a largely descriptive level. Hopefully, in the not too distant future, scholarly work in consumer logistics (hereafter, CL) will move beyond mere description to help consumers gain greater satisfaction from the consumption process by prescribing behavior that is appropriate in a normative sense.

For instance, scholars in the field of business logistics have developed models that, when implemented, can increase the efficiency of business handling and storage operations. In the household, the CL counterparts to these business operations have been performed with almost no help from scholars toward making their performance more efficient in terms of expenditures of time, energy, and money. In particular, household operations are generally somewhat disorganized, depending on the management skill of the household manager and her co-workers. Therefore, even simple contributions to the organization of consumer logistics operations can readily improve their efficiency, with attendant benefits to consumers. One part of the larger program of which this study is a part will be to: (1) adapt prescriptive decision models that have been developed in the field of business logistics; and (2) develop new models specifically designed to aid efficiency in CL.

Thus, the objective of this paper is to present a preliminary, conceptual, and heuristic portrayal of the elements of the structure and process of the H&S subsystem of the CL system. This portrayal is intended to provide an initial basis for further conceptual and empirical research into this area of consumer behavior. To demonstrate the heuristic value of this conceptualization, and to hopefully stimulate further work in this area, each major section concludes with research topics suggested by the presentation in that section.

Basic Concepts For Considering The Subsystem

This section presents the basic elements of the H&S subsystem necessary to further conceptualization. Given the lack of attention paid to H&S in the CL system by researchers, it seems appropriate (and necessary) to draw concepts from the findings of research into the business logistics system. Therefore, in addition to original contributions, this presentation also draws a number of concepts from conceptualizations that have been provided by scholars working in business logistics.

The Handling and Storage Subsystem as a Network

The H&S process involves movement of goods from one point in space and time to another point. Introducing the concept of a network can aid our understanding of this movement. For the process performed by a given household, these points can be seen as nodes in a network. The paths the goods follow are then the links that connect the nodes. In contrast with the large-scale, or macro, process of the transportation subsystem, the H&S subsystem involves a small-scale, or micro, movement process.

Figure 1 shows graphically how this process moves goods from one position in space and time to another. Labels for the nodes were taken from general systems theory. Examples of nodes arbitrarily refer to H&S of food items for illustrative purposes. Those movements that take place primarily with respect to positions in space may be considered a part of the handling segment of the subsystem. Those that relate to change from one point in time to another involve its storage segment.

Assortments in the Network

One form of network that has been well studied by marketing scholars is the marketing channel. The H&S network structure may be viewed as a small scale marketing channel. In the channel, goods flow from one position to another. As Alderson (1957) pointed out, the channel facilitates the flow of goods by changing assortments as it transfers goods from one node to another. To explain the changes in assortment that should be effected to produce the most efficient mix at succeeding nodes, Alderson introduced the concept of sorting. He showed assortments to be characterized by both their quantitative and qualitative composition, with the efficiency of the assortment at a given node being dependent on the operations to be performed on the goods at that node.

The concept of efficient assortments also pertains to the consumer logistics system. Here, as well, the composition of the assortment of goods involved in the CL process reflects the tasks to be performed on these goods to facilitate consumption. For example, because it is easier to carry grocery products from the store to one's car in a container, grocery items are typically sorted into a quantitative assortment that fits shopping bags. This temporary assortment is largely independent of the final assortment into which these goods will be sorted for consumption purposes. For its part, the qualitative composition of the assortment that is most effective for such consumption activities as food preparation and serving will most likely differ from the assortment used for placing the items into a cupboard.

Functions of the Subsystem

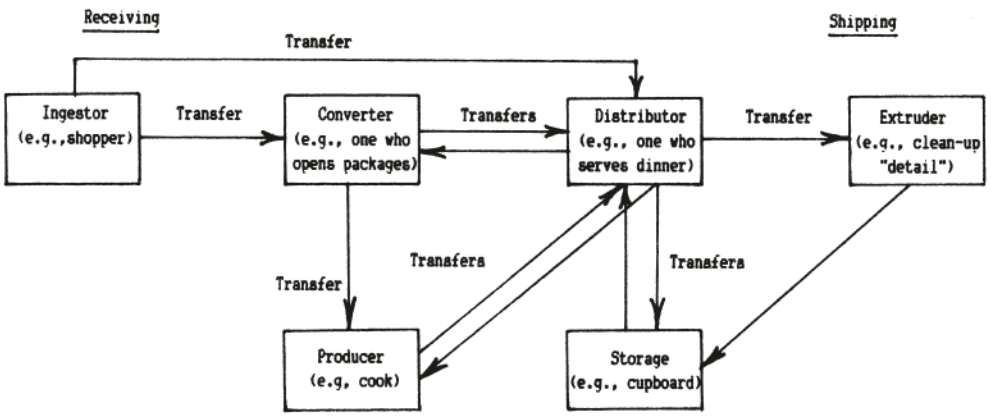
The H&S subsystem of the CL system performs various functions to move the goods through the network. It performs seven groups of H&S activities, the first six of which functions are commonly cited in the literature of business logistics/physical distribution. The seventh function comes from the work of Alderson discussed above. First, receiving subsumes the physical operations that bring goods over the boundary that separates the system from its environment, into the control of the system itself. Second, break-bulk transfers change the nature of the assortment of goods by quantitative disaggregation. Third, placement in storage locates the goods in an appropriate physical position for movement through time.

Fourth, retrieval from storage reverses the last process by reclaiming the goods for subsequent handling to meet the consumption needs of the household. (In the business setting, this operation is called order picking.) Fifth, make-bulk transfers again change the quantity of the assortment, by aggregating items that may have been removed from various places of storage into a grouping that meets the consumption needs of the moment. Sixth, shipping exports the goods or their residue from control of the H&S subsystem to the place of consumption, disposal, or disposition to another logistics system. Seventh, qualitative transfers change the mix of products as they move from one node to another.

A System Model

The H&S system is a subsystem of the CL system that serves to process goods to facilitate consumption. It handles and stores goods to make them available at the desired place in space and time, and in the condition required for consumption. It exports the residue of consumption to an external disposal system for further disposition.

FIGURE 1
THE HANDLING AND STORAGE SUBSYSTEM AS A NETWORK



Its structure is the organization of the set of elements (i.e., persons and artifacts) that perform the interrelated sequence of activities that constitute the process of the system. The H&S subsystem inputs resources of human energy, time, physical space, financial aid, and information to support its process.

The analysis of a business logistics system often focuses on its cost and customer service level, or on its contribution to the profits of the suprasystem. The counterpart of this criterion for evaluating the efficiency of consumer systems is not so easily stated. Instead of relying solely on monetary units, the analysis for a consumer system would have to deal with less concrete inputs and outputs. In an abstract sense, the criterion measure of success for the H&S subsystem is the ratio of consumption benefits received to the product and resource inputs required to generate these benefits.

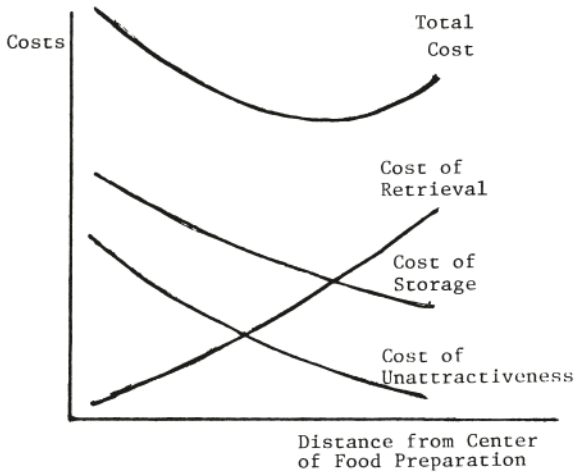
As appropriate to this early stage in the development of the field of CL, this treatment proceeds in a conceptual vein. One important concept in the of business logistics of potential value to study consumer logistics is total cost analysis (LeKashman and Stolle 1965). The following section demonstrates the potential value of adapting concepts from business logistics to enlarge our understanding of CL.

An Adaptation of the Concept of Total Cost

Total cost analysis recognizes the interrelationships among the various functions, or activities, of CL. The basic notion of total cost analysis is to consider the totality of costs, not just those associated with a single function. Total cost analysis seeks the minimum total cost of performing all logistics functions, given that the system achieves the customer service objectives that have been established. Thus, all relevant functions must be considered in the analysis of costs. In the case of an analysis for H&S, functions such as the seven listed above in the section on Functions of the Subsystems would provide useful cost components. (Of course, the "total" cost of H&S itself must be considered as a part of the larger-scale total cost of higher-level functions of which H&S is but one.)

Total cost analysis recognizes that individual functions are often at "cross-purposes" with one another, and recommends compromises in the level of some or all of the functions performed. For example, a food storage cupboard may be placed some fifteen feet from the optimal position for food preparation as evaluated by a time-and-motion study of kitchen efficiency -- because it "looks better" there, and because the placement allows a larger volume of storage space to be designed into the cupboard. This placement thus decreases the psychic cost of an unattractive kitchen and increases the storage ability of the H&S subsystem. But it increases the retrieval costs of food handling. As shown in **Figure 2**, a compromise placement could bring about the lowest sum of these three costs and if these three represented all relevant costs, the lowest <u>total</u> cost of food handling.

FIGURE 2
AN EXAMPLE OF TOTAL COST ANALYSIS BASED ON CUPBOARD PLACEMENT



As the example shows, total cost analysis involves cost trade-offs. Its goal is to effect decreases and increases in various cost components to produce the greatest net decrease in total cost for the system as a whole. That is, system designers will trade increases in one or more cost components for a greater decrease in one or more others.

Conceptually, total cost analysis for H&S (and for CL as a whole) begins by specifying those alternative system designs to be evaluated. Next, the analysis explicitly recognizes the basic functions (activities) of H&S. Then, the process accrues costs based on the performance of these activities; e.g., the cost of time spent moving goods from the counter to a storage cupboard. Finally, the costs are summed for each system design and the optimal alternative is selected.

In keeping with the heuristic objective of this paper, the portrayal in this section suggests a number of research topics, of which the following are illustrative:

Create a taxonomy of H&S movements through space and time;

Draw a comprehensive analogy between the marketing channel and the H&S subsystem, using various conceptual devices found useful for portraying the channel;

Provide a description of the H&S sorting process analogous to Alderson's description of that for the marketing channel;

Establish criteria for judging the effectiveness and efficiency of a given sequence of H&S sorting operations;

Elaborate the list of H&S functions to include their sub-functions;

Survey a sample of persons involved in H&S operations to develop a descriptive protocol of the tasks they perform, and form generalizations of the process based on these observations;

Create a generalized template, based on an elaborated list of H&S functions and sub-functions, for total cost analysis of the H&S sub-system and its sub-subsystems.

Strategic Issues In The H&S Subsystem

As an aid to organization, the issues to be investigated in the remainder of this paper will be treated under these headings found useful for the study of business logistics systems: first strategic issues and then operational issues.

System Design

As mentioned above, household H&S systems are largely devoid of formal organization. Generally, they just develop over time, for better or worse. Yet management principles dictate that logistics operations should be managed as a system. This section investigates the notion that the H&S system can be explicitly designed to promote more efficient operation.

Planning sets goals and establishes the means for reaching these goals. Planning becomes strategic when it applies at the level where decision makers take a relatively broad perspective. Formal household planning sessions are apparently uncommon, and those involving logistics issues even more rare. Yet the goals that are desired for the household and for its members often find some form of expression. In particular, people often state concrete objectives that they have set for themselves in terms of what they would like to consume. By stating objectives, they thus lay the foundation for planning the logistics activities necessary to support their consumption.

In the larger sense, the consumption objectives of the household can be converted to customer service goals for the CL system. This means that strategic planning should design a system that will efficiently provide the level of customer service that is desired by the household, whether explicitly or implicitly stated. In the language of total cost analysis, the system should be designed to provide the desired benefits or utilities at a minimum cost in terms of the contributions supplied by its participants.

For the system to facilitate the flow of goods that supports consumption, its design must reflect the nature of these flows. Input, throughput, and output operations will be based on the characteristics and volume of the various types of goods that flow through the system. Some goods, such as culinary water, can be expected to flow continuously. Others, such as winter clothing, flow in a seasonal fashion. Some goods, such as basic foodstuffs, flow to all household members, while others, such as cosmetics, may flow to only a subset of these members.

Design and Layout of the Dwelling

Presumably, the choice of a dwelling (thereby its location) has been treated by the location subsystem. The next issue to consider here is to what extent areas in the dwelling should be allocated to H&S operations. That is, what part of the dwelling should be given to these operations, and for what proportion of the time that this space is potentially available? For example, a closet might be used only for storage. But a table might be used for sorting goods, for eating, and as a primary element of interior design.

The allocation of spaces to uses often involves a competition between the functional and aesthetic modes of use. The extent to which these two uses can coexist reflects the skill with which the dwelling has been designed. Conceptually, this allocation is a matter for total cost analysis. Allocation decisions should be based on a suitable trade-off of the benefits and costs associated with the competing uses for various areas of a dwelling.

To begin, this trade-off involves the volume of space that is available for all competing uses. A large house may have certain areas allocated solely for H&S operations, while a small apartment may require that all spaces suitable for H&S be shared among a variety of uses. Thus, the volume and nature of the space potentially available for H&S operations both reflects and dictates the type of dwelling that will be selected by a particular household. Furthermore, as in the case of the corresponding business decision, whether to own, lease, or rent a dwelling may depend on the cost and usefulness of the space provided by each alternative.

Continuing in the vein of cost trade-offs, the cost of acquiring the dwelling involves a trade-off between acquisition costs (e.g., construction costs) and H&S costs. A dwelling that is cheap to acquire (e.g., by rental) may be a poor choice if it is so badly designed that the costs of H&S are high.

A number of principles found useful in the business sphere can be easily adapted to aid these decisions. Ideally, the ("interior") designer would act as a space utilization analyst. The designer-analyst would view the possessions of the household and learn about its life style to understand what consumer logistics activities must be supported by the H&S subsystem. The proper design (in all three spatial dimensions) would promote efficient traffic flow through and around areas where H&S operations take place, by considering the necessary trade-offs between the benefits and costs of storage space and traffic aisles. Traffic flow would be facilitated through the proper placement of exterior and interior doorways, which would be of sufficient width to allow easy movement of bulky items and large assortments. Similarly, counters would be designed to facilitate the creation of the necessary range

of product assortments. Shelves, closets, cabinets, and chests would be designed to facilitate maximum use of cubic space for storage.

The design and layout of the H&S areas within and without the dwelling should be made in consideration of a number of other issues broader than H&S or even CL. For example, should office space be set aside to provide a place for management of the CL system (more broadly, for household management functions)? To what extent should H&S operations be dispersed or concentrated at the point of receiving goods from the transportation subsystem? Under which members of the household should responsibility for H&S operations be centralized? These questions involve issues that transcend the boundaries of the H&S subsystem. Therefore, they call for a more explicit consideration of the interface between this subsystem and other systems with which it interacts.

Interfaces With Other Systems

Obviously, the CL system must be to some degree compatible with the systems with which it must interact. In fact, the efficiency of the H&S system will depend on how well it finds an interface with systems that affect it. Terms from **Fig. 1** can be used in an example of the interface with the business system. A shopper's (Ingestor's) ability to purchase grocery items in case-lot quantities may depend on her ability to load the cartons in the store, take them to a vehicle (Transporter), and convey them from the vehicle to the point where break-bulk operations will take place (Converter). Similarly, the household's (Extruder's) ability to dispose of some unneeded furniture items may depend on getting them to the point where they will be taken by municipal trash collectors.

Within the CL system itself, the five subsystems must also find a successful mutual interface. As a guide to designing this interface, total cost analysis points up the need to consider cost trade-offs.

Research issues suggested by the presentation in this section include:

- Investigate the extent to which relatively formal planning exists, and whether it does and could affect effectiveness and efficiency of CL operations;
- Determine the potential usefulness of explicitly stating consumption objectives as a means of guiding CL operations;
- Demonstrate how total cost analysis can be used to guide the design of a dwelling to improve CL operations;
- Show how decision models devised to guide the design of industrial warehouses can be adapted to aid design of dwellings;
- Develop procedures for measuring the concrete costs associated with H&S, both as outlay costs and as (opportunity) costs or benefits;
- Characterize the interface between the H&S subsystem and its environment, and learn how to control it;
- Use a systems approach to establish principles for the design of products and packages (e.g., cars and containers) that acknowledge the needs of CL;

Operations Issues In The H&S Subsystem

At the operations level, the level of day-to-day decision making, many of the basic principles of business materials handling apply to improving the efficiency of the consumer H&S system. For example, industrial engineers recognize that movement takes time, time that is in most cases a scarce resource. Therefore, the efficiency of handling operations can be improved by reducing the number of operations when each item is handled. Once an item is picked up, it should be directly transferred to storage or positioned within the assortment that is appropriate for the next set of operations. This way, the distance each item is moved, and the time it takes, can be minimized.

Storage operations can also benefit from prescriptions developed for business logistics. A number of rules have been established to guide placement of goods in the most efficient position for storage. For example, the simple popularity rule states that as much stock as possible should be placed near the point where it will be used in succeeding operations. It is for this reason that kitchen designers place the refrigerator near the stove that will be used to cook refrigerated items. When storage space is scarce near the place of work, another simple rule of business logistics applies. The size rule calls for placing smaller items near their point of future use, and larger items farther away, where space is more available.

Research issues suggested by the treatment in this section include:

- Develop an objective function for CL decisions based on time;
- Adapt concepts used to guide placement, movement, storage, and materials handling decisions in business logistics to the consumer logistics system;

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INTERNATIONAL MARKETING

THE INVOLVEMENT OF PRODUCTS AND SERVICES ACROSS SIX CULTURES[1]

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Abstract

The study uses the Personal Involvement Inventory (PII) model to measure the involvement that consumers in six countries have for a series of eight products and services. The purpose of the research is to gain further insight into two critical problems in standardizing marketing programs for multinational markets. The first problem is to identify products or services that potentially could be standardized, and the second problem is to discern the relative importance of the products or services to the different national consumers. The preliminary findings of the study reflect the difficulties involved in standardizing international marketing programs.

Introduction

The question of standardizing the marketing program versus designing a unique program for each country market has been an issue since the emergence of multinational marketing. This subject has received added interest in the last few years with Levitt's article on "The Globalization of Markets", Levitt (1983). In this controversial piece, he argued that people everywhere want goods of best quality and reliability at the lowest prices, and that cultural preferences, tastes, and standards are vestiges of the past because the world is becoming homogenized. Conversely, Kotler felt that only a few, if any, products can be standardized safely, and Wind stated that there is no hard evidence to show that consumers everywhere are becoming more alike. He points out that, in fact, there has been considerable marketing research which suggests that people's tastes are diverging as they become better educated and more affluent (c.f. Fisher, 1984, p.79).

The reasons for the attention given to the subject are, of course, the potential advantages and disadvantages. The potential benefits are economies of scale in production or marketing or both, the development of a consistent and universally recognized product or company image, and the fact that it is easier and more efficient to manage one common marketing program or programs with only a few adaptations. The potential disadvantage is the sales that are lost because the product does not meet the needs of a large portion of the target market, or the communication does not effectively reach the target market. As pointed out by Keegan (1985) in his alternative product and communication strategies for multinational marketing, the product and communication elements in the international marketing program are the most critical variables to the concept of standardization.

While there has been a fair amount of research on the degree of standardization practiced by the multinational companies (for example, Britt 1974; Sorenson and Weichman 1975; Killough 1978; Aydin and Terpstra 1981; and Hill and Still 1984), relatively little research has been conducted on what the companies should do in regard to the standardization questions in their multinational markets. These questions are critical since the marketing company that is standardizing some portion of its marketing program may not know that it is losing sales because of unsatisfied customers. On the other hand, the marketing company that has unique programs for each national market may not know that it is losing profits because some elements of the marketing programs could be standardized.

The relative lack of research on how multinational companies should or should not standardize the product and communication variables in their international marketing programs is due to the lack of cross-cultural consumer behavior research. This study is a modest attempt to correct this problem. If it is assumed that there may be some products or services that could be standardized for a number of national markets, either for all market countries or for a few countries in a particular region, then the first problem is to identify these products or services. To discern the possibility of a common communication program, the second problem involves determining the buying motives of the consumers in the different country markets as well as the relative importance of the products or services to the different national consumers. The concept of involvement is used in this study in order to gain further insight into these two problems.

The Concept of Involvement

Involvement is the perceived importance or concern for a particular aspect of a person's world to that person. The marketing application of involvement pertains to the perceived importance of a product class to the consumer. Furthermore, consumers with a high level of involvement in a product class usually have widely differing views of different brands in the class and increased commitment to or reactions against them. Conversely, consumers with a low level of involvement in a product

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class do not really care enough about that class to have an opinion about the brands in it; the product is not important enough for them to warrant concern (Harrell 1986). Thus, if the level of involvement for a series of product classes could be measured in various country markets, further insight could be gained into the feasibility of standardizing the product and communication variables in the international marketing programs for these products.

Until recently, however, there has not been an accepted method of measuring product involvement. The Personal Involvement Inventory (PII) was developed and tested for content validity; the stability of internally reliable items over time; the criterion related validity or the ability of the scale to discriminate among different products for the same people; and construct validity or the theoretical value of the scale to discriminate on self-reported behaviors (Zaichkowsky, 1985).

The PII requires the individual to rate twenty semantic differential items and the responses are scored (1) for low score to (7) for high score; thus, the total score for the twenty questions can range from 20 to 140. The total score is the measure of that individual's involvement with that particular product class.

Methodology

Culture can be defined as the sum total of the ways of living built up by a group of human beings and transmitted from one generation to another. Perhaps, a definition that lends itself better to this research is that a unique culture is produced by the interaction of a group of people and their particular environment. This development of a culture is similar to that of a biological species where the new species rises in response to the demands of its environment. The more a culture advances, the better the people are able to transcend the limitations of their environment. On the other hand, the more a culture is isolated in its natural environment, the greater a tendency for a people to have cultural fixation, since cultural development is not a matter of time but exposure to other cultures (Dawson, 1938).

Therefore, of the six countries included in this study it would seem that the people in Canada and the United States would have more or less the same levels of product involvement, as would the people in Finland and Sweden. While the People's Republic of China and Yugoslavia have considerably different environments, they do have the common element of socialistic economies. In addition, both of these countries, but particularly China, are relatively isolated; thus, there would be a tendency for both peoples to have cultural fixation.

It is critical in cross-cultural analysis to have a structural framework so that like people in various cultures are studied and compared. The structural framework in this study is based on the following dimensions, as recommended by Kassarjian and Robertson (1981).

1) Demographic Dimension
Age: All respondents are in their early twenties
Marital Status: Almost all respondents are single
Number of Children: Almost all respondents do not have any children
Education: All respondents are in their third or fourth year of college/university study

2) Organizational Dimension
All respondents are college/university students

3) Normative Dimension
The respondents are assumed to have reasonably similar values since they are all students preparing for careers in business.

To meet these conditions, the study was designed so that the sample consisted of approximately 50 students of business administration in their third or fourth year of study in college/university in each of six countries: Canada, China, Finland, Sweden, United States, and Yugoslavia. The questionnaires were administered in all cases by professors of marketing.

The selection of the products/services to be studied was based on the following factors: the products/services could be used in multinational marketing, a number of services must be included because of the growing importance of services in many economies, and a variety of both products and services should be included in order to provide a wide range of choices. The selected products/services were: Air Travel, Going to the Movies, Blue Jeans, Soft Drinks, Beer, Eating at a Restaurant, Hair Shampoo, and Stereo Set.

The questionnaires were prepared in English and had to be administered in English, because the meanings of the semantic differentials of the PII could not be maintained if translated into other languages. This required the responding students to have a reasonable fluency in the English language, which probably biased the selection of the sample. It is assumed that this will have little bias effect, if any, on the responses, however. In any event, this problem could not have been avoided.

It was considered necessary to present the products/services to the students in a random order to avoid influencing the response because of the position of the product/service in the questionnaire. To solve this problem, the questionnaire were made into booklets that included demographic questions, the random order of the involvement scales for the eight product/services, and questions that ask how often or how much the respondents use or consume the products/services.

Another reason for selecting college/university business students was to gain more control over the sample selection process. This is always difficult when other people are selecting the sample, or sub-samples in this case; however, it is assumed that the control was reasonably tight because of the rather strict sample

definition. This control was probably enhanced further by the fact that professors of marketing selected the sub-samples in each country to meet the sample conditions.

Findings and Discussion

The demographic characteristics of the sub-samples are listed in Table One and are reasonably similar, aside from the relative proportion of males and females. Thus, it is assumed that the sample selection meets the demographic dimension of the structural framework. Since the respondents are all business students in college/university, it is assumed that the selection also met the organizational and normative dimensions for the reasons stated previously.

TABLE 1
PROFILE OF RESPONDENTS

	Canada	China	Finland	Sweden	U.S.A.	Yugoslavia
Sample size	59	50	45	34	47	50
Male	66%	60%	60%	82%	43%	24%
Female	34%	40%	40%	18%	57%	76%
Average age	23.2	21.9	23.9	22.4	21.8	22.0
Single	95%	96%	89%	100%	98%	92%
No children	98%	98%	93%	100%	98%	94%

The PII proved to be a reliable measuring instrument across the six countries tested. Administering the questionnaires in English did not cause a problem of understanding the statements. The Cronbach Alpha, which measures the consistency of each student's response for the twenty questions regarding a product/service, ranged from 0.86 to 0.99 over products and countries (see Table Two). The fact that this is a reliable measuring instrument across different cultures, under certain conditions, adds support to the use of PII for cross-cultural consumer behavior research.

TABLE 2
RELIABILITY OF THE PII BY PRODUCT
AND BY COUNTRY
(Cronbach Alpha)

Prod./Serv.	Canada	China	Finland	Sweden	U.S.A.	Yugoslavia
Air Travel	0.93	0.91	0.92	0.88	0.92	0.86
Blue Jeans	0.96	0.97	0.96	0.94	0.96	0.95
Beer	0.98	0.98	0.98	0.99	0.99	0.97
Shampoo	0.92	0.98	0.94	0.94	0.93	0.91
Movies	0.96	0.95	0.92	0.95	0.97	0.94
Soft Drinks	0.96	0.95	0.97	0.95	0.97	0.91
Restaurant	0.96	0.94	0.95	0.94	0.96	0.93
Stereo Set	0.96	0.93	0.96	0.96	0.96	0.91

Involvement with Products Across Cultures

A one-way analyses of variance was carried out across the involvement levels for the six countries for each product/service. The general results of the analyses are listed in Table 3.

Air Travel

China had the lowest PII level for air travel, 85.5 (S.D.=19.2) and the United States had the highest PII level, 116 (S.D.=12.7). The Scheffe's multiple range test showed China was lower than any other country, while the U.S. was higher than any other country in their involvement with air travel.

Beer

The PII levels for beer ranged from an average low of 67.6 (S.D.=29.4) for Yugoslavia to an average high of 84.3 (S.D.=36.1) for Sweden. The analysis showed no overall differences in PII levels across cultures. No two countries were significantly different from each other in their perception of beer.

Blue Jeans

The PII levels for blue jeans ranged from an average low of 79.1 for China and a high score of 99.4 for the United States. The overall analysis was significant ($F(5,277)=8.77$, $p<.001$). The Scheffe's multiple range test found both Canada and the United States to have significantly higher involvement levels with blue jeans than Finland, Sweden, and China.

Eating at a Restaurant

China had the lowest average PII level for eating at a restaurant, 83.8 (S.D.=21.9) and Finland had the highest average PII, 103.9 (S.D.=16.2). The overall analysis was significant ($F(5,282)=8.12$, $p<.001$). The results of the Scheffe's multiple range test found China to be significantly lower in their involvement with restaurants than Canada, the United States, Finland and Sweden. Yugoslavia was also significantly less involved with restaurants than Finland.

Hair Shampoo

China had the lowest PII with hair shampoo 87.4 (S.D.=35.8), while Yugoslavia had the highest average PII, 110.9 (S.D.=20.9). Here again the overall test for differences among countries was significant ($F(5,282)=7.51$, $p<.001$). China was significantly lower than either the United States or Yugoslavia in their involvement with shampoo. Sweden was also significantly less involved with hair shampoo than Yugoslavia.

Going to the Movies

The country most involved with going to the movies was China, PII=109.1 (S.D.=20.3) while the United States was the least involved with movie going, PII=93.2 (S.D.=22.8). The overall test was significant ($F(5,277)=4.89$, $p<.001$). The results of the Scheffe's multiple range

TABLE 3
MEAN INVOLVEMENT LEVELS FOR PRODUCTS ACROSS SIX COUNTRIES

PRODUCT/ SERVICE	COUNTRY Canada N=60	U.S.A. N=46	Finland N=45	Yugoslavia N=50	Sweden N=36	China N=50	F Value	
Air Travel	105.6 (14.6)*	116 (12.7)	105.2 (13.9)	102 (14.3)	99.2 (14.1)	85.5 (19.3)	21.32 p<.001	1) China is significantly lower than all other countries** 2) U.S. is significantly higher than all other countries
Beer	69.6 (30.6)	71.1 (35.3)	80.1 (29.3)	67.6 (29.4)	84.3 (36.1)	79.5 (37.3)	2.0 NS	No two groups are significantly different at the 0.05 level
Blue Jeans	98.4 (19.9)	99.4 (20.6)	79.5 (21.9)	94.1 (22.6)	80.8 (18.6)	79.1 (29.6)	8.77 p<.001	Canada & U.S. are significantly different than Finland, Sweden and China
Eating at a Restaurant	98.7 (19.2)	102.8 (20.8)	103.9 (16.2)	90.0 (21.9)	102.1 (17.4)	83.8 (21.9)	8.12 p<.001	1) China is significantly different than Canada, U.S., Finland and Sweden 2) Yugoslavia is significantly different than Finland
Going to the Movies	101.5 (16.0)	106.5 (17.8)	97.7 (18.3)	110.9 (20.9)	92.4 (20.9)	87.4 (35.8)	7.52 p<.001	1) China is significantly different than the U.S. and Yugoslavia 2) Sweden is significantly different than Yugoslavia
Hair Shampoo	95.6 (17.6)	93.2 (22.8)	104.0 (12.2)	101.3 (18.4)	97.4 (19.0)	109.1 (20.3)	4.89 p<.001	China is significantly different than Canada and the U.S.
Soft Drinks	67.3 (23.1)	84.5 (27.7)	72.3 (23.8)	109.8 (17.1)	71.4 (20.2)	103.3 (21.8)	31.62 p<.001	1) The U.S. is significantly different than Canada 2) China is significantly different than Canada, U.S., Finland and Sweden 3) Yugoslavia is significantly different than Canada, U.S., Finland and Sweden
Stereo Set	109.8 (16.3)	111.5 (18.3)	104.1 (18.6)	110.3 (16.6)	109.2 (20.8)	115.9 (15.7)	2.2 NS	No two groups are significantly different

* Standard deviations
** A Scheffe's multiple range test detected which countries had significantly different involvement levels.

test showed China to be significantly more involved with going to the movies than either the United States or Canada.

Soft Drinks

The country most involved with soft drinks was Yugoslavia, PII=109.8 (S.D.=17.1). The country least involved with soft drinks was Canada, PII=67.3 (S.D.=23.1). The overall one way analysis of variance was highly significant ($F(5,281)=31.62$, $p<.001$). With soft drinks, many countries showed differences in the multiple range tests:

1) The United States was significantly more involved than Canada.
2) China was significantly more involved with soft drinks than Canada, the United States, Finland and Sweden.
3) Yugoslavia was significantly more involved with soft drinks than Canada, the United States, Finland, and Sweden.

Stereo Sets

All countries were relatively highly involved with stereo sets with PII levels ranging from 104 to 115. No two countries were significantly different than each other with their perceptions of stereos.

Discussion and Summary

The interesting results of this study lie in the countries' similarities and differences. The product categories which had the overall lowest involvement levels and highest involvement levels were the product categories where no differences existed across countries. Beer was not perceived differently across cultures, all PII levels were relatively low and had high standard deviations, indicating great variance within cultures, not across cultures. Stereo sets were rated highly across all cultures, perhaps indicating the importance of this product category to the demographic group selected for study. Perhaps these two products can be successfully adapted to 'global' marketing.

The rest of the product categories showed some very interesting differences among the countries. Air travel was exceedingly involving to the American students and exceedingly uninvolving to the Chinese students. This surely reflects an inherent difference in an integral part of culture, namely mobility. Blue jeans do not appear to be as important a product in Finland, Sweden and China as they are in Canada and the United States. Perhaps this indicates an opportunity to sell to these countries instead of the saturated North American market, or conversely it could indicate these countries are not that interested in blue jeans. Western countries scored high in eating at a restaurant,

while China scored very low in involvement with eating in a restaurant. Yugoslavia, another communist based country, also scored relatively low in this service area. The cultural difference in lifestyle might account for this difference.

On the other hand, the product category of hair shampoo was rated very high by China in relation to the U.S. and Canadian sample. Just what cultural difference account for this wide gap is unclear. Finland, a very modern country, also showed involvement levels similar to China for this product.

The product category of soft drinks might prove to be an instant success in China and Yugoslavia as they were highly involved with the product. The more western countries had lower levels of involvement, with the Canadians not being that concerned with the product at all. This same trend was evident in going to the movies with the China sample being greatly involved, more so that the North American samples.

The indication from this data is that the product categories of soft drinks, stereo sets and movies might be excellent products for initial penetration to the large China market. The interest is already there and would not have to be created.

Preliminary Conclusions

Based on the evidence presented, the Canadian and U.S. students are quite similar in their relative involvement levels for these products/services, and the Finnish and Swedish students are reasonably similar. The Chinese and the Yugoslavian students have rather different product involvement as compared to the U.S. students.

In answer to the critical questions for standardization, it appears that hair shampoo and stereo sets could be considered for further study because they are relatively high involvement products in all six countries. Beer is also a possibility since it is a relatively low involvement product in most countries, with the exception of China.

Perhaps, the major finding at this stage of the overall study is the difficulty in identifying products or services that meet the conditions of standardization from the perspective of consumers from widely different cultures. For this reason, the intention is to include the responses from business students in approximately ten more countries, and to extend the analysis to the study of product involvement in conjunction with product use as well as the relationships of both of these variables with income levels.

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THE CORRESPONDENCE BETWEEN THE PRICE AND QUALITY OF CONSUMER PRODUCTS IN 10 COUNTRIES: PRELIMINARY RESULTS

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Abstract

This study investigates the relationship between the price and quality of consumer products in 10 countries. The study first focuses on the strength of the price-quality relationship for durable and nondurable products individually within each country and then compares the price-quality correlations across countries. A second focus of the study is to explain the variability in the price-quality conditions by using an ANOVA model with price variability and price level as two independent variables.

Introduction

The relationship between the price and quality of consumer products has been a central focus of consumer advocates and public policymakers since 1927, when Chase and Schlink published their best selling book, Your Money's Worth, the locus classicus for the consumer movement. In this influential book, they reported a series of investigations conducted by other researchers attempting to determine the relationship between price and quality. Although these early investigations failed to establish an empirical relationship, they did demonstrate "the failure of price to measure quality" (p.77).

Almost twenty years after the publications of Your Money's Worth, Scitovsky (1945) hypothesized that due to the increased number of technologically complex products available in the marketplace, the modern consumer could no longer be considered an expert in assessing product quality and, therefore, must judge quality by indirect, and often misleading indices. Price was one such index. Scitovsky also noted that in markets where consumers use price as a cue for product quality, price and quality are unlikely to be highly correlated.

In the ensuing years Scitovsky's hypothesis engendered a considerable amount of research that examined the relationship between the price and quality of consumer products sold in the United States. Although these studies had differing objectives, the results suggest that the price-quality relationship is relatively weak. Generally, this relationship is stronger for durable products than for nondurable ones. In fact, for a sizeable number of primarily nondurable products, the relationship is negative.

The result of these studies are important to both consumer advocates and public policymakers for several reasons. First, the weak relationship between price and quality may suggest "that markets are not working well and consumers are not making efficient use of their resources" (Giestfeld 1986, p. 1). Although a variety of sources for this imperfection may be postulated, one likely source is that consumers lack the information they need to make accurate assessments of product quality (Maynes 1976).

The relationship between the price and quality of consumer products has also been a great interest to marketing managers and academicians. The tremendous increase in international business activity has engendered a need for greater attention to issues relating to business strategy in international markets (Porter 1986). Two marketing mix variables that have received increasing attention as a result of the globilization of world markets are price and product quality (Levitt 1983; Kotler, Fahey and Jatusripitak 1985; Hayes and Wheelwright 1984).

While the results of the studies reported in the literature on the price-quality relationship are useful, they are based on data from within the United States and, for the most part, from one source -- Consumer Reports Magazine. Therefore, the first objective of this study is to broaden our understanding of the price-quality relationship in other developed countries.

The second objective of the study is to determine the effect of two key variables -- price variability and price level -- on the level of price-quality correlations.

Literature Review

The Price-Quality Relationship

Since 1950, 22 studies have been reported in the literature that focus on the price-quality relationship. The 22 studies, summarized in Table 1, indicate that the overall relationship between price and quality is quite weak and has remained relatively unchanged over almost a 40-year period. Nonduarables consistently demonstrate a higher proportion of negative correlation coefficients and, therefore, a weaker relationship, than durables.

One reason for the consistent pattern of results reported in Table 1 is that, for the most part, the various investigations have utilized a common source of data -- Consumer Reports Magazine. And, in many cases, the investigators analyzed the same comparative product reports. Furthermore, in 20 of the 22 studies, the analysis was at the product level. In two investigations, however, the observation units were individual manufactures (Curry 1985; Faulds 1983).

The distillation of the above research provides four generalizations. First, Morris and Bronson (1969) show that "price and quality do correlate but at a level so low as to lack practical significance" (p. 33). Second, Curry and Riesz (1983) demonstrate that "the correlation for durables is much higher than that for nondurables" (p. 7). Third, Riesz (1978) points out that "the overall relationship between price and quality for a very wide range of products tested by Consumer Reports has remained essentially unchanged over almost a 30-year period" (p. 25). And finally, "the ex-

tension of the U.S. findings about the price-quality relationship to foreign markets, even those equally highly developed, is not a priori simple and straightforward" (Johansson and Erickson 1985, p. 52).

Table 1: Summary of the Price Objective Quality Literature

Reference	Source of Data	Analysis Period	Statistic	Results
Chase & Schlink Your Money's Worth,	Gov. Reports	1915-1927	N.A.	Weak relationship between price and quality
Oxenfeldt RES, 1950	CR	1939-1949	S	Mean: .252
Friedman JCA, 1967	CR	1961-196	S	Mean: .15
Morris & Bronson JM, 1969	CR	1958-1967	S	Mean: .29
Gale & Dardis JAATCC, 1970	Retail Outlet	1968	S	Rnage: -.037 to .761
Swan JM, 1974	CR	1961-1970	Chi-Square	Weak price-performance relationships
Sproles JCA, 1977	CR	1972-1974	S	Mean: .26
Riesz JR, 1978	CR	1961-1975	S	Mean: .26
Sutton & Riesz JCP, 1979	CR	1961-1978	S	Mean: .057
Riesz JCA, 1979	CR	1961-1975	S	Mean: .092
Dardis & Gieser JCP, 1980	CR	1970-1977	S	Mean: .278
Geistfield JCA, 1982	CR Retail	1976-1977	S	
Curry & Riesz, Unpublished Working Paper, 1982	CR	1961-1980	S	Mean: .266
Falkenberg, Unpublished Dissertation, 1982	CR	1968-1979	P	Mean: -.56
Archibald, Haulman, & Moody JCR, 1983	Runner's World	1979	S	Mean: .210
Faulds AMA, 1983	CR	1961-1980	P	Mean: .385
Hjorth-Andersen JCR, 1984	CR	1978-1980	S	Mean: .220
Curry JM, 1985	CR	1961-1980	P	Mean: .658
Yamanda & Ackerman JCA, 1984	Monthly Consumers (Japan)	1972-1981	S	Mean: -.060
Gerstner JMR, 1985	CR	1980-1982	K	Frequently Purchased Products (Total .01)
				Nonfrequently Puchased Products (Total .19)
Johansson & Erickson IMR, 1985	CR	1982	P	U.S. Japan Mean .040 -.179
Faulds Albert Haring Symposium, 1985	12 Consumer Organizations	1968 to 1983	S	Preliminary (Revised Since 1985)

CR Consumer Reports
P Pearson Correlation
S Spearman Correlation
K Kendall

The literature summarized in Table 1 suggests two hypotheses about the nature of the relationship between price and quality within each country.

Hypothesis 1: Within each country, the price-quality correlation for durable products will be less than or equal to the price-quality correlation for nondurables.

Hypothesis 2: Within each country, there is no association between product durability and the sign of the price-quality correlation coefficient.

Hypotheses 3, 4, and 5 examine the differences that exist among the countries with respect to the price-quality correlations. There are a number of factors that could affect the strength of this relationship in the 10 countries. Among these factors are tariff and non-tariff barriers, price controls, sales taxes, inflation rates, government priorities concerning exports, distribution channels, and exchange rates. Not all of these factors can be adequately dealt with on a country-by-country basis. However, in the absence of any supporting empirical evidence it seemed most logical to formulate hypotheses that took the position that no differences would exist in the price-quality correlations among the 10 countries. Hypothesis 3 addresses the difference in the nature of the price-quality relationship among the 10 countries for durables and nondurables combined. Hypotheses 4 and 5, however, examine the nature of this relationship for the durables and nondurables individually across the countries.

Hypothesis 3: There is no difference among the 10 countries with respect to the correlation between the price and quality of consumer products.

Hypothesis 4: There is no difference among the 10 countries with respect to the correlation between the price and quality of durable products.

Hypothesis 5: There is not difference among the 10 countries with respect to the correlations between the price and quality of nondurables products.

Price Variation and Price Level

The price level and the extent of price variability within a product class may also influence the strength of the price-quality correlation. Stigler (1961), for example, contends that price variability, as measured by the coefficient of variation, is indicative of the potential benefits that may accrue from comparative shopping. Tellis and Wernerfelt (1983) support Stigler's position when they state that

> One would expect more consumers to search and be informed as the spread in prices at which products are sold increases. This premise is consistent with the literature on search. Thus we expect the correlation between price and quality to be stronger in markets with a higher price range (p. 22).

Wilde (1977) and Salop and Stiglitz (1977) contend that price variability signals to the consumer that variations in quality may exist within a product class. In the absence of price variation in a product class, consumers must seek other signals assuming that variations in quality do exist. Therefore, price variation acts as a barometer for the benefits to be gained from comparative shopping. The consumer search literature also indicates that when consumers perceive large variations in price they tend to increase the extent of comparative shopping. Formally, the hypothesis states:

Hypothesis 6: Within each country, for both durables and nondurables the level of price variation (low, medium, high) has no effect on the level of the price-quality correlation.

Hypothesis 7 examines the impact of price levels on the variation in the price-quality correlations for durables and nondurables individually. The dynamics of consumer search behavior operate for Hypothesis 7 just as they do for Hypothesis 6.

When consumers perceive increases in price levels they perceive great benefits associated with increased search and alternatively they may perceive greater risk if they fail to engage in comparative shopping.

Hypothesis 7: Within each country, for both durables and nondurables the price level has no effect on the level of price-quality correlation.

Methodology

Data

The data available for analyses were obtained from 12 consumer product testing organizations in 10 countries: Australia, Belgium, Denmark, France, Germany, New Zealand, Norway, The Netherlands, the United Kingdom, and the United States. The primary data, consisting of price and objective quality ratings for approximately 100,000 brands and extracted from 7,000 comparative product reports, were published during the period 1968-1983.

Data Analysis

This section describes the general type of analysis used to test the hypotheses.

Hypothesis 1 test whether differences exist, within each country, between the price-quality correlations for durables and nondurables. A t-test was used to determine whether significant differences existed between the mean price-quality correlation coefficients for durables and nondurables for each country individually.

The relationship between product durability and the sign of the correlation coefficient is the subject of Hypothesis 2. Chi-square contingency tables were constructed for each country to test this hypothesis.

Hypotheses 3, 4, and 5 test whether significant differences exist among the 10 countries with respect to the price-quality correlation. The country pairwise comparisons were made first for durables and nondurables combined (Hypotheses 3) and, second, for durables (Hypothesis 4) and nondurables (Hypothesis 5), individually. Post-hoc comparisons were conducted to identify significant differences using the Bonferroni t-statistic.

Hypothesis 6 and 7 were tested using an ANOVA model.[1] These hypotheses are designed to determine the individual effects of price variation and price level on the Spearman price-quality correlation for durables and nondurables individually, within each country.

The dependent variable is the normalized version of the Fisher Z transformation of the Spearman price-quality correlation. This transformation is necessary to ensure that the error terms are distributed as multivariate normal with zero mean and constant variance.

The effect of price variability (COV), as measured by the coefficient of variation, on the Spearman price-quality correlation was tested by Hypothesis 6. To test this hypothesis, the coefficient of variation for price, associated with each comparative product report, was converted into a 3 level "price variability" (COV) factor. This topology was formed by dividing the range of the coefficient of variation into approximately three equal categories -- low, medium, and high. The decision to categorize this variable was based on preliminary regression analysis indicating a nonlinear relationship between price variability and the price-quality correlation.

Hypothesis 7 examines the relationship between the price level of a product category and the price-quality correlation. To test this hypothesis the price level was first converted into U.S. dollars using the appropriate yearly exchange rate then adjusted for inflation using 1980 as a base year. The adjusted prices were also categorized into three classifications -- low, medium, and high. The price level variable refers to the average price for all brands evaluated in a comparative product report.

Results

Hypotheses 1 and 2 - Durables vs. Nondurables

As shown in Table 2, the data indicate that the price-quality correlations are significantly different for durables and nondurables for eight of the countries studied, the two exceptions being Norway and New Zealand. It should be noted, however, that in the case of Norway the analysis is based on data collected from only four nondurable reports. The sample size for New Zealand (180 durable reports vs. 60 nondurable reports) seems sufficient to accept the results at face value.

Table 3 gives the results of the analysis performance to test Hypothesis 2. The data in Table 3 presents the data for the 16-year period for each country. For the 10 countries the nondurable pro-

Table 2. The Results of the T-test Between the Mean Price-Quality Correlations for Durables and Nondurables Within Countries a

Country	Durables	Non-durables	Prob > |T|
Australia	.847	.490	.0656
Belgium	.890	.367	.0001
Denmark	.973	.124	.0243
France	.909	.350	.0001
Germany	1.060	.7567	.0160
Norway	.895	.0896	.3851
Netherlands	2.557	.522	.0001
New Zealand	3.261	2.378	.7572
United Kingdom	1.238	.585	.0091
United States	1.542	.712	.0028

a. Fisher Z transformation on price-quality correlation mean

[1] The unit of analysis is the comparative product report. The selection of these two variables was in part dictated by the source of data employed in this investigation.

ducts had a higher proportion of negative price-quality correlations than the durable products, however, the difference was not significant in three of the countries (Australia, Norway, and the United Kingdom).

Table 3: Product Durability Versus Price-Quality Correlation Coeficient Sign

PRODUCT DURABILITY VERSUS CORRELATION COEFFICIENT SIGN

AUSTRALIA

	Nondurables	Durables	Total
Negative	25	117	142
Positive	39	268	307
Total	64	385	449

Chi-Square=1.909 d.f.=1 Prob.=.1671

DENMARK

	Nondurables	Durables	Total
Negative	14	48	62
Positive	12	113	125
Total	26	161	187

Chi-Square=5.834 d.f.=1 Prob.=.0157

BELGIUM

	Nondurables	Durables	Total
Negative	135	163	298
Positive	163	416	579
Total	298	579	877

Chi-Square=25.795 d.f.=1 Prob.=.0001

FEDERAL REPUBLIC OF GERMANY

	Nondurables	Durables	Total
Negative	72	116	238
Positive	154	544	698
Total	226	710	936

Chi-Square=6.498 d.f.=1 Prob.=.0108

FRANCE

	Nondurables	Durables	Total
Negative	162	130	292
Positive	219	302	521
Total	381	432	813

Chi-Square=13.584 d.f.=1 Prob.=.002

NORWAY

	Nondurables	Durables	Total
Negative	2	39	41
Positive	2	77	79
Total	4	116	120

Chi-Square=.461 d.f.=1 Prob.=.4971

THE NETHERLANDS

	Nondurables	Durables	Total
Negative	68	268	336
Positive	106	721	827
Total	174	988	1163

Chi-Square=10.341 d.f.=1 Prob.=.0013

NEW ZEALAND

	Nondurables	Durables	Total
Negative	30	61	91
Positive	30	119	149
Total	60	180	240

Chi-Square=4.962 d.f.=1 Prob.=.0259

UNITED KINGDOM

	Nondurables	Durables	Total
Negative	20	167	187
Positive	34	445	479
Total	54	612	666

Chi-Square=2.3364 d.f.=1 Prob.=.1264

UNITED STATES

	Nondurables	Durables	Total
Negative	86	116	202
Positive	139	486	625
Total	225	602	827

Chi-Square=31.872 d.f.=1 Prob.=.0001

Hypotheses 3, 4, and 5 - Country Comparisons

Hypotheses 3, 4, and 5 concerned the cross-national differences that exist among the price-quality correlations in each of the 10 countries for durables, nondurables, and these two categories combined, for the period 1968 to 1983. Before reporting the results of the hypotheses tests, it is important to note several aspects in the data reported in Table 4. First, the mean price-quality correlations reported for durables show a remarkable degree of consistency among the countries. Although the correlations range from a high of .303 for the U.S. to a low of .176 for Norway, a much narrower spread exists for the remaining countries with seven of them having correlations between .206 and .255.

In the case of nondurables, the range for the correlations is much greater, i.e. .034 for New Zealand to .167 for the Federal Republic of Germany. For over half the countries the correlation between the price and quality of the nondurable products was less than .1, a condition that indicates an extremely weak association between price and quality.

The results of the post-hoc test indicates that New Zealand is the only country that differs from the other nine countries with respect to the overall price-quality correlations. Hypotheses 4 and 5 separate durables and nondurables and deal with the price-quality correlations for each category across countries. Again, New Zealand is the only country that varies from the other nine, but only for durable products.

Hypotheses 6 and 7 - Price Variation and Price Level

Table 5 present the GLM results for durables and nondurables for each of the 10 countries. For durables, we find that the main effect for price variation, as measured by the coefficient of variation (COV) is significant beyond the p > .1000 level for 8 of the 10 countries. However, the main effect due to price level (PRICE) is significant in only two countries -- The Netherlands and The United Kingdom. The interaction between price variation (COV) and price level (PRICE) was signi-

Table 4: The Spearman Correlation between Price and Quality by Country: 1968 to 1983

		Australia	Belgium	Denmark	Federal Rep. Ger	France	Netherlands	New Zealand	Norway	United States	United Kingdom
DUR	Mean	.191[a]	.229[a]	.255[a]	.254[a]	.206[a]	.253[a]	.224[a]	.176[a]	.303[a]	.248[a]
	N(d)	385	579	161	710	432	989	180	116	602	612
NDUR	Mean	.085[b]	.044[b]	.044[c]	.167[a]	.050[b]	.125[a]	.034[c]	.085[c]	.112[b]	.112[b]
	N(d)	64	298	26	226	381	174	60	4	225	54
TOTAL	Mean	.176[a]	.166[a]	.213[a]	.233[a]	.132[a]	.234[a]	.159[a]	.167[a]	.251[a]	.237[a]
	N(d)	449	877	187	936	814	1,163	240	120	827	666

a. Ho: Mean = 0 Prob >|T| = .0001
b. Ho: Mean = 0 Prob >|T| = .1000
c. Not Significant
d. N represents the number of comparative product reports that had complete information on price and quality.

ficant in only one country -- The United Kingdom. For nondurables the main effects for these factors are not significant.

Table 5. Summary of the Main Effects and Interactions for the Variables in the Model: Durables

Australia			New Zealand		
Source	P(>F)a	P(>F)b	Source	P(>F)a	P(>F)b
Cov	.0050	.6546	Cov	.2307	.5432
Price	.5394	.9970	Price	.5576	.5514
Cov*Price	.3273	.3872	Cov*Price	.5271	.5889
Belgium			**Norway**		
Source	P(>F)a	P(>F)b	Source	P(>F)a	P(>F)c
Cov	.0001	.1262	Cov	.0243	
Price	.8633	.6765	Price	.1651	
Cov*Price	.7454	.4988	Cov*Price	.2772	
Denmark			**United Kingdom**		
Source	P(>F)a	P(>F)c	Source	P(>F)a	P(>F)b
Cov	.2520		Cov	.0008	.2057
Price	.1669		Price	.0300	.5704
Cov*Price	.3255		Cov*Price	.0243	.6183
France			**The Netherlands**		
Source	P(>F)a	P(>F)b	Source	P(>F)a	P(>F)b
Cov	.0005	.6070	Cov	.0007	.6163
Price	.6833	.8258	Price	.0752	.2617
Cov*Price	.3143	.2185	Cov*Price	.7943	.3033
Federal Republic of Germany			**United States**		
Source	P(>F)a	P(>F)b	Source	P(>F)a	P(>F)b
Cov	.0001	.6746	Cov	.0814	.0561
Price	.1867	.3033	Price	.9774	.2813
Cov*Price	.3107	.0911	Cov*Price	.5344	.3065

a. Durable products
b. Nondurable products
c. Not included due to small sample size reported by respective testing organization.

The Bonferroni t-statistic was used to determine significant difference existed among the pairwise means calculated for the three levels (low, medium, and high) of the independent variables. As Table 6 indicates as price variability (COV) increase for durable products the correlation between price and quality also increases. This is also the case for nondurables in 5 of the 10 countries. However, the findings reported in Table 6 for the price level factor (PRICE) offer mixed results.

Summary

Perhaps the most significant contribution of the study is that the results derived from data generated in 9 foreign countries reveal a high degree of similarity with the results from the studies conducted during the past four decades in the United States. Three of the four generalizations derived from the price-quality literature were for the most part confirmed by the data analysis carried out.

The model developed to test the affect of price-variation and price-level on the price-quality correlation revealed that only one factor, price

Table 6: Post-Hoc Comparisons Among Price-Quality Correlation c

	Means			Difference Between Means		
	Low	Med	High	LM	MH	LH
Australia						
Cov	.46/.66[a]	.81/.70	1.27/.11	--	b	c
Price	.91/.40	.89/.56	.75/.51	--	--	--
Belgium						
Cov	.49/.60	.69/.30	1.49/.21	--	c	c
Price	.93/.28	.92/.39	.82/.43	--	--	--
Denmark						
Cov	.75/.01	.66/.48	1.52/.13	--	--	--
Price	.55/.88	.73/.52	1.65/.10	--	--	--
France						
Cov	.57/.35	.75/.27	1.40/.43	--	--	--
Price	.89/.38	1.73/.52	1.65/.10	--	--	--
Federal Republic of Germany						
Cov	.65/.65	1.00/.76	1.53/.86	--	--	--
Price	1.03/.55	1.10/.86	1.03/.87	--	--	--
The Netherlands						
Cov	.73/.40	1.04/.55	1.46/.62	--	c	c
Price	.90/.58	1.29/.27	1.03/.71	--	--	--
United Kingdom						
Cov	.82/.91	1.03/.84	1.86/.00	--	c	c
Price	1.09/.30	.97/.51	1.65/.95	--	--	c
United States						
Cov	.69/.27	1.83/.84	2.11/1.02	--	--	--
Price	1.03/.55	1.10/.86	1.03/1.00	--	--	--
New Zealand						
Cov	.62/.11	.78/0.16	8.39/6.86	--	--	--
Price	6.98/.12	1.13/6.77	1.68/.25	--	--	--

a. The Fisher-Z transformation on the Price-Quality Correlation: Durable Mean/NonDurable Mean
b. Results of the Bonferroni T-test significant at .05 level.
c. Norway not included due to small sample size.

variation, had a significant affect. Although the pattern of results indicated that price-variability was significant for eight of the ten countries, this relationship existed only in the case of durable products. This finding seems to corroborate the economic literature which suggests that price variability within a product class can be indicative of the potential benefits from comparative shopping in that product category. This relationship seems to hold for 8 of the 10 countries analyzed, and over several hundred durable product categories.

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AN EMPIRICAL INVESTGATION OF THE ROLE OF LANGUAGE IN CROSS-NATIONAL RESEARCH

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Abstract

Words are often used to describe categories on a rating scale, while the answers are given numerical coded values for the analysis. If the words are directly translated can the same numerical values be used in the analysis of questionnaires in the various languages? This research indicates that they can be. However, the appropriateness of this procedure can be verified using magnitude estimation techniques.

Introduction

As business increasingly becomes an international phenomenon the role of international marketing research has become more prominent (Douglas and Craig, 1983). However, the increasing volume of cross-national research has raised serious methodological issues (Green and White, 1976; Davis, Douglas and Silk, 1981). The specific issues of concern in cross-national consumer research include the functional equivalence of the phenomena being studied across nations, the cross-national equivalence of the concepts and research instruments being employed, the comparability of the samples in each nation, and the translation of the research instrument into different languages. It should be noted that these cross-national methodological issues are also relevant in cross-national opinion polling and in the measurement of labor force attitudes, both topics of distinct interest to international business management.

The focus of our research is the problem of language equivalence. In particular, we address the fact that marketing research often assesses measures of amount, frequency and evaluation in a semantic mode. A typical situation could be the need to determine consumer response to the taste of a beverage. In this example it would be appropriate to have consumers evaluate the product on evaluative (sweet-sour, tart-bland) scales. To accomplish this task very often a set of rating scales is established. A typical scale consists of five or seven intervals, each of which is anchored by an adjective or phrase. Such a scale thus provides two stimuli ('position' and 'label') to which respondents may react.

Scales possessing attributes of 'label' and 'position' raise interesting questions. Do people respond solely to the adjective or phrase used or is the relative position of the phrase on the scale and important determinant of response as well? Two recent studies have investigated this issue. Wildt and Mazis (1978) developed a set of semantic labels based on the extreme concepts of "the best (worse) thing I can say about a product" as endpoints. Using category scaling methods 50 adjectives were evaluated on a 21-point spectrum. The extreme values were terrible (1.28) and superior (19.80). From these 50 adjectives a set of six 5-point scales were developed. Each scale used 'extremely good' and 'extremely poor' as endpoints. One scale was labeled only at the end points whereas a second scale included intermediate labels whose corresponding scale values divided the psychological range into approximately equal intervals. The two scales were thus designed to yield equivalent response values. Scales three and four were skewed versions of the first (the skewness being provided by adjective replacement, i.e. label adjustment). Scales five and six were developed as stretched and compressed versions of the second scale. Using this set of six scales responses were elicited to a set of 16 stimuli. The hypotheses of the study were the two extreme ones asserting, on one hand, that response tendency was solely a function of the location of each scale 'position' and, on the other hand, that response tendency was solely a function of the 'labels' affixed to each scale position. The findings suggested that the impact of 'position' and 'label' represents a complex phenomenon with both variables having an impact on response patterns.

Friedman and Leefer (1981) performed subsequent research on the relative contribution of 'label' and 'position' to scale response patterns. This study strongly indicated the primacy of the 'label'dimension of a scale over the 'position' dimension. While this latter study was methodologically flawed these two recent research papers strongly support the importance of semantic stimuli in eliciting questionnaire response patterns when adjectival labels are used to establish scales.

Given this indicated importance of semantic stimuli the question arises as to whether a direct translation of the terms used represents the quantitative equivalent of the original terms. For example, if the labels excellent, average and fairly poor are used to anchor a particular evaluative scale presented to respondent who speak English, would respondents who speak Spanish perceive a questionnaire which used the translated equivalent terms of excelente, promedio and bastante malo in such a way that the same numerical values could be assigned to questionnaires in both languages? As such scales are typically analyzed numerically, the importance of the quantitative equivalence of the translated version(s) to that of the original is apparent.

Our study was designed to find a preliminary answer to the above mentioned question. The specific objective of our research is to examine to what extent the translation of an adjectival label

used, for example, to anchor a seven-point semantic differential scale, reproduces respondents' quantitative assessment of the scale positions. Our study utilizes direct translation to establish equivalent scale labels and then investigates the numerical evaluation of these labels in both English and Spanish.

Method

The investigation draws heavily on the research tradition of psychophysics, the discipline which is concerned with the measurement of sensory and perceptual phenomena (Stevens, 1975). The particular technique utilized in this research was magnitude estimation which utilizes direct quantification of semantic stimuli by the respondent (Stevens, 1975, p. 26). The distinguishing characteristic of magnitude estimation is that it permits the achievement of the highest level of measurement, namely the ratio scale. As Stevens notes in comparing magnitude estimation to the more typical procedure (in marketing research also) of category scaling:

"....the category scaling procedure seems seductively simple. As a consequence, unfortunately, the procedure enjoys unmerited popularity. Category procedures result at best in interval scales, not in ratio scales. In most cases only a slight rewarding of the instructions would allow the observer to employ, not a restricted set of category numbers, but any numbers he thinks appropriate to express the apparent magnitude of the stimulus. It would then be possible for the observer to generate a ratio scale" (Stevens, 1975, p. 231).

It should be emphasized that there has been extensive work, principally by Stevens and his collaborators, to establish the ratio quality of magnitude estimation over a wide range of phenomena. While most of the investigations have studied such sensory stimuli as heat, light and sound there has been an increasing tendency for magnitude estimation to be used in social measurement.

Bass, Cascio and O'Connor (1974) provide a comprehensive description of the use of magnitude estimation to establish numerical values for adjectives which could be used as labels in scales measuring assessments of frequency and amount. They determined scale values for 39 expressions of frequency (never to always) and 44 expressions of amount (none to all). The ability of magnitude estimation to quantify such scale labels was confirmed in a study by Schriesheim and Schriesheim (1978). This latter study essentially replicated the findings of Bass, Cascio and O'Connor and thus confirmed the ability of magnitude estimation to at least achieve the interval level of measurement (a lower level than claimed by Stevens but sufficient for most scaling purposes). Lodge (1981) has provided a comprehensive review of the applicability of magnitude scaling in social science research.

Procedure

The vehicle used for investigating and illustrating the potential value of magnitude estimation in establishing the equivalence of scales in two languages was the evaluation of university instructors by bilingual students. From the Wildt and Mazis study cited earlier, nine evaluation adjectives were chosen to represent an approximately equal-interval scale -- "terrible" was the leaf favorable word and "excellent" was the most favorable.

To determine the Spanish equivalent of the nine English adjectives 20 bilingual students were asked to provide the Spanish word (or words) which best captured the meaning of the English word. Using this information as an item of significant input a native speaker, completely fluent in English, finalized the set of Spanish labels. The instructions provided to subjects are descriptive of the technique of magnitude estimation and are reproduced below. The Spanish version of the English evaluative stimuli are provided in brackets. It should realize that only English or Spanish words were used in any given data collection instrument:

> People frequently use words such as good, mediocre and poor to describe how they feel about some person or object. Assume someone has just said to you, "I think that Dr. X is an average instructor."
>
> On the following page, please assign a number to what you conceive "average" to mean. You may use any number greater than or equal to zero (0). Please place the number on the line next to "average".
>
> Then, using the number you have assigned to "average" as a standard, please assign a number to each of the other words on the form indicating each word's value relative to "average". Again, use any number greater than or equal to zero. The number placed next to each word or phrase should reflect what you feel that word or phrase means when compared with average. For example, if you assign a value of 50 to average, you might assign the value 100 to any other word or phrase which you feel represents twice the merit of average and a value of 5 to any word or phrase that seems to represent only 1/10 the merit of average.

Average (Promedio)	_____
Very good (Muy Bueno)	_____
Fine (Bueno)	_____
Allright (Está Bien)	_____
Bad (Malo)	_____
Terrible (Terrible)	_____
Excellent (Excelente)	_____
Fairly Poor (Bastante Malo)	_____
Mediocre (Mediocre)	_____

The subjects of the research were bilingual Hispanic business students of a university located in a major metropolitan area in the southeastern United States. They were a different group from those used to establish the Spanish adjectives. The data utilized in this research was collected from a sample of 105 students. Each student provided the numerical values he or she associated with both the English and Spanish versions of the adjectives. There was a one to two week interval between the two data collection occasions. To eliminate the possibility of systematic bias there were three orderings of the eight adjectives. 'Average', as the reference criterion, was invariably located in the first position on the list.

Results

There are multiple methods for analyzing the data. As the interest in cross-national research is focused on different samples in two nations, it was on this basis that our initial data analysis proceeded. It is recognized that our research design was strongly biased in favor of language equivalence because of the identical composition of the samples in both languages. This is justified on the basis of our study providing initial evidence on the language factor in cross-national research.

The data generated by the study is summarized in Table 1. In this table all data is presented in the format of English (Spanish) to facilitate direct comparisons. The initial analysis

TABLE 1

DATA SUMMARY - RAW SCORES*

Label	Mean	Standard Deviation
Excellent (Excelente)	55.8(57.0)	44.7(44.2)
Very Good (Muy Bueno)	49.1(49.6)	39.6(40.4)
Fine (Bueno)	41.0(44.3)	34.3(35.6)
Allright (Esta Bien)	41.0(41.1)	34.4(33.6)
Average (Promedio)	30.6(31.3)	25.0(24.4)
Mediocre (Mediocre)	26.6(26.5)	23.9(22.7)
Fairly Poor (Bastante Malo)**	18.0(12.9)	19.6(16.6)
Bad (Malo)	13.6(15.3)	16.3(17.5)
Terrible (Terrible)	7.7(7.6)	12.0(13.4)

Label	Maximum	Minimum
Excellent (Excelente)	100(100)	1(1)
Very Good (Muy Bueno)	100(100)	0(0)
Fine (Bueno)	100(98)	3(3)
Allright (Está Bien)	90(97)	2(0)
Average (Promedio)	80(80)	20(0)
Mediocre (Mediocre)	80(70)	1(1)
Fairly Poor (Bastante Malo)**	70(98)	0(0)
Bad (Malo)	80(88)	0(0)
Terrible (Terrible)	60(75)	0(0)

*All information presented in the format: English (Spanish)

**Means significantly different at 5% significance level.

performed was multivariate analysis of variance (MANOVA), utilizing BMDX69. The approximate F-statistic was 3.35 (d.f.,9,200). This was significant at the 1% level indicating that there was an overall difference between the numerical values assigned to the sets of words in the two languages. Further investigation involved univariate analysis of variance on each of the nine English/Spanish word pairs. BMDP7D was used to perform this set of analyses. The only word pair for which a significant value was obtained was that of 4.15 (d.f.,1,208) for "fairly poor/ bastante malo". a value indicating a significant difference at the 5% level. Inspection of **Table 1** confirms that the difference in mean value was greatest for this pair. The multivariate analysis of variance was then re-run with the values for "fairly poor/bastante malo" left out of the analysis. The resulting F-statistic of 1.0811 (d.f.,8,201) was not significant. Therefore, with the exception of values assigned to one of the nine pairs of terms, there was no overall difference between the numerical values assigned to the sets of words in two languages.

Further examination of **Table 1** indicates that, in English, the magnitude estimations of the Hispanic students reproduced the ordering that Wildt and Mazis had obtained in the results discussed earlier. In contrast, in Spanish, the ordering of "fairly poor" and "bad" was reversed (as compared to Wildt/Mazis). Other aspects of table 1 that are of interest include the relatively high standard deviations and the extreme range of respondents' perceptions of the quantitative value of the labels. There also appears to be a distinct trend toward lower standard deviations in both languages as we descend the table (and mean values of the magnitude estimations).

One reason we might find discrepancies between the labels in the two languages is that the use of average as a frame of reference means that discrepancies in values ascribed to "average" (promedio) permeate the complete data set. To determine the impact of this issue each respondents' data was transformed to reflect the 8 proportional scores based on the value of 50 for average (promedio). The data generated by this transformation is summarized in **Table 2**. The format is identical to **Table 1**. The application of MONOVA to this transformed data set gave an approximate F-statistic of 6.17 (d.f.,9,200). This was also significant at the 1% level. The set of univariate analyses of variance on each of the nine word pairs again showed significant differences for "fairly poor/bastante malo" (F=14.96,d,f,=1,108). This was significant at the 1% level. Thus the transformation did not materially affect the results of the analysis. While not material to this study it should be noted that **Table 3** indicates that the adjusted magnitude estimations of the Hispanic students of our study were similar to the similarly adjusted categorical judgments of the students in the Wildt/Mazis study.

TABLE 2

DATA SUMMARY - SCORES ADJUSTED TO REFLECT

Average (Promedio) = 50*

Label	Mean	Standard Deviation
Excellent (Excelente)	93.5(93.8)	15.2(20.3)
Very Good (Muy Bueno)	80.9(80.6)	17.0(21.3)
Fine (Bueno)	67.9(70.6)	15.0(15.8)
Allright (Está Bien)	64.6(64.4)	14.9(14.5)
Average (Promedio)	50(50)	0(0)
Mediocre (Mediocre)	42.0(42.9)	11.7(11.5)
Fairly Poor (Bastante Malo)**	27.4(19.5)	13.5(16.0)
Bad (Malo)	20.0(22.5)	13.7(15.2)
Terrible (Terrible)	10.8(10.9)	14.8(16.5)

Label	Maximum	Minimum
Excellent (Excelente)	100(200)	10(2)
Very Good (Muy Bueno)	100(150)	0(1)
Fine (Bueno)	100(100)	20(20)
Allright (Está Bien)	90(97)	30(25)
Average (Promedio)	50(50)	50(50)
Mediocre (Mediocre)	70(70)	2(1)
Fairly Poor (Bastante Malo)**	70(100)	0(0)
Bad (Malo)	80(80)	0(0)
Terrible (Terrible)	100(100)	0(0)

*All information presented in the format: English (Spanish)

**Means significantly different at 5% significance level.

TABLE 3

COMPARISON OF MEANS OF MAGNITUDE ESTIMATIONS* WITH CATEGORICAL SCALING SCORES** ("Average" = 50)

Label	Magnitude Estimation	Category Scale
Excellent	93.5	93.2
Very Good	80.0	83.9
Fine	67.9	74.3
Allright	64.6	56.9
Average	50	50
Mediocre	42.0	42.7
Fairly Poor	27.4	27.0
Bad	20.0	18.0
Terrible	10.8	6.2

*English estimations

**Wildt and Mazis study

Conclusions

Magnitude estimation, and the particular findings of previous research utilizing this method, is useful in determining which terms should be used to anchor points on various types of measurement scales. Our research provides some preliminary evidence that the direct translation of English language terms yields numerically equivalent scales. Therefore, the magnitude estimation procedure may be used for the English terms and may not be necessary for scales developed in each other language.

However, one of our nine labels did prove to be significantly different, quantitatively, in the two languages (English and Spanish). Depending on the nature of the research and the sensitivity of the results, it may be necessary to use magnitude estimation procedures on limited samples in each language.

It should also be noted that while previous research has indicated the importance of both the positioning of the terms and the actual labels used, we are not aware of any research which investigates this 'label/position' issue in a cross-cultural context. One solution to this problem is to use either pure 'position' scales or 'label' measuring procedures. This latter suggestion could utilize magnitude estimation as a measurement procedure.

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CONSUMER RIGHTS:
THE PERCEPTION OF BUSINESS MANAGERS IN HONG KONG

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Abstract

This paper presented an exploratory study which used a sample of business managers to understand their attitude towards consumer rights. It is expected that the findings would be useful for international marketing managers when making relevant marketing decsion in Hong Kong. This study indicated that most business managers had confidence in products in the market place and valued highly the system of free-enterprises in Hong Kong. Most respondents thought that consumers in Hong Kong had not many opportunities to be heard and to redress and businessmen were not aware of the polluted environment by advertisements and products.

The Significance of Consumer Satisfaction

Most modern marketers agree that the primary goal of the firm is to satisfy customer's or consumer's need and wants at a profit. Yet today consumer discontent appears to be of particular interest. Evidence has been found that there is a high level of dissatisfaction with some products such as automobiles, electrical appliances, tourist agencies, and photographic equipment (see Annual Report of the Consumer Council 1977 - 85). At the same time, there seems to exist a loss of consumer confidence in both the marketplace and the marketers (Greyser and Diamond 1974). There are different viewpoints which try to explain why consumers are discontented. Some writers point out that consumer's expectation of product quality in general had been steadily rising due to the increasing income and sociological forces which had prompted high expectations of a better life style (Jones and Gardner 1976.) This can result in a discrepancy between expectation and perceived product performance and lead to consumer dissatisfaction. From a different angle, Jones and Gardner (1976) attributed the causes of consumer discontent to the negligent attitude of business and government.

There is evidence that the level of consumer dissatisfaction seems to be rising. Consumer complaint has been regarded as an objective measure of consumer dissatisfaction (McNeal 1974; Cavusgil and Kaynak 1982). In many places of the world, there has been a record of an increase in the volume of consumer complaints in recent years. According to the Consumer Council of Hong Kong (C.C.) (1977, 1985), which receives consumer correspondences and/or complaints, the number of complaints recorded per thousand population was 0.97 in 1977 and 1.78 in 1985. This implies an increase of almost 100 % over the past eight years. There are two possible explanations for the increase in consumer complaints. The first explanation is that consumers are not more sensitive to irritating business practices. They have learnt how to protest their rights and are therefore more prone to complain than they were before. The second explanation is that there has been a higher level of consumer dissatisfaction as reflected by consumer complaints. In the case of Hong Kong, the Consumer Council has been criticised as a dummy organization because of its lack of judicial power (Hong Kong News Digest 1984). In an unpublished study concerning consumerism in Hong Kong (Hung and Leung 1977), the majority of respondents failed to identify the functions of the Consumer Council. Furthermore, about one-third of the respondents had no knowledge of the Council. A more recent study (Yau 1986) also indicates that the Consumer Council has not been performing its functions adequately as even perceived by business executives. Hence, it seems that the second explanation would be highly likely to provide the potential answer to the increase in consumer complaints.

The consequences of consumer satisfaction/ dissatisfaction are salient to businessmen, government and consumers. At the business level, satisfaction is seen as a dimension of market performance (Czepiel and Rosenberg 1977). Increasing consumer satisfaction may mean a growth of long-term as well as short-term sales, and market share as a result of repeat purchasing. Consumer satisfaction can help business identify weak spots of products which have fallen below consumer and government standards. Hence, modifications can be made to improve the products to prevent future intervention. In fact, consumer satisfaction can show to the direction which business firms should follow if they want to survive or to strengthen the competitive position of products through segmentation. However, consumer satisfaction is a psychological process which are usually measured by objective measures as such complaints or by subjective measurement through marketing surveys. Chinese are people with two specific cultural values which lead them not to report complaints. One is "abasement" and the other is "harmony with others" (Yau 1986). These two values tend to make complaints an unreliable, biased, and invalid measure of consumer dissatisfaction. Thus marketing surveys which are expensive if to be conducted annually tend to be a better way to understand consumer satisfaction. In fact, one of the effective but inexpensive ways of satisfying consumers is to uncover consumer wants by paying respect to consumer rights which businessmen often ignore. Understanding and respecting consumer rights, businessmen could satisfy their customers by providing adequate and timely product information, by providing good and safe products to prevent future intervention and gain a good reputation, and by providing a redress channel to obtain proper feedbacks of products from customers.

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Hence, this paper presents an exploratory study which used a sample of business managers to understand their attitudes towards consumer rights. Business managers' perceptions of the marketing system and its operation are evaluated and used generally to suggest some implications for marketing policies and/or management. The findings offer great potential to international marketers and public policy makers who are interested in drawing specific implications for their own situations.

Data

The Mail Survey

Since business managers in Hong Kong, as managers elsewhere, are busy and difficult to approach, it was resolved to adopt a mail survey to collect the necessary data in the study. A structured questionnaire was designed to include 30 statements used to measure attitudes of Hong Kong business managers towards consumer rights and Hong Kong Consumer Council. Since most business managers understand English, the questionnaire was written in English.

The Sample

A sample was drawn from the Directory of Hong Kong Industries which was published by Hong Kong Productivity Centre in 1985. Questionnaires with prepaid envelopes were sent by mail to 1000 companies which were drawn randomly from the directory. As a result, 187 were returned, resulting in a response rate of 18.7%. The response rate is acceptable when it is compared with those in similar studies in Hong Kong. For examples, Sin, Cheng and Yau (1986) secured a response rate of 18.3% in a mail survey of Chinese executives while Yau (1985) experienced a response rate of 18.7% in a mail survey of advertisers in Hong Kong.

Profile of Respondents

After the collection of questionnaire, an analysis of respondents in the survey was performed. The business of the companies covered by the survey includes manufacturing sector (19.2%), trading sector (35.2%), finance section (12.8%), and other service sectors (32.8%). Results also indicate that 76.8% and 23.2% of the sample respondents were male and female respectively. Respondents were mostly middle-aged managers. 28% of them were under thirty years of age; 44.8% were between 30 and 40; and 27.2% were above 40. As far as income is concerned, 65.9% of respondents earned a salary of over HK$10,000 per month.

Data Analysis

Item Analysis

The thirty statements which measured the attitudes of business managers in Hong Kong towards consumer rights were rated on a six-point scale. These statements were classified according to the five consumer rights above-mentioned. To make the analysis simple, responses on all statements were recoded into two categories: 'agree' and 'disagree.' Tables 1 through 6 report the percentage of respondents who agreed or disagreed with each of the statements.

The Right to Safety

The answers to the statements in Table 1 indicate that respondents believed that products in the marketplace were safe. 83.4% of all respondents disagreed that toys are dangerous for children to use. 34% of those responding agreed that medicine that may be obtained without a prescription is dangerous. A majority of respondents (65.2%) agreed with the idea that new cars seldom have serious defects, and only 31% agreed that most goods offered for sale are of inferior quality. Despite the attitude expressed about the confidence in products in the market, most respondents (66.8%) disagreed that sellers usually do not cheat buyers. These findings imply a mixed feeling of respondents as a whole about product safety in the marketplace. When they were completing the questionnaire, they considered themselves sometimes as consumers and sometimes as businessmen/managers.

TABLE 1. THE RIGHT TO SAFETY

Statement	Disagree* %	Agree %	Mean
1 In general, toys are dangerous for children to use.	83.4	16.6	2.39
5 Medicine that may be obtained without a prescription is dangerous.	34.2	65.8	4.17
9 New cars seldom have serious defects	34.8	65.2	4.08
13 Sellers usually do not cheat buyers	66.8	33.2	2.87
17 Most goods offered for sale are of inferior quality	66.3	33.7	3.00

* Each statement for Tables 1 through 6 was subjected to a two-tailed z test. The hypothesis tested was that P=0.5, where the observed proportion was computed as the ratio of the sum of "strongly agree", "agree", and "slightly agree" to the sample size. In Table 1, all statements are significant at the 0.05 level.

The Right to be Informed

Table 2 shows that the response to some statements about product information was in line with the results of other investigations of how consumers view advertising (Sin and Yau 1986;Arndt, Crane and Tallhaug 1978). Many respondents agreed that (1) in general, what is saidin ads cannot be trusted (56.2%), and (2) important facts cannot be obtained from ads (73.1%). Most respondents also seemed not satisfied with information obtained from other sources. Approximately 68% of them agreed that warranties are hard to understand and 72.2% agreed that salespeople in most stores do not give needed information. Neither did respondents believe in product labels. Almost 54.3% of respondents disagreed that most labels are sufficiently informative. With results in Table 1, these results imply that business managers have greater confidence in advertised products than they do in advertisements and suggests a credibility gap that could be closed by appropriate management action. Furthermore, findings also indicate there is a lack of sufficient information for consumers when making buying decisions. This seems an opportunity for business managers who have a strong will to serve their customers satisfactorily.

TABLE 2. THE RIGHT TO BE INFORMED

Statement	Disagree %	Agree* %	Mean
2 In general, what is said in ad cannot be trusted.	43.8	56.2	3.68
6 Most labels are sufficiently informative.	54.3	45.7	3.26
10 Important facts cannot be obtained from ads.	26.9	73.1	4.36
14 Warranties are hard to understand	32.1	67.9	4.09
18 Salespeople in most stores do not give needed information	27.8	72.2	4.23

* All statements are significant at the 0.05 level

The Right to Choose Business managers' attitudes toward the right to choose are summarized in Table 3. In contrast to the views expressed about the right to be informed, respondents generally agreed that consumers in Hong Kong have a wide variety of products available in the marketplace to choose and make product comparisons. Most respondents agreed that (1) it is not difficult for consumers to compare prices to different brands (62.1%) (2) most stores have variety of quality and prices (78.6%), and 3) price reflects quality for most goods (59.9%). However, it is striking that 72.7% of the respondents stated that repairs and service facilities for household appliances are not up to their demanded standard. These results imply that from the viewpoint of business managers, the right to choose repairs and service facilities for household appliances is not well respected.

TABLE 3. THE RIGHT TO CHOOSE

Statement	Disagree %	Agree %	Mean
3 Repairs and service facilities for household appliances are not as good as consumers demand.	27.3	72.7	4.16
7 It is not difficult for consumers to compare prices to different brands.	37.9	62.1	3.90
11 Price reflects quality for most goods.	40.1	59.9	3.71
15 Most stores have variety of quality and prices.	21.4	78.6	4.42

The Right to be Heard and to Redress Table 4 shows the attitudes of respondents toward consumer right to be heard and to redress. In general, most respondents agreed that the right to be heard is not well respected. Approximately, 73% of respondents did not agree that consumers have many opportunities to get complaints settled fairly and justly. However, it seems that most respondents did not welcome government regulations and arbitrations to fairly settle just claims. For example, only about 9% of respondents disagreed that more attention should be paid to consumer interested to consumer interests by new laws and regulations, governmental agencies etc. They also disagreed that consumers are seldom represented on public boards and committees (17.7%); but what they disagreed is true. In general, respondents' attitudes toward government arbitration bodies or services were not positive. Over 56% of the respondents agreed that the small-claim tribunal is useless in protecting consumers while almost 78% of them agreed that free legal services and arbitration procedures are badly needed to fair settlement of just claims in Hong Kong. These results imply that if business managers think that self-regulation is more important to Hong Kong as a whole, both managers and the government have to do something to protect consumer interested by providing better products/services, building up a better feedback channel and increasing the amount of free legal services. These findings are consistent with those of Arndt, Crane and Tallhaug (1978).

TABLE 4. THE RIGHT TO BE HEARD AND TO REDRESS

Statement	Disagree %	Agree %	Mean
4 Consumers have many opportunities to get complaints settled fairly and justly.	72.8	27.2	2.81
8 Complaints from customers are not treated in a satisfactory way by most stores.	16.0	84.0	4.56
12 More attention should be paid to consumer interests by new laws and regulations, governmental agencies, etc.	8.7	91.3	5.04
16 Consumers are seldom represented on public boards and committees.	17.7	83.3	4.54
20 Most producers take consumer complaints seriously.	59.1	40.9	3.24
21 The small-claim tribunal is useless in protecting consumers	44.3	55.7	3.91
30 Free legal services and arbitration procedures are badly needed to fair settlement of just claims in H.K.	22.5	77.5	4.46

Only statement 20 is not significant at the level of 0.05.

The Right to a Clean Environment The statements in Table 5 are designed to explore selected aspects of the clean environment that consumers have been facing. Almost 61% of the the respondents agreed that it is not an entertainment to watch TV ads. Almost 73% of the sample indicated that manufacturers do not have much consideration on products or ingredient of the products which will pollute environment and about 60% agreed that posters are now everywhere to make the city look ugly. However, most of them (60%) indicated that producers should not be responsible for litters thrown after the products are used or consumed. In general, the results indicate that business managers are aware of the pollution made by manufacturers and business enterprises and their responsibility for a clean environment.

Attitudes toward the Consumer Council Safeguard the rights and interests of buyers or consumers has been the responsibility of the Consumer Council. The statements in Table 6 examine the performance of the Consumer Council in protecting consumer interests in the operation of the marketing system.

In response to the notion that the Consumer Council is ineffective in helping consumer get physical or financial claim, 58.1% of the respondents expressed some level of agreement. More than 93% agreed that more counselling offices of the Consumer Council should be opened to hear complaints, and almost 68% agreed that it is a pity not to have a private consumer organization in Hong Kong. An equal half of the respondents indicated that the Consumer Council does not effectively represent the consumers'interests. These results imply that business managers as consumers are not satisfied with the performance of the Consumer Council, and that they have to reply more on the channel of their enterprises to hear consumer complaints and settle consumer claims.

TABLE 5. THE RIGHT TO A CLEAN ENVIRONMENT

Statement	Disagree %	Agree %	Mean
22 It is not an entertainment to watch TV ads.	60.8	39.2	3.27
23 Producers have to be responsible for litters thrown after the products are used or consumed.	59.9	40.1	3.13
25 Manufacturers do not have much consideration on products or ingredient of the products which will pollute environment.	27.4	72.6	4.16
26 Posters are now everywhere to make the city look ugly.	40.1	59.9	3.81

* All statements are significant at the level of 0

TABLE 6. ATTITUDES TOWARD CONSUMER COUNCIL

Statement	Disagree %	Agree %	Mean
21 The Small claim tribunal is useless in protecting consumers.	44.3	55.7	3.91
24 The Consumer Council is ineffective in helping consumers get claims.	41.9	58.1	3.79
27 More counselling offices of the Consumer Council should be opened to hear complaints.	6.9	93.1	4.94
28 It is a pity not to have a private consumer organization in Hong Kong	31.7	68.3	4.14
29 The Consumer Council does not effectively represent the consumers' interests.	49.7	50.3	3.57

* All statements are significant at the level of 0.05, except statement 29.

Factor Analysis

To summarise the information contained in the 30 items measured and to isolate the components that were common to two or more interrelated items, factor analysis was performed using the Statistical Package for the Social Sciences (SPSS) with varimax rotation. The Scree Test was used to determine the number of factors used for analysis (Cattell 1978). The factor analysis extracted seven factors, which in total accounted for 48.1% of the variance in the data. The factors as well as the items having the highest factor loadings are shown in Table 7. All factors except Factor 7 were acceptably reliable (Nunnually 1977). Factor 1 which seemed to be concerned with creditability of ads showed the highest loadings for items 10 and 2 which all were related to negative attitudes toward advertising. Factor 2 was composed of items relating to confidence in corporate responsibility (items 13,25 and 20), while factor 3 was entitleld "Inadequacy of Consumer Protection" with highest loadings for items 12, 27, 30 and 28. Items 18, 22 and 28 loaded highest on factor 4, which was then termed "the Right to Be Heard." Factor 5 included items addressing the issue of personal safety and security (items 23, 5, 17, 1, 19 and 4). "Representation of Consumer Interest" was made up of items 24, 26, 29 and 16. Finally, factor 7 which was labelled "the right to choose" consists of items 6, 11 and 15. It is interesting to note that the factors found coincided only to some extent with the organisation of items in Table 1 on the basis of the six rights. However, it is found that except for the factors, "the Right to be Heard", the other six factors are very much similar to those of Arndt, Crane and Tallhaug (1978). This seems to indicate that similarity in factor pattern exists between Norwegian consumers and Hong Kong business executives.

Summary And Implications

The information supplied by the cross-section of business managers in this study suggests several broad conclusions:

1. Most business managers have confidence in roducts in the marketplace, but believe that sellers usually cheat buyers.

2. Many business managers register considerable discontent about information provided by manufacturers and businessmen. The most obvious example is the lack of confidence in advertising

3. Most of the respondents conceded that the Hong Kong Consumer Council has not been performed its functions effectively during the past few years.

4. Most managers recognize and value highly the system of free-enterprise in Hong Kong and express that the right to choose should be highly respected.

5. In general, even though most respondents thought that consumers in Hong Kong have not many opportunities to be heard and to redress, they did not voice support for additional government regulation as a means of solving consumer problem but self-regulation of business enterprises.

6. Most managers were aware of the pollution of environment by advertisements and products. However, they agreed that producers or manufacturers concerned should be more liable to a clean environment for consumers.

7. Seven underlying dimensions of consumerism were identified. These dimensions are quitre similar to those in the literature.

The level of discontent expressed by business managers in this study must be interpreted in

TABLE 7. RESULTS OF FACTOR ANALYSIS

Statement No.	Factor Loading
Factor 1 Creditability of Advertisements (α=0.64)	
10 Important facts cannot be obtained from ads.	0.768
2 In General, what is said in ads cannot be trusted.	0.661
3 Repair and services facilities for household applicances aare not as good as consumers demand.	0.514
8 Complaints from customers are not treated in a satisfactory way.	0.488
Factor 2 Confidence in Corp. Responsibility(α=0.42)	
29 The C.C. does not effectively represent the consumers' interests.	0.591
21 The small-claim tribunal is useless in protecting consumers.	0.507
18 Salespeople in most stores do not give needed information.	0.485
22 Not an entertainment to watch TV ads.	0.463
Factor 3 Inadequacy of Consumer Protection (α=0.63)	
12 More attentions should be paid to consumer interested by new laws etc.	0.720
27 More counseling offices of the C.C. should be opened to hear complaints.	0.707
28 It is a pity not to have a private consumer organization in Hong Kong.	0.480
30 Free legal services and arbitration procedures are badly needed in H.K.	0.469
Factor 4 The Right to be Heard (α=0.57)	
13 Sellers usually do not cheat buyers.	-0.695
25 Manufacturers do not have much consideration on products or ingredient of the products that pollute environments.	0.585
20 Most producers take complaints seriously.	-0.560
9 New cars seldom have serious defects.	-0.448
Factor 5 Personal Safety and Security (α=0.54)	
23 Producers have to be responsible for litters thrown after the products are used.	0.682
5 Medicine that may obtained without a prescription is dangerous.	0.616
17 Business companies do what should be done to prevent air and water pollution.	0.523
1 In general, toys are dangerous for children to use.	0.490
4 Consumers have many opportunies to get complaints settled fairly and justly.	0.423
19 Most goods offered for sale are of inferior quality.	0.405
Factor 6 Representation of Consumer Interests(α=0.6	
26 Posters are now everywhere to make the city look ugly.	0.699
24 The C.C.is ineffective in helping consumers get physcial or financial cliams.	0.663
29 The C.C. does not effectively represent the consumers' interests.	0.407
Factor 7 The Right to Choose (α=0.40)	
6 Most labels are sufficiently informative.	0.572
15 Most stores have variety of quality and prices.	0.570
11 Price relects quality for most goods.	0.546
7 Not difficult to compare prices.	0.536

light of the general level of dissatisfaction that seems to prevail against all enterprises. Although criticism of government policy and performance seems to be increasing, respondents in this study were not very receptive to legislative solutions to consumer problems. These findings imply that business managers prefer self-regulation to government intervention. It seems that they understand that government intervention will not solve all consumer problems and certainly will not prevent problems created by consumers who are unwilling to accept their responsibilities in the marketplace. These findings also suggest that business must educate the public about the operations of the marketing system, the benefits of free enterprises and the limitations of government intervention. On the other hand, business should also re-examine its products and modify its policies to improve products and services offered consumers, and provide a more direct channel for consumer complaints.

Interpretation of the survey results must also consider the questionnaire response rate. Those who returned the questionnaire may have weaker opinions about consumer rights than those who did not return. A comparison with other studies shows that the right to be informed, the right to a clean environment, are in line with results of this study.

Respondents' replies indicate that they have confidence in products in the marketplace. However, it might suggest that they ignore the right to safety as recent reports by the Consumer Council revealed a variety of unsafe products in the market. Business should re-formulate their product policies so as to protect consumers at a profit.

The consumer movement has emphasized the responsibility of consumers to complain when justified. Findings of this survey show that the Consumer Council has not been doing a good job indicates at least two of the topics - attitudes toward the Consumer Council, helping consumers voice their complaints. At this stage, the Consumer Council should re-examine its functions and performance. Some potential remedies to regain its reputation are available. Firstly, additional counselling offices with longer opening hours should be added to help consumers. Secondly, officers hired by the Consumer Council should have a balance of both practical experience and sound academic thinking. This implies that existing officers be trained and re-trained academically in specific fields such as marketing, finance and information system, and practically in specific industries such as airlines, retailing and electronic industries. Many often, academic training becomes utmost important especially when officers face consumer problems which they have not encountered before. Thirdly, the Consumer Council should be more consumer-oriented. This implies that it should try harder to find out what kinds of services that consumers really need. If possible, consumer research should be carried out to identify consumer problems and the kinds of services provided. If the Council were able to sort out consumer problems before these problems became prevailing, consumers' interest would surely be better protected.

THE SHIFT-SHARE ANALYSIS : AN EXAMINATION AND APPLICATION TO IDENTIFY EXPORT OPPORTUNITIES TO CHINA

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Abstract

This paper discusses how the shift-share analysis, as used in regional economics could be applied in marketing. It describes how the method could be used to identify the best product-market alternative, the best market for a given product, and the best product for a given market. As an illustration of its application, the shift-share analysis was used to identify export opportunities to the People's Republic of China.

Introduction

The relationship between regional growth and industrial structure is often analysed and decomposed into various effects with a technique known as Shift-Share analysis. This technique was first developed and employed as an analytical tool during the early 1960's, and has been used extensively by regional economists. Recently, this technique has been employed in marketing research studies (Green and Allaway 1985, Green and Couture 1986).

The Shift-Share equation is designed to decompose the growth of a regional variable such as employment, income or output into three effects that measure the differential growth among regions (Herzog and Olsen 1977). Given information by industrial sectors for one of these regional variables at two points in time, the technique divides the change (d), over the time period into the following effects: national growth (g), industry mix (m) and competitive position (c).

In some literature, the national growth is also named the compositional mix or proportionality shift, and the competitive position effect is sometimes called the differential shift of regional share. Thus, the technique is known as the Shift and Share (or Shift-Share) analysis.

The Shift-Share Equation

From the foregoing discussion, we can express the shift-share equation for an industry or a sector i in the region j as :

$$d_{ij} = g_{ij} + m_{ij} + c_{ij} \quad (1)$$

If the analysis is applied to study the variable of employment, E, of various sectors in Canada, then:

$$d_{ij} = E_{ij}^* - E_{ij} \quad (2)$$

$$g_{ij} = E_{ij} r_{Can} \quad (3)$$

$$m_{ij} = E_{ij} (r_{i,Can} - r_{Can}) \quad (4)$$

$$c_{ij} = E_{ij} (r_{ij} - r_{i,Can}) \quad (5)$$

where r_{ij}, $r_{i,Can}$ and r_{Can} represent the regional and national growth rates and can be defined as follows :

$$r_{ij} = (E_{ij}^* - E_{ij})/E_{ij} \quad (6)$$

$$r_{i,Can} = (E_{i,Can}^* - E_{i,Can})/E_{i,Can} \quad (7)$$

$$r_{Can} = (E_{Can}^* - E_{Can})/E_{Can} \quad (8)$$

where:

E_{ij} = employment for sector i in j region;

$E_{i,Can}$ = employment for sector i in Canada;

E_{Can} = total employment in Canada, measured in a base year.

The symbol "*" denotes employment in the terminal year of the analysis

The Shift-Share equation for sector i in the j region is therefore :

$$\begin{aligned} d_{ij} &= E_{ij}^* - E_{ij} \\ &= E_{ij} r_{Can} + E_{ij}(r_{i,Can} - r_{Can}) \\ &\quad + E_{ij}(r_{ij} - r_{i,Can}) \end{aligned} \quad (9)$$

The difference between the actual employment change d and this national growth effect is called the net shift of sector i in the j region. This net shift is also equal to the sum of industry mix and competitive position effects. Thus, Net Shift :

$$\begin{aligned} &= d_{ij} - E_{ij} r_{Can} \\ &= E_{ij}(r_{i,Can} - r_{Can}) + E_{ij}(r_{ij} - r_{i,Can}) \end{aligned} \quad (10)$$

or

$$\text{Net shift} = d_{ij} - g_{ij} = m_{ij} + c_{ij}$$

The Shift-Share analysis does not purport to give any explanations to answer why certain regions or sectors have greater increase in employment than the rest of the regions or sectors. Thus, equations (9) and (10) should be considered an identity rather than a behavioural relationship. The Shift-Share analysis highlights regions or industries with high growth in employment for further more detailed study if necessary.

Application of Shift-Share Analysis to Identify Overseas Market Opportunities

Clearly, one can see how the Shift-Share analy-

sis can be used to study overseas market opportunities by considering the analogy presented in **Figure 1**. Instead of analysing employment as a variable, international marketers will be studying imports as a variable. The industry sector, i, will be defined as "product category i" while the region j of Canada in the previous example will be termed as "country j of the world (w)". In other words, international marketers can use the Shift-Share analysis to study the imports pattern of product category i (e.g. SITC code 4 digit aggregation level) of country j.

The Shift-Share equation for this case will be:

$$d_{ij} = I_{ij}r_w + I_{ij}(r_{i,w} - r_w) + I_{ij}(r_{ij} - r_{i,w}) \quad (11)$$

Note that the terminology and definition are analogous to those in equations (1) to (10) except I represents the imports of product category i of country j.

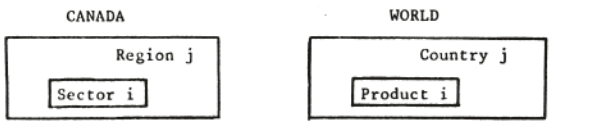
Also, the net shift in imports is defined as :

$$d_{ij} - I_{ij}r_w$$

which is also equal to :

$$I_{ij}(r_{i,w} - r_w) + I_{ij}(r_{ij} - r_{i,w}).$$

FIGURE 1
USE OF SHIFT-SHARE TO EXPLORE PRODUCTS

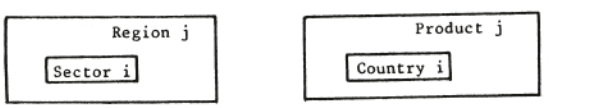


Variable : Employment, E
Sector i : Industry, i
Region j : Region, j

Variable : Imports, I
Sector i : Product category, i
Region j : Country, J

Alternatively, international marketers can also use Figure 2 as an analogy. In this case, attention will be focused mainly on the product categories. This analogy is more suited for marketers who have decided on the product category but like to explore other feasible markets.

FIGURE 2
USE OF SHIFT-SHARE ANALYSIS TO EXPLORE MARKETS



Variable : Employment, E
Sector i : Industry, i
Region j : Region, j

Variable : Imports, I
Sector i : Country, i
Region j : Product category, j

Essentially, the Shift-Share technique can be used to solve the three different types of problems encountered by marketers in identifying export opportunities.

To Find the Best Product-Market Alternative

The first type of problem is to identify the best product-market alternatives for a firm wishing to investigate the export potentials of its products. Using the Shift-Share equation, the company can compute the net shift of imports for each of the product-market alternatives under preview. By ranking all the product-market alternatives according to the extent of the net shift of imports, the firm would have ranked these alternatives according to the attractiveness in terms of export potential.

As mentioned earlier, Shift-Share analysis does not explain why imports of product i is growing at a rate faster than the growth of world (total) imports or why imports of product i into country j is growing at a rate faster than average growth rate of product i in the world. The analysis merely highlights to the company that attention should be focused on a product-market alternative which ranked highly in terms of net shift. Such selection (without providing an explanation) is sufficient for the company, since his objective is to screen and identify opportunities for further study or investigation.

In the computation of the net shift in imports of the product-market alternatives, a weight of I has been factored into the value of net shift. Thus, two countries and products having the same growth rate will still generate a different value for the net shift, if the absolute value of imports for these products or to these countries in the base year differs. Accordingly, the country/product with a larger import (in base year) will be given a higher net shift value than another country/product.

To Find the Best Product for a Given Market

Frequently, a firm will already have decided (as part of its strategic marketing plan) the countries that it would like to concentrate on. Thus, instead of computing net shift values for all the products in every country, the company can concentrate solely on the imports of the country under preview. In this case, the formula for the net shift in imports of products entering country A can be simplified as follows:

$$\text{Net shift} = d_i - I_i r_A = I_i(r_i - r_A)$$

where:

I_i : represents the imports of product i by country A;

r_A : represents the growth in imports of all products by country A; and

r_i : represents the growth in imports of product i by country A.

Products with higher net shift values are considered as alternatives that have better export potential to that country.

To Find the Best Market for a Given Product

For companies which concentrate only on a few products, a problem will be to identify new markets (or markets hithero neglected) for these products.

Using the analogy presented in **Figure 2** and simplifying the Shift-Share equation as in the previous section, the net shift of each country's imports of the product can be computed as follows :

$$\text{Net shift} = d_i - I_i r_p = I_i(r_i - r_p)$$

where:

I_i : represents the imports of product P by country i;

r_p : represents the growth in imports of product P by all countries; and

r_i : represents the growth in imports of product P by country i.

Practical Applications

Green and Allaway (1985) had applied the Shift-Share analysis to identify export opportunities. They illustrated how the analysis could be used to identify a feasibility set of high technology manufactured products with high export potential, and to identify country opportunity for a given set of product categories. In their study, instead of considering the absolute net shift value in imports, the % net shift of "proportion of imports to total imports" was used. It can, however, be shown in Appendix I that the result generated from using the absolute net shift in imports value would be the same as that generated by considering % net shift in the proportion of imports to total imports.

The Study

As an illustration of the usefulness of the Shift-Share analysis for international marketers, the technique was used to identify export opportunities for China. The choice of China was deliberate. After modernising for six years from 1979, and having completed its 6th five-year plan, China has proceeded to implement its 7th five-year plan from 1986 to 1990. This juncture represents an opportune time for international marketers to reassess the trade opportunities with China in the coming years. This assessment is made more urgent by the fact that China is likely to continue to modernise and trade with the outside world. In fact, China's total volume of imports and exports in 1985 was estimated to be 72% more than 1980 and the average growth rate was 11.4%, during the 6th five-year plan, and is targetting for 6 to 7% growth per annum for its 7th five-year plan. Its potential as a market for world imports is tremendous, given its huge population and its desire to establish some form of market system.

The Data and Approach to Analysis

One of the biggest challenges of doing research on China is the availability of data. In addition, the data should be as recent as possible, especially if the concern is to identify export opportunities. In addition, in order for the results to have usefulness and relevance to international marketers, the data should be as detailed as possible. Only in this way can the potential exporter be in a better position to identify the products for closer study.

Bearing in mind the above considerations, the data for this study were obtained from two main sources. The 1982 data was obtained from the Statistical Yearbook of China 1984 while the 1985 (January - June) data were obtained from China's Customs Statistics. The products were categorised according to the data provided in the Yearbook.

The approach used in the analysis of the data is similar to that of Green and Allaway (1985). Since the computation of the data involved proportions and percentages, the comparison using a 6-month data (1985) against a 12-month data (1982) would not affect the validity of the results.

The Results

Appendix II shows the 60 product categories that have the biggest potentials for exports to China. **Table 1** shows the results of the shift-share analysis. The major products will now be discussed.

Intermediate Goods

Intermediate goods including cement, timber, steel products, etc will be in great demand in 1968-1990. Such products are required for capital construction for China's basic industries and for other infrastructure development. For example, cement, steel products are required for building power plants, railways and roads. Also, such materials are also required for the construction of residential housing. The recent commercialising of rental housing in urban areas will encourage more residential housing to be built in urban areas.

Machinery and Transportation Vehicles

China will need to import larger quantity of machinery and equipment to manufacture durable consumer goods and intermediate goods, for example, steel.

It will also need machinery such as electrical generators and transport equipment to upgrade its energy industry and transportation system. As it is expected that China will not be able to improve its rail transportation substantially

TABLE 1
RESULTS OF SHIFT-SHARE ANALYSIS ON EXPORT TO CHINA

Products with Positive Shift	Proportion of Total 1985*	1982	Net Shift (in %)	Per Cent Net Shift
Intermediate Products				
Cement	0.33%	0.00%	0.33%	1.04%
Iron & steel products	14.93%	0.00%	14.93%	47.44%
Rolled steel	0.00%	0.91%	- 0.91%	- 2.90%
Billet	0.71%	0.00%	0.71%	2.26%
Iron & steel wires	0.06%	0.03%	0.04%	0.12%
Total				46.93%
Transportation Means				
Vehicles	6.70%	0.85%	5.85%	18.58%
Parts of vehicles	0.62%	0.31%	0.31%	0.97%
Ships	1.59%	1.06%	0.53%	1.68%
Total				21.23%
Durable Consumer Goods				
TV sets	2.33%	0.57%	1.76%	5.58%
Video recorders	0.37%	0.00%	0.37%	1.18%
Refrigerators	0.28%	0.00%	0.28%	0.89%
Washing machines	0.12%	0.00%	0.12%	0.37%
General cameras	0.10%	0.00%	0.10%	0.31%
Total				8.33%
Machinery				
Duplication machines	0.58%	0.00%	0.58%	1.85%
Medical instruments	0.51%	0.12%	0.39%	1.23%
Data Processing machines	0.34%	0.00%	0.34%	1.07%
Calculators	0.27%	0.14%	0.13%	0.42%
Machine tools	0.22%	0.17%	0.06%	0.18%
Total				4.75%
Minerals				
Copper	1.68%	0.94%	0.74%	2.36%
Zinc	0.73%	0.48%	0.25%	0.81%
Aluminium	1.23%	1.00%	0.24%	0.75%
Chromium	0.06%	0.04%	0.02%	0.06%
Total				3.98%
Chemicals				
Soda ash	0.38%	0.22%	0.16%	0.51%
Carprolactam	0.16%	0.04%	0.12%	0.38%
Polystyrene	0.26%	0.21%	0.04%	0.14%
Caustic soda	0.15%	0.11%	0.03%	0.11%
Pharmaceutical products	0.21%	0.18%	0.03%	0.08%
Polyvinyl chloride	0.09%	0.07%	0.01%	0.04%
Total				1.26%
Agricultural Chemicals				
Farming agent	0.39%	0.31%	0.09%	0.27%
Others			3.84%	12.20%
TOTAL NET SHIFT			31.48%	

* 6 months (Jan-Jun)

Source : Appendix II

within the next 5 year period, other forms of transportation, e.g. trucks and buses will be encouraged, especially for short-haul traffic. Such vehicles are expected to be imported in larger quantities.

Durable Consumer Goods

With a growing income, the demand for durable consumer goods will increase. The price reform implemented in 1984/85 has made the rural residents more affluent. These residents consituting a market four times that formed by the urban resident, will buy more durable consumer goods with a higher level of income.

However, it is unlikely that the Chinese authorities will allow the demand for durable consumer goods to go uncontrolled. Instead, whenever possible, the Government will try to encourage the import substitution for these goods.

Minerals, Fertilizers and Chemicals

Minerals such as copper, zinc, aluminium and chromium are also needed to support its industries. Similarly, in order to sustain a growth of 7-8% in agricultural product for 1986-1990, China will have to increase its crop yield through the use of more fertilizer and farm chemical such as pesticide. The application of fertilizers is also required to ensure that the soil retains its nutrients. This is important to ensure that the soil remain fertile.

Discussion and Conclusion

The result of the Shift-Share analysis showed that there would be trade opportunities for intermediate goods (iron and steel products and cement), transportation means (vehicles), durable consumer goods, and machinery and equipment to be exported to China in the coming years. These four product groups accounted for 74% of the percent net shift.

While the Shift-Share analysis does have some limitations, for example, the analysis only studies two sets of data of a time frame, and it does not consider qualitative factors such as changes in government's policy, it nevertheless is very useful in identifying the product types with high export potentials. These products could then be the focus of further study and analysis where additional qualitative and quantitative factors could be considered. In fact, Wee and Wong (1987 a,b) have shown that the technique is applicable for identifying products for exports in many other countries. The results obtained were also superior to those identified through trade missions or government agencies.

The Shift-Share analysis is relatively easy to use and the international marketer can update the results with new trade information obtained. In this way, the international marketer can then update the knowledge of trade opportunities on a regular basis.

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APPENDIX I
EXPOSITION OF THE SHIFT-SHARE ANALYSIS

In the Green and Allaway (1985)'s study, % net shift of "proportion of imports to total imports" was used to identify export opportunities instead of the absolute value of the net shift in imports. This study will examine the differences between the using of these two measurements.

Assuming that the products of a country have been arranged according to their value of net shift in imports, as in Table A. For simplicity, it can be assumed that the order of arrangement is in the descending order. That is, product I has the highest net shift value.

TABLE A

Product	Imports Year 1	Imports Year 0	Net Shift (Abs Value)	Net Shift (Proportion)	% Net Shift
Prod 1	I'_1	I_1	$I'_T \frac{I'_1}{I'_T} - \frac{I_1}{I_T}$	$\frac{I'_1}{I'_T} - \frac{I_1}{I_T}$	$\frac{1}{V_k} \frac{I'_1}{I'_T} - \frac{I_1}{I_T}$
Prod 2	I'_2	I_2	$I'_T \frac{I'_2}{I'_T} - \frac{I_2}{I_T}$	$\frac{I'_2}{I'_T} - \frac{I_2}{I_T}$	$\frac{1}{V_k} \frac{I'_2}{I'_T} - \frac{I_2}{I_T}$
Prod 3	I'_3	I_3	$I'_T \frac{I'_3}{I'_T} - \frac{I_3}{I_T}$	$\frac{I'_3}{I'_T} - \frac{I_3}{I_T}$	$\frac{1}{V_k} \frac{I'_3}{I'_T} - \frac{I_3}{I_T}$
⋮	⋮	⋮	⋮	⋮	⋮
Prod k	I'_k	I_k	∅	∅	∅
⋮	⋮	⋮	⋮	⋮	⋮
Prod n	I'_n	I_n	$I'_T \frac{I'_n}{I'_T} - \frac{I_n}{I_T}$	$\frac{I'_n}{I'_T} - \frac{I_n}{I_T}$	$\frac{1}{V_k} \frac{I'_n}{I'_T} - \frac{I_n}{I_T}$
Total	I'_T	I_T			

Net shift for Product I is defined as :

$$d_i - I_i r_A = I_i(r_i - r_A)$$

where :

$r_i = (I_i^1 - I_i)/I_i = I_i^1/I_i - 1$, and

$r_A = (I_T^1 - I_T)/I_T = I_T^1/I_T - 1$.

Thus,

$$\begin{aligned} \text{net shift} &= I_i[(I_i^1/I_i - 1) - (I_T^1/I_T - 1)] \\ &= I_i[(I_i^1/I_i) - (I_T^1/I_T)] \\ &= I_T^1[(I_i^1/I_T^1) - (I_i/I_T)] \\ &= I_T^1 * \end{aligned}$$

* (Proportion of imports in Year 1 to total imports minus proportion of imports in Year 0 to total imports)

Since I_T^1 is always positive, the effect of looking at the absolute value in the net shift of imports will be the same as looking at the net shift in the proportion of imports to the total imports.

While both % net shift of proportion and the net shift in absolute value in imports could generate the same result, there are benefits associated with each measurement.

% net shift : By comparing this value, one will know readily the proportion of the total positive net shift that is contributed by a product.

Net shift value : The computation for these values is relatively simple and faster since essentially only the computation of :

$$I'_i - I_i \left(\frac{\text{Total Imports in Yr 1}}{\text{Total Imports in Yr 0}}\right)$$

is required.

Further, if it is assumed that the first k products have positive net shift value, by adding up the net shift values of these ks products, another value V_k would be generated. The % net shift for each of the product is obtained by dividing the net shift by V_k.

Again, the relative ranking of the products in terms of their "attractiveness" would not be affected by this division since it is a division by a positive number.

APPENDIX II
IMPORTS OF CHINA BY PRODUCT CATEGORIES

	First 6 months 1985	For the year 1982	First 6 months 1985(%)	For the year 1982(%)	Net Shift (%)
Total Imports RMB (million)	52341.20	35769.21	100.00%	100.00%	
Cereal	1627.97	6316.61	3.11%	17.66%	-14.55%
Sugar	380.14	1218.71	0.73%	3.41%	- 2.68%
Coffee	2.57	26.56	0.00%	0.07%	- 0.07%
Cocoa	13.01	88.39	0.02%	0.25%	- 0.22%
Natural rubber	154.15	248.57	0.29%	0.69%	- 0.40%
Synthetic rubber	74.36	84.45	0.14%	0.24%	- 0.09%
Log	899.34	923.59	1.72%	2.58%	- 0.86%
Paper Pulp	262.43	393.55	0.50%	1.10%	- 0.60%
Cotton	0.19	1324.38	0.00%	3.70%	- 3.70%
Jute	5.09	26.20	0.01%	0.07%	- 0.06%
Synthetic fibres (for spinning)	1008.45	731.66	1.93%	2.05%	- 0.12%
Synthetic fibres (continous)	726.95	574.65	1.39%	1.61%	- 0.22%
Reg fibres (for spinning)	45.74	136.78	0.09%	0.38%	- 0.30%
Reg fibres (continous)	70.14	227.96	0.13%	0.64%	- 0.50%
Wool	451.85	553.45	0.86%	1.55%	- 0.68%
Sulphur	57.08	99.89	0.11%	0.28%	- 0.17%
Diamond (industrial)	12.58	10.63	0.02%	0.03%	- 0.01%
Iron	277.44	207.71	0.53%	0.58%	- 0.05%
Chromium	33.19	15.72	0.06%	0.04%	0.02%
Medical material	45.91	66.13	0.09%	0.18%	- 0.10%
Coal	91.60	116.01	0.18%	0.32%	- 0.15%
Animal oil	40.56	54.31	0.08%	0.15%	- 0.07%
Vegetable oil	86.11	142.59	0.16%	0.40%	- 0.23%
Oil seeds	1.04	4.04	0.00%	0.01%	- 0.01%
Carprolactam	84.65	15.53	0.16%	0.04%	0.12%
Caustic soda	77.19	40.66	0.15%	0.11%	0.03%
Soda ash	200.45	79.17	0.38%	0.22%	0.16%
Synthetic organic dyestuff	53.87	164.80	0.10%	0.46%	- 0.36%
Pharmaceutical products	107.85	64.52	0.21%	0.18%	0.03%
Fertilizers	2716.72	2321.74	5.19%	6.49%	- 1.30%
Polyethylene	556.06	592.31	1.06%	1.66%	- 0.59%
Polypropylene	362.60	338.99	0.69%	0.95%	- 0.25%
Polystyrene	135.64	76.81	0.26%	0.21%	0.04%
Polyvinyl chloride	44.51	25.47	0.09%	0.07%	0.01%
Farm agent	205.97	109.83	0.39%	0.31%	0.09%
Paper and paperboard	451.84	398.71	0.86%	1.11%	- 0.25%
Cement	170.71	-	0.33%	0.00%	0.33%
Billet	372.32	-	0.71%	0.00%	0.71%
Iron and steel products	7817.00	-	14.93%	0.00%	14.93%
Rolled steel	-	326.40	0.00%	0.91%	- 0.91%
Iron and steel wires	33.74	9.00	0.06%	0.03%	0.04%
Copper	878.75	335.02	1.68%	0.94%	0.74%
Aluminium	645.92	357.23	1.23%	1.00%	0.24%
Zinc	384.48	171.71	0.73%	0.48%	0.25%
Sets of equipment	1574.30	2057.61	3.01%	5.75%	- 2.74%
Machine tools	117.41	60.31	0.22%	0.17%	0.06%
Calculators	139.67	48.39	0.27%	0.14%	0.13%
Duplication machines	304.84	-	0.58%	0.00%	0.58%
Data Processing machines	176.80	-	0.34%	0.00%	0.34%
TV sets	1217.65	203.52	2.33%	0.57%	1.76%
Radio recorders	118.09	102.09	0.23%	0.29%	- 0.06%
Video recorders	194.71	-	0.37%	0.00%	0.37%
Washing machines	60.80	-	0.12%	0.00%	0.12%
Refrigerators	146.74	-	0.28%	0.00%	0.28%
Vehicles	3506.64	304.64	6.70%	0.85%	5.85%
Parts of vehicles	322.43	111.00	0.62%	0.31%	0.31%
Ships	833.29	380.07	1.59%	1.06%	0.53%
Medical instruments	267.89	44.37	0.51%	0.12%	0.39%
General cameras	50.92	-	0.10%	0.00%	0.10%
Wrist watches	30.35	41.16	0.06%	0.12%	- 0.06%
Others	21610.51	13395.61	41.29%	37.45%	3.84%

Sources : 1982 data - Statistical Yearbook of China, 1984
1985 (Jan-Jun) data - China's Customs Statistics

A REFUTATION OF THE PSYCHIC DISTANCE EFFECT ON EXPORT DEVELOPMENT

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Abstract

It has been hypothesized that companies develop the direction of their export thrust based on the psychic distance among countries. This concept, which is a construct of geographic and cultural factors, alleges that firms new to exporting will start their efforts in the psychically closest country and gradually expand to serve the psychically more distant markets. This research presents an empirical investigation of the concept and concludes that it does not make a major contribution to the understanding of export behavior. Rather, the existence and size of demand in any given market structure determines the orientation of the initial export thrust.

U.S. balance of trade deficits have been growing rapidly during this decade. In spite of internationally coordinated policy actions, the trade deficit for 1986 approaches 170 billion dollars and will remain large in the coming years. As a result, policy-makers are deeply concerned about the long-term economic health and competitiveness of U.S. industries.

Two major approaches which can be taken to improve the U.S. international trade position are the reduction of imports and the increase of exports. Since U.S. customers appear, at least in the short-run, unlikely to reduce their purchases from abroad, only protectionistic measures would be able to significantly affect the current level of U.S. imports. In order to avoid such protectionism and its potential worldwide repercussions, policy-makers are striving to find better ways to increase U.S. exports.

The academic community has followed suit in this quest for better export development strategies. After decades of neglect, major export research streams have been developed in the U.S. One major focus of this research has been the internationalization process of the firm. Given the small number of U.S. firms exporting, a better understanding of this process could aid policy-makers in designing programs leading to more successful export development.

In the context of export development theory, one concept has investigated the countries to which firms initiate exporting efforts, and has become known as the construct of "psychic distance." This concept postulates that geographic and cultural factors create a distance between selling and buying organizations. This distance inhibits different transfers which take place between the customer and supplier. Therefore, the more psychically distant countries and companies are from each other, the more difficult it is for them to establish and continue an export relationship.

If this concept of psychic distance is indeed applicable to the export development process, it has some major implications for export promotion activities by policy-makers. According to this theory, for example, Canada would present for U.S. firms a country which boasts of great psychic vicinity. Therefore, the conclusion of a free trade agreement with Canada could go far beyond its direct trade implications. If indeed trade with Canada would be free from any remaining governmental obstacles, U.S. firms could use this access to a foreign market as a training ground for their gradual internationalization. After having gained export experience in the psychically close country, this experience could then be transferred to export ventures with other countries.

In a similar vein, the policy community could attempt to reduce the psychic distance to other countries where an improvement in trade relations would be warranted. For example, public policy efforts could attempt to bring the Latin American culture closer to the minds of both current and future U.S. business executives so that, given the gradual reduction in that distance, trade interaction would increase.

Before one develops such far reaching policy implications, however, it seems prudent to attempt an empirical verification of the concept of "psychic distance."

Development of the Psychic Distance Concept and Empirical Evidence

The initiators of the concept of psychic distance in the area of international business seem to have been researchers at the Uppsala school. Researchers there have referred to two dimensions of psychic distance: geographic and cultural. Geographic distance refers to the physical distance between the buyer and the seller. An increase in such distance will

increase transportation costs, and generally make the mechanics of conducting business more difficult. Cultural distance is interpreted as consisting of the linguistic, educational, industrial, and developmental differences between countries. Such distance could hinder the transfer of information or the transfer of payment.

As applied to the determination of export destination, the Uppsala school has argued that exporting will begin to those countries which are geographically and culturally closest to the firm desirous of exporting, and then progressively extend to those countries that are culturally and geographically more distant. This development is thought to take place because firms new to the exporting process will want to begin with the easiest task, i.e., the psychically closest country, and only once they achieve mastery at this level move on to exporting to the more difficult, i.e., psychically more distant countries. (Johanson and Vahlne 1977; Wiedersheim-Paul, Olson, and Welch, 1978; Hallen and Wiedersheim-Paul, 1981).

Empirical evidence useful for the examination of psychic distance concept is somewhat limited. A study of 139 Oregon firms found that the three most common export destinations were Canada, Europe, and Latin America. (Sinai, 1970) A study of 720 Minnesota exporting firms found that 80% exported to Canada, and that their rank ordered frequency of export destinations was Canada, the United Kingdom, Japan, Mexico, Australia, West Germany, and France. (State of Minnesota 1975) A study of 423 Wisconsin firms indicated that most exporters tended to derive most of their export earnings from either Canada or Western Europe. (Bilkey and Tesar, 1977) These studies established some support for the notion of psychic distance, in that U.S. firms appear to export mostly to countries that are culturally close, such as Canada, the United Kingdom, and Australia, and to countries that are geographically close, such as Mexico, rather than exporting to areas which although geographically close may be culturally more distant. The lack of export activities by U.S. firms to the countries of Latin America may serve as an illustrative example here.

Only one study appears to have questioned the validity of the concept of psychic distance by claiming that this concept "seems to be an insufficient base for the development of an explanation of the evolution of the exporting process". (Czinkota and Ursic, 1983).

In spite of this scant empirical evidence, the concept of psychic distance seems to have found entry into the emerging theoretical framework of international marketing, as was evidenced by a recent high profile discussion of world marketing issues. (Kotler, 1986)

It is therefore important, to perform further empirical work in order to examine whether firms indeed will begin exporting to psychically close countries and then gradually expand their export activities to psychically more distant countries. This research was designed to provide such an examination.

Method

This research was conducted in 1985 through the use of the survey of United States firms. The universe consisted of all small and medium-sized U.S. manufacturing firms with annual sales of less than $50 million which, in 1979 fell into the following three industrial categories: materials handling equipment (SIC353): Avionics and aviation support (SIC372), and industrial instruments (SIC382). These industries were selected from a Department of Commerce list of export intensive industries. Manufacturers of industrial goods were chosen because they were thought to be less subject to government imposed trade restrictions than producers of consumer goods. Even though the listing of firms had been compiled in 1979, it was retained for this research, in order for research findings to be comparable to the results of previous investigations (Czinkota 1982, Czinkota and Ursic 1983).

Data were collected with a mail questionnaire. The initial mailing of surveys was followed by a second mailing six weeks later to ensure maximum response. Of the 820 firms contacted, 205 provided usable responses, making the effective response rate 25%. Only the 174 firms which were currently exporting were included in this analysis, so as to exclude those business units which had very little or no interest in foreign trade. Non-response bias was assessed by the use of wave analysis (Hawkins 1975; Filton 1975-76) and was found to be minimal. The only difference between waves of respondents which was suggested, was that non-respondents might export more to Mexico.

The first step in the analysis was to rank order 12 potential export destinations by the magnitude and direction of the correlation between length of time exported and the percentage exported to these destinations. If the correlation was negative, this would indicate that newer firms tended to export more to an area. Likewise, if the correlation was positive, this would indicate that more experienced firms tend to export more to that region.

Next, the 12 destinations were ordered by three continuums which might predict the relationship between length of time exported and choice of export destination. The first continuum investigated the importance of physical distance. This distance was measured

by using mileage from the nearest U.S. port to a substantial area of the specified destination. Canada was ranked above Mexico because it had more borderline with the United States.

The second continuum addressed the cultural/political distance. This distance was measured by a three-item scale, which weighed equally whether English was the primary language, whether democracy was the primary form of government, and whether there was a predominance of a Judean-Christian heritage.

The third continuum addressed economic affluence, as proxy for which the estimated average gross national product in the region was used. Spearman correlations were then computed for the relationship between the length of export experience of firms and the distance, cultural/political, and economic rankings.

Results

Detailed results are presented in Table 1. It appears, that the length of time exported seems to have only a modest relationship with the choice of export destination. Only three of the twelve correlations are significant at the .01 level. Therefore, it seems that for many firms the choice of export destination is unrelated to their export experience.

The results also show that physical distance is not a barrier for inexperienced exporting firms. The negative relationship seems to suggest, that firms with less export experience might be slightly more inclined to export to more distant locations, when compared to their more experienced competitors.

Cultural and political distances also do not appear to be strongly related to the export experience of firms. While inexperienced firms do appear to export less to countries which are culturally and politically more distant than do experienced firms, this relationship is not significant at the .10 level.

Economic distance, however, appears to have a substantial relationship to the export experience of firms. Inexperienced firms seem to export first to affluent regions and then progress to less affluent areas. The R value for this relationship is .53, which is significant at the .10 level.

Conclusions and Implications

The results of this research do not support the concept of psychic distance. Both the geographic and the cultural/political distance of trading partners do not seem to play a major role in the export decision. This is to be expected in a time when improved international transportation infrastructures make it possible to ship a ton of coal from the U.S. to West Germany for less than $3, when more rapid air travel makes visits to most foreign sites possible within twenty-four hours, and when modern telecommunication linkages greatly facilitate the interaction among firms. The lack of impact of cultural and political variables seems to indicate that perhaps we indeed see a globalization of marketing (Simon-Miller, 1986) and the de-emphasis on the part of firms on the political dimensions within the country of their trading partners.

Rather, what seems to be most relevant for firms is the economic dimension. Foreign buyers look for the economic leader when they begin their search for imports. In addition, they will only be able to purchase many products from abroad if they have enough capital and demand to do so. U.S. exporters in turn may be stimulated to export to a particular country by receiving unsolicited orders from abroad, i.e. by receiving a powerful expression of the existence of foreign demand, and by orienting themselves in their search for foreign market opportunities on the market potential abroad. Unlike the postulations of the "psychic distance" concept, firms therefore do not undergo a complex analysis of geographic, cultural, and political factors when initiating export activities, but rather use economic rationale by looking for sales in those regions of the world where it is most likely that they will encounter demand for their products.

From a policy perspective, these findings indicate, that while it might be overall useful to improve cultural relations with nations, or to enhance similarity among political systems, this fact will have little bearing on trade relations from the perspective of the firm. Rather, it is important to ensure that demand for U.S. products will continue to exist abroad. Therefore, current policy efforts on the way designed to stimulate foreign economies (such as those of Japan and West Germany) should continue to be vigorously pursued. Only if sufficient foreign economic activity continues to result in a demand for imports, will U.S. firms be able to increase their export activities.

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TABLE 1

RELATIONSHIP BETWEEN LENGTH OF TIME EXPORTING/ PERCENTAGE EXPORTED CORRELATIONS TO VARIOUS DISTANCE MEASURES

COUNTRY	PEARSON r LENGTH TIME EXPORTED/ % EXPORTED[a]		TIME RANK	PHYSICAL DISTANCE RANKING	CULTURAL/ POLITICAL RANKING	ECONOMIC RANKING
England	-.099	(.20)	1	5	2	5
East Europe	-.097	(.21)	2	9	8.5	6
Australia/ New Zealand	-.096	(.22)	3	12	2	3
USSR	-.071	(.36)	4	8	8.5	7
Central America	-.032	(.68)	5	3	6.5	8
Canada	-.027	(.73)	6	1	2	1
West Europe	-.017	(.82)	7	6	4.5	2
Middle East	.012	(.87)	8	10	11.5	4
Asia	.106	(.17)	9	11	11.5	11
Africa	.201	(.01)	10	7	10	12
South America	.213	(.01)	11	4	6.5	10
Mexico	.290	(.00)	12	2	4.5	9
Spearman r				-.25(.43)	.34(.26)	.53(.07)

[a] p values in parentheses.

THE DETERMINANTS OF U.S. INTERNATIONAL FAST FOOD FRANCHISING: AN APPLICATION TO THE PACIFIC BASIN

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Abstract

This paper studies the effect of both economic and demographic factors on the international fast food franchising. The study utilizes regression analysis of pooled cross-section (8 countries) and time-series data. It is found that among the economic factors, the market size is the most significant. On the other hand, both the level of urbanization and the ratio of female workers to the total labor force are positively related to the international restaurant franchising.

I Introduction

This paper examines the effect of demographic and economic factors on the fast food franchises of the U.S. franchisers (IFFF). U.S. fast food franchisers are currently operating in many countries or are engaged in negotiations for the purpose of entering foreign markets. As such, they are interested in the determinants of the IFFF to the extent that they perceive them as affecting their business.

In addition, both managers and scholars have shown increasing interest in the subject. This is due in part to the increased internationalization of the U.S. Business. More importantly however, it may be noted that the success of the fast food industry has occurred at the time of declining productivity and related difficulties associated with the U.S.'s ability to export. Consequently, the fast food industry has attracted attention not only because a success story deserves a closer look, but also because it can throw considerable light on what had been done "right."

The primary objective of this study is to analyze the relationship between demo-economic factors and the growth of U.S. fast food franchising in the Pacific Basin. Franchise operations typically follow expanding economies and population shifts. The rapid growth of the economies, and the changes in the demographics of the Pacific Basin made the region a perfect candidate as the general market area for our analysis. In addition, the eight (8) Pacific Basin countries included in this study represented approximately 65% of all U.S. international fast food franchising in 1984. (U.S.D.C. 1986)

Research on the relationship between demo-economic factors and IFFF has not been extensive. To our knowledge, there exist survey studies and published interviews with executives of selected fast food franchisers. (Restaurant Business 1980 & 1983) Moreover, many of the survey studies are really case studies of specific countries typically addressing the various problems encountered when a U.S. fast food franchiser goes international. Nevertheless, these studies have isolated economic growth and population shifts as the most important factors responsible for the expansion of the IFFF. "The population in many foreign countries is young and they like to try new products and concepts....more and more women everywhere are going to work....(which) reduces the amount of time spent in the kitchen and increases the demand for food purchased away from home." (U.S.D.C. 1986)

There are several weaknesses of the earlier studies: First, the previous studies have been mostly descriptive, being long on the production of the list of possible determinants of IFFF, but short on any rigorous testing of such factors. In addition, even when such tests are performed, they are broadly based on cross-sectional data.(Cherkasky 1982) There are some fundamental problems involved in utilizing a cross-sectional methodology to analyze a longitudinal phenomenon.(Kobrin 1976) Finally, the previous studies focused either only on domestic or only on foreign demo-economic environment. Relevant demo-economic changes can occur anywhere in the pertinent environment; in the U.S., in the host countries, and in both. This study improves upon the past studies by utilizing a methodology which investigates the relationship between IFFF and demo-economic factors both overtime and across countries, and by operationalizing specific hypotheses that can be subjected to statistical testing. This expanded scope of inquiry with its improved methodology contributes to the increased understanding of the phenomenal expansion of the U.S. fast food franchising in the Pacific Basin.

The next section states the hypotheses to be tested. In Part III, the research method is described. In the final part, the results of the regression analysis are presented along with a brief discussion of their implications.

II Hypotheses:

The hypotheses may be divided into two groups: (1) those dealing with economic events and IFFF; and (2) those dealing with the demographic factors and IFFF.

H_1:
A positive relationship exists between the IFFF (number of units of U.S. fast food franchising) in one country in year (t), and the market size of the same country in the year (t-k).

H_2:
A positive relationship exists between the IFFF in one country in year (t), and the market growth of that country in year (t-k).

H_3:
A positive relationship exists between IFFF in one country in year (t), and the growth of domestic competition in year t-k. The latter is measured by the number of fast food franchisee owned units in the U.S. The idea here is to test the "saturation hypothesis" which stipulates that due to intense domestic competition, U.S. franchisers look elsewhere for opportunities. As the market size and growth of the foreign country increase, U.S. franchisers perceive the desirability of establishing business contacts in that country as increasing. Secondly, increased domestic competition along with "saturated" market compel U.S. franchisers to consider areas beyond their borders. Gross Domestic Product (GDP) is used in this study as the indicator of market size while the change in GDP measures the market growth. (i.e., GDP_t-GDP_{t-1})

Demographic Factors:

H_4:
A positive relationship exists between IFFF in one country in year (t) and the level of urbanization in that country in year (t-k).

H_5:
A positive relationship exists between IFFF in one country in year (t) and the number of female workers in that country in year t-k.

H_6:
A positive relationship exists between IFFF in one country in year (t) and the number of people under 20 years of age in the country in year t-k.

It is thought that urbanization would be positively related to the expansion of fast food franchising since it was demonstrated to be important in the surge of service industries in the U.S. (U.S.D.C 1986) Urbanization is measured by the ratio of urban to total population. H_5 and H_6 are formulated so that we can test to see if growing number of women going to work would increase the demand for food purchased away from home. Additionally, if younger people would be more apt to buy new products and concepts, we would expect H_6 to hold.

III Methodology:

The above hypotheses are tested using regression analysis over time and across countries. The countries for which data were available from 1972 to 1984 (13 years) are included in this study. The countries are: Japan, Australia, New Zealand, Canada, Singapore, South Korea, Mexico and Malaysia. These countries were recipients of 65 percent of all U.S. international fast food franchising in 1983.

Data:

IFFF data is obtained from the U.S. Departments of Commerce, International Trade Administration. IFFF reflects the number of fast food franchisee units opened in the sample countries over the sample period, 1972 - 84. Data on the numbers of franchisee owned units in the U.S. (DFFF) are also obtained from the same source.

The data on Gross Domestic Product (GDP) were obtained from the International Monetary Fund's International Financial Statistics. GDP numbers are in constant U.S. dollars with 1980 = 100.

The indicator of market growth is the change during the year in Gross Domestic Product. This is labeled GGDP and it is equal to GDP_t-GDP_{t-1}

The sources of demographic data are two. First, female labor force is computed using the U.N. International Labor Office, Labor Force Statistics. The measure of urbanization was taken from U.N. Demographic Yearbook. The same source was also used to calculate the percentage of population under age 20. These variables are labeled FEM, URB and AGE.

The Model:

The basic model is as follows:

$$IFFF_t = B_o + B_1\, GDP_{i,\,t-k} + B_2\, GGDP_{i,\,t-k} + B_3\, DFFF_{us,\,t-k} + B_4\, URB_{i,\,t-k} + B_5\, FEM_{i,\,t-k} + B_6\, AGE_{i,\,t-k} + \varepsilon_{it}$$

$$(i = 1,2....,8;\ \text{and}\ t = 1,2....,13)$$

where the B's are the regression parameters to be estimated, ε_{it} is the error term, and the variables are as defined above. The independent variables are all lagged k years. We have estimated the model for k=1 and k=0, the two lags that are thought to be most appropriate because of the intense competition that exists among the U.S. franchisers to establish a foreign franchise. All t-tests conducted for B's are one-tail tests with the null hypotheses of $B_i=0$ for all i=1,..,6 and the alternative of $B_i > 0$ for all i=1...,6. This is so because the relationships that exist between the independent variables on the one hand and the dependent variable (IFFF) are thought to be positive. Therefore, we expect to reject the null hypotheses that $B_i=0$ in favor of the alternative hypotheses that $B_i > 0$, for all i=1...,6.

As it was indicated before, this study uses the pooled time series cross-sectional data. The most important advantage of such an approach is the enlargement of the sample size. The sample is much larger than would be the case of only time-series or only cross-sectional data were employed. As a result, the reliability of the regression parameters can be increased. On the other hand, however, inappropriate pooling may introduce aggregation bias which may result in inaccurate estimates. Therefore, one should be careful in pooling such data. In this study, only one test is conducted to determine the

appropriateness of pooling. First, countries on the sample were randomly brought together to form two subsets of interest. Second, these subsets are used separately to estimate the model. Finally, the results obtained are compared to check the appropriateness of pooling the two subsets and estimating one relationship for the entire data set. The results are reported below.

IV Research Findings:

The test of the equality of the regression coefficients resulted in the acceptance of the null hypotheses for both the zero year and the one-year lagged models. At the one-percent level, the critical F value is approximately 2.79 and the computed F value is 2.63 for the one-year lagged model. The test of intercept homogeneity (assuming identical slopes) has resulted in the acceptance of the null hypothesis at the five-percent level. Cattin and Wittink argue that if subsets which have the same overall relationship are combined, the chances of acceptance of the null hypotheses of equality of coefficients would be greatly enhanced. (Cattin & Wittink 1976)

Turning next to the result of the OLS model with explanatory variables lagged one-year (k=1) for all of the eight countries over 13 years, we find the coefficients of GDP (B_1), URB (B_4), and FEM (B_5) to be significant. The F value of 59.3 establishes the significance of the overall regression. Furthermore, an examination of the correlation matrix indicates that the problem of multicollinearity is not a serious issue. The largest correlation coefficient value is .67 between URB and FEM.

Table 1
IFFF Regression Results With k=1

GDB	GGDB	DFFF	URB	FEM	AGE
B_1*	B_2	B_3	B_4*	B_5*	B_6
1.79	1.85	16.04	2.04	55.95	-115.20
(0.15)	(1.35)	(9.8)	(1.02)	(14.1)	(19.9)

Figures in parentheses are standard errors. * indicates a significance at the 5 percent level.

The results, summarized above, indicate that Gross Domestic Product, an indicator of the market size does affect decisions regarding IFFF. The parameter B_1 indicates the mean response per unit increase in GDP, when all other independent variables are held constant. IFFF increased approximately 1.8 units for each unit (million $) increase in GDP.

The results also indicate that demographic factors do play an important role in determining IFFF in the countries included in the sample. For example, in the case of urbanization, the parameter B_4 indicates that for each percentage point increase in the rate if urbanization IFFF increases by 2.04 units. Secondly, as B_5 shows every one million increase in the number of female workers results in an increase of 56 units of IFFF.

The parameter B_3, though not significant at the 5 percent level, is found to be significant at the 10 percent level. Briefly, B_3 indicates that for every unit (thousand) increase in the number of domestic franchisee owned fast food restaurants (DFFF), IFFF increases by 16 units. This provides some support for the so called "saturation hypotheses."

The above results along with R^2 value of .849 show that the explanatory variables included in the right hand side of the regression equation explain approximately 85 percent of the total variation in IFFF, which is thought to be satisfactory. When a subsequent stepwise regression is performed, it is found that both the growth of market size (GGDP) and the number of domestic fast food franchises are deleted from the estimating equation. Such an outcome resulted in a 1 percent reduction in the value of the coefficient of determination. (R^2=.839)

In summary, the regression results of the one year lagged model (k=1) provide strong support for the acceptance of H_1, H_4 and H_5 (at the 5%) and H_3 (at the 10%). The results of the other appropriate lag examined (k=0) do not differ substantially from the one year lagged model.

V Conclusions

This study, which uses an econometric approach, does find a significant direct relationship between economic-demographic events and IFFF. The findings of this study confirm the findings of survey studies regarding the determinants of IFFF. Among the economic factors, the market size of the country is found to be the most significant factor. Also supported by this study is the "saturation hypothesis" that indicates that the intensity of domestic competition provides the added incentive for fast food franchisers to look offshore.

This study demonstrates the appropriateness of expanding the scope of an examination to include dimensions of the demographic environment. It is found that both the level of urbanization and the number of female workers are positively related to IFFF.

Finally, several suggestions for improvement should be noted. First, a more satisfactory treatment of the appropriateness of the pooling cross-section and time series data is needed. At the very least, mean square error criterion should be applied to random samples of data. Secondly, assumptions of OLS may not be the most appropriate in the context of the research methodology used. In fact, in dealing with

countries as the cross-sectional unit, it is frequently assumed that the error terms are heteroskedastic. In addition to the assumption of homoskedasticity, one other OLS assumption, cross sectional non-correlation, may also be inappropriate. Third, the relationship between IFFF and demo-economic factors should be investigated for other countries and for other franchisers based in countries other than the U.S. Finally, in view of the fact that the fast food franchises is a very broad term that includes many different types, and that there may be differences among them in terms of overseas growth patterns, considerable insight might be gained by studying them individually.

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SOME OBSERVATIONS ON JAPANESE RETAILING STRATEGIES: LESSONS FOR EASTERN EUROPE AND AMERICA

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Abstract

This paper develops the concept of a "balanced retailing market" and contrasts it with "buyers" markets and "sellers markets" in Eastern Europe and America. Features of the Japanese retailing environment are used to illustrate retailer tools, customer actions, and the end result for such a market situation. A comparative analysis of seven important retailing factors is made to assess the degree of adequacy of each of these factors in the concomitant markets.

Introduction

Retailing in a "seller's market" (Samli, 1978, 1983, 1987) and retailing in a "buyer's market" (Evans and Berman, 1986; Lewison and Delozier, 1986) are contrasted by studying East European and American retailing practices. By virtue of the prevailing economic conditions, the retailing sector in East European countries has been enjoying a seller's market. In these countries the retailer's problem primarily is not how to sell but how to find merchandise to sell. Indeed, each time a new retail establishment is opened there will be a long line of customers to enter and buy certain things that they need. This situation has not changed much during the past four decades. In a seller's market situation the retailer's sensitivity to customers' needs is virtually nonexistent. Similarly, the retailers do not need to promote themselves. They sell their products or services on a "take-it or leave-it" basis. They have been conducting their business in this fashion for a long time. Therefore, almost by definition, what has evolved in American retailing has not yet taken place in East European retailing. In other words, the "customer orientation" with its heavy emphasis on promotion, customer credit liberal return and exchange policies, has not yet reached East European countries on any large scale. At the other end of the spectrum, because of the dynamic nature of prevailing competition and primarily because of the emphasis on customers and on selling, the American retailing sector has become quite proficient in marketing with the 4 P's. Of course, this proficiency is at least in part caused by the highly competitive nature of the market, which implies the presence of a "buyer's market". Is there such a thing as a balanced market which is an alternative to both buyer dominated and seller dominated markets? How would the retailing sector function in a balanced market? The authors' position in this article is that the Japanese retailing system comes very close to what is called here a "balanced market." Within that context the authors generalize some features of Japanese retailing that may be associated with the balanced market concept.

The Concept of the Balanced Market

Alfred Marshall (1920) pointed out that when demand and supply meet there is either a buyer's surplus or a seller's surplus. In other words, if there is a "buyer's market", the buyer will have a surplus because the buyer is in a better position to negotiate or the economy is in a recession or depression. Therefore, the buyer can pick and choose what to buy and how much to pay. However, if it is a "seller's market", then the seller can determine the terms of exchange. In such situations there is either a deficiency of supply, that is, demand is growing faster than supply, or the economy is booming. This implies substantial profits for the seller at the expense of buyers.

If both parties (i.e., buyers and sellers) have optimized their position, then buyer's surplus and seller's surplus will disappear and the market will cease to be a buyer's or a seller's market. It is proposed in this paper that the economy which is neither a buyer's nor seller's market may be termed "balanced". Balance here implies that buyers and sellers have smooth and well established relationships that are mutually satisfactory (See Exhibit 1). It also means that nobody benefits at the expense of somebody else (Nishimizu & Hulten, 1983; Kellman and London, 1984).

The smooth relationship between buyers and sellers is depicted by a series of attitudes and functions. Exhibit 1 implies that the smooth relationships depicted in the Exhibit are more prevalent in Japan than the U.S. or Eastern European markets.

Although there are no methodologies to verify this situation, certain retailing practices may indicate the presence of a balanced market in Japan. By contrasting the retailing practices in Eastern Europe, primarily a seller's market, and retailing practices in the U.S., primarily a buyer's market, with those prevailing in Japan, the concept of a balanced market can be demonstrated.

The authors have personally observed and discussed the concepts of this paper with other marketing professors who also have experienced Japanese retailing practices. While the discussions were based on unstructured observations, four features of the Japanese retailing environment surfaced: sensitivity, awareness, effort, and perception related to actions and attitudes of store personnel.

Exhibit 2 illustrates these key features, how they are applied, and their obvious impact.

Sensitivity: Perhaps one of the most important features of Japanese retailing is depicted by the sensitivity displayed to customer needs (Hamada, 1984). Salespeople make a special effort to understand the customer's needs. Retailers question the customer carefully just to make sure that they have understood what would satisfy these needs. The logical follow-up of this sensitivity is the actual satisfaction of the customer's needs. This outcome implies a successful sales effort on the part of the retailer which leads to strong customer loyalty.

Awareness: The retail salesperson is aware of what the store has to offer and what can be done with this offering to satisfy the customer's need. Basically, the retail salesperson is very familiar with the product available in the store and the specific product features. Thus, the retail salesperson can give the best possible options to the customer. Although typically the price is fixed, the retailer can make it somewhat flexible by throwing in certain bonuses to satisfy the customer. These bonuses may include certain types of services or free gifts. As a result of this awareness feature, the typical retail store maintains a high turnover rate and achieves mutual satisfaction with its customers.

Effort: It is almost always obvious that the Japanese sales clerk is making an effort to satisfy the customer. Typically, the retail salesperson is very well acquainted with the customers and their needs. However, if the retail salesperson is not acquainted with the customer or the needs, there is a general expression of genuine sincerity trying to understand what the customer needs. The retail salesperson spends just enough time to give the customer the best alternative to satisfy the expressed need. The outcome of this effort is a high degree of productivity.

Preception: The customer in Japanese retailing appears to be perceived almost as a friend and/or a relative. Thus, one cannot help but notice the expressed respect for the customers and their needs by Japanese retail salesperson. The orientation often is one of giving a gift to a friend or a member of the family rather than one of selling. The outcome of this type of orientation is a continuing satisfactory relationship which particularly is indicative of the balanced market.

Although it is difficult to substantiate, two opposing scenarios can be proposed to explain the state of Japanese retailing: first, that the society has reached a certain level of development and stability and that these features have extended into the retailing sector; or secondly, that the retailing sector has come into balance because of the economic prosperity Japan now experiences, with its accompanying abundance of goods and demand for ownership.

American and East European Buyers and Sellers Markets

In order to understand the features of Japanese retailing better it is helpful to compare them to those of Eastern Europe and the U.S. Seven factors depicting retailing effectiveness may be considered. It may be noted that there are no commonly accepted variables for international comparative retailing. These seven are a most logical choice for the type of observations presented in this paper: (1) need satisfaction; (2) customer loyalty; (3)sales effort; (4) merchandise mix; (5) turnover rate; (6) degree of productivity and (7) continuing satisfactory relationship. Exhibit 3 presents a comparative analysis to establish relationships between the four features of Japanese retailing that were presented in Exhibit 2 and the seven factors presented in Exhibit 3. The functioning of the seven factors depends very greatly upon these four features.

Need Satisfaction: Satisfying the needs of customers is not standard procedure in East European countries. Even with the best of intentions the retailers cannot satisfy customer needs because of acute product shortages. East European stores are not well stocked, and hence they barely satisfy customer needs. Furthermore, in many East European countries, retailers are government employees, and their well-being is not tied to the store's well-being. As a result, the retail salespeople rarely try to please the customer (Samli, 1978).

In the U.S. most of the conditions are quite appropriate for the customer's satisfaction, i.e., retailers have the products and motivation to do a good job. However, because the retailer does not know the customer personally and because pressures for retailers to sell are at times excessive, customer needs may either be incompletely satisfied or occasionally "over-satisfied", leading to ineffectiveness in the retailing process.

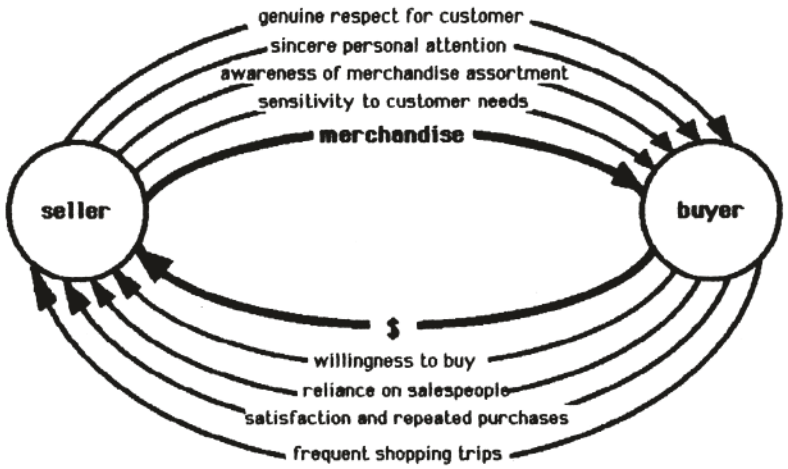
In Japan, because the retailer-customer relationship is well established and because the retailer knows the customer almost intuitively, customer needs are satisfied more successfully.

Customer Loyalty: Customer loyalty in East European retailing is not by choice. Because of certain formulae (Samli, 1978), retail establishments are located in certain places and are not duplicated. Thus, the consumer has a limited selection of stores. As a result, they go to the same store for very long periods of time.

Since the U.S. is a very dynamic society, consumers move around. It has been stated that approximately 20 percent of Americans move yearly. Even a move across town changes retail affiliations. Additionally, the average

longevity of retail establishments is not very high. Customer needs and wants also change quite often, and therefore over time consumers may frequent different retail establishments. Thus, only in rare cases is there a long-lasting customer loyalty.

In Japan, both business and consumer sectors are very stable. Consumers do not move very often, and retail establishments stay in business literally for generations. But particularly because their needs are satisfied,



A Balanced Retailing Market

Exhibit 1

Exhibit 2

Aspects of Japanese Retailing

Features	Tools	Action	End Result
Sensitivity	Careful questioning; Understanding customer needs	Satisfying customers	Positive sales effort and customer loyalty
Awareness	Knowledge of merchandise in store; Lattitude in giving	Giving the best the store has to offer to customers	High turnover rate and mutual satisfaction
Effort	Displayed sincerety Personal acquaintance with customers	Spending time to give the best alternative	High degree of retail productivity
Perception	Expressed respect for customers and their needs	Acting as if the customer is a best friend or part of the family	Continuing satisfactory relationship

Exhibit 3

Comparative Analysis of Eastern European, U. S. and Japanese Retailing

	Degree of Adequacy		
Factor	**East Europe**	**U. S.**	**Japan**
Need Satisfaction	Very Low	Medium	High
Customer Loyalty	High (but not by choice)	Medium	High
Sales Effort	Very Low	Unnecessarily High	High
Merchandise Mix	Very low	Unnecessarily High	High
Turnover Rate	Medium	Medium	High
Productivity Level	Very Low	Medium	High
Continuing Satisfactory Relationships	Very Low	Medium	High

customers are very loyal to the retail establishment.

Sales Effort: In East European countries, because of shortages and because of the absence of incentive systems, the retail salespersons do not make much of a sales effort. Again, the shortages account for this situation.

In the U.S., much of the time the retail salespeople are almost overzealous. Incentive systems, competition and unfamiliarity with the customer and customer needs may motivate the salespeople to try to sell as much as they can and perhaps to sell the most expensive options.

In Japan, on the other hand, there is a well established relationship and understanding between the retail salesperson and the customer. The retail salesperson may make just enough of an effort to satisfy the customer's needs. Thus, a low key sales effort becomes very adequate.

Merchandise Mix: In East European countries, the merchandise mix is a critical problem. Even if the retailer were to have the motivation to adjust the merchandise mix to consumer needs, this may not be possible. Acute shortages of different products are the norm. This situation makes it difficult to plan effective merchandise mixes.

In the U.S. the merchandise mix is usually quite adequate, but two problems still prevail. First, due to the retailer's lack of knowledge of the customers, the merchandise mix may be off target; and second, again because of this lack of information, the inventory mix could be more adequate.

In Japan, on the other hand, because of the familiarity of the retailers with their customers and customer's familiarity with the retailer, the merchandise mix can reach a higher degree of adequacy. What customers cannot find can easily be communicated to the retailer. Furthermore, since the retailer knows the clientele very well, seldom, if ever, will there be an occasion where the merchandise mix will be off target.

Turnover Rate: In Eastern Europe the inventory turnover rate is rather erratic. Since there are serious shortages, certain products turnover quite fast. However, often there are numerous products that are not geared to the specific needs and desires of the stores' clientele, and these products move very slowly.

In the U.S., lack of personal knowledge of the clientele combined with efforts to provide customers with a wide range of selection slows down the turnover rate. However, salespeople's overzealousness and heavy promotional efforts accelerate the turnover rate.

In Japan, personal familiarity with the clientele and offering the type of merchandise that customers want to buy provides the basis for higher inventory turnover rates.

Productivity Level: In Eastern Europe, particularly because individuals are not motivated, productivity is low. Additionally, even if the retail salespersons were to be motivated, certain products may just not move. These products are not produced on the basis of market information and inputs from consumers. Thus, high retail productivity is not readily prevalent.

In the U.S., retail productivity is relatively high. However, because of the excess inventories and lack of personal familiarity with the customers it may take longer for the merchandise to move as fast as it would otherwise. Thus, even though productivity, in terms of sales per transaction or sales per advertising dollar may be high on the average, the U.S. efficiency can be improved.

In Japan, on the other hand, both buying as well as selling on the part of the retailer is done with the customers in mind. Since the retailer is very familiar with the customers, both buying and selling are efficient and on target. Thus, retail productivity is the highest.

Continuing Satisfactory Relationships: In East European countries, customers come to the same retail establishment not necessarily by choice but because of the lack of options. Although not satisfactory there are continuing relationships between the retailer and the consumers. The fact that the population is not highly mobile is also a contributing factor to this long lasting relationship. Because needs are not satisfied adequately, because sales efforts are quite superficial, and primarily because the merchandise mix is deficient, the relationship is not satisfactory.

In the U.S., because of excessive competition and ever increasing alternatives for the retailer's customers and because the population is highly mobile, continuing satisfactory relationships exist only to a certain extent. Some of this cannot be remedied until the population becomes more settled, and the retail salespeople become more familiar with their customers.

In Japan, because of high need satisfaction facilitated by effective sales effort and an appropriate merchandise mix, the relationship between the retailer and the clientele is highly satisfactory. This relationship is also long lasting because of the society's stability. Both retailers and consumers remain in the same place for a long time, and the relationships continue for generations.

Conclusions

If one were to consider Eastern Europe as a seller's market and the U.S. (typically) as a buyer's market, one may venture to call the Japanese market balanced, or neutral. This neutrality implies almost the type of equilibrium described in economics textbooks. Both buyers and sellers are satisfied, and there is not much tendency to change. Such a situation is achieved by the retailer's being very knowledgeable about their customers and the merchandise that they sell, and also by being very concerned about the customer's well-being.

The Japanese example can hardly be transplanted into East European countries, since consumer goods are not properly emphasized there. Furthermore, the system does not provide good incentives for the retailer to do a better job of satisfying the consumer's needs. Similarly, it is also difficult for U.S. retailers to simulate the Japanese model. There are at least three reasons for this: (1) the American population is quite unsettled; Americans move around very often, thus it becomes impossible for the retailers and the consumers to establish a Japanese style bond; (2) incentive programs in the U.S. are not effective enough (or too effective) to provide motivation for the retail salespersons to feel that they are selling to members of the family. Finally, (3) American retailing is not settled yet in the sense that a retail establishment can exist in the same location and will remain in the same family for generations. There are a number of lessons that can be learned from Japanese retailing:

1. The closer the retail salespeople are to their customers, the greater the possibility of customer satisfaction

2. Better knowledge of customers can increase the effectiveness of the merchandise mix and sales efforts

3. A long-range orientation in establishing strong ties with customers is likely to benefit both parties

4. Such a long-range orientation is also likely to increase retailing efficiency.

The discussion in this paper was particularly relevant for small and medium size retailers in all three markets. As we know in the U.S., the "personal touch" is lost as large-scale retailing takes over.

Much work remains to be done in determining if the emergence of large scale retailing in Japan will change the overall picture. It is quite possible that as more retail giants emerge on the Japanese scene, the retail sector may become similar to that of the U.S.

At the higher and more theoretical level the concept of a "balanced economy" as presented in this paper needs more attention and research. It is quite possible that such a concept may provide goals and directions for third world economies.

As for East European retailing effectiveness, if these countries continue making economic

progress, they will have to learn some lessons from the U.S. as well as from the Japanese models. Once the supply picture is improved (if ever) and retailers are given better incentives, Eastern Europe retailing can also become quite effective.

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STANDARDIZING MARKETING STRATEGIES INTERNATIONALLY: A MODEL OF THE ISSUES AND A LOOK AT THE FUTURE

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Abstract

The degree to which international marketers should standardize their marketing mix rather than adapting it to individual country markets continues to be widely debated in the business literature. This paper considers the factors determining the degree of standardization and notes that our perspective on global competition has subtly shifted in the 1980's. The paper discusses the further effects of economic and political trends on the decision to standardize and suggests implications of this issue for international marketing and researchers.

Introduction

If, as Thorelli and Becker (1980, p. xvii) have suggested, the critical question in marketing is how to fit marketing strategy to market structure, then the international arena poses a complex challenge both to marketers and to the concept of segmentation. Wendell Smith (1956) clearly articulated the choice between product differentiation--a strategy of serving an aggregate market with a single product differentiated from competition--and that of segmentation--recognizing that differences in markets require differences in marketing mix--for the domestic marketplace. At the international level, the question is more complex since segments might be nations, with their different languages and customs, regions, or groups such as information seekers, teenagers, or working wives--that transcend national boundaries. Largely, the literature suggests that some adaptation is necessary; the degree of adaptation depends on a variety of contingencies.

This paper discusses the standardization issue from the strategic perspective of the firm. It models the determinants of standardization, notes a shift in emphasis among them in the 1980's, reviews economic and political forces that are leading to standardization and discusses the implications of these developments for research topics and methodologies.

Nature of Strategy Adaptation

Clearly, all elements of the marketing mix--product, promotion, price and channels--can be adapted to the specific segment the firm wishes to target. Sorenson and Weichmann (1975) distinguish between obligatory and custom adaptation. Obligatory adaption is that taken in response to such barriers to standardization as government regulations or the absence of particular retail or media outlets--factors that, at least in the intermediate term, the firm cannot affect. Discretionary custom tailoring of strategy occurs when "management is not compelled to make changes but chooses to make them in response to subtle differences in local market conditions" (p. 44).

A more recently proposed distinction in nature of adaptation is that between strategic differences and minor differences. Strategic changes require "a fundamental rethinking of the product in the new market" (Kirpalani 1985) or affect the company's global presence by detracting from global goals of brand presence/positioning or cost advantages sought through economies of scale and experience (Hamel and Prahalad 1985, Quelch and Hoff 1986). It is the focus on strategic adaptation that directs this discussion of marketing strategy standardization.

Determinants of the Degree of Standardization

Numerous sources list factors that will affect the degree of adaptation a firm will pursue in a particular market (for example, Bilkey 1980, Buzzell 1980, Cundiff and Hilger 1984, Keegan 1980, Kirpalani 1985, Hamel and Prahalad 1986, Levitt 1983, Quelch and Hoff 1986, and Sorenson and Weichman 1975). This section of the paper synthesizes these sources into a single model. Two types of determinants of the degree of standardization are proposed: the strategic motivations of the firm in entering international markets and the structural barriers that exist in specific markets (Figure 1). Strategic motivations of the firm, which will be discussed first, include the firm's goals, objectives, and resources, the international market's attractiveness, and competitive pressures.

FIGURE 1
DETERMINANTS OF THE DEGREE OF STANDARDIZATION



Strategic Motivations

Firm Goals, Objectives, and Resources

The degree to which a firm will adapt its marketing strategy will depend largely on the role of international segment of the business in obtaining the company's goals. Bilkey (1980) suggests firms export for either internal or external reasons; that is, they are forced into foreign markets due to overcapacity, product uniqueness or unrealized expansion goals or pulled into the

markets by fortuitous orders, market competition or government stimulation. As long as firms see themselves as exporters (less than 20% of business from international markets) rather than multinationals or transnationals, their motivation to adapt is limited. However, as presence and share in international markets becomes critical to its success and competitive pressures intensify, the firm is increasingly driven to gain a firmer hold on foreign markets. Historically, the firm in this position has adapted its marketing mix on a country-by-country or regional basis to capture the marginal increase in sales; they follow a strategy of decreased standardization to capture market niches where the chief competitors are local companies.

In addition, the degree of marketing strategy standardization will be a function of the firm's resources. Strategy demands consideration of distinctive competencies. If the firm does not feel it has or can reasonably obtain the financial, manufacturing, R&D, or marketing capacity and skilled personnel to adapt to the foreign market, it may opt to allow the market to be merely a source of "extra" or overflow sales, rather than a fundamental building block of the firm's success. In this case, the strategy of standardization is adopted by default.

Market Attractiveness

Market attractiveness determines the degree of adaptation of the marketing strategy through a cost/benefit analysis. At the country or segment level, the firm seeks to assess the costs of adaptation of the strategy against the benefits in sales, share, and long term profits (or other goals). For example, such costs of adaptation as the increased complexity of managing the company, increased manufacturing or promotional development costs, or the ability to protect a trademark are weighed against the corresponding increase in sales and profits resulting from such adaptations. Typically, in the traditionally oriented multinational, such assessments would be made largely on a country-by-country basis.

Competitive Pressure

Recently, writers such as Hamel and Prahalad (1986) and Levitt (1983) have argued that a global strategy is radically different from a mentality that treats international business as an extra market in times of domestic overcapacity or seeks to maximize the multinational's position on a country-by-country basis. One school suggests that firms must enter world markets when their products are such that 1) they can gain economies of scale and experience which will lead to lower costs in world markets or 2) the consumer offered low costs and high quality will "lay aside culture bound product preferences....So while Caterpillar views its battle with Komatsu in global terms, CPC International and Unilever may safely consider their foreign operations multidomestic"(Hamel and Prahalad 1986, p. 139). In contrast, Hamel and Prahalad argue for a broader view of global strategy (p. 140). When the competition seeks to be a global company--one which has "distribution systems in key foreign markets that enable cross-subsidization, international retaliation, and world scale volume" (p. 141)--then the issue is "world brand dominance." The firm must seek to build a global presence (e.g., Japanese automobiles and electronics) rather than defend a domestic position (many U.S. companies) or overcome fragmented national markets (European companies). The method for building this world presence is to:

1) enter markets to gain volume on which manufacturing cost advantages will be based and
2) obtain global distribution strength--a competitive asset not easily or quickly copied and
3) build a global brand franchise (awareness, position) across contiguous products.

If this longer term view of competitive strategy drives the firm's entrance into foreign markets, then adaptations to be avoided are those that detract from manufacturing cost position (product changes) or from consistency in brand position (promotion, price, distribution). While the authors cited, as well as many international researchers, do provide a rationale for standardization in broad competitive terms, they fail to specifically delineate the types of decisions to standardize and the types to vary locally. The answer seems to be "it depends" on other contingencies, many of which are structural barriers.

Government Regulation

Structural barriers to standardization include government regulation, market structure and marketing institutions. Government actions are often the product of economic nationalism: protective and subsidized trade practices, special tax aids and restrictions for home market producers. They can also take the form of regulation that applies equally to domestic and foreign competitors, such as restrictions on media use. Adapting marketing programs to such barriers is a prerequisite for entering the country; companies will not avoid such obligatory adaptations and must assess whether the costs of adapting the entry exceed the benefits.

Market Environment

Market environment refers to such factors as the physical environment in which the product is used, the stage of economic development (income, shopping patterns), "cultural" factors (tastes, preferences, values, product use, nationalistic feelings), and the market's stage in the product life cycle. While the physical environment--climate, voltage available, size of homes, etc. --is a reality that must be accommodated by most products, much debate has occurred over whether cultural factors and the stage in the PLC actually vary across countries. Levitt (1983) argues that technology has created truly global markets:

> A powerful force drives the world toward a converging commonality, and that force is technology. It has proletarianized communication, transport, and travel. It

has made isolated places and impoverished people eager for modernity's allurements...

The result is a new commercial reality--the emergence of global markets for standardized consumer products on a previously unimagined scale of magnitude....The world's needs and desires have been irrevocably homogenized (p. 92-3).

Levitt argues that good quality and reliability at a low price are universal values; the companies that standardize and offer such products across the globe will attain low costs and reap profits to fund future R&D. Consumer products such as fast foods (McDonald's), soft drinks (Coca-Cola and Pepsi-Cola), clothes (Levi's), televisions (Sony) are cited as supporting examples as well as raw materials and industrial and high technology products (automobiles, steel, chemicals, agricultural commodities and equipment, pharmaceuticals, and telecommunications).

Arguing against the "global markets" view are the numerous examples of "marketing blunders," or unsuccessful standardization efforts in foreign countries (Ricks et al. 1974; Ricks 1983; Cundiff and Hilgar 1984; Keegan 1980). These failures to recognize structural barriers support the need for adapting the marketing mix to local conditions. The degree to which such cultural differences are "real" rather than superficial and to which they parallel country boundaries rather than cross them is the heart of the standardization debate.

Marketing Institutions

A structural barrier which is more easily identified is the nature of marketing institutions in a country. The availability of the various media vehicles or distribution systems, for example, will clearly limit some strategy standardization. However, Levitt (1983) argues that even distribution barriers to standardization can be overcome with sufficient persistence; he cites Outboard Marine's collapsing a three tiered distribution system to a two tiered system, Komatsu's entry in to the U.S. and SmithKline's use of 35 rather than the 1000 traditional wholesalers to introduce Contact600 to Japan (p. 100).

In summary, the determinants of adaption versus standardization are of two types: strategic motivational factors (firm's goals and resources, market attractiveness, and competitive pressure) and structural factors (government regulation, market structure, and marketing institutions). Recently, business observers have urged managers to emphasize global competitive pressures in their standardization decisions and to recognize shifts toward a common global market structure. In addition, the power of understanding and using marketing institutions--a brand presence across countries and a strong distribution base --is increasingly being emphasized (Hamel and Prahalad 1986; Levitt 1983; Quelch and Hoff 1986).

Approaches to Resolving the Issue

Several researchers have suggested ways to deal with structural differences between countries other than pure standardization or pure country-by-country policies. Kirpalani (1985), for example, suggests grouping countries into regions which are largely similar. However, Boddewyn (1981) observes that while such regions may be similar in socioeconomic variables, the similarity with regard to a particular product may vary widely (e.g., the market for suntan lotion in the Scandinavian countries). However, this debate is merely an issue as to what variables one should use to divide the countries into clusters for a specific product. As the Wind (1978) segmentation review article notes, little theory drives this area and the variables selected will depend on the nature of the decision to be made (market entry, product repositioning, etc.). Thus, the multi-country approach appears useful, but no larger theory of cross-cultural differences exists to guide the manager in selecting segmentation bases for the country groups.

Many researchers have argued for the conceptualization of markets not as global or as country based, but as made up of homogeneous segments across countries (information seekers, teen subculture, working "liberated" wives, lifestyles, etc.). This approach is particularly appealing as it appears to look for fundamental differences between consumer groups that are tied to specific products; however, it ignores the language, governmental, and institutional differences that must be dealt with in cross-national campaigns. These barriers/costs appear formidable if one is seeking to appeal only to a narrow segment--unless the small segment is used as an entry mechanism into the broader market with further adaptations to reach the average consumer.

Finally, Hamel and Prahalad (1986) suggest a broader view of segmentation (similar to that of Wind 1978) is appropriate in the international market:

Global competitors must have the capacity to think and act in complex ways. In other words, they may slice the company [and the market] in one way for distribution investments, in another for technology, and in still another for manufacturing. (p. 148, brackets mine).

This more complex view suggests that country-by-country analysis, clustering countries, or isolating transnational segments may be an appropriate approach, depending on the decision at hand.

A Look at the Future

Two major trends will affect the degree to which MNC's will be both motivated and able to standardize their marketing programs worldwide: the rapidly integrating world economy and nationalistic forces. As Drucker (1986) suggests:

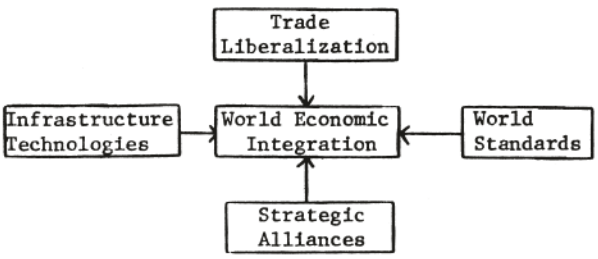
Economic realities are thus forcing the multinational to become a transnational

> system. And yet the political world in which every business has to operate is becoming more nationalist, more protectionist--indeed more chauvinistic--day by day in every major country....It must succeed in becoming a bridge between both the realities of a rapidly integrating world economy and a splintering world polity (p. 24).

Rapidly Integrating World Economy

An integrated world economy is one in which countries are interdependent, grow more similar in nature, and a number of economic power centers competitively coexist (U.S., Western Europe, Japan). Sheth (1986) depicts the forces that create this integration: Infrastructure Technologies (information technologies, transportation services and financial markets), Trade Liberalization, Corporate Strategic Alliances (global mergers and acquisitions, licensing and joint ventures), and Universal Product Standards (Figure 2).

FIGURE 2
FORCES DRIVING WORLD ECONOMIC INTEGRATION



Source: Adapted from Sheth (1986)

The nature of the world's economic interdependence is currently somewhat surface; it is a phenomenon "at the margin," as Levitt (1983) notes, rather than a completed reality. Today, the integration is largely in terms of exchanges of raw materials and finished products. In the future, the integration will extend to production sharing of components and the division of labor across countries where either unskilled labor is cheap or highly skilled technical labor is available.

The implications of this integration are threefold (Dmysza 1984, Drucker 1986 and 1982, Levitt 1983 and Root 1984). First, the integration accelerates the development of global markets, which justifies marketing standardization. For example, in this process, the newly industrializing countries, with their rapidly increasing consumer income, become critical targets for the multinationals as markets for products like those already sold in more industrialized countries. Second, the increasing complexity, more reactive environment, and increased competition demand better strategic planning and a global, rather than country-by-country analysis and decision-making. Third, Root (1984) and Drucker (1982) suggest the integration leads to alliances with other firms rather than direct investment. As Root suggests, firms will:

> ...more freely transfer nonstrategic production processes to firms...under contract manufacture, licensing, and minority-joint venture arrangements that are based far more on cooperation than on control (p. 23).

Dymsza also agrees that this trend toward alliances with other firms rather than direct investment is occurring (p. 37-8). However, he recognizes the potential conflict between global integration and partnership arrangements; standardized marketing programs are threatened if the network implementing them is autonomous.

Splintering Polity

The reactions of the world governments and their constituencies can either facilitate or hinder the integration of the world economy and, therefore, limit the opportunity of companies to standardize their marketing programs.

Typically one expects the governments of industralized nations to resist automation, production sharing and the shift of traditional businesses to the NIC's since these changes imply short term job losses and worker displacement. For example, Dymsza (1984) notes:

> Since the early 1970's with two major global recessions, there has been a major resurgence of protectionism...the continued imposition of voluntary export restraints, various subtle nontariff barriers, the politicalization of East-West trade, the rise in other trade conflicts involving Japan...threaten the liberal trading system developed in the post World War II period (p. 41).

Even in the face of this evidence, Root (1984) argues that protectionism will fail "because the economic/technological imperative at work in the world economy is stronger than the political imperative" (p. 22).

Wright et al. (1982) discuss trends in developing countries that will affect standardization:

> There has been an evolving belief on the part of the leaders of the Third World that not only have their nations become dependent on the capital, technology and influence of the multinationals, but that the multinationals have finally become a threat to the values and national sovereignties of the developing countries (p. 120).

If these nations' governments perceive the MNE's integrative global strategies are at odds with their national interests, they will seek more limitations on multinationals' activities--demands for a share in ownership as well as performance requirements such as "local content, export obligations, employment of nationals, development of local managers, and local R&D" (Dymsza 1984, p. 32). Clearly, such requirements make standardization more difficult.

In conclusion, it appears that the pressures toward standardization will outweigh those toward

adaptation. However, the standardization considered is that of a strategic nature--brand image, distribution, and product--rather than less strategic issues--media mix and promotional tools. In addition, the pace at which the trend occurs is largely uncertain. Levitt (1983) and even Hamel and Prahalad (1986) are ahead of their time; in contrast, the traditional multinationals who still operate on a country-by-country basis clearly need to rethink their position.

Research Implications

In the 1980's, our view of the world competitive situation has changed considerably. In terms of the model of standardization determinants (Figure 1), emphasis has shifted toward longer term, strategic implications of international marketing strategy--toward studying competitive pressure globally, toward focusing on the increasing degree of similarity in market structures and toward treating marketing institutions and the development of a "world brand presence" as critical aspects of the international competitive battle. This shift in the standardization debate clearly has implications for international marketing research.

This analysis emphasizes the need of researchers to view the segmentation decision more broadly. First, different variables for use in all types of marketing decisions--new product introduction, price, packaging, distribution--must be identified and the investigated at domestic, multi-country and global levels. Second, recent developments highlight the importance of international researchers continuing their efforts to identify segmentation variables that explain varied product success across markets which are similar in terms of their socioeconomic characteristics. The work in international marketing segmentation must be supported by research in comparative marketing to develop a larger theory of cross cultural differences (Boddewyn 1981).

The world competitive view demands managers pursue global dominance not in terms of single products, but in terms of a family of contiguous products (Hamel and Prahalad 1986). Similarly, international researchers might consider such product groups as their proper unit of analysis.

Researchers also need to develop more complex models and tools to analyze risk of entry. Such analysis must incorporate not just product and market considerations, but also company worldwide competitive position--manufacturing and research and development economies as well as the investment in a strong brand image and distribution system--across product groups related by marketing, manufacturing or distribution communalties.

The view of distribution as a competitive asset which is not easily imitated in a particular country market suggests an increased emphasis on distribution issues and decisions across cultures. For example, such research questions as the following might be of interest: How are power and conflict perceptions different in channels settings across different cultures? Under what conditions might it be most effective to use sales representatives from the manufacturer's country rather than hiring representatives in the buying country (McGee and Spiro 1986)? Whether the strategic alliance be a joint venture between manufacturers or between a foreign manufacturer and a domestic marketer, a better understanding of how to structure such alliances and how to forge strong, coordinated efforts, not just between the upper management groups, but throughout the partners' organizations is clearly needed (Business Week 1986).

Research in international marketing is still in a developmental stage. Yet, the environment in which studies are undertaken is rapidly changing. Recognizing this movement, both to understand its effects on today's research results and to use it to direct future research is a significant challenge.

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WHAT IS MEANT BY GLOBAL MARKETING?

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Abstract

The global approach to international marketing put forth by Theodore Levitt, a prolific and respected leader in marketing thought, flies in the face of conventional international marketing wisdom. This approach, which is interpreted as the application of the same strategy and tactics all over the world, is examined in light of the significant differences between various cultures.

Introduction

Madison Avenue reverberates these days with the sounds of one of the latest advertising industry bandwagon: Global Marketing. Hardly a new concept, Exxon, Hertz and Coca-Cola among others have been doing it for decades; but it recently became popular and faddish because of Theodore Levitt's idea that technological homogeneity makes the world one big market; thereby favoring a global approach to marketing and advertising. Global marketing is the idea that the same product can be sold in essentially the same way everywhere. This idea is contrary to conventional international marketing wisdom, but Levitt (1983) warns that without such thinking companies will perish in the rough seas of the 'new global realities'. Saatchi and Saatchi and Grey Advertising, however, seem to be taking the opposite side to this approach (Fortune, 1984).

There have long been two schools of thought on the subject of international marketing. One viewpoint states that with the extent of industrialization and granted that basic human needs and behavior are similar, except for minor changes to adjust to peculiar local circumstances, the same product can be sold with similar promotional appeals all over the world. Advocates for standardization argue that after all, needs are universal and only the attitudes and values tend to be localized. The other school contends that each country is different so that its unique cultural and social situation make a unified approach impossible. Kotler, who identifies with the second school, points out that only certain products lend themselves to standardization. He believes products and marketing programs should be attuned to fit each country-or at least be made such that one can get away without an attunement. Even the so-called standardized products are offered variedly to suit the local preferences. Coke varies its offerings in sweetness, carbonation and so on (Fortune, 1984).

Even after decades of aggressive multinational marketing, there seems to be no clear cut solution to this dilemma-to standardize or to localize. The argument for adjusting the marketing mix to specific countries or even to regions within a country will be made in this paper. Some observors will hold these truths to be self-evident, but the continuing argument in favor of global marketing (one marketing mix for the world) indicates that it would be helpful to again show why this doesn't work. This paper will highlight the basis for cultural differences and examine certain peculiar differences which work against the effective implementation of global marketing strategies. The concepts of standardization versus localization can be viewed as the extreme ends of a spectrum with the ideal, a mix of the two, being in between. Levitt believes a world market should be seen more as a point of destination or a goal of the future. But then, the world would have gained little with the loss of a rich texture of ethnic cultures. In the international marketing situation, the following alternative marketing mixes (MM) are shown in Table 1.

TABLE 1

	Communication: Standardize	Communication: Localize
Product: Standardize	Typical Export, Old MM I	Promotion Adaption, Old MM except for promotion III
Product: Localize	Product Adaption, Old MM except for product II	Total Adaption, Totally New MM IV

Assuming that in international marketing price and physical distribution are bound to be different whatever approach one takes, the question of standardization or localization therefore relates to the product and promotion (communication). Hence, a typical export could be viewed as extending the old marketing mix while a total adaption, a brand new marketing mix. The other two quadrants in the figure above represent altered marketing mixes where one element is changed while holding the other element constant. All the four quadrants, however, represent growth opportunities for the firm. The probability of success is low in the first quadrant, higher in the second but still low, higher in the third and highest in the fourth.

Ansoff (1957) identifies four growth opportunities (see Table 2). The probability of success of each of the four strategies are noted in the parenthesis and were suggested by the Research Institute of America (1974). International Marketing which can be viewed as either market development or diversification has a fairly low probability of success. Marketing literature abounds with cases illustrating how firms get into trouble because they fail to understand the needs, desires and mechanisms of a new market, even in their own countries. If the new market is foreign, the differences increase, intensifying the inadequacy of knowledge and decreasing the probability of success of marketing

TABLE 2

Marketing Mix

Target Market		Old	New
	Old	Market Penetration (0.75)	Product Development (0.50)
	New	Market Development (0.25)	Diversification (0.05)

strategies. It seems naive to believe that one strategy (global marketing) will work as a rule, now or within this century. Furthermore, every market (domestic or international) should be approached with a different marketing mix. In some cases, the differences in the marketing mixes will be substantial and in a few cases, no marketing mixes will be found acceptable. Multinational and global marketing are used almost synonymously, but in this paper global marketing is distinguished from multinational marketing. Global marketing means one marketing strategy (mix) is employed for the world, while multinational marketing refers to the manner by which the firms decide very carefully how uniform their marketing strategies (mix) should be from country to country (Kotler, 1976).

Defining terms here is important. In his examples, Levitt (1986; Hill, 1986) seems to indicate that global marketing is a uniform strategy at the broadest, highest level, and if this is his definition then global marketing is feasible but as suggested below, strategy at this level is almost meaningless. It is the implementation of this broad strategy for each element of the marketing mix that is important and that has to differ for different areas. Whatever is meant by Levitt when he proposes global marketing, it is obvious that marketers are interpreting it to be one marketing mix (strategies) for the world. History is replete with fiascos where someone has tried to transplant a successful marketing mix from one area to another without thoughtful changes to account for the new environment. The purpose of this paper is to again show why the marketing mix must be adjusted from country to country in a meaningful significant way, something most marketing people have been saying for years, but which bears repeating as it comes under attack by a person of Levitt's stature.

Differences

The approach is a function of a host of variables (uncontrollable and controllable) varying between countries. Kotler (1984) feels that there are few uncontrollables and that the firm should change undesirable variables. For instance, he feels that government and commercial interests should try to change Japanese trade regulations. He is glib when he says that Japanese trade regulations are really controllable because so far, after decades of efforts, the regulations remain a barrier to entry. Laws and regulations along with cultural, social, income, political and value variables affect every aspect of the marketing mix and differ so much between countries that it becomes impossible to even think of a global strategy.

Some may consider this problem to be dated, but the March 26, 1986 issue of Advertising Age devotes almost three full pages (pp 29, 40, 42 and 43) to a special report on global marketing (Chase, 1986) with a pertinent quotation (Hill, 1986) from a revised edition of a Levitt (1986) book. Levitt credits Seiko with using global marketing with a high quality, low price strategy, but then he goes on to admit that the only other constant is the internals of the watch. Is this the best example of global marketing? If so, it is not a good example. First of all, a high quality, low price strategy is so broad and desirable as to be almost meaningless. For sure it is global, a fairly good strategy in almost any market, for almost any product. The alternatives are high quality, high price; low quality, low price; and low quality, high price. Of course there are other combinations, such as changing the adjectives low and high to medium and adding the adverb very, but if the possibilities are limited to the above four, then low quality, high price doesn't seem feasible even though some firms do it. High quality, low price is certainly superior to low quality, low price and this leaves high quality, high price as the only alternative to Seiko's strategy. High quality, low price seems to be a great strategy, particularly for the mass market, but it is also a motherhood statement-broad and general enough to be almost meaningless. The most telling comment by Levitt is that the externals of the watch are changed for some markets. But if what Levitt calls the "packaging" is different isn't it also true that the promotion is different for the same reasons that the watches are different, plus differences in media? Levitt makes the point that Mozart, Ming vases and Rembrandt have always communicated universally, but unfortunately to a limited market. Levitt may dig Mozart, but can the mass market in any country even recognize Mozart when they hear it?

In this section points of differences which justify the argument against global marketing are examined. None of what follows is particularly new, but it seems necessary to discuss it again in order to make the argument against one of the more current marketing fads-global marketing.

Culture: Many successful American advertising campaigns fail overseas because of failure to fully understand the foreign culture and its social norm (Hornik, 1980). Hornik suggests that there are major propositions which underlie current thinking on culture:

1. Learning about a cultural pattern is an important means of reducing uncertainty about the behavior of customers of that culture. Cross-cultural diversities exist. These diversities are the result of differences in the situation, which consist of cultural values, goals and norms and other forces that may affect the reception and acceptance of messages.
2. Culture is primarily a phenomenon of a region or nationality: national identity predicts culture. But parallels between nation and culture should be carefully examined. It is possible to find much greater viability in horizontal analysis based on common occupation, socioeconomic class or ethnicity which will account for differences in perception.

There may be a few global campaign (Exxon, Coke etc.) but the main objective is still knowing how to play the exception for each culture, or trying to get away without an attunement. The secret lies in unearthing the characteristics of the cultures and in establishing a pattern of cultural differentiation before going into a foreign market.

The following indicates some of the basic characteristics that underlie all cultures (Kohler and Kramer, 1977):

1. Culture is learned, it is not present at birth but must be acquired.
2. Culture is passed from one generation to another. Inculcation involves not only the passing on of techniques and knowledge but also the disciplining of the childs' instincts and impulses in order to adjust him to social life.
3. Culture is social by nature and consists of groups Of habits formed in relationship with others. In effect, culture prescribes the manner of social interaction and the frame of reference.
4. Group habits, to an extent, are conceptualized as ideal norms of behavior. Most people show an acute awareness of their own cultural norms.
5. Culture always satisfies some basic or secondary need. Its elements are tested, habitual techniques for gratifying human impulses in man's interaction with the external world. Any product of culture that is not gratifying tends to be changed over time.
6. Culture tends to adjust to the geographic environment by borrowing from the social environment of neighboring people. It also tends to adjust to biological and psychological demands of the people composing the culture.
7. Elements of a culture tend to form a consistent and integrated whole.

These factors must be analyzed before initiating a foreign campaign or the campaign may not succeed. Products and campaigns which aim to change attitudes and/or behavior meet with great resistance. The marketing program's challenge is to facilitate the consumer's getting over the "risk-taking" syndrome associated with new products and programs. The lack of respect for other cultures is directly affecting this country's dealings overseas. In 1960, the USA was the world's largest exporter of manufactured products. Since then, Germany and Japan have taken the lead.

Religion is another variable which could boost the risk factor if not taken into account. It is the main spring of behavior and the basis for most values and attitudes. It affects the attitudes toward acquisition and pattern of consumption. It is as central to a culture's self-definition as speech or tool making. It is the key to the culture. Every nation finds legitimacy in being part of a larger context. The cosmos, the making of history or the purpose of God provide a nation with its reason for being. Society is never merely a social contract, an association of individuals who band together out of mutual self-interest. It always transcends the social and finds its meaning in the sacred. Such and other cultural differences should be taken note of in adapting both the product and promotion (Terpstra, 1978). Apart from cultural patterns, a knowledge of cultural communication modes is imperative. Language, which is an obvious difference, plays a vital role and as a complex cultural phenomena; it is difficult to even define it. One definition offered states that it is an "aspect of human behavior that involves the use of vocal sounds into meaningful patterns and, corresponding written symbols to form, express and communicate thoughts and feelings (Terpstra, 1978).

Language distinguishes cultures, and given that there exists at least 3000 languages, there must at least be as many different cultures in the world. Each country has its own set official and unofficial languages. For instance, Singapore has four official languages-English, Malay, Mandarin and Tamil. One might think that the problems are simplified because English or French is the official language in some fifty countries. Unfortunately, most of the countries are former colonies where the majority of the people do not speak the colonial language (Terpstra, 1982). In India, English is one of the two official languages, but a high proportion of the population does not speak English. In order to be successful, the international marketer must be able to think in the local language. Otherwise "body by Fisher" can turn out to be "corpse by Fisher" in Flemish, and "rendezvous lounges" can connote "rooms hired for making love". Another classic blunder was the all too familiar "come alive with Pepsi" campaign of Pepsi Cola Inc. In Germany the literal translation of "come alive" is "come alive out of the grave" (Mazze, 1964). No va in Spanish means, "it doesn't run" so that GM's Chevy Nova did not do well in Latin America (Beitiks 1985). Makes one wonder how well the Nova did in San Antonio or southern California. All these and more suggest that an additional factor influencing advertising transferrability is the skill with which standardization is done (Lorimar, 1979).

Color and Symbols: The successful communicator uses symbols as a means of establishing company with another person. The advertiser must carefully choose the symbols used in advertising in a foreign market. Color is one type of visual symbol. Different cultures attribute different meanings to colors, as shown in Table 3. Care must be taken in choosing colors for the audience may be offended. Pepsodent's promise of white teeth was especially inappropriate in many regions of Southeast Asia where chewing betel nut is an elite habit and brownish-red teeth, a symbol of prestige. The

TABLE 3

Color	Country	Meaning
Blue	Holland	warmth
	Iran	death
	Sweden	coldness
White	India	purity
U.S.A.		purity
Japan		mourning
China		mourning
Yellow	Japan	imperial
	U.S.A.	warmth
	France	infidelity
Purple	Japan	mobility
	Burma	death
	Brazi	death

"wonder where the yellow went" slogan did not help out either (Ricks, et al 1982).

Promotion: As alluded to earlier, standardization has been argued for most vehemently in the case of advertising strategy. On an international scale, advertising gets the major proportion of promotional expenditures. An arrangement whereby an international agency works in cooperation with a local agency is common. The problem of executive perception and communication apart from trying to have the local campaign in line with overall company advertising objectives may arise. Britons look for creativity in their advertisements while their American counterparts look out for the right spokesperson. Furthermore, the process of information diffusion and innovation varies entirely in different regions of the world. It depends upon the state and rate of change of a society as it moves from the traditional to a modernized one. The traditionally inclined conservative society of the 1960's in India found the Binaca Talcum Powder ad totally indecent and distasteful. The ad showed an attractive nude woman lavishly dousing herself with the powder with the caption: "Don't go wild - just enough is all you need of Binaca Talc". Because each country has its own peculiar customs and needs, Britt argues that if a product is culturally specific to a given country, it will make a poor candidate for a standardized approach (Britt, 1974). The international advertisers must tailor the campaigns to fit the appropriate needs, otherwise they can expect to encounter problems.

Media Factors: There are only a few print media which qualify as being truly international - these, of course, have regional editions to suit the local flavor. Income and educational levels of different societies vary drastically. Low levels of literacy hinder print media coverage, limiting it to small segments of the market. Contrary to expectations, television is not a good medium in South America for most advertisers because there is no relationship between TV ownership and purchasing power (Giges, 1977). Radio and cinema may be appropriate here. Linguistic diversity compounds the problem. Multiplicity of languages can tremendously offset advertising economies of scale. A Tower of Babel environment is a great handicap to an advertiser. The country of Zaire illustrates the problem at its worst. The official language, French, is spoken only by a fraction of the population, the rest is split between 100 or more tribal languages. Radio might be the answer to situations such as these. It penetrates the lowest socio-economic levels, reaching potential market segments which otherwise are inaccessible at reasonable cost. One of the most interesting developments in international radio advertising is recent years was the establishment of offshore commercial stations in Europe. They are believed to nullify to some extent the effects of restrictions (or prohibitions) of such advertisements by certain other European nations. Such restrictions and the inability to comprehend complex messages can be barriers to radio advertising in the face of a multi-lingual situation. Television which has a potential to get through the barriers of illiteracy, linguistic problems, and so on, is used only in a handful of affluent countries. In other countries, only those in the upper socio-economic class are the basic viewers, the masses' exposure being only through community TV, if any. But even in those 'networked' countries there are restrictions on the commercial use of TV. In the Federal Republic of Germany for instance, commercials have to be lumped together at four time blocks between 6:15 p.m. and 8:00 p.m. On week nights, substantially contributing to problems of overlap, confusion and reduced effectiveness. It is only a hope that as the societies develop into modern ones, the economic and social benefits of the TV advertising will be understood by the parties concerned and pave the way for the better utilization of the medium. The effectiveness is inhibited further by the extent of consumer education required while introducing a new product.

Governmental Restrictions: For the most part, governments of foreign countries invite multinationals only to play transitory roles in the country's development and not on a perpetual scale. The Koreans allow western companies to enter all the unprofitable ones (Chase, 1984). Sometimes there are other reasons. The Indian government approved Gillette's entry into its shaving market because of the fear that a local monopoly was developing. But there are a host of laws and regulations which vitiate the effective implementation of the Global Concept. The restriction relates to both investment and marketing and can vary from country to country. Many countries have laws that in one way or another restrict the nature, content, or style of advertising message. For example, Germany does not permit the use of comparative form, or comparison with competing products. Thus, in Germany a company cannot say its product is better than another (Albaum and Miracle, 1970).

One must note that the United States government does not practice "laissez-faire" in advertising, but its involvement is not heavy enough to warrant substantial consideration in advertising discussion. Abroad there are many countries with tighter restrictions and others with lighter restrictions than the United States. A number of countries do not allow advertising on radio and/or television and governments usually regulates advertising for cigarettes, liquor and a variety of other products considered sensitive (Terpstra, 1982). The most prevalent types of restrictions are those that limit personnel hiring and work permits; remittance of profits, fees and royalties; legal establishment and degree of ownership; access to public sector market; and importation of advertising materials. There are also restrictions that either prohibit or tax foreign produced advertising (Bockman, 1982). Some countries have requirements stipulating which language may be used for advertising, and others require some kinds of advertisements to be prepared locally, rather than in the firm's home office (Terpstra, 1982). Advertising associations in several countries, including the United States, have established industry self-regulatory organizations. They work with government regulatory agencies in an effort to promote a better understanding of advertising. The major problem facing the advertising business is extreme nationalism which leads to restrictive trade barriers and government control of media (Bockman, 1982). Government prohibits many advertised commercials and many products from either being on the television, on the radio, or in the newspaper. The following highlight the different situations:

1. In West Germany, pharmaceutical regulation has been implemented by law which went into effect August 1, 1961. It provides rigid rules for licensing and registration of manufacturing, product labeling and promotion.
2. A French economic and social plan currently operating condemns a society of consumption because it gives futile satisfaction. But when you observe French consumers, you cannot escape the conclusion that they want very much to have what the American consumer has.
3. Norway has laws about unfair competition which forbid giveaways, free offers, and premiums if they are not available to everybody and if the consumer has to buy a product to get a them. It also forbids untrue and false advertising. Absurd high prices can be stopped by a public committee reporting to a court of justice.
4. Sweden has a strong Council Business Practice, a self-policing body representing sixteen national organizations in manufacturing, retailing, banking, labor, insurance, agriculture consumer cooperatives, the press, advertising, tourism and transportation. Although there are rigid laws on untrue advertising, fictitious pricing, premiums etc.; in Sweden these have not been as rigidly enforced as in other countries because of effective self-policing.
5. Japan has laws on foods, drugs, advertising, and unfair competition similar to those of United States. Not so long ago some food manufacturers were prohibited from running prize contests, because the values they claimed for the prizes were absurd. Several food and beverage groups are now under investigation.
6. Mexico has new laws requiring the Department of Health be furnished with a list of ingredients of any cosmetic product sold in that country. Trademarked products must include a statement showing the generic chemical names.
7. England presents probably the closest parallel to the United States in problems of government intervention in advertising. The Labor party has demanded an independent commission to inquire into advertising. The Advertising Association of Great Britain is finding it necessary to play a mOre vigorous role in promoting public confidence in advertising, developing and improving advertising, fostering higher ethical standards, etc. (Dunn, 1964, p. 530).

Conclusion

There is a hope on the part of some marketing people that one day markets in the world will be so similar that one marketing strategy will satisfy every market (Levitt's syndrome). This myth is called global marketing, and some people think that day has arrived. However, many marketeers recognized that even in the allegedly homogeneous United States there are, for a number of reasons, significant regional differences requiring somewhat different approaches. If there are still regional differences in this country, how can anyone say that global strategy will work now or quite frankly ever. The popular song "We are the world....." may not be true, yet. We are only a part of it!

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AGGRESSIVE MARKETING AND REVITALIZING THE CORPORATION: INCREASING U.S. COMPETITIVENESS

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Abstract

There is increasing concern among analysts, researchers, and leaders of American industry about our eroding competitive position in international markets. Less radical solutions include joint ventures and government intervention. A more radical solution is the adoption of a more aggressive marketing position, including a focus on growth in market share as the central organizational goal, a long-term perspective, concern with competitive intelligence, and true marketing analysis to identify competitive advantage and distinctive competences. An even more radical solution involves revitalizing or re-inventing the corporation. A variety of considerations comes into play here, including employee ownership in the company, leasing employees instead of hiring them, elimination of top-down authoritarian style and substitution with a networking style of management, increasing use of entrepreneurship within companies--intrapreneurship--and formation of smaller autonomous businesses within a larger structure.

Introduction

Recent articles by Sailer and Baliga (1983) and Thorelli and Sailer (1986) described the deteriorating competitive position of the United States in the international economic order. Of particular significance was the fact that not only had the rate of growth in imports exceeded that of exports, but in the case of certain goods categories the U.S. had largely become a net importer. Indeed, this country is now a debtor nation in many industries. George Lodge (1984), in his book called The American Disease, describes the situation forcefully. By the early 1980's, the U.S. was aware, for the first time, of losing ground in its competitive race with other nations. The power and efficiency of the industrial system, which since World War II had been taken for granted, was eroding. America had been living beyond its means. According to Skinner (1986), even American manufacturers' near-heroic efforts to regain a competitive edge through productivity improvements have been disappointing. In the late 1970's, after facing a severe loss of market share in dozens of industries, U.S. producers aggressively mounted programs to revitalize their manufacturing functions. But the results overall have been dismal. For many companies, the harder they pursue productivity, the more elusive it becomes.

As one of the best examples of the decline of American competitiveness, the automobile industry is in an increasingly vulnerable position. The U.S. International Trade Commission, in its annual report on automotive trade statistics, gave a chilling compilation of the import-export imbalance. The U.S. trade balance in passenger automobiles with all countries registered a deficit of 2.9 million units, valued at $24.4 billion. U.S. imports of passenger autos rose to 3.6 million units in 1984. The value of U.S. imports of all motor vehicles increased to $36.7 billion, with Japan being the leading source. This contrasts dramatically with U.S. exports, which numbered only 613,051 units and were valued at $7.0 billion (U.S. Automotive Industry 1985).

These gripping statistics express more clearly than words ever could the seriousness of the situation in one of America's core industries. The question then arises as to what is to be done about our deteriorating competitive position. In addition to the explanatory value offered through application of the international product life cycle, other specific solutions recently offered have included market segmentation, design modifications, joint ventures, and government policies. These solutions have been discussed in earlier papers (Thorelli and Sailer 1986, 1987) and will be alluded to briefly. More radical solutions have become increasingly popular and have resulted from analyses of Japanese business strategies. These include the adoption of a more aggressive marketing policy by American companies and the revitalizing of the American firm.

Less Radical Solutions

The International Product Life Cycle. An earlier paper (Thorelli and Sailer 1986) discussed the operation of the international product life cycle. Louis Wells (1968) and Raymond Vernon (1966) developed the notion of a cycle in international trade, during which the U.S. is initially an exporter, then notices the emergence of foreign producers, later loses its export markets, and finally becomes an importer of the product. Considering the four stages in that trade cycle, the first phase is U.S. Export Strength. Because of a large body of high-income consumers, many innovations have been developed by American manufacturers primarily for the domestic market. Thus, to the extent there is a world market for the product, the U.S. would have a virtual monopoly for these products. In the second phase, Foreign Production Starts, incomes and product familiarity abroad increase. Favorable profit projections based on a demonstrated market and an ability to underprice imports will induce entrepreneurs in wealthier foreign markets to take the plunge and start serious manufacture.

In the third phase, Foreign Production Competitive in Export Markets, the costs of foreign manufacturers will begin to fall, especially with their typically much lower labor costs. Foreign products will become competitive with American goods in third markets where goods from both countries have to carry similar freight and duty charges. The last stage is Import Competition begins. As foreign manufacturers reach mass production based on their home and export markets, their lower labor rates and perhaps newer plant may enable them to produce at lower costs than an American manufacturer. U.S. exports will be reduced significantly, and import competition may become severe.

Based on the trade cycle, the import competition America has experienced can be explained by the international product life cycle. It has shown its application to several core industries, especially the U.S. auto industry. This same cycle can also be successfully applied to Japan vis-a-vis the newly developing nations, such as South Korea.

Market Segmentation. Given that many American industries are in the fourth stage of the international product life cycle, market segmentation is an area where remedial action can be taken (Thorelli and Sailer (1987). Market segmentation is exactly what one American industry has done in recent years. In The Future of the Automobile, Altshuler, Anderson, Jones, Roos, and Womack (1984) make this point in their study written with the sponsorship of MIT's International Automobile Program. In their examination, they indicate that domestic producers have retained an identified niche in the overall market. Specifically, Americans have a comparative cost advantage in the world market in the production of larger-sized models. As more and more consumers in foreign countries are reaching the high-income levels of many Americans, the market for these cars will continue to increase.

Design Modifications. Design modifications are another area where there is much room for improvement. This refers not to cost-cutting procedures but to true improvements in productivity. Chipping away at waste and inefficiency is not enough to restore competitive health. Structural decisions would need to be modified, such as what to make and what to buy, the capacity levels to be provided, and work force management policies. For example, Ford used a program management approach in the creation of its new Taurus-Sable instead of its five-year sequential process (Mitchell 1986). Representatives from all the various units--planning, design, engineering,and manufacturing--worked together as a group. Because all of the usually disjointed groups were intimately involved from the start, problems were resolved early on. Another major change was identifying the world's best-designed and engineered automotive features, and then incorporating as many as possible in the Taurus-Sable. This illustrates the use of a new manufacturing strategy.

Manufacturing Abroad and Joint Ventures. Manufacturing abroad is another strategy to increase American competitiveness. In this case firms take advantage of lower tariffs and production costs. As Gluck (1983) points out international marketing can no longer be viewed as a strategic alternative by American business firms, but as a strategic imperative. Considering the American auto industry as an excellent example of joint ventures, the evolution taking place in that industry is leading to a situation where the "all American car" is rapidly becoming a thing of the past. General Motors owns 34 percent of Isuzu and 5 percent of Suzuki. Ford owns 25 percent of Mazda and Chrysler owns 15 percent of Mitsubishi. Internationalization also includes the production of foreign cars in the U.S.--such as Accord being produced in the Honda plant in Ohio--just as it does the production of American-brand cars overseas, such as Ford Escort being manufactured in Western European plants. And the GM-Toyota and Chrysler-Mitsubishi joint ventures to assemble subcompact cars in the U.S. indicate a fundamental shift in thinking about the way to produce and market automobiles.

The joint ventures between U.S. and Japanese auto manufacturers have been formed to provide benefits to both the U.S. and Japanese firms. U.S. auto makers see the joint ventures as a method of learning more about the efficiencies of Japanese production techniques. Japanese producers see these joint ventures as a way to reduce their vulnerability to potential protectionist actions by the U.S. However, although the Federal Trade Commission approved the formation of the GM-Toyota joint venture, there were dissenting voices heard even on the Commission itself, in the areas of lessened competition, job losses for Americans, and no real opportunity for direct learning of Japanese methods by GM. Thus, as Wassink and Carbaugh (1986) indicate in the first issue of a new journal, the International Trade Journal, it is not yet certain whether the FTC decision to allow the international joint venture between GM and Toyota was good or bad. But it is increasingly clear that the solution of joint ventures is not nearly as simple and beneficial to all concerned as was thought initially.

Government Intervention. Protectionism has played a significant role in several domestic industries for many years, especially in the auto and steel industries. The use of government policies to favor our balance of trade position is a partial solution for American industry. As noted by Culbertson (1986), classical economics teaches us that free exchange works to produce the best results for all. But this concept works only when the exchange is an equal one that occurs within a common framework of laws, customs, rules, and regulations. When each nation creates self-serving rules, free trade across national boundaries becomes destructive. American companies, therefore, end up competing not with foreign companies but with sovereign foreign states--states intent on winning jobs and sometimes whole industries for themselves. Japan grants favorable credit terms to certain industries, for example, and many give cheap export-finance loans.

Peter Drucker (1986) makes the same point forcefully in his article on Japan and adversarial trade. Classical notions of international trade assume there is complementary trade. Both countries buy and sell to each other in areas that they are weakest and strongest in, respectively.However, the Japanese, to an extent, only sell; they do not buy. They practice adversarial trade. In such a situation the seller's goods displace the goods produced by the manufacturers of the buying country without any compensating purchases from that country. The only true solution would be for the Japanese to become buyers of foreign goods. Similarly to Culbertson, Drucker suggests that we need a measure that arrests adversarial trade.

In the Auto Program sponsored by MIT and participated in by representatives of the U.S., France, Italy, Japan, Sweden, England, and West Germany, the trade policies for each country was a critical issue. As Altshuler et al. (1984, p. 235) note, "the most intensely debated issues in the Auto Program were what the trade policies of the Auto Program countries ought to be in the years to come." Later, "in practice, the domestic political balance in nearly every country tends toward

interventionism" (p. 238). Thus, since the U.S. is not operating in an open market, it may be advisable to include some level of government involvement in the overall strategy.

Adopting a More Aggressive Marketing Posture

Taking a much more difficult approach toward regaining our competitiveness in the international arena, many serious authors have studied our most formidable foe in many industries--Japan--and have described what the Japanese do that American manufacturers might imitate or adapt to their own case.

There are several outside factors which have significantly helped Japanese businesses. These include heavy subsidies provided by the Japanese government to industry, reluctance of the Japanese government to endorse income redistribution policies such as social security and welfare which are vigourously pursued by the U.S. government, and the reconstruction of Japanese manufacturing facilities following World War II. It would be difficult for U.S. manufacturers to develop the immense industrial groups consisting of general trading companies (sogo shosha), banks, and the manufacturing base that exist in Japan. Those collaborative efforts go against many of our established practices (Martin 1986). It would also be difficult to change our personal savings and education patterns. Japanese individuals save 20 percent of their disposable income; Americans save 5 percent. With a population only half as large, Japan graduates more engineers each year than the U.S. does (Alden 1985).

It is also true that the Japanese government, corporations, and groups cooperate closely to further their shared interests. The participants, managed by the Ministry of International Trade and Industry (MITI), target segments of industry and subsidize the efforts of companies with grants, tax relief, tariff protection, and market-sharing agreements, then press forward into Western markets. This view is part of the "sinister conspiracy" of the Japanese, according to recently popular theories. Examples of this view are Wolf's (1983) book, The Japanese Conspiracy, and Drucker's (1986) article entitled "Japan and Adversarial Trade." Parenthetically, the participatory management style of the Japanese is part of the "benign conspiracy," as espoused in theories most popular in the late 1970's and early 1980's. An example of this position is Ouchi's (1982) book, Theory Z.

However, as Abegglen and Stalk (1985) indicate in their book on Kaisha--the Japanese corporation--it is companies, not societies, that compete for markets. It is companies, not governments,that trade. And in the end it is companies that prosper or stagnate. The Japanese companies that succeed do so principally because of their choice of competitive fundamentals, of which many can be readily adopted by determined Western competitors. It is thus incorrect to say that were it not for favorable government policies, Japan would not be a viable international competitor.

The competitive fundamentals chosen by the successful Kaisha include: a growth bias, a preoccupation with actions of competitors, the creation and ruthless exploitation of competitive advantage, and the choice of corporate financial and personnel policies that are economically consistent with all of the above. For example, the Kaisha rely much more on debt financing than do their Western counterparts. Although this exposes them to greater financial risks, their all important competitive risks are reduced. A company with large debts assumes higher financial risks and cannot waste cash on dividends. The Kaisha typically earn less as a percent of revenues, pay less in dividends, borrow more, spend more, and grow faster than their U.S. competitors.

Thus, the single overriding characteristic of the Kaisha is their unrelenting focus on competitive position. The result is a preoccupation with market share and competitive position in contrast to the Western firm's return on investment objectives. This point is brought home as well by Kotler, Fahey, and Jatusripitak (1985) in their book analyzing the New Competition which for them is the competition of the Japanese. The role of marketing was critical in the market-takeover process, especially in the automobile manufacturing industry. First, the Japanese government used marketing analysis to evaluate and select national industries worthy of special treatment and development, industries with expected superior investment return and international trade benefits over a sustained period. For example, the domestic auto industry was protected by import tariffs, foreign currency regulations, commodity tax, and control of foreign investment. To encourage exports, the Japanese government relied on incentives and rewards, direct assistance, and support measures.

Second, the individual firms within these "target" industries have used the right marketing concepts to design effective corporate strategies for winning markets. For example, a critical phase in Japanese firms' plans has been to develop familiarity with every facet of the consumer and cross-cultural differences in the global markets they have intended to serve. In contrast, the strategies of U.S. automakers totally lacked market targeting. Detroit failed to recognize the difference between selling and marketing.

Japanese marketers thus spent their time continuously refining their marketing strategy. They emphasized market segmentation and targeting; product quality and innovation; pricing according to perceived value; careful dealer selection and motivation; focused and heavy advertising. The Japanese aim their marketing efforts, not at where the competition is situated, but at where they think the competitive battlefield will be in the future. This action is particularly successful against the essentially defensive and short-run stance of many American corporations.

The mentality underlying Japanese competitive behavior is captured in the following three elements, according to Kotler et al. (1985): 1) the desirability of a long-term orientation, 2) the importance of targeting competitors for defeat as well as wooing customers, and 3) the definition of product and market development as the key to strategic success. For example, considering the second point, the Japanese appetite for competitive intelligence is legendary. General trading companies, banks, and sales subsidiaries, among others, collect hives of data.

How can Western nations and companies meet Japan's challenge and the increasing challenge coming from other nations in the Far East? Response strategies for meeting the New Competition can be classified along two dimensions. The first is whether the public or private sector undertakes the response. The second is whether the response is competitive or cooperative in nature. As discussed in Kotler et al. (1985), public-competitive responses would include providing direct financial aid to industry, enforcing antitrust laws, and imposing higher tariffs, quotas, and bans. Public-cooperative responses include reducing mutual trade barriers and encouraging joint foreign aid to developing countries. Private-cooperative responses include licensing agreements with companies in other nations, entering joint ventures with other companies (horizontal or vertical), using other nations' trading companies and banks, and pursuing mergers and acquisitions. Private-competitive responses include improving quality and service, lowering costs, and increasing the aggressive stance.

Although the above responses have been used with some success by the U.S., numerous signs point to an era of increasing Japanese threats to several more U.S. industries. U.S. companies must learn to fight harder and smarter. Kotler et al. (1985) identify several steps that companies can take right away. First, companies must identify and assess competitive advantage. Firms must determine what competitive advantages they possess in each line of business. Second, each firm must know all the factors affecting the speed with which each of the company's major products will lose its competitive advantage. These factors are both internal (e.g., the company's strategic response) and external. For the U.S., the external factors include government policy, the behavior of competitors, and the behavior of other industries.

Third, companies must know and understand the Japanese success model (goals and strategies),which has been discussed earlier in this section. Fourth, U.S. managers must realize the breadth of the firm's options. Each of the four strategic responses (public-private, cooperative-competitive) is a viable alternative. Fifth, companies must engage in longer-run planning. U.S. shareholders need to change performance measures used; they could lengthen the time horizon used; and they could accept lower profits in the short run. Sixth, we need to learn how to plan and execute truly aggressive competitive strategies.

Overall, the Japanese have not invented any strikingly new concepts. Indeed, the Japanese have simply put into practice what U.S. management has preached for years but did not widely practice. Japanese strategic behavior suggests the following goals: build market share over a long time period, disregard profits as market share is being obtained and when a significant market position is finally established, then take U.S. and other foreign competitors head-on in their principal product-markets. These goals allow the Japanese to engage in the strategic behavior described earlier: continued and gradual product and market development, a transition from imitators to leaders, initial aggressive pricing to penetrate and develop market position, followed by premium pricing. Their strategy is consistent with their goals.

Revitalizing the Corporation

An even more radical curative than revamping the marketing structure of American companies is that of revitalizing or re-inventing the corporation itself. As Naisbitt and Aburdene (1985) indicate in their book, we are living in one of those rare times in history when the two crucial elements for social change are present--new values and economic necessity. In the new information society which is developing, human capital has replaced dollar capital as the strategic resource. People and profits are now inexorably linked.

In thinking about re-inventing the corporation, several major elements serve as the underlying framework. Examples of how each of the elements has been successfully and in some cases widely applied are given in Naisbitt and Aburdene's (1985) book. First, the companies that create the most nourishing environments for personal growth will attract the most talented people. These environments can be created by getting more of the most experienced, senior people out of their offices and working with younger talent; instituting flexible hours; considering awarding sabbaticals to creative people; and moving people laterally to develop well-roundedness.

A second element is that inside the corporation, the manager's new role will be to cultivate and maintain a nourishing environment for personal growth. The manager's role is that of coach,teacher, and mentor. Third, the best people want ownership--psychic and literal--in a company; the best companies are providing it. Compensation systems that reward performance and innovation are transforming employees into stockholders. This includes bonus plans, stock-incentive plans, employee stock-option plans, profit sharing, even outright employee ownership.

Fourth, companies will increasingly turn to third-party contractors,shifting from hired labor to contract labor. This means employee leasing, or contract staffing. Thusfar, it seems to be a win/win arrangement. Leased employees enjoy top benefits, and businesses outwit the paperwork. Fifth, the top-down authoritarian management style is yielding to a networking style of management, where people learn from one another horizontally, where everyone is a resource for everyone else, and where each person gets support and assistance from many different directions.

A sixth element in re-inventing the corporation is entrepreneurship within corporations--intrapreneurship--which is creating new products and new markets and has helped to revitalize companies from the inside out. In other words, companies should allow inside entrepreneurs to have control and responsibility for a new venture within the overall organization. There are now courses in entrepeneurship taught in 150 American business schools. Seventh, intuition and creativity are gaining a new respectability in the corporate world, which has been run by numbers for so long. Intuition becomes increasingly valuable in the new information society precisely because there is so much data.

Eighth, large corporations are emulating the positive and productive qualities of small business.

For example, developing an independent business unit outside a company's hierarchy, or promoting autonomy between units is one way to turn a large company into many smaller ones. Some companies now have divided into units with not more than 200 people so that everyone knows what everyone else's role is in relation to the whole. Lastly, in the new information society, we are shifting from infrastructure to quality of life. For example, companies are increasingly locating offices where creative people say they want to be.

Thus, as Naisbitt and Aburdene (1985) conclude, people want to make a commitment to a purpose, a goal, a vision that is bigger than themselves--big enough to make them stretch and grow until they assume personal responsibility for achieving it. But suppose your company makes widgets, one might argue. How do you create a vision that inspires personal responsibility? Maybe "by taking such great pride in your widgets that your reject rate is 0.00 percent. Perhaps your vision is that you deliver new widgets to the customer anytime of the night in any weather. Or maybe it is that people--the customers and employees of Widget, Inc.--always come before the widgets" (p. 255). People want to make a commitment. It is commitment, not authority, that produces results.

Conclusion

In recent years U.S. industry has found itself in an increasingly vulnerable position in international markets. Many foreign countries, particularly Japan, have made substantial inroads and threaten to expand into other areas such as banking, insurance, and cosmetics. Faced with such a situation, many partial solutions can be offered, in addition to the explanatory value of the international product life cycle. Less radical solutions to America's eroding competitive position include market segmentation, design modifications, joint ventures, and the use of government policies to create a level playing field.

A much more radical solution to America's woes is the adoption of a more aggressive marketing position. This includes a growth bias, high debt-equity ratios, a preoccupation with actions of competitors, and the creation and ruthless exploitation of competitive advantage. This also includes a preoccupation with market share and long-term growth instead of American focus on return on investment and short-term profits. This includes using a combination of public-cooperative, public-competitive, private-cooperative, and private-competitive responses.

A more fundamentally radical solution is to revitalize or re-invent the corporation, in this era of rapid social change. There are several essential elements in the re-inventing of the corporation. Companies that create the most nourishing environments for personal growth will attract the most talented people. The manager's new role will be that of coach, teacher, and mentor. The best companies will provide some type of ownership option for their employees. Companies will increasingly turn to leasing companies to obtain employees, shifting from hired labor to contract labor. The top-down authoritarian management style is yielding to a networking style of management. Entrepreneurship within corporations--intrapreneurship--is now one of the most popular new approaches used in American companies. Intuition and creativity will be reintroduced into the corporate world to complement the use of numbers in making decisions. Large companies are dividing themselves up into smaller units, thereby emulating the positive and productive qualities of small business.

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NATIONALISM AND THE CONSUMER: IS IT REALLY IMPORTANT?

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Abstract

Most publications on international marketing assume that the relationship between nationalism and behavior toward national or non-national product is congruent. No conceptual models which explicitly establish this linkage exist, and marketing decisions tend to be made in the absence of empirical data.

This study presents a conceptual linkage between nationalism and purchase predisposition for domestic versus foreign brands, examines the relationship empirically, and shows that nationalistic effect differs across product categories. The study concludes that while nationalistic effect is statistically significant, it may not be determinant of choice since for most products it tends to be masked by market, marketing mix, and situational variables.

Introduction

Nationalism and its impact on trans-national business decisions has long been the subject of much attention in the international business literature (Dauman 1983, Cateora 1983, Farmer and Richman 1974, Kirplani 1975). In an era of national and international emphasis on exporting activities, the existence and extent of nationalistic influences on consumer decision processes is of paramount importance. Included among the issues of importance are the extent to which differences in purchase predisposition or choice behavior toward national versus non-national products are attributable to nationalistic influences, and the degree to which nationalistic appeals can be mobilized in support of national product/brand choices.

The importance of nationalism derives from its potential to bias public and consumer decisions in favor of national choices (Dunn 1976, Cateora 1983). However, despite the obvious marketing implications, efforts by marketers to systematically examine the degree and extent of its influence on the consumer decision-making process has been scant (Duffus 1979). The tentativeness with which the concept has been embraced by marketing scholars reflect the absence of conceptual models of how nationalism influence consumer preferences and choice decision processes. The objective of this study is to show the relationship between nationalism and the consumer decision-making process, and to attempt to empirically demonstrate congruency relationships between nationalism and preference for national versus non-national origin substitutes.

Nationalism Defined

Nationalism is a concept which expresses notions of national identity and self-determination. It is based on emotional and psychological ties which define the level and strength of loyalty and attachment to the national community or nation.

Webster's Third New International Dictionary (1961) defines nationalism as "an attitude ... characterized by a sense of national consciousness, an exhortation of one nation above all others and an emphasis on loyalty to and promotion of the culture and interests of one nation as opposed to subordinate areas or other nations and supranational groups." This global definition is entirely consistent with nationalism as defined by others (American Heritage Dictionary 1969, Hayes 1960, Snyder 1954).

The view of nationalism most prevalent in the marketing literature fits the global mold (Sharp 1981, Christian 1977, Caulkin 1977, Dunn 1976, and Mazzolini 1975). For example, Keegan (1977) defines it as "... The powerful influence of collective forces that are unleashed by the social, economic, and cultural group that we call a nation," and Terpstra (1983) describes it as "... a belief among individuals of one nation that they are different from and/or better than individuals of other nations." Unfortunately, these definitions are not operational, and thus provide little practical guidance for business and marketing decision-makers.

In addition to discussing nationalism in general, the literature also focuses on specific nationalism; e.g., cultural, economic, political (Kohn 1965, Snyder 1954). One conceptualization views nationalism as the antithesis of internationalism (Levinson 1957), while another views the construct as bipolar. Stone (1973) defines it as a function of the level of attachment to the geographical entity classified as the 'nation' and collective self-images of the society and its people.

FIGURE 1
TYPOLOGY OF LEVELS OF NATIONALISM[1]

Level of Nationalism	Strong Attachment to the National Community	Positive Self-Image of the Society	Positive Self-Image of the People
Negative	Negative	Negative	Negative
Weak	Positive	Negative	Negative
Moderate	Positive	Positive	Negative
Strong	Positive	Positive	Positive

[1]Source: Carl Stone, "Class, Race, and Political Behavior in Urban Jamaican," Institute of Social and Economic Research, University of the West Indies, 1973.

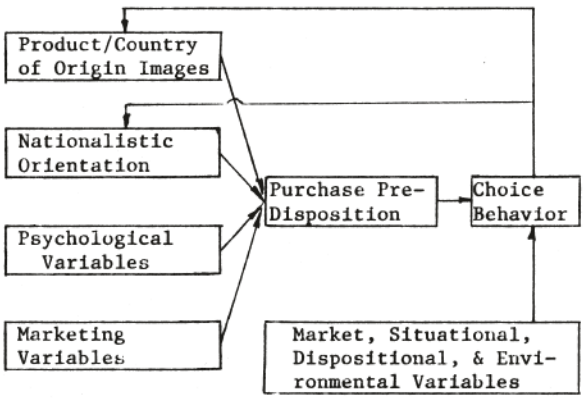
Stone's model is both conceptually simple and intuitively appealing and forms the basis for measuring nationalism in this study.

According to Stone's (1973) operationalization (**Figure** 1), the structure of nationalism is essentially time invariant. That is, the nature and level of nationalism within the community may change over time but the underlying dimensions of the construct remain relatively enduring.

Conceptual Framework

The conceptual model shown in **Figure** 2 illustrates the role of nationalism and its interactions in the decision-making process.

FIGURE 2
CONCEPTUAL MODEL OF NATIONALISM
INFLUENCED DECISION PROCESS



The effect of product/country-of-origin images on attitudes and behavior toward foreign products are well established (Bilkey and Nes 1982). The "Made in _____" label represents a subjective cluster of meanings and symbols, and encapsulates the favorable and unfavorable images that a consumer has about a country and its products. According to Nagashima (1970), this stereotype image is created by such variables as representative products, economic background, and trading traditions.

Perceptual influences from country stereotyping have the effect of introducing systematic shifts as well as random noise in individuals' beliefs about a product (Erickson, Johansson and Chen 1984; Johansson and Thorelli 1985). Thus, country-of-origin factors directly affect where a product is positioned in consumers' perceptual maps of the product space. It has a strong influence on trans-national marketing behavior as it is associated with mass communication, interpersonal communications, personal experiences, and the views of national opinion leaders.

Nationalistic effect refers to the tendency of the individual in making decisions involving national versus non-national alternatives to be influenced by some concept of "national interest." It is the incremental contribution to explaining behavior (or purchase predisposition) which results from the nationalistic orientation of the individual. Thus, to the extent that brand preference is biased by nationalistic effect, one would expect sharper predictions of behavioral predispositions by the model. This is particularly relevant where the alternatives involve choice between national and non-national substitutes. Support for this comes from Johansson and Thorelli (1985), Schooler (1965), and Daniels, Orgam, and Radebaugh (1982). According to Johansson and Thorelli (1985), " ... country-of-origin of the imported product will often be a salient factor in the buyer evaluation process. The effect of country stereotype will be to shift the position of the product in the perceptual space and alter the overall evaluation of its merits. The competitive strength of the product will thus be affected by country biases." Daniels, Orgam, and Radebaugh (1982) argue that because of nationalistic sentiments "... consumers may have a preference for buying domestically made goods even when these are more expensive."

Hypotheses

Inasmuch as nationalism is only one of the many forces that influence choice behavior, it is extremely difficult to isolate its contributory effects. In view of this, it is useful to analyze the communication and decision processes relevant in a causal sense to the desired behavior, and to identify intervening variables on which to base objectives. One such intervening variable, purchase predisposition, is the dependent variable in this study.

Three central issues form the basis of this research and are addressed in the following hypotheses:

H1. There is a statistically significant relationship between nationalism and purchase predisposition.

Nationalism is a continuous variable which varies between extremes. Clearly, therefore, a necessary and sufficient condition for demonstrating lack of statistical independence between nationalism and purchase predisposition is to show that the condition $B_i > 0$ is valid.

H2. Nationalistic effect will tend to be most significant for products where the national and non-national substitutes are perceived to be qualitatively similar.

As indicated by the model, strong nationalism does not necessarily imply generalized support for national over non-national goods. Understanding the importance of nationalistic symbols and cues to the individual suggest the possibility that nationalistic effect will tend to be most manifest in situations where qualitative product similarities are perceived to exist, or national prestige is at issue. McDougal and Rawling (1979) suggest that despite strong nationalistic sentiments in Canada, Canadians will not accept inferior national products over superior non-national ones, nor

will they support large price differentials between Canadian and foreign goods. This view is also articulated by Cundiff and Hilger (1984) who assert that " ... the French are more nationalistic than either the Italians or the Irish," and thus " ... they tend to be less willing (than the others) to substitute a foreign made product, at least in areas which reflect national expertise."

H3. Nationalistic effect varies across product classes.

It appears reasonable to assume that inasmuch as national expertise and stereotype images vary across product classes, different levels of nationalistic effect will prevail for different product classes. This is consistent with the issues related to perceptions of cross-national product similarities and differences, and national expertise and prestige. Expectations are that decisions concerning product classes for which superior, or specialized national expertise is perceived to exist, will display greater nationalistic sentiments. Thus, in comparisons between craft type substitutes and complex hi-tech substitutes, nationalistic effect will tend to reflect perceptions about national technical capabilities. In a low-tech environment, nationalistic effect will be more manifest with craft type products and masked by qualitative and other factors for the high-tech products. In a high tech environment, the reverse may prevail, though, inasmuch as craft type products tend to be culture-related, one would also expect manifestations of strong nationalistic sentiments.

Research Methodology

The data used in this analysis were collected July, 1984. Five hundred and ten self-administered questionnaires were mailed to female head of households in three socio-economically dissimilar communities in Kingston, Jamaica. Prior study have established that these communities are economically dissimiliar from each other but possess a high degree of internal homogeneity (Duffus 1979). A usable response of 42% (148) - (40%, 27%, and 33% from the three communities were received.)[1]

The focus of the study is on the relationship between nationalism and purchase predisposition (P). Thus, it is logical to look at the dichotomy "prefer to purchase national" versus "prefer to purchase non-national" substitute. In order to avoid the abstractions of dealing with generalized perceptions of 'all foreign brands', four specific countries, in addition to Jamaica, were used in this survey. The major criterion for selection of the non-Jamaican countries were that they be major trading partners with Jamaica, as well as having strong business contact. All of the non-Jamaican countries included in the study are sources of a wide range of consumer products.

Five product categories and eight products were used in the survey (Technological - electrical fans, household mirrors; Orally Ingested Products - canned foods, vitamins; Handicraft Products - ladies clothing, jewelry; and Hygenic Products - toothpaste and spray deodorant). The product selection criterion was designed to preclude inclusion of strong corporate and brand images, brands with dominant market share, as well as esoteric products about which consumers use of or knowledge about might be limited or non-existent. Other product selection criterion included the requirement that the product be (a) relatively low cost and readily available, (b) not strongly identified with any country, including Jamaica, and (c) either made in Jamaica or having a high probability that it could be made in Jamaica.

Measurement of nationalism was performed using the items developed by Stone (1973).[2]

Purchase predisposition (P) was used as the dependent variable in a simple regression model ($Pi = B(Ni) + \epsilon$) to determine the significance of nationalism as a discriminating variable.

Findings

Table 1 summarizes the performance of the regression model. The model's parameters are statistically significant at better than P=0.05 for five of the eight products. As expected, $Bi > 0$ for all products, confirming the hypothesized relationship between purchase predisposition and nationalism, and suggesting the existence of a threshold level of nationalistic effect.

An interesting issue is raised by the magnitude of R^2. The uniformly low value brings into question the practical significance of the relationship between nationalism and purchase predisposition. The major implications of the low R^2 are that the results are confounded by responses of the large intermediate group (moderate nationalism), and consequently, that the error variance around the regression line is relatively large. Only 1% to 10% of the total variance was explained by the relationship between nationalism and purchase predisposition. If the objective basis of the relationship is to predict national or non-national brand choices, then variables other

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[1] The research design did not attempt to secure a sample that is representative of the entire population. This is justified by the study objective - to examine the nature of the relationship between nationalism and behavior, and not to make inferences about the Jamaican population.

[2] Stone used a two point agree/disagree scale and the following items:

1. People like yourself should be proud to be Jamaican (attachment to national community).
2. Jamaica is not a good place for anyone to live in (self-image of the society).
3. Most Jamaicans are selfish people who do not mean each other well (self-image of the people).

In this study, Likert scales were used to measure nationalistic responses.

than nationalism (e.g., marketing mix, market, psychographic, socio-economic, etc.) may be more important discriminators. If, however, the objective is diagnostic rather than predictive, then the relevant observation is that people who are strongly nationalistic will tend to have a stronger purchase predisposition for, and will be more likely to purchase products of national origin than people with a weak nationalistic orientation. As indicated by Smith (1956), segmentation analysis involves postulates about the characteristics and the behavior groups, and not individuals. Thus, it is only necessary that the size of the total population be large enough that the confidence interval for the group means be mutually exclusive.

TABLE 1
REGRESSION ESTIMATES OF Bi COEFFICIENT

PRODUCTS	Bi	R^2	Level of Significance
Spray Deodorant	.01920 (0.036)[1]	.0967	0.0451
Toothpaste	.01750 (0.005)[1]	.0638	0.0901
Mirrors	.07380 (0.0400)[1]	.0341	0.1365
Ladies Clothing	.01790 (0.003)[1]	.0611	0.0001
Canned Foods	.02370 (0.004)[1]	.0871	0.0001
Jewelry	.01950 (0.004)[1]	.0709	0.0001
Vitamins	.03110 (0.025)[1]	.0104	0.6717
Electric Fans	.01470 (0.009)[1]	.0161	0.4916

1. Standard Error

Among the eight products, nationalistic effect is most manifest where the national offerings are perceived to be qualitatively similar to the non-national offerings.[3] Conversely, those products for which no statistically significant linkages between nationalism and purchase predispositon were found to exist were perceived as qualitatively dissimilar to the non-national offerings. Confirmation of this was obtained by comparing the mean similarity ratings between the national and non-national product offerings for the statistically significant and non-significant purchase predisposition-nationalism relationships.[4] Differences in the average mean similarity ratings are significant at the 0.10 level.

The above analysis ignored the possibility of a national product being perceived as clearly superior, a situation which will tend to heighten the nationalistic effect. It also ignored the confounding effect of domestically located multinational manufacturing. Both effects were minimized by the product selection criterion, as well as by the fact that Jamaica is not known as possessing distinct production, technological, aesthetic, or other advantages for any of the product classes involved.

The statistical results of the hypothesized relationship between nationalism and various product classes were somewhat inconclusive. For one of the two products in both the "Orally Ingested" and "Technological Product" categories, no statistically significant relationship was found. This ambiguity in no way disconfirms the hypothesis. Rather, it raises questions about the relative homogeneity of the product classes used, as well as invite speculation as to the relative importance of the products, stereotype images, usage context, and consensus on prior usage experiences. One implication is that for staples such as food products, consumers are culturally conditioned to accept national product alternatives as a) suitable to personal taste and satisfaction of normal needs, b) qualitatively (and quantitatively) similar or superior to non-national offerings, and c) systemically inoffensive. Conceivably, with high involvement items such as vitamins, the qualitative, psychological and emotional issues associated with personal and family health mask the nationalistic effect, and thus play a determinant role in purchase predisposition. Undoubtedly, economic factors, negative personal experiences, and stereotype images with respect to mechanical products overrode the influence of nationalism for electric fans.

Conclusions And Implications

The findings conclusively demonstrate that a statistically significant relationship exists between nationalism and purchase predisposition, and that a threshold level of nationalistic effect exists. It also confirmed that the impact of nationalistic effect varies across product classes, and that this effect tends to be most pronounced in situations where the national offering is perceived to be superior to, or qualitatively similar to the non-national substitutes.

The study results makes no clear inference where non-national substitutes have important differential advantages. Neither does it provide a quantitative measure of the importance of nationalism relative to marketing mix and other variables. The evidence suggests that where differential advantages are involved, nationalistic effect may be masked by other factors.

The existence of nationalistic effect has important implications for national and international segmentation and advertising strategies. An obvious temptation is to use it as a segmentation basis to capture the nationalistic segment. however, the relatively high within group variance suggest that while nationalistic effect is significant, other

[3] No effort was made in this study to empirically assess the quantitative relationship. However, one may infer that both quantitative and qualitative similarities trigger statistically significant relationships.

[4] Comparisons were between the national product and the most preferred non-national substitute.

variables may be more determinant indicators of purchase predisposition, and ultimately choice behavior. Thus, it is unlikely that nationalism alone will sell a national substitute. Inasmuch as segmentation analysis involves postulates about group instead of individual behavior, nationalistic effect is more beneficially interpreted as a diagnostic tool to explain consumer behavior rather than as a tool to predict individual behavior.

Nationalistic appeals satisfy an important emotional and psychological need among a substantial market segment by evoking a personal sense of national identity. Its impact will, of course, tend to be greater among individuals that are more nationalistic, although the distribution frequency of nationalistic responses suggest that nationalistic themes have a broad-based appeal. To the extent that such appeals are associated with a "national product", congruity theory suggest that consumers will tend to favor the national substitute. Thus, nationalistic appeals can play an important role in mobilizing consumer awareness in support of national choices.

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USING INTERNATIONAL CONSULTING SERVICES FOR EXPORT DEVELOPMENT: A CASE STUDY IN NORTH AMERICA

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Abstract

Little research has yet been reported on the use of international consulting services for export development in less developed markets. In this paper, a profile of export consultants working in this field is presented, and the special problems associated with exporting from LDCs are discussed. Then a case study is presented, showing how a tripartite export venture was organized to break into the North American market. The three parties included Moroccan entrepreneurs, the Irish Export Board, and the Moroccan Export Promotion Center.

Introduction

When manufacturing companies consider entering the export market for the first time, they may choose to consult an array of public or private export support services or leading foreign trade banks, for basic information on where the opportunities are and how to get started. Companies' first steps along the internationalization path are well documented in the literature (Cavusgil 1980; Johanson and Gunnar-Mattson 1986.) Also documented are the perceived problems in starting to export and entering new or unfamiliar markets. The "psychic distance" theory explains to some degree the patterns of export expansion that new exporters tend to follow (Johanson and Widersheim-Paul 1975). Other opportunities for new exporters have been established through the use of export management or export trading companies (Williamson and Bello 1984; Amine, Cavusgil and Weinstein 1986).

These scenarios, issues, and concerns have been widely studied with relation to export companies based in developed countries. Yet the literature is sparse, if not non-existent, with regard to the export initiatives and experiences of new exporters based in developing countries. Moreover, even the theme of collective or federated export efforts has received little attention in the literature. In this paper, a case study is presented of new exporters in an LDC and their collective experience of breaking into exports, with the assistance of an international consulting service.

The paper is presented in four parts. First, some insights into the activities of international export consultants are given. Second, an analysis is presented of problems commonly encountered by small-scale exporters based in LDCs. Third, the case study is presented showing how a group of Moroccan producers worked with the Irish Export Board to break into the North American market. Data for this case study were assembled during field involvement by the author in the early stages of the project.

Profile of International Export Consultants

Documentary evidence of the activities of international export consultants is hard to find. This may be a result of the private, contractual arrangements between the buyer and the seller of the consulting service. It may also be a result of the inherent characteristics of services marketing--their intangibility, inseparability, heterogeneity, and perishability. Indeed, it may be that only by "tangibilizing the intangible" (Levitt 1981) through the case study approach, that international consulting services can be adequately profiled.

The case study method was used by Sharma and Johanson (1985) to examine the internationalization process of two Swedish consultancy firms over the period 1930-1960. Contrary to expectations, Sharma and Johanson found that the "psychic distance" model of export expansion did not apply. This was attributed to the nature of the "export" itself, since technical consultancy is a professional, skill-intensive industry. Services exports depend on information, creativity, communication, and distribution, and are basically a "people and paper business". As the market specificity of these resources is relatively low, the professional consultant can be moved from one market to another at short notice, with minor adjustments, and at relatively little cost. The perceived risk of establishing a market presence in a psychically-distant market is also, therefore, correspondingly low.

Later, Sharma and Johanson (1986) substantiated their finding that the psychic distance model did not apply to Swedish consulting firms, by means of a survey of 92 consulting firms, whose principal markets were the Middle East and North Africa. This finding was attributed to the lack of availability of local technical consultancy and the higher prices which these countries are prepared to pay, compared with European services customers.

The case study approach was also used by Joynt and Welch (1985) who examined a pilot project started in 1981 by the Norwegian National Institute of Technology, to promote small business internationalization. Three groups of 3-5 companies were established under the direction of a consultant group, who acted as a coordinator. The objective was to produce a new product together, to be marketed in a target country. The task requires the collaboration of different types of manufacturers who may not share any common characteristics, other than the desire to "get into exports."

Other collaborative efforts have been attempted in Britain and Austria. Fedec Food Industry is a British group including a food flavoring producer, two food machinery manufacturers, a food canning manufacturer, and a marketing consultancy group, Europa Industrial Projects, which specializes in coordinating collaborative ventures. The group's primary objective is to penetrate the Soviet market. Fedec is looking for contracts in which the partners can each participate independently, even though their businesses are complementary (Milmo 1983).

In Austria, Thelen and Muhlbacher (1986) identified 307 firms with experience of export cooperation, 44 which were established for the purpose of export cooperation, and 658 firms with an interest in cooperation. In their study of 87 experienced firms, Thelen and Muhlbacher conclude that export cooperation between firms is more efficient the closer the contractual agreement, the more intense the communication between the partners, and the better balanced the perceived cost/benefit ratio of the agreement for each party concerned.

In developing country markets, cooperative groups have been formed to promote both domestic and export business (Business Week 1983). For example, Technoserve Inc. is a non-profit economic development consulting company which specializes in assisting agro-business cooperatives. Other organizations that help to start or improve business enterprises include Accion International/AITEC and the Partnership for Productivity (PFP), both U.S. firms that concentrate on small companies with less than $25,000 in capital. The largest private economic development consulting firm is International Executive Service Corps (IESC), which has conducted almost 9,000 projects in 72 countries over the past 20 years.

Funded partly by fee income, corporate contributions, and allocations from the U.S. Agency for International Development, these consulting firms put great emphasis on using local experts wherever possible, rather than relying on expatriates. The duration of the assistance period varies: from about 6 weeks for visiting IESC volunteer consultants, to one year for PFP, and as long as four years for Technoserve (Business Week 1983). The market for exported business knowledge to Third World countries is seen as a growth market, as the developing world pursues economic development and expansion goals.

This brief profile of some international consultants illustrates both the range of ventures initiated and the type of factors which may prove critical to a group's success. Next, an analysis is presented of problems commonly encountered by small firms in LDCs, which are trying to start or expand export activities.

Problems Associated with Exporting From LDCs

Vernon (1965) identified four major problem areas which affect exporting by small firms in LDCs. Each of these is discussed below.

The Problem of Ignorance

Getting into exports is commonly regarded by manufacturers in developed countries as a major and difficult challenge, despite the availability of published market data, assistance from chambers of commerce and industry associations, and the possibility of government-subsidized missionary tours. If this is the case, how much more difficult does exporting appear to companies in LDCs, which do not enjoy the benefits of such highly-developed export assistance. However, we cannot assume that merely providing documentation and advisory services will resolve the problem of ignorance. As Albaum (1983) has shown, there is a need to re-appraise the effectiveness of many export assistance programs as well as the methods used to generate awareness of the availability of assistance.

The Risk Issue

At home, entrepreneurs in LDCs often confront a market characterized by growing demand, extensive import restrictions, and limited domestic competition. In this market, risks exist but they are much less on the demand side than on the supply side. In contrast, in world export markets, demand-side risks are of another order of magnitude. If the exporter is unaware of the dimensions of the market he hopes to penetrate, he has no basis for estimating what would be an appropriate investment in market evaluation, penetration, and development. Types and sources of overseas competition may be difficult to define or predict. Finally, there is the problem of tracking and/or anticipating changes in import policies that may occur in the importing country.

The Issue of Scale

Just as the problem of risk is related to that of ignorance, so too the problem of scale is linked to that of risk. Where the cost of market investigation is substantial, the exporter has to choose either to research the market with the hope of penetrating on a fairly large scale, or not to investigate the market at all. Any lesser position might mean that initial research and penetration costs could not be recouped. Furthermore, product-differentiation and market-differentiation usually involve large, lumpy costs at the outset. If the volume is large enough and reliable enough, distributors of many products in developed countries are sometimes willing to bear or share these costs. If the volume is small, the exporter is obliged to bear them or abandon exporting.

Problems of scale also tend to become inseparable from questions of production costs. Limited market size at home, lack of supervisory staff, inadequate quality control, short production runs, and lack of competition due to "infant-industry" status and government

protection, all contribute to higher production costs. Expansion into export markets may help to alleviate this major problem, thus facilitating foreign market entry through more competitive pricing.

Import Restraints

Considerable expertise is needed to understand the complex system of import restraints operated by individual countries and groups such as the EC and COMECON. Although in the past the general trend has been toward relaxation of tariffs, protectionist policies are now appearing affecting products such as foodstuffs, textiles, clothing, footwear, and consumer electronics which originate from low-wage countries.

These four major problems assume even greater importance for exporters in LDCs who do not choose the "easy route", by exporting to a developed country with which former colonial links once existed. The "psychic distance" theory takes on new meaning here, as LDC exporters seek first to break out of their domestic market, and second, to break into a foreign market with which few cultural, political or communications ties exist even at the government level. Thus, these exporters may be unable to obtain information about potential export markets, even from government support agencies in their own country. Such is the case of small exporters in Morocco.

Case Study: A Tripartite Export Development Venture

Problem Definition

Historical trading and cultural links with certain countries have resulted in 60 percent of Morocco's total exports being concentrated on seven key markets. These are France, Spain, India, West Germany, Italy, the Netherlands and Belgium. This dependence constitutes inherent risks of several types, commercial, financial, and political. Recent changes in regulations concerning Morocco's status as an EC Associate, together with a series of erratic price fluctuations in export markets, have prompted serious re-evaluations of Morocco's export trade links. Diversification of export markets and export production represents both an opportunity and a necessity if Morocco is to achieve trading independence and more diverse long-term growth prospects.

Morocco has both traditional and modern manufacturing industries, and is well known for exports of phosphates. Less well known are its exports of fresh and canned fruits and vegetables, canned fish, apparel, shoes, rugs, and other leather goods. Foodstuff producers sell directly to the Export Trading Office (OCE), which takes over responsibility for exporting the merchandise. Similarly, the Phosphate Trading Office (OCP) uses its strength as a nationalized industry to achieve greater export efficiency than might be achieved on a piecemeal basis.

The government has established a wide range of fiscal, financial, and investment incentives for independent exporters, including special customs regimes. The Moroccan Foreign Trade Bank (BMCE) offers a range of export insurance schemes and publishes a monthly list of export/import opportunities solicted by foreign companies. Yet, despite these provisions, the burden of responsibility for planning and managing an export venture remains with the individual entrepreneur, hence the tendency to trade with only a few familiar markets. The most evident solution to these problems was considered by the government to be some sort of collective export effort. This would be directed toward one market, which might meet the needs of a diverse group of exporters. Thus, a government initiative was taken in 1981 to organize a collective export venture directed at the North American market.

Identification of Possible Solutions

In trying to promote diversification away from dependence on France particularly, the BMCE identified some potentially attractive export markets. These include Brazil, Kuwait, Guinea, North America, and the USSR. Established passenger and cargo airline routes to Brazil and Kuwait are positive incentives for export, but language difficulties in Brazil, and small market size in Kuwait, argue against these markets as candidates for major export expansion. Guinea also offers only limited market potential, in terms of buying power and growth perspectives. The USSR has established trade links with Morocco, but these are at the governmental level and relate mainly to barter deals. North America emerged as the most favored market for a collective export drive because of its immense buying power, diverse market segments, growth potential, and attractive currency.

Other factors favoring choice of North America included:

-closer political ties and improved understanding, following King Hassan II's visit in 1980 to the USA;

-availability of regular airflights (747) between Casablanca, New York and Montreal;

-availability of able, new graduates from the business school in Casablanca (ISCAE), trained in modern business methods and fluent in both French and English.

Perhaps the most important contributing factor in this venture was the creation in 1980 of a new state agency, the Export Promotion Center (CPE) in Casablanca, under the direction of a professionally-trained, Moroccan marketing expert, fluent in Arabic, French and English.

Early on in the export venture, it was decided to investigate the whole North American market, not just the USA, in order to increase the number and range of export opportunities. In

order to coordinate a viable export drive for a variety of manufactured goods, the government of Morocco established links with the Irish Export Board (IEB).

The Three Parties

Through its Technical Assistance Program (TAP), the IEB has established a worldwide reputation as a consultant to LDCs. Funding is provided by the EC, the U.N. Development Program, the World Bank, and the Irish Bilateral Aid Programme (Irish Export Board 1982). Besides its reputation, the IEB had a second major advantage, being an anglophone agency, with offices in 20 countries, including two in the USA and one in Canada.

The second partner in this tripartite venture was the Export Promotion Center (CPE). Its objectives are to:

-establish an export information network;

-disseminate practical information relevant to exporters;

-formulate ideas and recommendations for the development of a national trading policy;

-assist the government in the administration and improvement of export incentives;

-orient both public and private investors toward industries with good export potential, in cooperation with the Office for the Development of Industry; and

-promote the training of foreign trade specialists, through the use of seminars, conferences and training sessions on export promotion techniques and marketing (Guedira 1981).

The third party to the venture included local Moroccan entrepreneurs interested in breaking into exports. They represented a diverse array of industries and company profiles. The success of this three-way cooperation centered in the IEB's representative, a marketing consultant, as the unifying agent. The human resource management skills of the consultant were critical in maintaining and strengthening confidence in the viability of the project.

Of fundamental importance was the realization by the CPE and the local entrepreneurs that North America is already extremely well served by many LDCs. US importers naturally ask themselves why they should take the risk of changing from proven sources of supply to a relatively unknown supplier such as Morocco. Thus, efforts were needed to combat a somewhat negative "country-of-origin" effect, and to minimize the credibility problem.

Action Plan

Three factors were deemed essential to success by the consultant:

-in-depth knowledge of the target market, concerning import regulations, business attitudes, customs and practices, etc.;

-in-depth knowledge of Morocco's industries with export potential, their management capabilities, labor skills and availability, raw material supply sources, etc. Also an understanding was needed of local businessmen's motivation, along with information on governmental policies and support for exports;

-finally, and perhaps most critical, was the need for creative decision-making by the consultant, since the Moroccan exporters had little market knowledge on which to base their judgements.

A four-stage action plan was devised. First, the consultant made an exploratory tour in Morocco to meet the various parties. Second, a missionary market tour of North America was carried out by the consultant. Third, on return to Morocco, the consultant presented his report and asked for a commitment from a commitment from local firms. Fourth, marketing and production planning was started to expedite the first export orders.

A similar multi-stage, action plan has been proposed by Chaston (1982) for UK exporters, also wishing to gain US market entry. The use of a standardized approach to export expansion provides more evidence that consultants' services are not market-specific. Moreover, the routine mobility of consultants and the use of a standardized approach mean that nationality differences between customer and service supplier do not necessarily result in incompatibility. In the present case, the Irish-Moroccan collaboration proved effective because of the strong task orientation of both parties.

Getting Started in Exporting

Anticipated operating problems in Morocco include the following:

-achieving consistent production schedules and reliable quality control;

-solving communications problems, both in terms of language and time-lags. Few of the small firms had telex facilities and relied on the CPE to act as a clearing house;

-familiarizing the exporters with North American business practices and expectations (e.g. punctuality in delivery, prompt response to inquiries, etc.)

It was expected that the staff of the Export Promotion Center would play a critical role in overcoming these difficulties and maintaining sound business communications.

Conclusion

Several observations are a propos. First, psychic distance did <u>not</u> present a problem for the Irish consultant in Morocco since he was experienced in rapid acculturation to new

environments. In contrast, the psychic distance problem had strongly affected the Moroccan government and exporters, (hence the official call for assistance to the IEB) and continued to remain a problem.

Second, from this study it appears that the export of technical services does not follow the same pattern of incremental expansion into neighboring markets, as in the case of manufactured exports. Services exports have little market specificity, being a "people and paper" business. Presumably, then, services exports would be amenable to the globalized marketing strategy proposed by Levitt (1983). Future research should focus on the paradox behind the psychic distance problem, which may not affect cosmopolitan consultants, but which constitutes a major problem for the local customer of services exports.

Third, exporters based in LDCs face a challenging situation, given the general lack of comprehensive, local export support services. Even where some exist, they may provide information only on traditional trading markets. Thus, any private initiative to move away from established export patterns may be lost for lack of public support by government agencies.

A fourth finding concerns the degree of cohesiveness of group efforts to export. In some instances, collaboration consists only of an informal alliance, designed to acheive cost savings during the early stages of market investigation and penetration. In other cases, the whole venture may be imperiled if one member pulls out. In the Moroccan venture, the three-way, multi-cultural collaboration was even more sensitive to failure. The critical factor was not just a question of loyalty to the group, but rather, the marked variation in levels of export knowledge between the consultant, the export promotion center staff, and the local entrepreneurs. Only strong vested interests in a favorable payoff could hold together such a diverse group for a sustained period of time.

Fifth, the time commitment required of export development consultants may vary from a short-term intervention to a much longer involvement. Sixth, the intrusion of a foreign consulting agency has a radical effect on an LDC firm's mode of operations since, in many instances, it is necessary to "westernize" internal company culture and management practices. This imposes an extra burden on the inexperienced exporter who is already struggling to meet the demands of a new and unfamiliar target market.

Finally, we must recognize that collective export ventures require entrepreneurs to be both daring, as they enter new markets, and at the same time, demure, as they follow the advice and instructions of consultants, government employees, and foreign business contacts. The complexity of these issues is only now being recognized. Failed projects and uneven performance levels should be tolerated, just as success should be acknowledged, by all the parties concerned in the collective export venture.

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TURKISH FREE TRADE ZONES: AN EXPORT-ORIENTED DEVELOPMENT STRATEGY

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Abstract

Like many developing countries, Turkey also has recently shifted the priorities of its developmental policies from import-substitution to export promotion and established free trade zones as instruments of export-led industrialization. The success of free trade zones of many developing countries in serving these development strategies has been quite limited. Although it is too early for a thorough evaluation of the Turkish free trade zones, it is possible to argue that, if the foreseen organizational and managerial problems are taken care of, they can be more attractive for multinationals and can better serve the developmental goals of the country.

Introduction

Although not unique to developing countries, free trade zones have gradually come to be seen as one of the effective instruments of an export-oriented industrialization strategy. Parallel to the number of developing countries which have adopted export-led industrial growth strategies, the number of free trade zones in developing countries also has rapidly grown during the last ten-fifteen years. Turkey, like many other developing countries, made a major change in its economic development strategy in 1980, breaking away from its traditional interventionist import-substitution practices and adopting a new export promotion strategy. The recently opened Turkish free trade zones have been designed to accelerate country's opening to the world and to back-up its new development strategy.

The purpose of this paper is, first, to examine the basic features of free trade zones in developing countries, and then take an evaluative look at the Turkish free trade zones.

Import Substitution vs. Export Promotion

The Second World War marked some major modifications in the economic policies of less developed countries (LDCs). The fall in international demand for the traditional export products of many LDCs had reduced their capability to finance their rising imports, resulting in their increased indebtedness and dependency on industrialized countries. The need for diversification, essentially through industrialization, led them to adopt a new economic policy of import substitution. Import substitution policy was based on the assumption that the imperfections of the market mechanism make it difficult for LDCs to compete and develop. Therefore, a protectionist and inward-oriented economic policy was inevitable if LDCs were going to achieve industrial growth (Basile and Germidis 1984).

The outcomes of the two decades (1950-1970) during which import substitution policies were adopted and implemented by many LDCs, however, were far from being satisfactory. Although many LDCs had been able during this period to reduce the import of manufactured goods, their balance of payments had worsened because of the increase in imports of intermediate products and capital goods needed for industrialization. The economies of LDCs under import substitution policies were characterized by excessive red-tape, time-consuming licensing formalities, prohibition of imports, quantitative restrictions, prohibitive tariffs, overvalued exchange rates, high production costs, and reduced exports (Krueger 1985).

The limited success of inward-oriented economies generated considerable debate on the appropriateness of import substitution policies, and caused scholars to turn their attentions to export-oriented industrialization strategies. During the 1960s a number of developing countries such as Brazil, Hong Kong, Korea, Singapore, and Taiwan had already abandoned or considerably reduced their trade barriers and economic controls. The result was a remarkable rate of sustained economic growth which had started to attract the interest of other LDCs. A 1967 United Nations resolution set the stage for rapid and widespread adoption of export promotion strategy (Papadopoulos 1985). In 1975, out of 144 developing countries 51 had adopted export promotion as a policy of industrialization and economic development (Basile and Germidis 1984.)

Export promotion strategy is composed of a set of nonuniform policies, with usually nondiscriminatory incentives, to encourage exports and develop export markets. Incentives provided under this strategy usually favor production for export. This, in turn, requires openness and competition in world markets which necessitates considerable behavioral change on the part of the developing countries (Krueger 1985).

The establishment of Free Trade Zones (FTZs), called Foreign Trade Zones in the United States, and/or Free Export Processing Zones (FEPZs) in most of the developing countries came around the same time as the shift in those countries' economic development policies from import substitution towards export-oriented industrialization. Adoption of the new strategy and increasing behavioral openness provided the favorable context in which FTZs and FEPZs could be established and grow rapidly. Many developing countries regarded such zones "as the most promising instrument of their industrialization and integration into international trade" (Basile and Germidis 1984:11).

Definition of Free Trade Zone

According to one definition, "any area known as a free trade zone (FTZ) is but a latter day development of the age-old concept of the free port" (Jayawardena 1983, p. 427). Another author defines FTZ as "a geographic enclave into which firms can import products for warehousing, transshipment, labelling, packaging and production or both, while being exempt from import duties unless the products are moved from the zone into the 'domestic' area of the country" (Papadopoulos 1985, p. 52).

Free Export Processing Zone (FEPZ) is a more specialized variant of FTZ. It also offers a complete range of services. It can be defined as "an administratively and sometimes geographically defined area, enjoying special status allowing for the free import of equipment and other materials to be used in the manufacture of goods earmarked for export" (Basile and Germidis 1984, p. 20). Also known as "Production Zones," "Free Economic Zones," "Investment Promotion Zones," and "Process of Selective Deregulation," FEPZs are engaged primarily in export-oriented manufacturing activities (UNCTAD 1983; UNIDO 1980).

Development and Nature of FTZs in Developing Countries

The development of FTZs in developing countries is a phenomenon of the last 25 years. The two FTZs established in Istanbul, Turkey in 1929 and 1946 were short-lived experiences. The first successful example of FTZs was provided in Panama in 1953. This was followed by Shannon airport in Ireland (1959), FTZs or FEPZs in India (1960), Puerto Rico (1962), Mexico (1966), Brazil (1968), Korea (1970), Malaysia (1971), etc. Indonesia, the Philippines, Thailand, People's Republic of China, and Turkey are among the latecomers. The number of FTZs or similar zones in developing countries increased from 4 in 1965 to 250 in 1985. In 1980 there were more than 55 developing countries which had already established some sorts of FTZs (UNIDO 1980; UNCTAD 1983). Today, the number of free zones in the world is estimated to be above 400.

When the nature and outcomes of the free zones in developing countries are put under examination, a number of characteristics and/or tendencies are disclosed. Some of these can be summarized as follows:

1. The main purpose of many developing countries in opening some areas of their lands as free zones has been to promote export-led industrial development by attracting foreign capital and investment. Most of the free zones in LDCs have been established at a time when the country's industrialization policy was changed from import substitution to export-led growth.

More specific objectives of free zones in developing countries have been (a) development of new employment opportunities, (b) transfer of advanced technology and know-how, (c) improvement of managerial and technical skills, (d) increasing demand for raw material and intermediate goods in domestic markets, (e) inducement of foreign exchange earnings, and (f) assured markets (Kiljunen 1984).

2. The attraction of free zones as sites for foreign capital is based on such incentives as (a) tax concessions, (b) duty free imports and exports, (c) cheap labor at subsidized or suppressed rates, (d) foreign exchange transactions free of control, (e) provision of utilities and infrastructural services, (f) preferential financing facilities, and (g) low transportation cost of exports from free zones because of proximity to the nearby markets.

3. Among the incentives provided by LDCs, cheap labor and employment conditions have grown into a controversial issue and have attracted more attention than others. The direct employment in all FEPZs located in developing countries, was estimated to be around one million persons in 1980 (UNIDO 1980). About 60 percent of this total employment was in the free zones of South Korea, Mexico, and Singapore. The employment conditions and labor practices in FTZs of developing countries are best described in the following paragraph:

> In almost all FTZs work environments are sub-standard, safety measures are almost non-existent, strikes are banned and industrial injury compensation lacking. Non-supervisory workers are employed on a temporary basis for all their working life. Normal working hours, holidays, etc., are not benefits which are known in the FTZs (Jayawardena 1983, p. 429).

Employment of a large number of women and young workers (about 70-90 percent) seems to be the source of another problem.

Such unfair labor practices in free zones of LDCs have generated a considerable amount of criticism, domestic as well as international, essentially coming from labor and human rights organizations.

4. The early FTZs in LDCs have essentially been labor intensive. The manufacturing activities in these zones have been characterized by labor intensive assembly type of operations and simple processing. Recently, however, there seems to be a tendency on the part of the FTZs in some developing countries to develop into a more capital-intensive export-oriented facilities. As these countries industrialize and as their wages go up, their "footloose industries" tend to move into new FTZs of other countries with lower wages. (Papadopoulos 1985).

5. FTZs in developing countries, like their counterparts in developed countries, have extra-territorial status, free from government controls and interference of domestic civil laws. They usually have their own laws. In some cases, constitutional guarantees against nationalization of foreign-owned production factors have been

provided. FTZs have their own administrative authorities empowered to negotiate and sign agreements with foreign governments, corporations and individuals.

6. The share of free zone exports in a host country's total exports has been estimated to be, in most cases, below five percent. On the other hand, about 50 percent of subcontracting and offshore processing located in developing countries takes place in free zones. The gross value of free zones export, however, cannot be a sound indicator of its real contribution to the national economies of LDCs because of its dependence on imports. "The share of domestic value added in EPZ exports does not normally exceed 25 percent and is often considerably lower, describing a high import dependence of the production" (Kiljunen 1984, p. 51).

While such free zones as Shannon (Ireland), Kaoshiung (Taiwan), Sungei Way and Bayan lepa (Malaysia), Mauritius and Bataan (Philippines), and Masan (South Korea) can be regarded as examples of success, there are many more examples of failures (Basile and Germidis 1984). It seems that developing countries have started to compete with one another "in offering the most liberal status and excessive inducements." The number of free zones as well as concessions keep increasing. Considerable capacity of many FTZs in developing countries remains unused. Whether the cost of early feasibility studies, infrastructure, installations, and inducement can, over the long run, be met by the total benefits is a major problem to be dealt with by all those concerned.

Free Trade Zones In Turkey

The idea of free trade zone is not new to Turkey. The Ottoman Empire established a free port at Sulina (at the juncture of the Danube and the Black Sea) as early as 1870. The new Turkish Republic passed a Free Trade Zone Law in 1927. In 1929, the Turkish government assigned a free zone at Tophane, Istanbul to the Ford Motor Company for the assembly of automobiles, trucks and tractors without any interference from Turkish authorities. The Turkish Maritime Bank opened an entrepot at Eminonu, Istanbul for warehousing such transit merchandise as oriental rugs, furs, etc., passing through Turkey, in 1946. A new Free Trade Zones Law was issued in 1953. The Turkish Railroad Authority started to operate a free trade zone in Iskenderun in 1957. However, due to such problems as inadequate advertising and promotion, lack of infrastructure, legal formalities and administrative inefficiencies, all of these early free zones were short-lived (DPT 1985a).

More recently, the Turkish government has made a more serious attempt to establish a number of free trade zones to back-up its new export-oriented economic liberalization program. The efforts in that direction were initiated in 1980, following the adoption of the January 24 stabilization and liberalization program which marked a major shift in the country's economic development policy from the traditional import substitution to export promotion (Alpar 1985).

A government decree issued in October 1983 formed the Directorate of Free Trade Zones, first put under the Office of the Prime Minister, then affiliated with the State Planning Organization. A month later, with another decree, the Government identified the ports of Mersin and Antalya, both of which are important gates on the Mediterranean, as Free Trade Zones (FTZs). In 1984, the newly formed High Board of Free Trade Zones decided to establish two other Free Trade Zones, one in Adana/Yumurtalik and the other in Izmir/Nemrut. The new Free Trade Zones Law was passed in June 1985 (1985b).

The establishment of new FTZs in Turkey has been one of the components of a more comprehensive stabilization and liberalization program introduced on the 24th of January, 1980. The new program represents a sharp break away from the traditional inward-looking and interventionist trade and industrialization strategy. One of the major objectives of the new stabilization and liberalization program was liberalization of foreign trade and payments as a part of the efforts to shift to an export-oriented industrialization strategy and attain a sustainable balance of payments position.

FTZs have been considered by the present Government as one of the major instruments of successful implementation of the export-oriented industrialization strategy.

The major characteristics of the Turkish FTZs can be summarized as follows (Alpar 1985; The Turkish Free Zones Administration 1985).

Objectives

The objectives of the FTZs are listed in the new Free Trade Zones Law as (a) increasing export-oriented investment and production in Turkey; (b) accelerating the entry of foreign capital and technology; (c) procuring the inputs of the economy in an economic and orderly fashion; and (d) increasing the utilization of external finance and trade possibilities.

Administrative Structure

At the top of the administrative hierarchy of the FTZs stands the State Planning Organization, with the Free Trade Zones Directorate responsible for policy decisions, planning, and the granting and revocation of licenses to operate in FTZs. A Regional FTZ Directorate, affiliated with the Governor's office of the province, is responsible for the local administration of each FTZ. The FTZs Operating Company, a joint stock company with 25-30% public participation, is responsible for regulating, directing and supervising the activities of the users of the zones.

Activities

With the approval by the Economic Affairs Supreme Coordination Council, all kinds of industrial, commercial and service activities may be

carried out within the FTZs.

Incentives

FTZs are considered to be outside of the customs borders. The laws, rules and regulations of the country pertaining to taxes, levies, duties, customs, and foreign exchange are not applicable in FTZs. Investors may bring into the FTZs any inputs they require from foreign locations without being subject to any taxes, duties or tolls. Income and revenues generated in FTZs are exempt from income and corporate taxes. Foreign managers and qualified personnel can be employed by firms operating in FTZs. No income taxes will be levied upon the salaries of those working within the zones. Strikes and lockouts are prohibited for a period of ten years.

Turkish FTZs will, no doubt, be quite attractive to foreign investors not only for the incentives provided but also for the following reasons well-expressed by G. Lincoln McCurdy, the U.S. Commercial Officer in Istanbul (1983, p. 25):

> The major advantage for foreign corporations investing in Turkish free trade zones would be proximity to Middle East markets in a pro-Western and stable environment. They would also have access to the country's large source of skilled and semi-skilled workers. Turkey's associate status with the European Common Market is an additional benefit for firms seeking European markets for goods produced in such trade zones.

Conclusion

The Turkish FTZs, like many of their counterparts in other developing countries, have emerged as the product of a conscious effort to break away from inward-looking protective import substitution towards an export-oriented industrialization strategy. Although a successful start has been made, it is too early to provide a meaningful evaluation of the Turkish FTZs. However, based on the experiences of other developing countries, it is possible to provide some insights into some of the problem areas.

1. One problematic feature of the new Turkish FTZs is related to its organizational and administrative structure. The existing structure is highly dominated by the State Planning Organization. It is a fairly complicated structure with several bodies, levels, and divided authority. Under such a structure, overlapping and duplication of duties and responsibilities, and conflict between different bodies seem to be inevitable. Moreover, Government interference with zone authorities, which may easily come through the State Planning Organization, may considerably reduce the needed autonomy and flexibility. Unless simplified and necessary changes are made, this administrative structure may reduce the efficiency of the FTZs.

2. The prohibition of strikes and lockouts, as well as other provisions of the Turkish labor laws, in the FTZs for the next ten years is an indication of a compromise between long-term employee rights and interests of enterprises. However, this arrangement may not be satisfactory to either party and may negatively affect the long-term investment decisions of enterprises.

3. It is important for Turkey to devise the necessary mechanisms for the integration of the domestic economy with the production processes of the FTZs. The FTZs should not be allowed to turn into completely isolated economic islands with all their inputs brought in from other countries, all their outputs exported to other countries, and all of their profits taken out of the country. The gains of the Turkish economy, in terms of employment and foreign exchange, depend to a large extent on the share of Turkish inputs in the production of goods and services exported from the FTZs.

4. The contribution of the FTZs to the national economy will also be determined by the amount and quality of foreign technology coming into the zones, and the size of the investment projects undertaken. It is, therefore, desirable to let only big companies, with their large-scale investment projects and sophisticated technology, into the zones. However, at this point a dilemma seems to be inevitable. The more capital-intensive advanced technology may not provide as much employment as desired. Thus, a choice between the type of technology and unemployment may need to be made.

5. Can Turkey attract the necessary amount of foreign capital, which it has not been able to obtain by means of conventional incentives, through the FTZs and whether the zones will have some negative effects on the flow of foreign capital into the country are some other important questions. The incentives provided are, no doubt, more attractive than the traditional incentives offered to foreign capital, and quite competitive when compared with those of other countries. Foreign capital can, therefore, be expected to favor the more attractive incentives as well as the strategic locations of FTZs.

6. Another important consideration is related to value-added tax on the finished or semi-finished goods imported from the FTZs into Turkey. An arrangement similar to the Mexican "Maquiladora Program," which requires an import tax on only the value added to the finished or semi-finished goods produced in the FTZs with domestic inputs (raw materials, equipment, etc.), may increase the amount of exchange between the FTZs and the national economy.

7. Finally, it is possible to think of the four FTZs (two of which have already been opened in Mersin and Antalya and the other two are in the process of being established in Adana/Yumurtalik and Izmir/Nemrut) as Turkey's new doors opening to the world and as a significant factor in bringing about the expected behavioral change. Moreover, these high-cost (estimated cost is $1 billion) undertakings may all by themselves bring some stimulation to the economy and may generate a widespread outward-looking behavior.

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FOREIGN TRADE ZONES POLICY IN THE UNITED STATES: A CONTROVERSIAL INSTRUMENT1

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Abstract

In recent years, Foreign Trade Zone usage in the United States has been increasing substantially. While certain business and competitive advantages can be realized by the Zone user and by communities with zones, questions have been raised about the application of the concept in the United States. This paper addresses issues which deal with the controversial evolution of the regulatory environment of zones, and how that may have contributed to a particular pattern of uneven growth, resulting more in users developing their capabilities to compete in the United States rather than in foreign markets.

Introduction

U.S. Foreign Trade Zones (FTZs), known in other countries as Free Trade Zones, are secured areas that are in the geographical territory of the U.S. but are considered as being outside customs territory with respect to such customs laws as those dealing with the imposition of tariffs and quotas on imported goods. Foreign products except those specifically prohibited by law or which the FTZ Board feels are "detrimental to the public interest, health or safety" may be brought into a zone and the usual customs regulations on imported merchandise do not apply. These imported products can be "stored, sold (but not at retail), exhibited, broken up, repacked, assembled, distributed, sorted, graded, cleaned, mixed with domestic merchandise, or otherwise manipulated, or be manufactured... and be exported, destroyed, or sent into customs territory of the U.S...." If goods are destroyed or exported, customs duties do not have to be paid (19.U.S.C 81c).

If goods enter U.S. customs territory, duties have to be paid but the importer has an interesting choice - he can pay the duty either on the state that it enters the FTZ or on the altered condition in which it enters. If the importer decides that he would prefer to pay the tariff based on the original state, he still does not have to pay the duties right away but can defer payment until the product enters U.S. customs territory.

The Foreign Trade Zones Board which is comprised of representatives of the Departments of Commerce, Treasury and the Army provides the authority to qualified public or private corporations to operate these zones under customs supervision. Most general-purpose Foreign Trade Zones in the U.S. are typically protected areas with warehousing capabilites and access to different transportation modes. The zone operator generally leases space to users for allowable zone activity but in certain cases will also sell lots where a user may construct his own warehousing (or manufacturing) facility. Subsequent to the passage of the Foreign Trade Zones Act in 1934, legislative amendments and their interpretation by the Foreign Trade Zones Board have resulted in certain producers obtaining zone status for manufacturing activities conducted in certain designated areas on their own premises. Referred to as "sub-zones," the advantages to the user are the same as those in a general-purpose zone.

From a user's perspective, there are many benefits that can accrue to the company operating in a zone or having sub-zone status. Some possible benefits may be expressed as follows:

* Imports may be landed and stored quickly without full customs formalities. U.S. quota restrictions, duty and bonding are not applicable in the zone.
* Cash flow can be improved because duty is not paid until goods leave the zone. If goods are exported, U.S. Customs duty payments are not required.
* Insurance on goods in zone storage can be limited to value alone plus ocean freight, rather than value plus freight plus duty plus taxes paid.
* Buyers may inspect and sample goods displayed in a zone showroom, before purchase and payment of duty.
* Goods may be processed or manipulated to qualify for lowest duties or freight charges, and duties may be avoided on damaged items, substandard items, and waste material.
* Goods may be altered, relabeled or re-marked to meet federal or local requirements or to avoid fines for improperly marked merchandise, and samples may be withdrawn to submit to Customs for proper classification.
*For products manufactured in a zone a choice is offered: the rate of duty or quota limitation on the finished product entering U.S. trade channels may be applied to the finished product - that is, the percentage of which is of foreign materials in the finished product or to the foreign materials in the finished products.
* Goods in excess of U.S. import quotas may be imported and held in the zone until the next quota period, since such quotas do not apply in the zone.
* Goods subject to a U.S. quota can be imported into a zone and fabricated into a product not subject to quota limitations.
* Indefinite zone storage permits importers to await the best U.S. market conditions, or if

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U.S. buyers are found unreceptive, offers the option of shipment elsewhere.
* Capital stays free longer, since duties are not paid until goods are shipped. If re-exported, money is not tied up with drawbacks.
* Warehouse receipts are issued on request so one can borrow on the basis of goods stored in the zone.

Many companies are indeed taking advantage of the opportunities available to them. Volkswagen, General Electric, Zenith, Sanyo, Kawasaki, Honda, Nissan, Ford, Chrysler, General Motors are some of the more well known manufacturers who are benefitting from zone and sub-zone operations (Quraeshi and Luqmani 1986; Robinson 1983; Dulaney 1980; Garino 1975; Patno 1978).

Some companies incorporate the fact that they have access to a zone in their decision to locate in a particular region in the U.S. and suggest that zone status has contributed towards making them competitive (Whisenhunt 1985).

With increased zone usage, more communities are planning and applying to the FTZ Board for permission to operate zones and sub-zones (Smith 1985). The increased interest is not without controversy as concerns are expressed by a number of affected groups regarding the evolution, development and implementation of the concept in the U.S.

Three major interrelated areas of concern dominate the controversy over the FTZ phenomenon. The first has to do with concerns about developments in the legal and regulatory environment including the role of the major overseer - the FTZ Board. Here a central issue is whether the FTZ Board may be assuming powers that the legislative branch did not intend it to have, particularly the congressional role of setting trade policy. The second issue, related to the first, is how certain interpretations of the law have resulted in uneven patterns of growth of zones. The third issue has to do with the economic and competitive implications for non-users and the impact on regional economic development.

This paper intends to present these interrelated issues which need to be considered and debated.

The Policy Issue

When the Foreign Trade Zones Act was passed in 1934, it was a time of world depression and U.S. imports exceeded exports. Proponents of the zone concept looked at it as a way of strengthening the competitive capabilities of American firms in foreign markets. Besides, at the time, sentiment was that the legislation would also facilitate and promote re-export and transshipment through U.S. ports, thus encouraging port development. Congressman Celler, the author of the Bill, indicated that "a free port is not a hole in the tariff wall or an entering wedge for the dumping of foreign products. It is a vestibule located on American soil but outside of the customs limits of the United States. Every pound of copper, ton of sugar, and barrel of oil landed in such a zone would be subject to the payment of duties or taxes to the U.S. the minute it came through the customs barriers for sale in this country" (Miller 1969).

At the time there were other processes available to help re-exports and transshipment including the system of drawbacks and bonded warehouses. In the drawback scheme, if imported goods were eventually re-exported, 99% of the duties could eventually be recovered on making proper application. Under the bonded warehouse scheme, goods could be stored for a limited period of time without having to pay duties if the goods were eventually exported.

The proposed 1934 legislation was seen as a way of smoothing and expediting the process of export. Drawbacks and bonded warehouse mechanisms meant paperwork, red-tape and delays (Clasen 1981).

At that time proponents of the legislation were not sure as to the future effects of zone usage and indicated that government policy should be reviewed as the concept developed. Those who opposed the zone concept expressed concern that if zone products were allowed into the U.S. it would have an adverse impact on American industry. For this reason, the original legislation did not allow manufacturing in a zone. Present day critics emphasize this point to underscore their disagreement with expansion of the concept to accommodate manufacturing, arguing that the original intent of Congress was to disallow this type of activity.

By 1950, sixteen years after the passage of the FTZ Act, there were only six general-purpose zones in operation. The lack of interest in zones could partially be attributed to the prohibition of manufacturing and exhibition in zones. There also was an administrative problem of applying the regulations and trying to distinguish between manipulation (allowed) and manufacturing (not allowed) and between inspection (allowed) and exhibition (not allowed).

In 1950, the Boggs Amendment to the FTZ Act was then passed (19 U.S.C.81c). This removed the restrictions prohibiting exhibition and manufacturing in zones and thus did away with the problem of trying to distinguish these activities from the previously permissible ones. An additional rationale behind the amendment was to strengthen American capabilites in foreign markets. American firms would benefit by being able to combine foreign products with domestic products and then export these goods to third country markets. This would allow assembly operations to take place here rather than abroad leading to increased employment in the U.S.

Right after World War II, European Allies were trying to rebuild their war-torn economies and the feeling was that if European raw materials and component parts were allowed into FTZs it would help their rebuilding efforts. When these imported products were combined with domestic products on American soil, and exported, it would also help U.S. employment. Critics of

current zone procedures cite the contextual circumstances under which manufacturing was allowed and insist that the 1950 amendment was for furthering exports to other markets.

In 1952, another significant development occurred in an interpretation of the Boggs amendment by the FTZ Board. The Board forwarded the position that since it was the intent of Congress to allow manufacturing in zones, it would be reasonable to permit those manufacturers facing economic difficulties in relocating to general-purpose zones to be granted sub-zones status at their own locations. This interpretation has drawn a lot of flak from critics who argue that the FTZ Board has obverted Congressional intent. The level of criticism has increased particularly because manufacturers with sub-zone status have been exporting their finished product to the U.S. rather than to foreign markets.

Not only has the Board's interpretation of the Boggs amendment been questioned but also procedures used to grant sub-zone status have been criticized for being too simplistic and without careful evaluation of possible adverse competitive impacts on domestic non-zone users. The original legislative intent to promote port usage has also been subverted, say critics, since sub-zones could be established within 35 miles of a port of entry, and, at present, the FTZ Board has the flexibility to approve a sub-zone even further away (48 F.R. 16502, 1983).

A more recent development which would allow zone and sub-zone operators to monitor their own processes without customs representation has raised objections. In the past, an inventory control system to monitor incoming and outgoing goods was maintained by U.S. customs. Because of the increased work pressure on customs personnel, zone operators have been encouraged to adopt an audit inspection method whereby customs officials would only periodically conduct a spot check to see if regulations are being followed, eliminating the need for on-site customs personnel. This gradual transfer of customs functions has raised questions.

Another customs procedure that has evolved is that of granting "non-privileged" status to incoming goods, which means that duties can be paid on the condition of the product not as it enters the FTZ but on its condition when it enters the U.S. from the zone. This allows importers facing inverted tariffs (where component parts have duties higher than those on the finished product) to benefit from being in a zone or having sub-zone status.

In 1980, urged by zone lobbyists, Customs changed their valuation practices to further benefit zone users. Previous to the change, if goods were assigned "non-privileged" status, customs included zone processing, labor and overhead costs in the valuation of the product leaving a zone. This negated, to a significant degree, the duty savings effect of invoking "non-privileged" status for component parts. Treasury decision 80-87 excluded zone processing, labor and overhead costs in determining the dutiable value of the finished product. This was rationalized on the basis that it would help employment of U.S. labor and make it attractive for firms to locate in the U.S. rather than overseas.

Some argue that Congress had no intention of allowing the "non-privileged" status for incoming goods and that U.S. tariff policies are being made (or circumvented) by the FTZ Board's interpretations and by the Treasury. Dissenters contend that by granting sub-zone status to on-going operations, Congressional tariff policy is being subverted. A manufacturer's flexibility, allowed by the FTZ Board, to invoke and revoke sub-zone status quite liberally is just a mechanism of circumventing legitimate customs duties. It is hardly surprising that the strongest criticisms have come from domestic suppliers of component parts.

As is evident, the original legislation and subsequent amendments, along with their interpretations, have resulted in strong debates.

The growth and pattern of zone usage tends to reinforce and re-emphasize the issues discussed. The increased attraction of becoming zone participants parallels the favorable interpretation of laws and regulations and is the subject of the next section.

Growth Patterns

Proponents of the zone concept point to the increased growth in zone usage and indeed the value of shipments has risen substantially particularly in the past few years. The latest data available indicate that between 1975 and 1982 shipments increased ninefold (see Table 1).

TABLE 1
VALUE OF SHIPMENTS FROM FTZs IN THE U.S.
(IN MILLIONS OF DOLLARS)

Year	Total Shipments
1975	387
1976	668
1977	516
1978	743
1979	1,455
1980	2,445
1981	2,887
1982	3,392

Source: Foreign Trade Zones Board

Similarly, community interest in establishing zones has been increasing (See Table 2).

TABLE 2
NUMBER OF AUTHORIZED FTZS IN THE U.S.

Year	General-Purpose Zones	Sub-zones
1940	1	0
1950	6	0
1970	10	7
1975	18	5
1976	21	5
1977	30	6
1978	41	8
1979	49	10
1980	59	11
1981	67	14
1982	74	19

Source: Foreign Trade Zones Board

A closer inspection indicates that the pattern of growth has been uneven and has basically occurred during the last decade. A combination of events has led to this type of growth, not the least of which has been the regulatory environment. First, until the 1950s, there simply was not that much interest in general-purpose zones, and sub-zones were not allowed. During the next two decades of the 1960s and 1970s, with manufacturing allowed and sub-zones permitted, interest mounted. It was really in the late 1970s and early 1980s that interest sparked, because of the attractive U.S. Treasury decision 80-87 to start excluding zone processing, overhead and labor costs from the valuation of finished products entering U.S. customers territory from FTZs.

With increasing competitive pressure from foreign manufacturers in U.S. markets, U.S. companies are using the FTZ concept to bring in component parts duty-free and combining them with domestic products in a zone or sub-zone facility. These companies can then move the finished assembled product out of a zone into the U.S. market at a cheaper rate of duty. In addition, the duty is applied on only the foreign content of the finished product. With the increase in international sourcing of component parts and materials, manufacturers who have to pay a higher rate of duty on these have a strong incentive to apply for sub-zone status.

One can thus expect that most of the increase in activity would be because of the increased interest in sub-zones. This is borne out by dissecting the overall usage of zones into sub-zone and general-purpose zone activity (See Table 3).

TABLE 3
VALUE OF SHIPMENTS FROM FTZs IN THE U.S.
BY TYPE OF ZONE

Year	Total ($ millions)	Sub-zones ($millions)	General-purpose zone ($millions)
1978	743	352(47%)	391(53%)
1979	1,455	854(59%)	601(41%)
1980	2,445	1,491(61%)	954(39%)
1981	2,887	1,907(66%)	980(34%)
1982	3,932	2,408(61%)	1,525(39%)

Source: Foreign Trade Zones Board

Shipments from sub-zones have increased more than six-fold between 1978 and 1982. Although there are a variety of industry users including microwave oven manufacturers, television set producers, women's garment manufacturers, and oil refineries, the predominant users of the sub-zone concept now are producers of cars, trucks and motorcycles. In fact, all of the automobile producers in the U.S. are utilizing sub-zones in some facility. The inverted tariff - seven to eight percent on component parts versus about three percent on the foreign components of the finished product - is a major reason why automobile manufacturers look upon this technique as an attractive alternative to lower their costs. The FTZ Board has been quite accommodating - hardly any sub-zone applications have been rejected - and the process of obtaining sub-zone status is perceived as being simple.

A closer inspection of the increase in activity in general-purpose zones suggests that most of the increased activity is accounted for by two general-purpose zones: the McAllen, Texas Zone and the Miami Zone. The McAllen Zone, which is near the Mexican border, accounted for almost 45% of all general-purpose zones in 1982. Zenith, General Electric and Kimball Piano are among users of this zone. The Miami Zone accounted for about 15% of the total shipments from general-purpose zones (44th Annual Report, 1982). This particular zone's activities are closer to what present day critics suggest was the original intent of Congress to promote because it acts as a consolidation and transshipment point for goods coming in from Europe and Asia destined for South America. Goods include such products as jewelry, textiles, and clothing which may be exhibited in the FTZ for purchase by South American customers.

Economic and Competitive Impact

The debate continues over the economic implications of FTZs. The positive effect on users and on regional development is often cited by proponents of the FTZ concept while opponents point to the adverse competitive impact on domestic non-users.

Proponents suggest that as zones are established, jobs are created not only within the zones but also in transportation, retailing, freight forwarding, customs brokerage firms, and

the like. Critics say that although regional development may occur, this is at the expense of the firm locating elsewhere in the U.S. so that employment is shifted from one area to another rather than being created. Critics also contend that employment figures cited on direct employment in FTZs can be quite misleading because employment, particularly in sub-zones, would exist with or without sub-zone status. Companies such as those in the automobile industry have suggested that sub-zone status has contributed towards maintaining employment in certain plants under intense competitive pressures. Dissenters argue that by allowing in components free of duty the competitive stress is shifted to the component supplier industry. Besides, say critics, it is the larger firms that generate the volume to take advantage of the sub-zone concept, placing small domestic competitors at a disadvantage.

Certain industries have been more vocal in their criticism; the iron and steel industry, electronic components, bicycles and textiles have expressed their concern that a procedure originally intended to help in expanding exports is working to their disadvantage in the domestic market.

Conclusions

Whereas FTZs in the U.S. have undoubtedly provided zone users with opportunities to strengthen their business capabilities, the resulting competitive impact has been felt more in the U.S. market than in export markets. This could be attributed to the controversial legal and regulatory developments in FTZ governance. The pattern of growth has been tilted towards fueling sub-zone activity through arguable interpretations of the FTZ Act. Economic implications of zone development are contested by proponents and opponents.

The controversy surrounding the FTZ phenomenon suggest issues that need to be carefully considered and debated. Is tariff policy, a Congressional prerogative, being circumvented? Should the FTZ Board adopt more stringent procedures before granting zone, and particularly sub-zone, status? Should sub-zone status applicants be expected to show that sub-zone status would not be competitively damaging to non-users? Should sub-zone status, if granted, be given to all the members of an industry rather than to individual firms? These are some issues that need further exploration.

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AIRLINE PASSENGER SERVICE PREFERENCE: A COMPARISON OF INTERNATIONAL AND DOMESTIC USERS

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Abstract

Passenger airlines with domestic and international services face the problem of whether to identify the domestic and international markets as true individual market segments. Domestic and international air passengers' perceptions and preferences were examined using multidimensional preference mapping. Anticipated differences between these markets were not found.

Firms with international and domestic services are confronted with complex marketing strategy problems. In addition to the traditional domestic marketing environment, these service firms must also adapt to inherent international market differences in culture, language and other potential barriers to market entry. The task still remains to develop an effective marketing strategy to take full advantage of market conditions.

An important preliminary role for strategic marketing in international service firms is to identify market segments (and related consumer needs or desired product attributes) that will allow the strategist to determine where and how the company should place its marketing efforts. Bonoma and Shapiro (1983) identified three major reasons for segmenting a market:

1. To better understand the total marketplace as well as how and why customers buy,
2. To select for marketing attention those segments that best fit the company's competence, and
3. To facilitate the development of strategies, plans, and programs to profitably meet the needs of different segments as well as providing the company with distinctive competitive advantage.

Customers are traditionally believed to differ geographically, demographically, in consumption patterns and benefits sought (Haley 1968; Frank, Massey, & Wind 1972; Assael & Roscoe 1976). One obvious basis for segmentation for international service firms would be geographical differences. That is, a firm could pursue domestic service markets with one strategy and international services users with a second marketing strategy. The logic for geographic segmentation is the potential existence of cost, competition and cultural differences between geographical territories. Pursuing these two markets differently could result in a more profitable outcome.

On the other hand, because of the nature of service firms, cost differences between domestic service delivery and international service delivery systems may not exist. In addition, cultural differences in service usage may not exist. Service firms provide an intangible, perishable commodity. The service cannot be picked up and examined, and if it is not used when created, the commodity is gone. Because there is no inventory, the opportunity for revenue is lost when a unit of the service commodity is unused. These distinctive properties of a service firm might indicate geographic segmentation of international and domestic service users for marketing strategy may be inappropriate.

Air passenger transportation service firms are a prime example of the dilemma presented above. As a service firm, the commodity they offer consumers is intangible. In addition, the commodity is perishable. On any given flight, seats are the commodity. The opportunity for revenue based on that unit of the commodity is eliminated if unused. An effective marketing strategy is critical in this situation. For airlines offering domestic and international flights the segmentation issue becomes a problem. Should the domestic service market and international service market be considered to be different market segments? Assuming similar aircraft body types and flight times exist for an airline, cost structures for international and domestic flights should be similar (transcontinental and transatlantic flights are similar in length and required aircraft body types). The real question regarding the segmentation problem concerns cultural differences. Clearly these are significant cultural differences between countries. However, in segmentation, the concern is with differences between markets that are functional (responsive) to the firm's marketing strategy. The direction and magnitude of marketing activities to establish a firm's position must be based on each individual segment's consumer perceptions and preferences for service attributes.

This study was conducted to determine airline and airline attribute perceptions and preferences of international and domestic passenger service users. Potential differences between international and domestic service users as a basis for segmentation were investigated.

METHOD

A survey was developed to determine customer beliefs regarding services offered by the target company and by competitors, as well as customer preferences for those service attributes and preferences for the target airline and its competition. The target company whose customers were surveyed was chosen because it had domestic and international routes. The target company was also chosen because of the similarities between the physical dimensions of the domestic and international flights. The flight routes were very similar in terms of flight duration times (transcontinental flights and transatlantic flights), types of aircraft used, brand (name of airline was the same for both routes), staffing and on-flight service requirements, and all flights had a common terminal through which they passed. Importance of attempting to control for such physical variables when comparing perceptions and preferences is due to the need to minimize contamination effects.

The inflight survey was designed to measure individual difference variables, as well as

identify felt importance of service attributes, beliefs concerning the extent to which each of the represented airlines offers those service attributes, and an overall preference rating for each of the represented airlines by customers of the target airline. Two surveys were developed, one for domestic flight customers and one for international flight customers.

Prior to development of the inflight survey, a "pilot" postcard survey was conducted on board domestic and international flights for the target company. Preliminary survey data revealed key airline service attributes important to customers and four primary competitors in each market. These factors and competitors were then included in the inflight survey. This information was an invaluable part of the process of mapping customer perceptions. The survey was administered during February, 1985, on board both domestic and international flights by the senior on-board flight attendant. Flights selected were all transcontinental and transatlantic flights to or from the common hub airport during February, 1985. A cover letter accompanied each survey explaining the nature and intent of the survey. The sample consisted of customers flying the target company's first/premium service class (coach class passengers were not included) who agreed to respond. Respondents were limited to adult paying customers.

RESULTS AND DISCUSSION

One hundred sixty six domestic flight customers and 126 international customers responded to the survey. A profile of these two customer segments indicates close similarities on a number of variables (see **table 1**). The international and domestic route users were the focus of segmentation. As can be seen in **table 1**, international flight customers were both U.S. citizens (57%) and non U.S. citizens (43%), giving the international flight segment a truly international component. The two segments (domestic and international) are extremely similar on demographic, leisure, and usage pattern variables. This supports Levitt's (1986) suggestion that differences between domestic and international markets may be minimal. Levitt concluded that a firm's marketing strategy should reflect a global market with the domestic market as one segment. Such a global approach should be undertaken if international and domestic users perceive the service similarly. If there is similarity in perceptions of the service and preferences for specific service attributes then a global marketing strategy would be suggested.

Analysis of the data was conducted in two steps. First, stated importance of attributes and stated preference of airlines were examined for domestic and international users. Second, preference maps for customers' perceptual space were constructed and examined. Multidimensional scaling is an effective way of representing consumer preferences for a set of competing service firms. By using preference similarities among firms and preferences for firm attributes, the underlying dimensions for preference judgments are developed. The result is a "map" of consumer preferences for each of the firms as well as the location of consumers' ideal version of the service firm. This preference map can be the mechanism for developing a marketing strategy. International and domestic users were compared looking for differences/similarities in perceptions and preferences of the airline industry and the target airline.

The first set of analyses rank ordered two sets of attributes in terms of their importance to selection of an airline (see **table 2**). The first set of attributes concerned general features and policies of airlines. The second set of attributes concerned more specific, detailed features. The rank order was based on the mean importance scores (respondents rated each attribute 1-5 for importance). The similarities between domestic and international flyers are clear. Rank order of stated importance of the attributes for the two groups are nearly identical (Spearman's Rho = .93 and .96 for the two sets of attributes). International and domestic flight customers are definitely similar in the perceptions of what attributes are important. The target company was rated the most preferred by both domestic and international flyers. This is not surprising since respondents were all customers of the target airline.

As discussed previously, segmenting markets for an air transportation company requires knowledge of international and domestic consumers' perception of the target airline in relation to competitors. Additionally, one would want to know the different segments' beliefs concerning ideal version of a company to identify preferences for specific attributes by the different segments. The representation of consumers' perceptual space, or their image, of the target airline firm and its competitors was accomplished thorough the use of multidimensional scaling analysis. The algorithm used was PREFMAP (Carroll & Chang 1970). The similarity in attribute and airline preferences and the similarity in perceptions of airlines were used to develop two dimensional preference maps which plotted airlines, attributes, and customers' ideal version of an airline relative to the preference of attributes for international and domestic flight users. The representation of international and domestic customers' perceptual space is represented in **Figures 1** & **2**, respectively.

For both domestic and international flyers, the target company had a very distinct position. Additionally, it can be observed that competitors A, B, & C, for international customers (A, E, & F for domestic users) were perceived to be extremely similar to one another and competitor D for international customers (G for domestic users) was perceived to be distinctly different from both the target company and the other competitors. Clearly the international and domestic users perceive the relation between the target company and competitors in a very similar configuration.

To further identify the similarity in perceptions between the two groups of users, customers' perceptions of the airlines with respect to relevant attributes were examined. To place the target company's position in relation to the set of attributes, a line must be drawn from the attribute point through the origin of the preference map. Each company is then placed on this vector by drawing a perpendicular line from the vector to each company in this map. This provides the customers perception of the target company's relative or competitive position with respect to the attribute. **Figure 3** shows each company's perceived position regarding low fares for international users. The target company was positioned closest to the low fare attribute for the international segment. In examining **figure 2**, it can be seen that domestic customers perceive the target in a very similar position for low fares. As one examines the target company's perceived relative position for each attribute for each of the segments, significant similarities in perceptions emerge between international and domestic service users.

Locating international and domestic ideal points in **figures 1 & 2**, respectively, provides further evidence that these two segments are extremely similar in perceptions and preferences. The ideal point provides an indication of preference for attributes and an ideal image of an airline within the given attributes. **Figures 1 & 2** indicate significant similarities of location of ideal points for international and domestic flight customers relative to the attributes and companies.

CONCLUSION

Results show meaningful similarities between international and domestic flight users in terms of perceptions and preferences for airlines. The results are especially strong because of the match between domestic and international routes on a number of physical usage dimensions. Replication studies examining different service industries would further enhance the findings.

This research indicates identification of international and domestic market segments based on assumed differences in preferences and benefits may be inappropriate. Expected perceptual and preference differences between international and domestic segments may not exist, in which case, similar, not different, strategies should be developed for international markets. Levitt (1986, p. 22) in advocating a global marketing strategy suggested "...the global corporation operates...as if the entire world (or major regions of it) were a single, largely identical entity; it does and sells the same things in the same single way everywhere". The results from this study suggest the global approach may be appropriate at least for the airline industry. Advantages of a global approach to marketing strategy would include economies in marketing costs and the ability to capitalize on the firm's marketing experience curve. Approaching marketing strategy from this perspective for an airline may increase the efficiency and impact of the marketing effort.

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Table 1

List of variables for which the profiles of domestic and international customers were not significantly different from one another.

who paid for the ticket (company, self or other)
primary reason for travel (business or pleasure)
number of trips taken in past 12 months
seating preferences (aisle or window)
current seating (aisle or window)
percent smokers
types of alcoholic beverages consumed (beer, wine, or liquor)
preferences for activities in which to engage (golf, tennis, etc.)
own a personal computer
had a vacation in past 12 months
whether they own a vacation home
whether they own their residence
business owners
gender, age, and education

There was a significant difference between international and domestic customers on income and occupation. International customers had higher incomes and had more people in higher level management positions than domestic customers.

Breakdown of international and domestic flights by citizenship.

	International	Domestic
U.S.A.	57.6%	94.3%
Other	42.4%	5.7%

Table 2

Rank order of stated importance of attributes for domestic and international customers.

International Rankings		Domestic Rankings
1	Ample seat width and legroom	1
2	Employees with positive attitudes and good manners	2
3	Arrives at an easily accessible airport	5
4	Departs from an easily accessible airport	4
5	Provides high quality inflight service	6
6	Offers convenient schedules	3
7	Has low fares	10
8	Has previously provided satisfactory service	7
9	Provides high quality ground service	8
10	Has unrestricted fares	12
11	Usually has seats available on short notice	11
12	Operates widebody aircraft	9
13	Offers a frequent flyer program	14
14	Allows customer to pay for only those service selected	13
15	Recommended by a friend, relative or associate	15

(Spearman's Rho (rank order correlation between the 2 sets of ranks) =.93, Z = 3.77, p = .00 for H_0: Rho = 0.00)

International Rankings		Domestic Rankings
1.	Has seats with ample legroom	1
2.	Provides fast, efficient check-in	3
3.	Provides seats with ample width	2
4.	Has flight attendants with positive attitudes and good manners	4
5.	Provides timely checked luggage retrieval	5
6.	Offers prereserved seat assignments	7
7.	Provides high quality food and beverage service	8
8.	Allows for carry-on luggage	6
9.	Provides special airport lounges for customers	10
10.	Offers sleeper seating	11
11.	Provides high quality inflight audio/video entertainment	12
12.	Has readily available skycaps/porters	9
13.	Provides a variety of reading material	13
14.	Offers inflight telephone services	14

(Spearman's Rho = .96, Z = 3.45, p = .00 for H_0: Rho = 0.00)

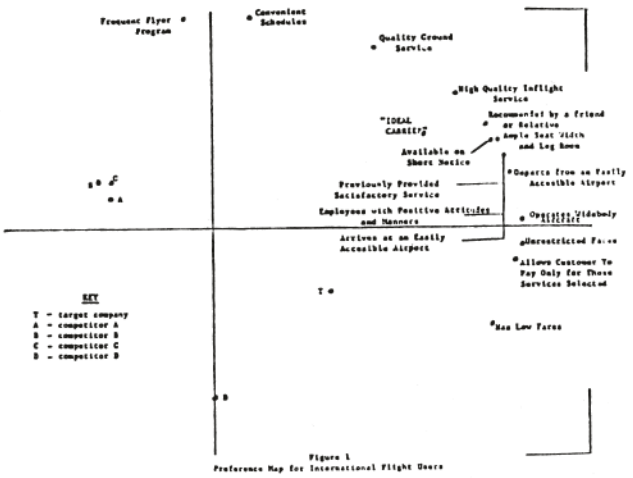


Figure 1
Preference Map for International Flight Users

Figure 2
Preference Map for Domestic Flight Users

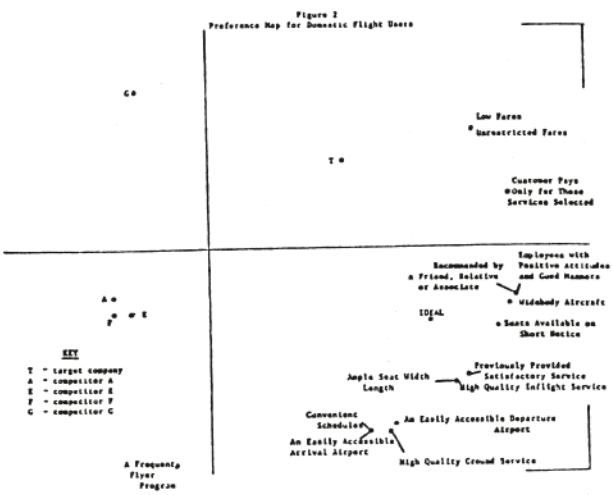
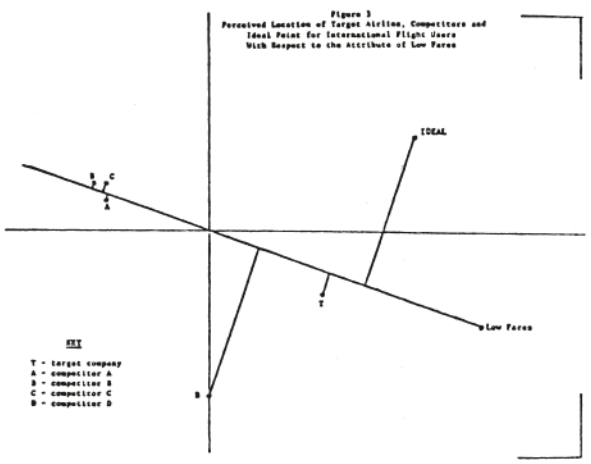


Figure 3
Perceived Location of Target Airline, Competitors and Ideal Point for International Flight Users With Respect to the Attribute of Low Fares



MARKETING EDUCATION

AN ALTERNATIVE INSTRUCTIONAL METHOD FOR TEACHING DOCTORAL SEMINARS: AN EXAMINATION OF ISSUES AND ARGUMENTS

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Abstract

An alternative model, team teaching mini-seminars, is introduced as an innovative approach for teaching marketing seminars at the doctoral level. This model is currently in use at the University of Colorado at Boulder. A number of pedagogical and administrative issues associated with implementing this alternative doctoral seminar instructional model are discussed.

Introduction

One of the ongoing challenges of marketing faculties is to keep their course offerings up to date at the undergraduate, master, and doctoral levels. Among those universities which offer doctoral programs in marketing, a problem that faculty committees constantly face involves developing an appropriate number of seminars to insure that each student is exposed to a balance of breadth versus depth in various topic areas in marketing. To the extent that doctoral seminars are faculty intensive, it is a challenge for faculties to maintain, let alone increase, the resources devoted to the doctoral program.

This paper will discuss a variety of issues associated with an innovative method of instruction of marketing doctoral seminars--team teaching mini-seminars. First, the concept of team teaching will be defined and discussed. Second, the development of the team concept of mini-seminars currently in use at the University of Colorado at Boulder will be discussed. Finally, a general discussion will be presented of the issues associated with implementation of team-taught mini-seminars, and problems faced by instructors of and team-taught mini-seminars.

Background

Johnson and Lobb (1959) defined team teaching as "a group of two or more persons assigned to the same students at the same time for instructional purposes in a particular subject or combination of subjects." While the history of the concept of team teaching appears clouded, Polos (1965) believes that team teaching may have begun in the 1930's. In addition, at the college and university level, LaFauci and Richter (1970) found evidence that the team-teaching concept was employed in the 1940's. However, it was in the mid 1950's that team teaching at the college/university level began to accelerate. A 1956 program by the Committee on Utilization of College Teaching, supported by the Ford Foundation and the Fund for Advancement of Education used a form of team teaching (Polos 1965). However, it should be noted that the utilization of team teaching at the college level has historically focused on undergraduates (Schustereit 1980).

Team Teaching and Marketing

The published literature on team teaching marketing courses is relatively sparse. Consistent with the literature cited above, the utilization of the team-teaching method in marketing appears more prevalent at the undergraduate level. Schornack (1970) reported an imaginative variation of team teaching the Marketing Principles course at Waudesha County Technical Institute. The class was divided into groups dependent upon the individual's interest in a functional area of marketing. Each group was then headed by the faculty with similar interests. While both students and faculty experienced problems, Schornack concludes that the method had merit.

Another marketing-specific report on team teaching was presented by Klein (1982). Klein participated as a faculty member in a team-taught course that involved the marketing and finance departments at California State University, Long Beach. The course, "The Consumer: A Socio-Legal Approach," was designed to present information on consumer behavior (from the marketing perspective) and consumer law. (The finance professor had a degree in law). While Klein admits that the first attempt at offering the course was not a total success, through time and modification, the course has evolved into a successful blend of information. There are undoubtedly other team-teaching efforts in progress in marketing departments, although written reports have not found their way into the literature.

Objectives of Team Teaching Mini-Seminars

When developing (or refining) the course program of instruction at the doctoral level, a series of trade-offs are involved. For instance, what seminars will be offered, and who is to be responsible for each seminar? While unanimous agreement may exist concerning the subject matter of some seminars (quantitative methods, consumer behavior, theory, etc.), others may not enjoy unanimity (channels of distribution, pricing, sales management, industrial marketing and international marketing, to name a few). The actual doctoral seminars offered may develop along a number of different lines: blindly repeating seminars offered in the past, power within a division, seniority, to expose the students to the local "big guns", or any of a number of other possible scenarios. Whatever the method(s) used to determine what seminars will

be offered, it is inevitable that important topic areas will be overlooked. To summarize, it is difficult to establish priorities among functional areas. For instance, is a seminar in pricing more important than a seminar in channels of distribution? Given a limited number of seminars a division can effectively offer during any semester or quarter, how should the decision on priorities be made? This leads to the first objective of team teaching mini-seminars:

Objective 1. Increase the breadth of instruction at the doctoral level.

An extension of the breadth issue raised above is the idea that limited exposure of the functional areas of marketing in the seminars results in limited exposure to various areas for scholarly pursuit. If it is assumed that doctoral students develop areas of interest in a relatively unstructured and unpredictable manner, without regard to the seminars they are exposed to during the course of study, then no problem exists. However, if it is assumed that doctoral students' areas of interest are a function of the seminars they are exposed to, then those faculty offering the seminars will have greater access to the doctoral candidates than the remaining portion of the faculty. As a consequence, the students' areas of interest will likely mirror those of the faculty teaching the seminars. This leads to the second objective of team teaching mini-seminars:

Objective 2. Increase the interaction among all faculty and the doctoral students.

Each professor within the division has specific areas of interest, skill, and expertise. Unless every faculty member is involved in the doctoral program, it can be argued that any particular faculty is unlikely to fully utilize the expertise of each faculty member. Therefore, the third objective of team teaching mini-seminars is:

Objective 3. Better utilize the talents and expertise of the individual faculty members.

The model of team teaching mini-seminars at the University of Colorado was developed to fulfill these objectives. All interested faculty are given the opportunity to develop a mini-seminar. A sixteen-week semester seminar is divided into three five-week blocks with the final week used as a review or integration section. One professor is responsible for developing a reading list and evaluation of the students' performance during each five-week session. While the content of each five-week session is reviewed and approved by the division chairman and the division director of doctoral studies, the content of the session is generally left to the professor.

The benefits of the team-teaching mini-seminar concept are numerous and satisfy the three primary objectives developed earlier. First, all interested faculty are given the opportunity to participate in offering a doctoral seminar. This effectively increases the number of interactions among faculty and doctoral students. Second, the team-teaching model increases the breadth of the students' knowledge. The student is exposed to a larger number of areas within the marketing discipline. Thus, the student has a better opportunity to select, from a number of topical areas, those that interest the student for further study and research. Third, the doctoral students are exposed to the individual expertise of the faculty and each section of the seminar is presented by the faculty member who is most knowledgeable in the area. Thus no professor is asked to deliver a section of a seminar outside that professor's realm of expertise.

Finally, while not expressed as an objective of team teaching mini-seminars, another benefit exists. The burden of developing seminars is shared by a greater number of faculty. If it is assumed that the preparation time for a doctoral seminar is greater than the preparation time for either undergraduate or graduate classes, then team teaching should decrease the individual's load. That is, teaching a five-week mini-seminar should take significantly less work than developing a full sixteen-week seminar.

Limitations

While a number of very positive dimensions are associated with team teaching mini-seminars, there are some limitations. In the mini-seminar format, students are typically asked to write a major paper at the end of each of the five week sessions. The opportunity to do more elaborate research present in the context of a semester is greatly reduced. This is particularly true with respect to empirically based papers. It is not possible to design, collect, and analyze data and write the paper in the context of a mini-seminar. While this is a real limitation associated with the mini-seminar, it is important to recognize that the purpose of the mini-seminar is to expose the students to a larger number of topics and faculty. The mini-seminars are balanced against other, more traditional full-semester seminars in consumer behavior, multivariate statistics and marketing theory in which the opportunity for more complete paper development, including empirically based papers, is possible.

A second major limitation is in the areas of grading and coordination. With different topics and different instructors involved in offering these mini-seminars, it is unlikely that each of them will see each student's performance in the same manner. Therefore, it is necessary for the instructors to make a concerted effort to agree on grading and coordination procedures before the semester begins, and that these procedures be communicated to the students.

Implementation Issues Associated with Team Teaching

Beyond the obvious advantages and limitations, it is worthwhile to address a number of the questions which are most frequently raised with respect to team teaching. Table 1 presents eight important questions that marketing

faculty should address when determining whether to consider implementing the team-teaching mini-seminar concept for one or more doctoral seminars.

TABLE 1
RELEVANT QUESTIONS CONCERNING
TEAM TEACHING MINI-SEMINARS

1. How should the workload be divided?
2. How should the time spent in the classroom be considered by administration?
3. Should the team have a formal or informal leader?
4. How should the students be evaluated?
5. What are the best criteria for choosing members of a team?
6. How many members should be on a team?
7. Is it necessary to have a "common thread" throughout the team-taught seminar?
8. What is the perception of doctoral students concerning the concepts of team-taught mini-seminars?

Question 1 deals with the division of labor within the team. Nolan and Roper (1977) report that unequal workloads is a common criticism of team teaching. Therefore, it is necessary to insure that the workload is shared equally among members of the team. In the mini-seminar model, it is not necessary that all team members be present for each session of the seminar. In fact, a preferred method of instruction would be that each team member have the opportunity to present the material in the manner he or she feels appropriate. Assuming that the segments of the mini-seminar are equal in length, the major issue of equal workload has been removed.

The second question raised in Table 1 deals with the method to be employed by department heads and deans concerning recognition of the individual faculty's efforts to the seminar under the team concept. Obviously, team teaching a seminar on an overload basis is not appealing to most faculty. In addition, the administration may not be willing to count teaching five weeks of a seminar a full load. One answer is to count the seminar proportionally to the effort involved. For instance, if three faculty members are team teaching a seminar, each faculty is credited for teaching 1/3 of the class. Therefore, after three such seminars each faculty's teaching load will be reduced by one full class. If the administration is dedicated to the doctoral program, this concept should be relatively easy to support. However, this approach is totally dependent upon the cooperation and level of commitment of the administration. It should be noted that if seminars are offered on a two year rotating sequence, then the benefit for the faculty member may take several years to achieve. In this context, consistency at the department level is essential.

The question of leadership within the team should be addressed. While some members (and administration) may feel more comfortable with a formal leader, it has been suggested that the teams with informal leaders experience higher morale (Nolan and Roper 1977). Consistent with this perspective, it is argued here that the mini-seminar operates best with some coordination, but is best left informal.

Many alternatives are available for evaluation of the students in the seminar. First, each team member may require the completion of a given assignment (paper, etc.) and the final grade is merely the average of all assignments. Another alternative would be to require a paper that attempts to integrate all that the students were exposed to during the seminar. This would increase the students' ability to assimilate and integrate information, and should improve the students' ability to develop ideas on their own. Another alternative the team may wish to consider is offering a final examination that covers all material presented in the seminar. A final alternative is any combination of the methods discussed above.

Given that one purpose is breadth of topical coverage, combined with the need to utilize various faculty member expertise, asking the student to find an integrating theme could be a great challenge. One advantage of the final examination format would be the opportunity to focus on comprehensive examination type questions. The single most important question is the issue of coordination between team members so that the students are clear on the evaluation to be used in the seminar. Thus, the issue of grading must be discussed carefully by the participating faculty at the beginning of the semester.

The fifth question in Table 1 deals with how to choose members of the team. Nolan and Roper (1977) argue that friendship among members is not the best criterion. A preferable technique is to choose members based on skills and interest. Therefore, it appears preferable that the topics of discussion be determined, then the faculty that can best teach that topic be chosen without much regard to the final personality of the team.

Team size is the next question raised in Table 1. Nolan and Roper (1977) report that the optimal team size is two or three team members. While a certain amount of discontinuity may be expected in a team-taught seminar, especially in the first session, discontinuity can be minimized by keeping the number of team members to a manageable level. Further, from a pragmatic perspective, it is likely that five weeks represents the minimum reasonable time for each mini-seminar. An alternative format of two eight week mini-seminars might also be attractive. Thus the most common decision is whether to have two or three instructors share responsibility for the seminar.

The response to having a "common thread" or theme for the seminar raised in question seven appears to be optional. There are situations that could arise making the common thread an

ideal situation. For example, a seminar where the concepts of channels of distribution and logistics or physical distribution are introduced would offer a coherent theme for a seminar. In addition, a seminar consisting of new product development, pricing and promotion would appear to provide an excellent opportunity for continuity. However, the presence or absence of a theme for the seminar should be unrelated to the seminar's effectiveness. In the final analysis, the effectiveness of the seminar is totally in the hands of the team members. As the number of topics within marketing worthy of at least mini-seminar attention expands, the probability of having an outstanding integrating theme is less likely.

Finally, the question concerning the doctoral candidate's perception of attending a team-taught seminar needs to be addressed. Unfortunately, no literature was found to support any conclusions. However, Nolan and Roper (1977) reported that students interviewed in their study suggested that there were benefits from interaction with more than one instructor. If the students are presented with the apparent benefits of a team-taught seminar (expansion of the students' knowledge base, breadth of knowledge, etc.), apprehension should be minimized. In addition, the seminar will develop a reputation within the doctoral ranks, and this reputation will depend more on the effectiveness of the team members than the concept of team teaching itself. However, student reactions are still a question worthy of future research.

Potential Problems

Table 2 isolates some of the problems experienced by members of teaching teams in the past. While the list is not exhaustive, it is offered as a planning tool for potential team members.

TABLE 2
POTENTIAL PROBLEMS WITH
TEAM TEACHING DOCTORAL SEMINARS

1. Personality clashes (Nolan and Roper 1977).
2. Inconsistent messages delivered to students by different members of the team.
3. Additional planning required in a team situation (Instructor 1978).
4. Possible loss of academic freedom (Seyfarth and Canady 1978, Thompson 1976).

The problem of personality clashes is obviously dependent upon the membership of the team. A strong commitment to the team by the individual members should minimize the possibility of personality clashes. In addition, in the mini-seminar model of team teaching, in which each member is individually responsible for a section of the seminar, personalities should not interfere with the effectiveness of instruction.

The most common types of inconsistent messages (problem 2) are likely to involve administrative details for the course rather than substantive issues within the discipline. The problem of delivering inconsistent administrative messages can easily be minimized by the members of the team. The most important requirement is for all team members to agree in advance on the evaluation techniques and other administrative details associated with the course. In this way students should not receive different messages from different faculty. On the substantive side, it is possible that one member might contradict the points made by another member of the team. This possibility can be minimized in two ways. First, if all team members are made aware of the material that is to be covered by each team member, the possibility of contradiction is reduced. Second, if a contradiction is brought to the attention of a team member, the contradiction can be dealt with as a matter of opinion, rather than fact.

The third problem mentioned in Table 2 is the additional preparation time required for a team effort. A substantial part of this additional time is likely to be administrative in nature and is not easily rectified. Team members will probably spend considerable time developing strategies for the seminar which will only be minimized over time. That is, the administrative time required by the faculty in preparing the seminar will decrease as the members progress through the learning curve of developing team-taught seminars.

Problem number four deals with a loss of academic freedom in the classroom. This problem, however, need never arise as long as the faculty member is allowed to present information as he or she sees fit. While a departmental agreement on seminar topics may be necessary, the faculty member should be granted the normal freedom expected in any other classroom situation.

Conclusions

While the concept of team teaching is not new, perhaps the area where the concept can enjoy the greatest success is not in the undergraduate classroom, where most of the experiences have been reported, but rather in the doctoral mini-seminars. While team teaching doctoral seminars is not without problems, the perceived benefits outweigh the problems. In addition, it should be noted that seminars using the model of team teaching described above are in addition to conventionally taught seminars offered at the University of Colorado at Boulder. That is, other doctoral seminars (consumer behavior, quantitative methods and others) are taught using conventional methods. The conventionally taught seminars are offered to cover those areas where depth of knowledge is the primary goal; conversely, the team-taught seminars increase the breadth of knowledge.

Faculties across the country are likely to continue to struggle with the depth versus breadth issue. While doctoral students may be well

trained in research capabilities and consumer behavior, has adequate attention been devoted to making sure the students know the breadth of marketing? By increasing the breadth of study through the utilization of team-taught mini-seminars, we can feel more comfortable about the amount of marketing known by our doctoral students.

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EXPANDING THE UNDERGRADUATE MARKETING CURRICULUM: A COURSE IN MARKETING AND PUBLIC POLICY

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Abstract

Generally, the mix of courses offered in the marketing curriculum has changed as knowledge of marketing has advanced. However, a course in marketing and public policy is absent from many curricula. This paper examines the response of marketing educators to the need for an undergraduate course in marketing and public policy and presents a framework and suggested course outline for teaching an elective course in this important area.

Introduction

Periodically, university educators must evaluate their curricula to determine whether their students are being adequately prepared to begin a career in their chosen field. This is especially true within department such as marketing where the subject matter is diverse and dynamic. Over the years, marketing educators have responded to the needs of their students by offering courses in retailing, advertising and marketing research. More recently, some marketing departments have offered courses in the marketing of services and nonprofit organizations. However, an elective course in marketing and public policy is absent from the curricula of many marketing departments. This is somewhat surprising given public policies have a major impact on marketing programs (Business Week 1980). The purposes of this paper are to: (1) assess how marketing educators have approached this area of study; and (2) present a framework and outline for teaching a course in marketing and public policy.

Why a Course in Public Policy

One of the functions of government is to develop public policy through the social administration of the economic system (Enis 1980). Governmental administration may take several forms including: direct intervention; consumer and business protection; or the policing of market activities. Governments may intervene directly when the market mechanism fails to efficiently consummate marketing exchanges. Examples of public policies that influence the exchange process include subsidies, price controls, and rationing. Governments use protective policies when they want to protect the rights of the parties involved in the exchange process. The statutes that govern business law, grading standards, licensing of professions, and bans on deceptive marketing practices are public polices that protect the consumer and/or the supplier. Public policy also is used to police the structure, conduct, and performance of markets. The antitrust acts are examples of this police action.

Although governmental administration of the economic system directly influences marketing decisions, the marketing discipline has not expended a great deal of effort toward trying to understand how such decisions are made. For example, few theories of regulation have been developed in the marketing literature compared to the number developed in economics. In addition, only recently has it been suggested that marketers become political actors and actively participate in the establishment of public policy (Pearce 1984).

The task of educating future marketing managers on how to manage in the public policy environment must begin with marketing educators. Today's marketing students must learn how public policy analysis fits into the overall framework of marketing decision making. Offering a course in marketing and public policy would be a way to fill this void.

How Marketing Educators Have Responded

In assessing the emphasis marketing educators place on the study of marketing and public policy 23, recent edition undergraduate marketing textbooks and the syllabi of public policy related undergraduate marketing courses were examined. **Table 1** lists the 23 texts which were evaluated on the basis of their coverage of various public policy issues. Most of the texts discuss the antitrust laws, consumer protection laws, consumerism, and marketing ethics as examples of public policies that have an influence on marketing decisions. The usual method of presenting these topics is to briefly describe the issues (e.g., a summary of each antitrust and consumer protection act). Eight texts, however, relate their discussion to how selected aspects of public policy influence marketing decisions. For example, Pride and Ferrell (1985) provide an in-depth discussion of marketing practices that are prohibited (e.g., resale price maintenance) and then examine how marketers cope with various laws and regulations. Kinnear and Bernhardt (1986) have devoted an entire chapter on the implications public policy decisions have on marketing programs. (See **Table 1**.)

The number of pages allocated to the discussion of public policy issues in the textbooks in **Table 1** is comparable to the number of pages allocated to the discussion of other facets of marketing management (e.g., nonprofit marketing and services marketing). However, a question remains whether public policy decisions are presented in enough depth and breadth for the marketing student to understand the full impact of such decisions on marketing activities. For example, little or no emphasis is given to theories of regulation, the effects of deregulation, or products liability in these texts. Even the most current texts do not discuss all components of public policy identified in **Table 1**. These texts also do not provide comprehensive frameworks that tie together the complex issues involved in the public policy environment.

Although instructors of beginning marketing classes may supplement the textbook treatment with outside material, only enough time may be allocated in a beginning course for a cursory view of the public policy implications of marketing decisions. A separate course is needed to provide a comprehensive look at this important topic. Yet Murphy and Laczniak (1980) reported only 6% of the marketing departments they surveyed offered a course (either as an elective or a required course) in marketing and public policy. In an attempt to determine if this percentage has changed in the intervening years, the present study also sought to identify the number and content of courses devoted to this topic.

The undergraduate course offerings of 171 marketing departments of AACSB-accredited schools that offer a marketing-related major or concentration were examined to identify marketing courses that focused specifically on public policy issues. The course descriptions of other business departments were not reviewed since the focus of the present paper was on the relationship between marketing and public policy. Although the catalog review indicated that most marketing departments provide the opportunity for students to study public policy concerns as an independent study, 38 marketing departments (22%) offered at least one elective public policy related course.

A personalized cover letter explaining the purpose of the study and requesting a copy of the syllabus for each course identified in the review and a postage-paid return envelope were mailed to the chairpersons of these 38 marketing departments. Of the 38 chairpersons contacted, a total of 25 replied for a response rate of 66 percent. Seven chairpersons wrote letters explaining that their departments either dropped the course from there curricula or had not offered the course in several years. No specific reason was stated for these actions (e.g., lack of enrollment, funds and/or faculty to teach the course). Twenty syllabi were received from the remaining 18 department chairpersons.

Content of Syllabi

Although the small sample of syllabi does not provide a consensus as what should be covered in a course in marketing and public policy, they do provide insight into the types of topics that might be covered in such a course. In addition, information derived from a content analysis of the syllabi that were received was somewhat limited by the variability in the thoroughness of each syllabus. Many courses used the case method of study while others relied on current issues from periodicals, papers, books, and speakers to provide class discussion material. A frequency of the topics covered in the 20 syllabi received is reported in **Table 2**. Some courses covered several topics while others were more limited in their scope. Social responsibility, ecological issues, marketing ethics, and government regulation were the topics most frequently covered in these courses. The application of consumerism, labor relations, and antitrust laws to marketing decisions were also studied in approximately 25 percent of the courses. (See **Table 2**.)

While the syllabi suggest that the study of marketing and public policy is being effectively addressed by several marketing departments, it can be concluded from the small number of schools offering these courses that the majority of students are not provided the opportunity to study this important environment in greater detail. The reason why comparatively few departments offer a course in marketing and public policy could be due to a shortage of faculty as well as other resources. In addition, student demand might be insufficient for many marketing departments to offer a course in public policy each academic term. The central point is that marketing students be given the opportunity to study public policy implications of marketing decisions some time during their program of study. Offering one or two sections of the course once during the academic year would satisfy this need.

Framework for a Course in Marketing and Public Policy

A course in marketing and public policy should start with a review of the political process in the United States since government entities establish public policy. Only after the student understands this process should the impact of specific public policies on marketing decisions be addressed. **Figure 1** illustrates a framework which conceptualizes the inputs, processes, and outputs of the formulation of public policy. Such a framework provides the student with insight into the complexities of the public policy which are not always covered adequately in a beginning marketing course. (See **Figure 1**.)

Inputs

The formulation of public policy begins when conflict arises in the marketing environment. Conflict may be economic, social, or protectionist in nature. Economic conflict would involve the international and technological environments. Changes in ethics, customers and mores, and consumer desires results in social conflict. Conflict that is protectionist in nature would include consumer complaints, resource availability, and pollution-related environmental concerns. Knowing that conflict drives the formulation of public policy can benefit the marketer. Strategic environmental monitoring could be used to resolve conflict before the government gets involved. As an example, Johnson and Johnson recently decided to stop production of capsule encased Tylenol as a way of resolving the conflict over product tampering before protection-oriented legislation was passed that would strictly regulate the packaging of over-the-counter drugs.

Processing

The political arena is where conflict is resolved. Here there is a great deal of political posturing. The establishment of public policy does not reflect an "all or nothing" decision toward any particular player's stance. Rather, public policy formulation usually involves "give

and take" which is produced by the vehicles of lobbying, referendums, law suits, and negotiation. For this reason, the marketing student must recognize when participation in the political process is often desirable. This is where Pearce's (1984) idea of a marketer as a political actor could be incorporated.

Outputs

Public policy is established in several ways. Generally, policies established by legislation are broadly defined as legislators attempt to retain the support (i.e., votes) of parties with divergent interests. Formulating the specifics of legislative policies is left to administrative agencies and the courts. Policies established at the administrative and court levels tend to be more specific and are modified more rapidly because these policymakers are not as dependent on the support of as many constituents for their continued existence.

Public policy reflects social change. Marketers usually view public policies as threatening and costly. When marketers overlook are the marketing opportunities which are generated from public policies. For example, recycling legislation has been criticized as being too costly, but it has also created an opportunity for a distribution channel member as well as forcing marketers to address ecological concerns.

As **Figure 1** illustrates, public policies and marketing responses to these policies subsequently influence the marketing environment which initiated the process. Exposing marketing students to a framework such as **Figure 1** positions the formulation of public policy in the course as a process which allows marketers to recognize an capitalize on marketing opportunities while minimizing the effects of threats via strategic environmental monitoring.

Other Components of a Course in Marketing and Public Policy

After discussing the public policy process, the legislative environment should be explored. The focus should be not only on the process of enacting legislation and the specifics of procompetitive and consumer protection laws, but an attempt also should be made to critically evaluate the standards, remedies, and effectiveness of these policies. The student should be encouraged to think about the prognostic and diagnostic aspects of this environment. This and other sections of the course should include an evaluation of marketing opportunities and a discussion of alternative marketing strategies.

Next, the regulation environment should be discussed. Stigler's (1960) "The Theory of Economic Regulation" could be used to illustrate why regulation of the economic system exists. Then specific regulations of marketing practices could be presented.

Fourth, a discussion of the judicial environment should focus on how the courts set public policy in precedent decisions. Included here would be a discussion of products liability and the tests, standards and remedies of the judicial system as they relate to marketing.

The role of public policy in the international environment is the next area that should receive some attention in this course. The interaction of marketing and public policies in foreign countries is important because public policies in foreign countries differ widely. Inserting this discussion in the course should provide the student with an increased awareness of the complexity of international marketing which is crucial for the resurgence of American industry.

The final part of the course should discuss social responsibility and marketing ethics. This would include consumerism and natural resource consumption issues. The study of consumerism issues should focus on such topics as the impact of product recalls on consumer attitudes and the strategic dimensions involved in interfacing with consumer groups. Natural resource consumption is important from the standpoint of having enough raw materials to produce finished goods and issues of pollution and recycling after the goods have been consumed.

Course Materials

The marketing educator currently has a number of materials to choose from in teaching a course in marketing and public policy. In addition to the Journal of Macromarketing and the Journal of Public Policy and Marketing which have been devoted to the study of public policy and marketing, the Federal Trade Commission offers several free publications on topics ranging from the Magnuson-Moss Warranty Act to testimony before the Federal Trade Commission concerning proposed regulation of children's advertising. The West Publishing Company has several paperbacks in their nutshell series that could be used in the course. Some of the topics covered include: products liability, antitrust, consumer law, and a primer on regulated industries. Lastly, books, such as Stern and Eovaldi's (1984) Legal Aspects of Marketing Strategy or Wilson's (1980) The Role of Regulation, could be used depending on the focus of the course.

Implementation

Many marketing departments may face staffing problems, ceilings on student units, or the possible elimination of other elective courses when new courses are added which may hinder the integration of a public policy course into the marketing curriculum. Therefore, a joint effort with other departments outside the business school may yield an opportunity to team teach this course and provide valuable cross-discipline insights. Departments of Public Programs, Political Science, or Economics might find this arrangement mutually beneficial. However, it is important that the marketing aspects of public policy decisions are stressed because marketing is the driving force behind successful organizations and businesses which might adapt to the changing public policy environment.

TABLE 1

SUMMARY OF THE TREATMENT OF PUBLIC POLICY ISSUES BY UNDERGRADUATE MARKETING TEXTS

	Year	# of pages	Antitrust	Conservation	Consumerism	Deregulation	Ecology	Ethics	Products liability	Regulation	Consumer Protection	Marketing Implications
Barry	1986	10	☆	☆	☆			★				
Berkowitz/Kerin/ Rudelius	1986	9	★		★		★				★	
Boone/Kurtz	1986	20	★		☆	★	☆	☆			☆	
Cravens/ Woodruff	1986	33	★		★	★		★			★	☆
Evans/Berman	1985	32	☆	☆	★		☆	★			☆	☆
Evens/Berman	1984	16	☆	☆	☆	★	★	★			☆	
Gaedeke Totelian	1983	18	★	☆	★			★			★	★
Kinnear/ Bernhardt	1986	38	★		★		★	☆			★	☆
Kotler	1984	22	☆	☆	☆		☆	★			☆	★
Kotler	1986	32	★	★	☆		★	☆			★	☆
Kurtz/Boone	1984	30	☆		☆		☆	☆			☆	
McCarthy Perreault	1984	11	★		★		★	★			★	
McCarthy/ Perreault	1985	21	★		☆		★	☆			☆	
McDaniel	1982	11	☆	☆	☆			★				
Mandell/ Rosenberg	1981	25	★		★		★	★			★	★
Murphy/Enis	1985	18	☆		☆		☆	☆		☆	☆	
Nickels	1982	16	☆		☆		☆	☆				
Pride/Ferrell	1985	28	☆		☆			☆			☆	☆
Rachman	1985	18	☆		☆		☆	☆			☆	
Reibstein	1985	2	☆			☆					☆	
Stanton	1984	16	☆		☆		☆	☆			☆	
Udell/ Laczniak	1981	16	★	☆	★		★	★		☆		
Zikmond/ d'Amico	1986	24	★		☆		☆	★			☆	

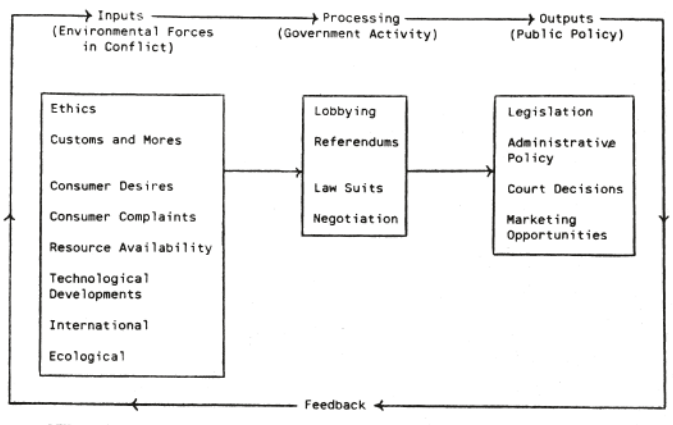
TABLE 2

FREQUENCY OF TOPICS COVERED IN SYLLABI

Topic	Frequency
Social Responsibility	8
Ecology	7
Government Regulation	6
Ethics	6
Consumerism	5
Labor Relations	5
Antitrust	4
International Environment	4
Deceptive Advertising	3
Products Liability	3
Deregulation	2
Children's Advertising	2
Marketing and the Poor	2
Warranties	2
Product Warnings	1

FIGURE 1

PROCESS OF PUBLIC FORMULATION



Adapted from Enis, Marketing Principles: The Managerial Process, 3rd ed., 1980

Conclusion

The public policy environment is dynamic and influences many marketing decisions. Marketing departments have begun to respond by offering an effetive course in marketing and public policy. However, the study of marketing opportunities and the development of strategies from public policies is one of the neglected areas of the curricula of many marketing deparments. Marketing students need to be exposed in greater detail to this interaction before their marketing education is complete. Marketing educators should consider the inclusion of an elective course in marketing and public policy into the curriculum to ensure that this need is satisfied.

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THE MARKETING RESEARCH PRINCIPLES COURSE: AN ALTERNATIVE APPROACH TO THE CLIENT-SPONSORED PROJECT

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Abstract

A number of limitations with the client-sponsored approach in the Marketing Research Principles course are raised and an alternative approach is proposed. It is suggested that marketing departments need to segment those students in the Research Principles course and subsequently provide an additional class for those students who seek careers in marketing research. An example format and discussion of one approach to this additional course is presented.

Introduction

Faced with declining rates of enrollment growth, many colleges and universities have begun to recognize the importance of applying the marketing concept to their institutions and marketing educators are continually pointing out the value of taking a marketing perspective to higher education (Berry 1973; Abell 1977; Enis 1977; Weinrauch 1977; Hampton 1983; Hawes and Glison 1983; Tashchian and Frieden 1983; McDaniel and Hise 1984). As a result, marketing educators have recently placed a great deal of emphasis on determining the needs and wants of the publics it serves with respect to alternative course formats (Jolson 1982; Goretsky 1984; Jolson & Dubinsky 1984) and to curriculum development in general. For instance, Hancock and Bell (1970) investigated the views of faculty, students, graduates, administrators and employees as to what they felt should be included in a marketing education. More recently, studies have been conducted among educators (Murphy and Laczniak 1980), practitioners (Bellenger and Bernhardt 1977), graduates (Loundenback 1973) and combinations of the above (Wilson and Darley 1982; Bellenger and Bernhardt 1977) regarding undergraduate marketing curriculum. Finally, Schleede and Lepisto (1984) developed a model designed to guide the development or review of marketing curriculum taking into account not only faculty resources but the needs and perceptions of both practitioners and past marketing graduates.

Marketing Research Course

One of the most prevalent courses in undergraduate marketing curriculum is Principles of Marketing Research. A study conducted by McDaniel and Hise (1984) indicates that 81.3% of colleges and universities surveyed in the United States required the course for graduation while a slightly higher percentage offered the course second only to Principles of Marketing. Further, Wilson and Darley (1982), in a survey of AACSB educators and practitioners regarding the core marketing courses that should be required of undergraduates majoring in marketing, found that respondents considered marketing research appropriate for inclusion in the core. In fact, the authors concluded that Marketing Research ranked first in a list of six courses recommended from the core of required marketing courses. Thus, it would appear that there is an overwhelming consensus among educators and practitioners alike that Marketing Research is a valuable course for undergraduate marketing majors.

Client-Sponsored Research Project

One of the pedagogical techniques available to facilitate the instruction of marketing research which has been given considerable attention in the literature is the client-sponsored research project where students get "hands on" experience conducting a marketing research study for a client (Richardson 1979; Richardson and Raveed 1980; Humphreys 1981; Dean 1982; McDaniel 1984). While the advantages and benefits of this experiential learning approach are well documented (Humphreys 1981; Goretsky 1984; McDaniel 1984), rarely are the limitations and disadvantages of the method discussed. The objective of this paper is to: (1) point out the limitations of this approach in a marketing research principles course and the impact of these limitations on student learning; and (2) describe an alternative approach to the teaching of marketing research that recognizes the differing needs of students enrolled in the course.

Limitations of the Client Sponsored Project

Sequential Nature of the Course

A serious limitation of the client-sponsored project in a student's first rigorous exposure to marketing research focuses on its true educational value within the confines of a one semester or quarter course that is sequential in nature. Students who are first learning about research tools and techniques as the project progresses, are incapable of making all the decisions involved in the research project in light of the implications of their decisions to the overall quality of the project. As a result, the required decisions are made either: (1) by the professor teaching the course; or (2) by the students, independent of other decisions that will have to be made (which are, in fact, dependent on the first). Both of these alternatives have serious consequences on the value of the project to the students in the class.

In the first scenario, one has to question the effectiveness of the pedagogical technique when students are forced into the roles of little more than fieldworkers and analysts. For instance, the faculty member, in light of his or her knowledge of research, may decide to use a particular survey method considering all those factors having an impact on this decision. Accordingly, the students are having little impact on the decision itself despite the fact that, taking on the role of the decision-maker is purportedly one of the primary objectives of this type of approach. Further, one has to question the motivation level of the student when forced to take on a somewhat passive role rather than truly being the active participants the project is designed to encourage.

Moreover, even if the professor does not make the required decisions but rather allows the student participants to take a truly active role in the development of the project, other negative consequences emerge. Students forced to make the required decisions cannot anticipate at any one stage the interrelated decisions required at subsequent stages, nor can they be expected to possess this foresight since they have yet to cover these topics in the course. Thus, students are forced to make basically uninformed decisions which may (1) have a direct impact on the quality of the research the client receives, and (2) give students an erroneous perspective as to the entire research process. While it is often necessary to present the research process to students early in the course as a series of stages, most authors of research texts are quick to point out that this process does not proceed in a stepwise fashion (Zikmund 1982; Churchill 1983; Kinnear and Taylor 1983; Tull and Hawkins 1984). Rather, all of the stages in the research

process are interrelated, and it is essential that a researcher anticipate all the stages when designing a research project. Allowing students to make independent decisions by use of a client-sponsored project in their first exposure to marketing research may be performing a student disservice.

Value of Hands-On Experience

The real value of the client-sponsored research project lies in its ability to give students hands-on and decision-making experience and a sense of what it is like conducting marketing research in the "real world." However, one has to question the value of this experience not for future "doers" of research but for future "users" of information provided by marketing research. While this practical experience will be of unquestionable benefit to those students who will be conducting marketing research in the future, it may not be the optimum pedagogical technique for future users of research. Traditional thinking suggests that research is an important component of marketing core curriculum not because the majority of students will eventually be conducting marketing research in their careers, but rather, that the majority of students will eventually be users of research information. The subsequent implication is that an understanding of research methods and techniques will enable students to critically evaluate the procedures used and adequately assess the confidence that should be placed on the results when faced with contracting for marketing research studies or utilizing the results of research information. While there is merit to this rationale, it is possible for students to acquire this knowledge without actually conducting a marketing research project. In light of the time constraints imposed in a one semester or quarter course, those students who do not intend on seeking entry level jobs in marketing research, might benefit more from a course that supplements standard lectures and textbook materials with: (1) short class exercises on specific techniques designed to acquaint students with the use of procedures; and (2) a heavy emphasis on cases geared toward the interpretation and use of marketing research information on decision-making.

While the client-sponsored project can provide the students with a feel for the value of research information in a decision-making context, unless it is supplemented with extensive use of other pedagogical techniques such as case analyses, the most students can expect to be exposed to is one situation or context in which research information is used in decision-making. In fact, while McDaniel (1984) found that students involved in a client-sponsored project evaluated the experience positively, there was a strong feeling that the project was too time-consuming, a major drawback from the students' perspective. Thus, it appears that while the client-sponsored research project has merit, one of its major deterents is that it may be too time consuming to be conducted in conjunction with class exercises and cases, the latter of which may be more beneficial to future users of research information.

Alternative Approach

What all this suggests is that when designing curriculum many marketing departments have failed to adequately apply marketing principles. While there has been some attempt to identify diverse student segments in the marketing principles course (Dwyer 1982), there has been a failure on the part of educators to recognize that there are two distinct segments in the basic marketing research course—those students who will seek jobs in marketing research and those students who will try to obtain positions in other areas within marketing. While traditionally the number of marketing research positions available to students without a graduate degree was relatively small, recent evidence suggests that not only are graduate degrees not always necessary but are not always preferred, particularly for entry level positions (Hulin-Salkin 1985).

Acknowledging these two segments suggests the need for two distinct courses. The principles of marketing research course, typically required of all marketing majors, should focus less on the actual conducting of research and more on the interpretation and an understanding of how marketing research techniques are used in a problem-solving context. That is, the basic marketing research course should be geared toward the student who will be a future user of research information. While the basic tools and techniques of research have to be examined and covered, the emphasis should be on the application of the research results in marketing decision making.

Equally important, students with a strong desire for learning more about marketing research, typically those students who elect to pursue marketing research as a career path, should have the option of an additional course in marketing research. This second course, which could be called Advanced Marketing Research, should then take an applied approach to the marketing research process, with an emphasis on learning by doing. While this course could be designed similarly to the client-sponsored project approach in the principles course, it has numerous advantages. First, students who will have already been exposed to the typical marketing research principles course content will be better equipped to: (1) fully appreciate the complexity of designing a research study; and (2) anticipate all of the stages of the research process when designing a research project. Second, the additional time available not covering the subject matter of the basic course makes more time available to cover additional lecture topics and provide a greater depth and scope of practical experience. Last, the students in the course will be a relatively homogeneous group with respect to their career goals. As such, the course can be designed specifically to meet their needs taking into account the high interest level and motivation of these students who elect to take the course. An example of the format and structure of one such course will now be discussed.

Advanced Research Course Structure

The previous suggestions are based on the experience of teaching the principles course in Marketing Research and a course in Advanced Marketing Research to undergraduate marketing students, the latter of which has evolved to a rigorous and apparently successful course that truly benefits those students interested in careers in the marketing research industry. An example format for a 15 week semester course is presented in Appendix I.

As shown in Appendix I, 11 weeks of the course are primarily devoted to weekly assignments alternating between individual and group assignments that collectively constitute 60% of a student's overall course grade. Further, students are not assigned to one group throughout the semester. Rather, new groups are formed by the instructor for each group assignment given and students are requested to provide peer evaluations for each group member on each group assignment. This practice has advantages for the student and instructor alike. First, alternating between individual and group projects adds sheer variety to the course. Second, changing group composition while somewhat unrealistic, enables the students to get to know all members of the class and subsequently experience differing group dynamics as a result of the alternative group compositions. Third,

students are not forced to remain throughout the semester in a "bad" group where conflicts arise as a result of a particular member not carrying his or her own weight. And last, student grades are not solely determined by their performance within a group. Thus, an individual who may have difficulty working with his or her peers is not at a total disadvantage with respect to his or her performance assessment.

From the instructor's perspective, alternating between group and individual assignments not only eliminates the excessive grading that would be required if all assignments were done on an individual basis, but allows the joint assessment of both an individual's performance by him or herself and an individual's ability to work with others. Furthermore, changing group composition gives the instructor an element of control over the level of performance of individual students. That is, it is difficult for a particular student to be "carried" by other group members throughout the course since: (1) the individual is required to complete assignments on his or her own; and (2) the instructor has control over group composition. For instance, if on the first group assignment, three students are evaluated poorly by their peers, the instructor may elect to put these three individuals together in one group on the second group assignment. In this way, these students are forced to perform to standards or suffer the consequences with respect to their assignment grade rather than being "carried" by more conscientious students. Finally, changing group composition and the resulting high level of student interaction that occurs has been found to result in a very cohesive class whose members are typically willing to exchange ideas and fully participate in the classroom environment.

It should also be noted that while the individual assignments are basically independent of one another, the group assignments involve students in one research project from start to finish. Past projects have involved students in extensive interaction with the respective client in formulating the study objectives in light of the problems addressed, followed by focus groups of the sample population. Based on the resulting transcript and analysis, student groups were then required to submit and formally present complete proposals of the research project, including their pretested data collection instruments, which were then subject to review by the instructor and the client. The proposal that was considered best by these judges was subsequently carried out by the entire class during the remainder of the term. As shown in Appendix I, the remaining tasks were broken down into three distinct assignments: (1) data collection and submission of a codebook for the measuring instrument, including drawing the appropriate sample; (2) coding and entering the data on the computer along with the submission of a plan of analysis; and (3) data analysis and interpretation, submitted in the form of a formal research report.

At each stage of the project, after a group submits their assignment, and while students are working on their next individual assignment, the instructor can grade the group assignments and provide thorough feedback to the students prior to their moving on to the next group assignment. In this way, students have continuous feedback as to their performance and there is no lag time in the course. While the instructor is grading one assignment, students are already involved in another.

With respect to the individual assignments, the course format allows a great deal of flexibility depending on the instructor's perceptions of specific student needs and interests. Consequently, what is presented in Appendix I serves as only an example. For instance, one of the two quantitative data analysis assignments could easily be replaced by an analysis of qualitative data or an additional exercise in sample design.

Finally, the last four weeks of the course are devoted to an additional data analysis project and final exam, each constituting 20% of an individual's overall course grade. The data analysis project, conducted on an individual basis, involves providing the student with the study's background and objectives, data collection instrument, coding scheme, and data base, and the instruction to analyze the data in light of the studies objectives and submit a research report to management. This ensures that all students are exposed twice to data analysis and report writing, both on an individual and group basis. The final exam is of an applied nature and provides the instructor with another indicator of the individual student's ability to apply marketing research concepts and techniques.

Finally, at the end of each term, each student is requested to complete a lengthy questionnaire evaluating not only the course as a whole, but each assignment completed. This feedback provides the instructor with a basis for assessing the students' perceptions of the value of the particular assignments so that appropriate changes can be made in future sections of the course. Table 1 provides a composite assessment of the overall course by two classes, a similar evaluation of which is made with respect to each particular assignment given. As noted, while the sample size is small, student evaluations of the course are overwhelming positive. Over 90% of the students agreed that the course not only facilitated their understanding of concepts taught

TABLE 1
STUDENT EVALUATIONS OF THE COURSE

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Mean[a]
	(In Percentages[b])					
1. This course was beneficial to me.	47.22	47.22	0.00	5.56	0.00	1.64
2. This course was very enjoyable.	13.88	58.33	16.67	5.56	5.56	2.31
3. My expected grade in this course accurately reflects my performance.	16.67	47.22	8.33	27.78	0.00	2.47
4. Overall, I enjoyed the variety of having both individual and group assignments.	22.22	47.22	30.56	0.00	0.00	2.08
5. Conducting one marketing research project from start to finish was a positive feature of the course.	55.55	30.55	5.56	5.56	2.78	1.69
6. This course helped me understand the concepts and topics discussed in my previous marketing research course.	50.00	41.66	2.78	5.56	0.00	1.64
7. After having taken this course, I have a better under standing of what a job in marketing research might be like.	55.55	38.89	0.00	5.56	0.00	1.56

[a] The mean was calculated on the basis of "Strongly Agree" = 1, "Agree" = 2, "Neither Agree Nor Disagree" = 3, "Disagree" = 4, "Strongly Disagree" = 5.
[b] n = 36

in the marketing research principles course but that it gave them a better understanding of what a job in marketing research might be like. Further, the vast majority of students, 94.44% and 72.21% respectively, found the course to be both beneficial and enjoyable.

Benefits

The benefits of this Advanced Marketing Research course to the student who seeks employment in the marketing research industry are numerous. Parasuraman and Wright (1983), in an extensive study of job opportunities in marketing research, found that while potential recruiters found students' quantitative/statistical skills more than adequate, they found students to be too theoretical and unrealistic, overconfident due to their technical skills, and possessed poor communication abilities. These findings led the authors to recommend that marketing educators involved with teaching marketing research stress oral and written communication skills, provide opportunities for students to get "hands on" experience in marketing research fundamentals and, further, offer some assistance to students interested in finding marketing research jobs.

The course previously outlined provides assistance to students in all these areas. First, the sheer number of assignments the student is expected to complete and the time constraints imposed on each not only provides students with hands on experience in regard to a number of marketing research areas, but forces students to be realistic with respect to the demands they place on themselves. The structure of the course forces students to be organized and budget their time. Second, the requirement of a secondary data research report, a research proposal, and two formal research reports on both an individual and group basis makes giant strides in improving the students' written communication skills which is heavily weighted in the determination of their respective grades. Similarly, formal presentations of the research proposal and a research report further refine their verbal communication skills. Third, completion of all the assignments provides the student with a portfolio of research projects that can be submitted to prospective employers in job interviews.

Conclusions and Recommendations

The purpose of this article was to outline some of the problems inherent in conducting a client-sponsored project in a marketing research course that represents the student's first exposure to the subject matter and, further, to suggest that the students in the often required marketing research course are not a homogeneous segment but rather adverse group with differing career goals and objectives. In light of this, it is additionally recommended that marketing departments reevaluate the focus and extent of their marketing research course offerings to accommodate the differing needs of their student body. One approach to satisfying these differing needs by way of offering two very different marketing research courses was set forth. Students taking both courses, who seek careers in marketing research, will acquire both a body of knowledge and practical experience that will help differentiate them from other students in the job market.

APPENDIX 1
EXAMPLE ASSIGNMENT OUTLINE: ADVANCED MARKETING RESEARCH COURSE

Assignment	Format	Time Frame
Secondary Data Research Report (I)	Using only secondary sources, students are required to submit a research report on a specific product or brand.	1 wk.
Focus Group (G)	Students are expected to conduct a focus group on a topic given by the instructor and submit a cassette recording of the discussion, resulting transcript and analysis.	1 wk.
Designing Data Collection Form (I)	Students are required to construct a questionnaire based on a focus group transcript and objectives provided by the instructor.	1 wk.
Research Proposal (G)	In light of the objectives outlined by the client and the previous groups conducted, students are required to prepare and present a research proposal to acquire the needed information, complete with a pretested data collection form.	1 wk.
Experimental Design (I)	Students are required to design an experiment to test hypotheses given by the instructor.	1 wk.
Data Collection and Codebook Design (G)	Assignment consisting of 3 parts based on the research proprosal that was previously accepted: (1) if appropriate, selection of sample elements; (2) collection of data; and (3) construction of the codebook for the raw data.	1 wk.
Quantitative Data Analysis (I)	Students are required to summarize data from a study provided by the instructor using a computer software package.	1 wk.
Data Entry and Plan of Analysis (G)	Assignment consisting of (1) coding the completed data collection forms; (2) entering the previously collected data on diskettes; and (3) proposing a plan of analysis.	1 wk.
Quantitative Data Analysis (I)	Students are required to analyze and interpret data in view of hypotheses and a data base provided by the instructor.	1 wk.
Data Analysis and Report Writing (G)[a]	Students are required to analyze and interpret the data collected for the client study and submit a report of their findings, along with a presentation.	2 wks.
Final Project	Given a data base by the instructor and background information, students are expected to analyze the data and submit a report of their findings.	3 wks.
Final Exam	Short answer/essay exam of an applied nature.	—

(I) denotes individual assignment.
(G) denotes group assignment.
[a]This assignment receives double weight in the calculation of the student's overall assignment grade.

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DIRECT MARKETING AND ETHICS: A COLLISION COURSE

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Abstract

In recent years two concepts have garnered bands of supporters in the marketing discipline. The first of these concepts has been given a variety of labels; however, it essentially embraces the issue of the proper role of ethics in business in general and in marketing in particular. The second is the concept of direct marketing. Both of these are important to the marketing discipline; both have the potential to allow marketing to be more responsive to its consumers--to truly embrace the marketing concept. Unfortunately, the proponents of these concepts may find themselves on a collision course. The purpose of this paper is threefold: (1) to present brief backgrounds of the role of ethics in marketing and of direct marketing; (2) to outline their potential course of collision; and (3) to propose a way to divert this collision.

The Role of Ethics

Ethical problems arise when one interacts with other people. An individual faces an ethical conflict when he believes that his responsibilities toward one group are inconsistent with his responsibilities toward another, including himself (Hunt, Chonko, and Wilcox 1984).

Business executives and business educators have become increasingly concerned about the appropriate role of ethics in business activities and decision-making. Over two decades ago business executives identified eight major ethical problems that they wanted to eliminate, five of which pertained to marketing activities (Baumhart 1961). It is not surprising that marketing bears the brunt of the charges of ethical abuse in business. It is the most visible of the business functions and operates in an environment external to the business organization.

Most people would agree that they want a society in which ethics and justice prevail. To endure, private enterprise must operate so that people believe that justice does prevail (Martin 1985). This is a challenge because marketing faces skepticism and cynicism. For example, the 1983 Gallup poll listed several marketing occupations near the bottom of the ethics ladder. In addition, state, local, and federal governments have created a multitude of laws, commissions, and regulatory agencies in an attempt to achieve a just business society.

There is agreement that ethical principles should provide the basis for decision-making in general and marketing in particular. In addition to suggestions for incorporating ethics into marketing decision-making, researchers have conducted empirical examinations of the role of ethics in decision-making. A comparison of the ethical beliefs of marketing professionals and students with those of other groups indicated a significant difference between their ethical beliefs (Sturdivant and Cocanougher 1973). When compared with marketing academicians, marketing practitioners were more flexible in their evaluations of ethical practices (Trawick and Darden 1980). However, the differences between the academicians and practitioners were more a matter of degree than of substance. In other research marketers were found to be more manipulative than society as a whole (Hunt and Chonko 1984). In fact, marketing managers perceived their ethical beliefs and behavior to be superior to that of their peers; therefore, they felt themselves under no pressure to improve their ethics (Ferrell and Weaver 1978).

Other empirical studies identified unethical behaviors and practices. The general behaviors considered most unethical were those involving overt deception requiring direct action which could hurt another entity (Ferrell and Weaver 1978). The specific behaviors mentioned most often as ethical problems were bribery, fairness, honesty, pricing strategy, product strategy, and personnel policies, in that order (Chonko and Hunt 1985). The most reported ethical conflict involved the attempt to balance the corporate interests with those of others. Managers believed that there were many opportunities for unethical behavior, but that general unethical behavior did not lead to success.

Dealing with Ethical Problems

The ethical issues in marketing decision-making are not the problem; the problem is dealing with these ethical issues. Three specific recommendations for improving marketing ethics are professional codes of marketing ethics, marketing ethics committees, and ethics education for marketing managers (Laczniak and Murphy 1985).

Codes of ethics serve as operational guidelines for ethical decision-making and are at least a commitment in name to ethical principles. However, most existing codes are little more than public relations instruments. To be effective codes of ethics should deal with industry specific ethical issues and should be

enforced. They should be kept up to date so that they anticipate ethical conflicts (Laczniak and Murphy 1985).

A task force consisting of American Marketing Association members is drafting a new code of ethics that would replace the research code developed several decades ago as well as the general code of conduct (Marketing News 1986). Procedures for implementation have not been published at this writing. Violation of the code could result in suspension or loss of AMA membership.

Corporations should also have ethics committees with the power to investigate any potential ethical abuses in marketing, the right to protect the careers of employees who provide information on organizational wrongdoings from, and mechanisms to deal with ethical problems in decision-making. These committees should be devoted solely to ethics, not merely to social auditing or social responsibility (Laczniak and Murphy 1985).

Education would reflect possibly the greatest commitment to high ethical standards in marketing. In one study formal education was ranked as the number one factor for improving ethics in marketing. The improvement of marketing ethics requires the improvement of personal ethics (Trawick and Darden 1980). However, ethics cannot be taught as absolute values. Because ethical issues are so often complex and subtle, the ethical decision maker must be open-minded. This requires the teaching of ethical relativism, which recognizes individual differences in value systems (Robin 1980).

This education would be conducted on two fronts. The first would be periodic seminars for marketing managers that deal with ethics. The purpose of these seminars would be to increase marketers' awareness of ethical problems and to provide instruction about systems of moral reasoning and ethical thought (Laczniak and Murphy 1985). Multidimensional, nonutilitarian frameworks are best suited as educational tools to help managers become sensitive to factors important in ethical decision-making (Laczniak 1983).

The second front would be within university classrooms in schools of business. There are two valid reasons for this. First, AACSB standards require the coverage of ethics in business school curricula. Second, the marketing students of today are the marketing managers of tomorrow. To prepare these future marketers for their positions in business educators must be aware of "real world ethical issues" (Trawick and Darden 1980). This knowledge can help students become more able to analyze ethical problems and conflicts and to make responsible moral decisions.

However, the issue of teaching ethics in schools of business is by no means a settled issue. Some critics accuse ethics education of going too far (Gaski 1985), while others says it has not progressed far enough (Scott and Mitchell 1985). At least three alternative positions have been taken. The first would require the school to advocate ethical neutrality, neither teaching ethics nor taking a position on any ethical issue. According to the second position the educational process include the possession of the ability to discern right from wrong. The third is that the school has the responsibility to remind students that ethical decisions must be made and to help them learn how to make such decisions (Long 1984).

Although a census of 224 AACSB-accredited programs indicated that over 46 percent of the institutions offered a special undergraduate course in business ethics, only half of those institutions required that course to be taken by all business majors. An interdisciplinary business ethics course should be required of all business majors early in their studies (George 1984). Such a course should embrace both the theoretical and practical aspects of the study of ethics.

Direct Marketing

Direct marketing has been defined as "the total of activities by which the seller, in effecting the transfer of goods and services to the buyer, directs his promotional efforts to qualified audiences using one or more media and/or salespeople for the purpose of soliciting a countable order or inquiry by phone, mail from, or personal visit (in person or by phone) to, a prospect or customer, with this activity preserved on a computerized marketing database" (Hoke 1985).

The preceding definition of direct marketing contains four key phrases: (1) directs ...to qualified audiences, (2) one or more media, (3) countable order or inquiry, and (4) marketing database. First, direct marketing is extremely suitable for marketers interested in reaching a select target group. In fact, the narrower the target, the more likely is direct marketing to improve marketing performance (Edwards 1985, Jenkins 1984).

Second, direct marketing uses one or more communication media. These media can include postal and non-postal direct mail, telephone, interactive television, cable television, broadcast television, videotex, teletex, radio, newspapers, magazines, and such miscellaneous media as matchbooks, yellow pages, and bill and package inserts.

Third, direct marketing requires that a response or a transaction be recorded in some way, preferably by computer, so that the response is measured. The response and/or transaction can be measured at any location--vending machine, mail or telephone, personal visit or call by the seller, or personal visit by the buyer.

Fourth, the basic difference between marketing and direct marketing is that direct marketing requires a database (Hoke 1984, 1985, Jenkins 1984). Consisting of a mailing list of customers and marketing information about those customers. This database allows for a continued flow of information, which provides effective measures of the direct marketing message (Hoke 1984).

The Collision Course

It is both interesting and eye-opening to note that the majority of research and information about the role of ethics in marketing decision-making is found in journals aimed toward the marketing academician, while the majority of the research and information about direct marketing is found in journals aimed toward the marketing practitioner. The concern is that academicians may be reluctant to embrace the concept of direct marketing unless certain ethical issues inherent in the concept of direct marketing are addressed. Not only must these issues be addressed, they must be addressed in such a way that the academician can deal with them in the school of business classroom.

Direct marketing, by its very nature, faces several potential ethical conflicts. The most serious of these is the ethical abuse of the individual's right to privacy. Whether the direct marketer uses mail or telephone, the issue of consumer privacy arises (Higgins 1985). In addition, the use of computers to make telephone sales calls is not only annoying to consumers but also socially irresponsible (Brewer 1984).

Another ethical issue that centers around the individual's right to privacy arises from direct marketing's use of the database. A wide variety of personal data regarding purchasing habits and lifestyles, when combined with other information, such as telephone directories, auto registration, driver's licenses, mail responses, and warranty cards, can provide a detailed picture of each consumer. Some of these lists are used for purposes other than those originally intended (Higgins 1985). Even the Internal Revenue Service has expressed an interest in these direct marketing databases (Naimark 1985).

Another potential ethical abuse is the denial of the individual's right to be informed. Direct marketing has been charged with using "weasel-words" to mislead or guarantees and warranties as sales gimmicks (Lewis 1983, 1985).

A final area of ethical abuse is the use of such strategies and ploys as bribery and cajolery to get beyond the consumer's natural defenses (McTigue 1985, Naimark 1985). Similar ploys have been used in business-to-business direct marketing to bypass the defences of chief executive officers (Alpert 1985). At first, these may appear to be "smart marketing," but as consumers become more cynical and skeptical toward creative and "urgent" messages, the direct marketer may find himself in a similar position to the boy who cried, "Wolf!" Of the 52.8 billion direct mail pieces during 1984, about 51.7 were discarded, most of them unopened (Kendel 1985).

Some ethical issues have become legal issues. During the first five months of 1985 over fifty bills were introduced in various state legislatures regarding direct marketing. Some of these bills are designed to limit or prohibit the use of recorded messages or computer telephone calls (Edwards 1985). Over a dozen states currently have laws which ban or regulate automated calls (Posch 1984). Other bills would require telephone directories to have asterisks by the listing for individuals who do not wish to receive telephone solicitations and restrict the time of day such calls could be made (Edwards 1985).

Direct Marketing's Self-Regulation

These ethical and legal issues do not indicate that direct marketing has been lax in regulating itself. On the contrary, the majority of direct marketers actively support self-regulation through adherence to ethical guidelines. The Direct Marketing Association has published guidelines for ethical business practices, forty articles covering a wide range of activities and concerns in direct marketing (Hoffman 1985). One of the issues addressed is the consumer's right to privacy; information that consumers expected to be kept confidential should not be exchanged on mailing lists (Higgins 1985). Another focuses on stricter direct response advertising guidelines in an effort to deter misleading advertising (Hoffman 1985).

The Direct Marketing Association created the Mail Preference Service to allow consumers to have their names deleted from many national advertising lists (Hoffman 1985). Recently a parallel service was created for telephone lists (Edwards 1985).

Conclusions

Two concepts are making headway in the marketing discipline. Both of them have the potential to contribute to marketing; both have the potential to allow marketers to better adopt the marketing concept. Unfortunately, these two concepts appear to be on a collision course. Marketing practitioners must face the realism of profitability; marketing academicians have the freedom to escape many of the demands of reality.

However, the collision can be averted. The best way to do so is for marketing practitioners and marketing academicians to educate

each other. Marketing practitioners can make the academicians more aware of and more sensitive to the concept of direct marketing. This could be accomplished in a variety of ways. Business people engaged in direct marketing should conduct seminars for marketing professors and students at area universities. They should also make themselves available as speakers for university marketing classes and student associations such as collegiate chapters of the American Marketing Association. Direct marketers could also make internships available for both marketing faculty and marketing students. The Direct Marketing Association does offer many programs such as these; however, only a few faculty and students have been able to benefit from them thus far.

Perhaps the greatest potential educational tool direct marketing practitioners can provide to marketing academicians is to share "real life" ethical conflicts they have faced in their business dealings. In conjunction with the ethical problems, practitioners should share potential solutions to these problems, such as their existing ethics programs. Bringing such situations to the attention of academicians allows these practitioners to share their attempts to balance their responsibilities to consumers, owners, employees, and the general public.

Marketing academicians can help to make marketing practitioners more aware of and more sensitive to ethical issues. The university setting provides an excellent forum for business leaders to share with faculty, students, and the general public as well as with each other. Furthermore, this forum can also provide the direct marketing practitioner with outside-business viewpoints of ethical problems and their potential solutions.

The Direct Marketing Association's published ethical guidelines are an important foundation for ethical decision making. However, it is merely that--a foundation. To address adequately the issues underlying business ethics, marketing students in general and direct marketing students, specifically, need training in ethical decision making.

The ethical standards of marketing result from religious heritage and traditions of political, social, and economic freedom. They impose upon each individual high obligations in his dealings with his fellow men. New ethical and moral problems are created by the ever-increasing complexity of society. In marketing, as in every other activity, individuals must continually seek to identify appropriate standards to deal with these new problems. A responsibility rests upon all who engage in marketing activities, as well as upon those who help to develop the marketers of the future.

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A SIMULATION OF THE FACULTY-ASSIGNMENT PROBLEM: AN INTEGER PROGRAMMING APPROACH

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Abstract

In this paper, the authors formulate and solve the integer programming model of the faculty assignment problem. This integer programming model is capable of assigning different faculty members to different task forces according to their productivities.

Introduction

Mathematical programming problems are often concerned with the efficient use or allocation of limited resources to meet some objectives. A characteristic of such a model is the assumption that individuals make "rational" choices.

One variation of the transportation problem is so-called "personnel assignment problem." The proliferation of the personnel assignment problems can be seen in Collins, Gass, and Rosendahl (1983), Hansemann and Hess (1960), Harwood and Lawless (1975), Lilien and Rao (1975), Patz (1970), Ross and Zoltners (1979), Rothstein (1972), Shih and Sullivan (1977), Summers (1972), Taylor, Moore and Clayton (1982), and Trippi, Ash, and Ravenis (1974). The soluton algorithm can be found in the Hungarian algorithm of Kuhn (1955), Barr, Glover, and Klingman (1974) (1977). Specifically, individuals are assumed to have well-defined objects of choices and coherent rankings of these objects, and strive to choose the most preferred objects available.

In this paper, we will investigate the model of the faculty assignment problem in a given marketing department with limited resources (teaching hours). This model can easily be expanded to incorporate other constraints such as AACSB accreditation considerations, overload, and load reduction.

Model Formulation and Description

Suppose there is given an integer set M in which only finite positive integers are considered, let X_{ijk} denote the conventional 0 - 1 variable for faculty i to teach course j at schedule k for $i \epsilon M$, $j \epsilon M$, $k \epsilon M$. The objective is to maximize total teaching effectiveness subject to faculty and course demand constraints. This can be as follows:

$$\text{Maximize} \quad \sum_{ijk} e_{ij} X_{ijk} \tag{1}$$

$$\text{Subject to} \quad \sum_{jk} X_{ijk} \leq L_i \tag{2}$$

$$\sum_{ik} X_{ijk} \geq C_j \tag{3}$$

$$X_{ijk} = 0 \text{ or } 1 \tag{4}$$

Where

L_i = the maximum teaching load for faculty i

C_j = the minimum number of sections for course j

e_{ij} = an index of faculty productivity (e.g., student rating scores divided by the grade distribution average), or even better the difference between the pretest and posttest scores.

To simulate this integer programming assignment model, we make use of a hypothetical data on the productivity index of faculty members of a marketing department. This is shown in Table 1. Note that the rating scores from students range from 4 (highest rating) to 0 (lowest rating), and grades are computed based on the scale of A = 4.0, B = 3.0, C = 2.0, D = 1.0, and F = 0. In addition, release time is granted to faculty #1 and #2, and we assume only faculty #3 is willing to teach three sections of the same course. The code for each course is as follows:

1 = Principles of Marketing
2 = Marketing Management
3 = Retailing Management
4 = Advertising Management
5 = Industrial Marketing
6 = Physical Distribution Management
7 = Marketing Research

The faculty members of the department are fictitiously identified as follows:

1 = Brown
2 = Hausch
3 = Miller
4 = Reilly
5 = Sibley

TABLE 1
A HYPOTHETICAL PRODUCTIVITY INDEX OF FACULTY

Faculty i \ Course j	1	2	3	4	5	6	7	Course load of faculty
Brown	3.3** / 2.5***	3.1 / 2.2		3.5 / 3.0			3.5 / 2.6	2
Hausch	2.8 / 1.5		3.0 / 2.0		2.7 / 1.5			3
Miller*	3.7 / 2.7	3.9 / 3.0	3.6 / 3.1	3.8 / 3.5		4.0 / 3.6		4
Reilly		2.7 / 1.9	2.5 / 1.7			2.7 / 1.9	2.9 / 2.5	4
Sibley	1.9 / 1.5	2.1 / 0.9			2.3 / 1.6		2.3 / 1.7	4
# of sections that must be offered in the semester	5	4	3	2	1	1	1	17

* We assume that no faculty other than faculty 'Miller' would want to teach three sections of the same course.
** The numerators are the average student rating given to faculty i in course j.
*** The denominators are the average grade given out by faculty i on course j.

Discussion of the Result

Using the Lindo package on Vax, we are able to solve the model easily. The optimum schedule of the faculty assignment problem is given in **Table 2**. The computer assigns task based upon individual's comparative advantage. For instance, faculty 'Miller' and 'Hausch' have comparative advantage in teaching course #1. This particular course, therefore, should be taught between them.

Viewing from a different angle, faculty 'Miller' is to teach three sections of course #1 and one section of #4 even though the productivity index on course #4 is the lowest among four possible courses that he/she has taught. This is because only faculty 'Brown' and 'Miller' are willing to teach course #4 and they must split two sections of course #4. The allocation of course #5, 6, and 7 is strictly based upon production index, as can be seen by **Table 1**.

Summary and Conclusions

The model can be easily expanded to consider (1) changing productivity index, (2) overload situation when one would like to determine who is the most "optimum" candidate to teach course j and (3) course-reduction situation as to who is not to teach a section (or a course) that is be eliminated due to inadequate enrollments, and (4) AACSB accreditation in which nonterminal degree faculty members are discouraged from teaching graduate courses (Chaffin 1985).

For instance, the constraint will be $X_{141} + X_{142} + X_{341} + X_{342} \geq 2$ if only faculty members 'Brown' and 'Miller' are assigned to teach course #4.

This paper serves only a starting point to many future studies regarding the faculty-task allocation problem.

TABLE 2
INTEGER SOLUTION OF ADJUSTED RATINGS

Course j / Faculty i	1	2	3	4	5	6	7	Course load of faculty
Brown		1		1				2
Hausch	2		1					3
Miller*	3			1				4
Reilly		1	2			6		4
Sibley		2			1		1	4
# of sections that must be offered in the semester	5	4	3	2	1	1	1	17

* We assume that no faculty other than faculty 'Miller" would want to teach three sections of the same course.

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STRUCTURE AND LOCUS OF CONTROL IN MARKETING COURSES

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Abstract

The interaction of teaching methods with other educational constructs is relatively unexplored in marketing education. This paper describes the construct of class structure and how it interacts with teaching methods and certain student characteristics. The paper also describes how the examination of this interaction may help indicate the appropriate method of instruction.

Introduction

Decades of educational research have failed to reveal the most effective method of instruction. The main reason for this shortcoming is the failure to investigate the interaction of teaching methods with other educational constructs like class structure and student characteristics. The purpose of this paper is to explain the construct of class structure and how its interaction with teaching style and student characteristics produces effective learning situations.

Background

Research regarding marketing education has been conducted in various areas which can be summarized in four basic categories. The first category relates to the utilization of specific teaching techniques and approaches, including the use of audio-visual materials (Lipson and Gur-Arie 1981), the case method (Nastas 1984), class projects (Goretsky 1984), and others (Jackson and Morgan 1983; Madden 1983). The second category of study relates to student characteristics such as personality and learning styles (Tom and Calvert 1984). Articles relating to teaching specific marketing classes such as international marketing (Peters 1984), principles of marketing (Murphy 1981; Peek 1983), industrial marketing (Kortge 1982), and consumer behavior (McNeal and McDaniel 1981) represent the third category. Finally, there is research concerning the design of the marketing curriculum (McDaniel and Hise 1984), and the relationship of the curriculum to the career goals of marketing students (Hafer and Hoth 1981; Laric and Tucker 1982).

The overall design of the teaching process, sometimes referred to as teaching methodology (Burns and Golen 1983), incorporates all four of the above-mentioned categories of research. Yet despite a broad-based approach to the study of teaching methodology, research generally has failed to detect significantly different outcomes as a result of different teaching methods (Burns and Sherrell 1982; Kulik, et al. 1980). The main reason for these inconclusive results can be explained by investigating teaching methods in the context of other educational constructs like class structure and student characteristics.

Structure

The contribution of class structure to teaching methodology has roots in both the educational and leadership literature. Each of these streams of research will be discussed in the following sections.

The Educational Perspective on Structure

Course structure has been defined in the educational literature many different ways. Essentially it refers to the extent to which the teacher controls the teaching process and learning environment (Hersey, Angelini, and Carakushansky 1982). For example a highly structured situation would be one where the teacher sets the goals, determines what to do, and when, where, and how to do it. The specific dimensions of structure are many, including: use of time, use of space, direction of activities, and evaluation to name a few. If one quickly examines a principles of marketing course, it becomes clear that vastly different courses can be developed through the manipulation of structure alone. To a certain degree the structure defines the course. Only a few of the dimensions of structure are mentioned here. A more complete listing can be found in Katz (1972) and Dowaliby, Curwin, and Quinsland (1981).

Interest in structure arose out of the desire to determine the optimal method of instruction for all students. Indeed, much of the research on instruction prior to 1960 took this approach (Dowaliby, Curwin, and Quinsland 1981). The methods of instruction studied included lecture, discussion, open classrooms, student participation, etc. Although over 100 studies (see Dubin and Taveggia, 1968) were completed, the optimal teaching approach was not revealed. The studies either showed no differences between treatment groups or produced significant results supporting contradictory conclusions.

Subsequently, research became more multidimensional by taking into account aptitudes and traits of the students along with the method of instruction. For example, research studies have demonstrated that appropriate class structure is influenced by student attributes, namely the maturity of students (Hersey, Angelini, and Carakushansky 1982), and students' locus of control (Arlin 1975; Strom, Zimmer, and Hocevar 1982; Dowaliby, Curwin, and Quinsland 1981). The interactions between structure and these student attributes are discussed in a later section.

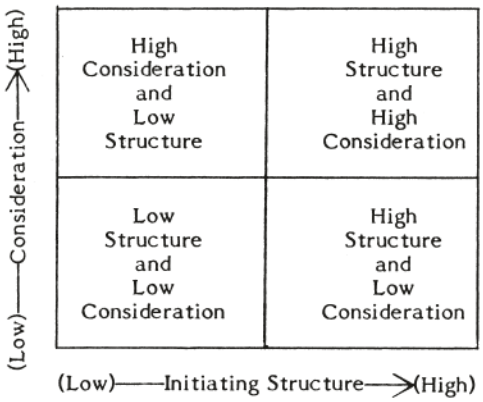
The Leadership Perspective on Structure

While it is not accurate to say that teaching and leadership are the same thing, clearly there is a dimension of leadership in teaching. In addition, the leadership literature provides many useful insights into the dynamics of the teaching process. For these reasons a short discussion of relevant leadership studies is included here.

Just as the educational studies were unable to establish one best method of instruction, leadership studies did not support the notion of one best form of leadership. The assumptions of scientific management did not appear to hold for leadership. Instead of a best style, leaders were viewed as having the option of being either autocratic or democratic. This later was revised to a continuum of possible styles ranging from autocratic to democratic (Tannenbaum and Schmidt 1957).

The dimensions of leader behavior were refined further by the Bureau of Business Research at the Ohio State University. As a result of their studies, the leadership dimensions were viewed as being completely separate independent dimensions rather than a continuum. A leader could be concerned both about the task and the individual, and did not have to trade off one concern for the other. These two dimensions were referred to as "initiating structure" and "consideration," where initiating structure refers to leader directed activities such as assigning tasks, setting standard rules and communicating expectations. Consideration involves promoting group interaction, flexibility and approachability of the leader. The Ohio State leadership quadrants, shown in **Figure 1**, describe four basic types of leader styles. The question still remained however, concerning which leadership style is best for a given situation.

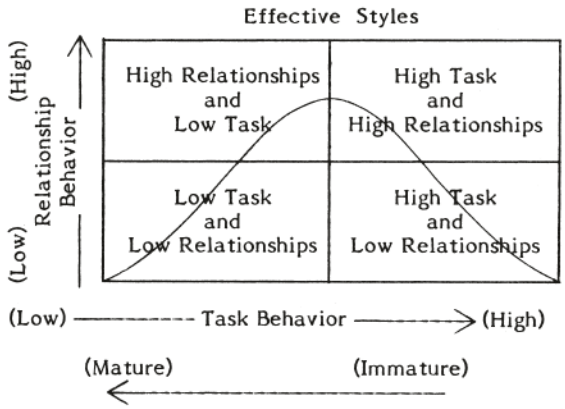
FIGURE 1
THE OHIO STATE LEADERSHIP QUADRANTS



One attempt at matching leader style with the situation is provided by the Life Cycle Theory of leadership (Hersey and Blanchard 1972). This theory is demonstrated in **Figure 2**. Notice that the leader should move through (1) high task and low relationships, to (2) high task and high relationships, to (3) high relationships and low task, to (4) low task and low relationships as the followers progress from immaturity to maturity. The appropriate leadership style depends on the maturity of the follower, where maturity refers to ability and technical knowledge in some area. The concept of maturity will be discussed in more detail later in the paper.

The contributions of the leadership studies to teaching methodology lie in two areas. First, the concept of structure or task orientation is highlighted as an important dimension of leader behavior. This is parallel to the notion of class structure in the education literature. Second, Life Cycle Theory offers insight into how a teaching approach could be manipulated to fit the class situation. For example, Hersey, Angelini and Carakushansky (1982) report on how Life Cycle Theory was applied to a class situation. In their experiment, class structure was changed as suggested by the theory; high structure in the beginning with decreasing structure as the course progressed. The results show that the experimental groups demonstrated significantly higher levels of learning than did the control groups, suggesting that class structure should indeed be adjusted to match the changing maturity of the students. Elsewhere, Blanchard and Hersey (1970) indicate high structure is appropriate early in an academic career but not for later courses. They cite the example of the failure of many self-paced learning curriculums. While these innovative programs might have their place, they are not appropriate for intellectually and emotionally immature students. Following this line of reasoning, a marketing curriculum should progress from high structure in principles courses to lower structure in more advanced courses.

FIGURE 2
LIFE CYCLE THEORY OF LEADERSHIP



This brief review of the leadership literature shows where leadership studies may provide some insight into how to alter teaching methodology to fit the teaching situation. The next section will look at student attributes and their impact on teaching methodology.

Student Attributes and Structure

The two types of student attributes discussed in this section are maturity and locus of control. Maturity, as discussed in the previous section, refers to ability and technical knowledge in a subject area as well as self-confidence in oneself as an individual. Argyris (1957) contends that as people mature they move from a passive state to a state of increasing activity and independence. This view of maturity is consistent with Life Cycle Theory, in that as people mature they become more independent and therefore require less structure.

Argyris goes on to state that these changes in maturity should not only be understood but also encouraged. Organizations should help individuals become more self sufficient. In the educational setting this means adjusting class structure to encourage development of student maturity.

The second student aptitude which has been shown to affect structure is locus of control. Originally formulated by Rotter (1966) this construct allows for the identification of two types of persons. "Internals" ascribe the consequences of activities to their own behavior and assume responsibility for them. Their perceived locus of control is internal because they believe a causal relationship exists between their behavior and its consequences. As a result, they believe they can change outcomes by changing their behavior.

"Externals" ascribe the consequences of their behavior to forces outside themselves such as luck or fate. As a result, externals do not believe that they can alter the rewards in their lives.

The way potential students perceive their ability to affect the rewards and outcomes in their lives influences which structure will be most effective in encouraging learning and satisfaction with a class. Educational studies involving locus of control tend to support the notion that internals prefer low structure while externals prefer high structure. A study by Arlin (1975) showed that for fourth, sixth, and eighth graders internals overall had a more favorable attitude toward their teachers. In addition, internals were more satisfied with their teachers in an open, unstructured setting than in a structured setting.

In a review of studies linking classroom structure with student achievement Strom et al. (1982) report that internals show greater achievement in less structured environments (Daniels and Stevens 1976; Peterson 1977, 1979; Strom and Hocevar 1980). These results were shown to apply also to the hearing-impaired (Dowaliby et al. 1981). In general these studies show a connection between locus of control and achievement and satisfaction.

The studies showing interactions between structure and student attributes (maturity, locus of control) support the notion of a contingency approach to instruction and with it the nagging question of determining the optimal instructional approach for each situation. The situational dimension complicates considerably the instructional process since a certain amount of student preevaluation is required.

The benefit of the contingency approach is that it specifies when different instructional approaches are appropriate. This is important since the development of a class structure which is optimal in all cases is not practicable. Thus locus of control and maturity become important keys in determining how to structure a given course.

Upon evaluating the research it appears that the most appropriate approach to instruction is to provide internals with an unstructured course and externals with a structured one. However, a case can be made that a major goal of education is to encourage and develop internals. Because internals take control of their lives they should have better opportunities for academic and business success. Internals are likely to believe that hard work will get them better grades and/or will lead to business success. Thus our proposition is that being internal is more desirable than being external. This proposition follows the work of Argyris (1957) who contends that as people mature they move from a passive state to a state of increasing activity and independence. Applied to the educational setting, Argyris' ideas suggest that highly structured classes are not in the students' best interests as they progress in their academic careers. While the move to independence or internal locus of control may not be easy, it appears to be appropriate.

At this point it is appropriate to ask "Should we merely match externals with high structure and internals with low structure environments or do we have a responsibility to 'create' more internals?" The answer seems to lie somewhere between these two postures. At the beginning of a program of study it is desirable to provide the commensurate degree of structure. If most of the class are externals then high structure is appropriate for the initial stages of training. To encourage the students to become more internal, the environment should gradually move to lower structure as reported by Hersey, Angelini, and Carakushansky (1982). This approach allows us to match properly students with course structure and encourage the development of internals.

This brings up the question of whether internal locus of control is really a predictor of success? Secondly, can locus of control be altered, and if so, how?

Locus of Control and Careers in Marketing

Locus of control has been the focus of many research efforts in business. These efforts have centered primarily on the relationship of locus of control and the work environment. Runyon (1973) found that internals are more satisfied with a participative management style because they seek more involvement. A similar study indicated that internals prefer to plan their work procedures and externals prefer that the work procedures be planned for them (Ruble, 1976). A related study done on an international basis points out that internally-oriented workers have greater job involvement than workers with an external locus of control (Reitz, Joseph, and Jewell 1979). Other related studies have detected the same basic relationship between locus of control and the work environment — internals are more likely to prefer an environment in which they control their actions and externals function better in work situations in which they are closely directed. These findings are consistent with classroom studies.

Most career paths available to students majoring in marketing would seem to favor an internal locus of control. It is well documented that successful personal selling requires a perception that outcomes are a function of the salesperson's activities and, therefore, are somewhat controllable by the salesperson (Churchill, Ford, and Walker, 1981). Studies regarding success in personal selling often identify personality components related to locus of control as important such as ego-drive (Mayer and Greenberg, 1964) and self-confidence (McMurry, 1968). Most other positions in marketing would seem to favor the individual who perceives himself or herself to be capable of controlling the work environment. Therefore, it is established to some degree in the business literature that the ideal candidate for success in marketing positions should be internally, rather than externally oriented.

The Development of Locus of Control in Marketing Education

Given that internals are more likely to have successful careers in marketing, the question arises as to whether this characteristic can be instilled and developed in students of marketing. Anderson and Schneier (1978) cite research that indicates that training procedures can alter an individual's locus of control. Therefore, teachers of marketing can play an active role in assisting students of marketing in the development of internal orientation. Manipulation of classroom structure may be one way in which this development can be accomplished.

A key issue in any plan to adjust course structure to meet students' needs is the degree of flexibility required of the instructor. The approach suggested here recommends tailoring the learning environment to meet the needs of the students rather than focusing on specific competencies of the teachers. Undoubtedly some teachers will be reluctant to adjust their teaching style which may have been developed and polished over the years. If this is the case these individuals should teach classes which are most appropriate for their teaching style.

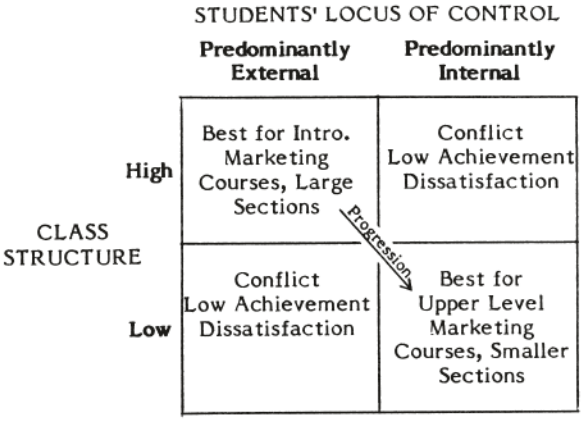
The whole point of the contingency approach to education is that the best teaching methodology depends on the situation. As educators we must be sensitive to the need to adopt our teaching methodology to the requirements of the learning environment. Or we should consider limiting our teaching to these environments that suit our teaching styles.

Conclusion

Class structure represents an important construct in marketing education. The manipulation of structure to meet differences in student characteristics seems not only possible but advisable. This paper has discussed structure and its relationship to two such characteristics: maturity and locus of control. Based on these relationships three propositions are proposed. First, there is not one best structure for all instructional situations. Rather, the optimal course structure depends on the maturity and locus of control of the students. Second, educators should attempt to match the students' locus of control with the appropriate level of structure. And finally, we should encourage the development of "internals" through the manipulation of structure. **Figure 3** summarizes the normative approach. Externals are started with high structure but then progressively moved to low structure. Internals start and remain in low structure environments.

Additional research needs to be conducted to empirically support and refine the general approach outlined in this paper. First, the concepts set fourth in this paper need to be empirically tested using data gathered from individuals employed in marketing and from marketing students. The most basic research question regarding these concepts concerns whether internal locus of control is desirable for employment in marketing. This question can be addressed by conducting studies that survey individuals currently employed in the marketing field. More research is also needed to refine the measurement of locus of control as a personality characteristic for marketing students.

FIGURE 3
RELATIONSHIP BETWEEN STRUCTURE AND LOCUS OF CONTROL



Second, studies need to be performed to identify the relative locus of control of target groups of students. These baseline scores can be used to determine what constitutes an external/internal orientation in marketing students of the specific institution involved and to gather longitudinal data as students progress through the marketing program.

Third, if beginning students are externals as expected, structure can be manipulated in various ways to change this position toward a more internal orientation. To make this change effectively, research into different elements of structure is needed. For example, after baseline scores for external/internal orientation are established, different teaching tools can be tested to determine which ones are most effective in changing the students' locus of control. These tools include both individual and group marketing projects, case studies, class presentations, and many others. Also, hypotheses can be tested that address other elements of structure such as the pattern of assignments and examinations. Finally, research should be done to determine the relationship of the time dimension in this change process. The time factor may have important implications for overall curriculum planning and design.

The areas of research discussed in this paper are generally uninvestigated in marketing education and it seems important for researchers in marketing to examine them closely. The theoretical and practical significance of this area represents a prime one for applied research in marketing education.

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SELECTING A UNIVERSITY: INFORMATION SOURCES AND TYPES

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Abstract

This study was designed to investigate the sources and types of information students use to decide between universities. A report of findings and implications for future research is provided.

Introduction

An understanding of consumers' buying motives, evaluative criteria, and decision processes is necessary in the application of marketing theory to specific organizations. Marketing academics have not been reluctant to call on university administrators to adopt the marketing philosophy in their approach to satisfying the needs of their principle consumers, students. As recently as last April's conference in Anaheim, members of the Academy of Marketing Science received yet another plea for educators to embrace the marketing perspective (Babb and Gigo, 1986). It is time that marketing academics reflect on their efforts in this regard and lead by actions instead of words.

Marketing academics may be in the unenviable position of having to lead by example. If a university's administration is unwilling or unable to engage in market research designed to better enable them to tailor their offerings to their target markets, business and/or marketing departments may have to do so on their own. Concrete evidence of the benefits of such activity may in fact be most persuasive in swaying administrators. Yet, how many business or marketing departments understand why their students chose their school, department or major; what type of information students used in making their decision; what was the relative significance of various information sources, what sources of information were used; what improvements could be made?

This paper presents a brief review of previous research in this area and reports the findings of a pilot study conducted to address the issue of information sources and types used in university education selection.

Previous Research

Academics are beginning to recognize the need to analyze their consumers' selection process from a marketing standpoint (Litten 1982, Saunders and Lancaster, 1980). Emphasis is turning toward examining how and why a student chooses one institution over another.

Chapman (1981) developed a model of institutional choice that linked the students characteristics, personal influences in the student's life, and the recruitment efforts of the institution.

Other researchers have addressed some of the factors which affect the selection of one university over another. Some of the more common factors are academic considerations (Kane, Parsons and Associates, 1981; Quinley, 1985); job market requirements (Bannister, 1984); location (Baker, 1974, Quinley, 1985); prestige of the university (Baker, 1979; Hammach, 1981); ease of entry (Sanders and Lancaster, 1980); cost (Brodigan et. al. 1980), and personal sources of influence (Sanders and Lancaster, 1980). Though hardly exhaustive, this spectrum of factors suggests the complexity of the process.

Gilmore et. al. (1981) note a major flaw in investigations such as those cited above. There has been a lack of analysis on the relationship between the factor at issue (e.g. prestige of the school) and the point in time that the student considers the factor in the decision process. In addition there has been little research done on the sources' of information impact on the decision process.

Based on this research the present study was undertaken. The study attempted to see 1) with what relative frequency, various information sources were used 2) to see which sources were used for the various types of information which were suggested in previous research as being used in the university selection process.

This pilot study investigates the information sources used in choosing between universities and the self-reported degree of influence of these information sources. Twenty-two potential sources of information were considered (see Table 2) across four information types (academic considerations, social climate, cost, and miscellaneous) provided by the Gilmore et. al. model (1981).

Method

Sample

Due to restrictions imposed by school boards, a convenience sample of participants was drawn from four high schools located in Eastern Canada and four universities in the same region. Participants were advised of the nature of the study and guaranteed anonymity. A total of

105 high school seniors' (H.S.) and 95 freshmen university students' (college) usable surveys were obtained. The university students were asked to answer retrospectively. High school students had to have indicated that they had decided to attend university but were not required to have chosen one to be included in the sample.

The Instrument

A questionnaire was composed consisting of four sections. Section one was designed to determine which were the most useful sources of information for respondents about universities. Additionally, it required students to indicate the degree of usefulness of the obtained information via a five-point scale (1 = less useful to 5 = more useful).

Section two was designed to determine what types of information (cost, social climate, academic considerations or miscellaneous) the sources indicated in section one provided.

Section three focused on the importance of the different types of information to the respondent in making a university choice. Respondents were asked to indicate the importance of the four general information types and then more specifically the importance of individual factors within these general categories. (See Table 3). Section four requested demographic data.

Results

Information Source Importance - Table 1 indicates a ranking of the number of times a specific source of information was indicated as being one of the five most useful sources of information for the two sample groups, high school and university students.

TABLE 1
RANK ORDER OF INFORMATION SOURCES
BY STUDENT GROUPS

	H.S.		College	
	High School Students Ranking and % of Group Selecting		University Students Ranking and % of Group Selecting	
	Rank	% Selecting	Rank	% Selecting
*High School Counsellor	1	76.2	2	65.3
Friends	2	70.5	1	70.5
Talks by university reps	3	44.8	4	32.6
University Calendar	4	38.1	3	62.1
Parents	5	35.2	7	26.3
High School Teacher	6.5	32.4	6	28.4
*Pamphlets	6.5	32.4	10	15.8
Siblings	8.5	21	11	4.2
Other people	8.5	21	11	4.2
Info. found in high school	10	17.1	8	24.2
Lit. sent in application pkg.	11	12.4	5	31.6

*p < .05

In all but two cases, high school students responded with greater frequency the use of information sources. The two exceptions being: use of the University Calendar and Literature Sent in Application Packages. This is probably due to the accessability of these two sources of information. If a high school student had not formally applied to a university then both sources of information would be relatively unavailable. These results support the idea that information sources change over time. Significant differences between the two groups at the p .05 level were found for use of high school counsellor and pamphlets. These findings support the hypothesis that information source values may change over time.

The information that previous research has suggested is used by students in making a university choice, were grouped in the present study into four categories. Residence fees, tuition fees, and the availability of scholarships were grouped into a category labeled "Costs". A second category, "Social Climate", includes information of a non-academic type, such as athletic programs, fraternities, and residence life. Prestige and variety of programs at the university were grouped under "Academic Considerations". Finally, a "Miscellaneous" category contains other potentially useful references such as religious orientation and student services.

Table 2 indicates the percentage of respondents reporting the use of various information sources for the four types of information previously discussed. The results are shown for the high school seniors, college freshmen and the two groups combined.

TABLE 2
RELATIVE FREQUENCY OF INFORMATION
BY TYPE

	Cost			Social Climate		
Information Source	H.S.	College	Comb.	H.S.	College	Comb.
- Friends in high school	*19	8	14	*43	28	36
- Friends in college	*29	17	23	*62	40	52
- Parents	*34	16	16	*16	6	12
- Brothers/Sisters	*24	15	20	27	17	22
- Other relatives	9	5	7	10	6	8
- High School Councillor	*42	27	35	19	15	17
- High School Teacher	11	6	9	16	12	14
- Girlfriend/Boyfriend	8	2	5	12	1	7
- Formal Campus Visits	7	7	7	11	10	10
- Informal Campus Visits	6	7	7	23	23	21
- Alumni Association Letters	2	1	2	1	0	2
- Information found in High School Councillor's Office	11	22	27	17	16	17
- Literature found at the University	13	11	12	7	6	7
- University Calendar	48	54	51	23	18	21
Literature sent in application package	25	30	27	16	17	17
- Talks by university reps.	47	18	33	40	23	32
- University open houses	5	0	3	10	2	6
- Ads on T.V., radio, newspapers	5	1	3	10	2	6
Displays at malls, libraries	2	0	1	3	2	3
Alumni activities	0	0	0	3	3	3
News media coverage	11	7	10	7	7	1
Other (please state)	16	3	5	9	3	6

TABLE 2
RELATIVE FREQUENCY OF INFORMATION
BY TYPE

(cont'd)

Information Source		Academic Considerations H.S.	College	Comb.	Miscellaneous H.S.	College	Comb.
- Friends in high school	*	*31	17	24	*32	19	26
- Friends in college		44	39	42	37	25	32
- Parents		47	24	36	*20	10	15
Brothers/Sisters		28	18	23	*21	11	16
- Other relatives		16	16	16	10	7	9
- High School Councillor		68	62	65	*33	20	27
High School Teacher		14	27	21	*17	8	13
Girlfriend/boyfriend		*11	1	6	9	4	7
Formal Campus Visits		10	11	10	7	9	8
Informal Campus Visits		11	14	13	11	13	12
- Alumni Association Letters		4	1	3	3	1	2
- Information found in High School Councillor's Office		36	34	35	22	13	18
- Literature found at the University		16	10	13	11	4	8
- University Calendar		*50	64	57	29	32	30
- Literature sent in application package		24	36	30	13	21	18
- Talks by university reps.		*52	37	45	*41	17	30
- University open houses		*10	2	6	7	2	5
- Ads on T.V., radio, newspapers		11	4	8	7	3	5
Displays at malls, libraries		4	2	3	3	0	2
Alumni activities		0	1	1	0	0	0
News media coverage		8	7	8	7	4	6
Other (please specify)		32	19	0	8	2	5

p < .05

TABLE 3
MEAN SCORE OF IMPORTANCE RATING

	Combined	H.S.	College	
Variety of Programs	4.2	4.1	4.2	
Prestige	3.8	3.8	3.8	
Tuition fees	3.5	3.6	3.4	
Student Services	3.2	3.3	3.1	
Scholarships	2.8	3.0	2.5	
Ease of Entry	2.8	3.0	2.6	*
Night life	2.5	2.9	2.2	*
Residence life	2.4	2.7	2.0	*
Residence fees	2.3	2.5	2.1	*
Frats	2.0	2.4	1.5	*
Religious Orientation	1.7	1.8	1.6	

* p < .05 1 = less important
5 = more important

Table 3 indicates the respondents' mean rating of the importance of specific types of information based on a five point scale from less to more important. Both groups rated information concerning the variety of programs offered and the prestige of the institution first and second most important respectively. Both types of information fall under the more general category, Academic Considerations. The general information type categories were rated by the total sample as follows:

Academic Considerations	4.5
Cost	3.5
Social Climate	3.2
Miscellaneous	2.9

Discussion

This paper provides a first look at the types of information used in selecting a university, its importance, and what sources were used to acquire it.

The results indicate that over 40% of high school students acquired information in all four areas from only one source for each area. However, the most used source in one area was not the most used for any other.

When seeking information, two sources were at the top frequency of use, "University Calendar" (48%) and "Talks by University Reps" (47%). The institution is seen as being the appropriate source for current cost information.

When seeking information about social climate, "Friends in College" was the most used by far at 62%. Interestingly, these friends ranked fifth as a source for cost data. The number one source of information for data on academic considerations was "High School Conselor" at 68%. High school counselors are reported as an important source for miscellaneous information as well as for cost data but not for social climate data.

As might be expected, since miscellaneous data tends to be institution specific, talks by university reps emerged as the most often mentioned.

There is also a wide variance in the sources used at all. Over three quarters of high school students stated they received some information from their counselors while virtually no one claimed to have received anything from alumni associations. Though this was a regional study, the authors feel that this is probably the general case.

When asked how important various criteria were, only four items had means of three or higher on a five point scale. The first two were academic in nature - Variety of Programs and Prestige of the University. This is the type of information that students get from their counselor and directly from the university. This information must be presented to counselors and in the schools own literature in ways that are meaningful to high school students.

The third criterion with a score over three was "tuition fees". High school students reported

that they got this directly from the university. The fourth criterion was student services. University reps must be aware of the importance of this criterion and be fully prepared to answer specific questions in this regard. Additionally, as the number two source for miscellaneous information are friends in college, it is necessary to promote services to present students to be sure all are aware of what is available. The third most used source for this type of information is High School Counselors and they also need to be made aware of the auxiliary services available - information such as the availability of stress reduction courses or religious counselling may be very important in the decision process rather than only after entry to university.

The information presented here provides many leads for future research. Several limitations of the present study lead directly to several future research needs. The fact that high school students tended to rate everything higher may not indicate that each item is more important, but rather that in the predecision stage the entire question is more salient. This may mean that university students are poor surrogates for high school students and future data collection efforts should take notice of this.

A second limitation is that this report deals with positive rather than normative data. It may be that various scores would be different if perceptions were that other sources would have the desired information. Future research should also investigate this in order to determine, for instance, if additional alumni activities would be worthwhile.

Another limitation is that current research was cross sectional. Had the data been collected at different points in the school year, it is possible that the results may have been different. Once again, future research should attempt a longitudinal approach to see if sources, information types, or importance ratings differ as students go through the decision process.

The current study did not investigate possible differences between students entering different majors. Future research should be conducted to see if different segments of students seek different information or go to different sources.

A final limitation deals with the quality of students surveyed. This study did not investigate if "A" students are different from "D" students. Longitudinal panel data may be necessary in order to determine if the information needs of top quality students differ from others.

Conclusion

If universities and/or business departments wish to successfully market their institutions, there is much that they have yet to learn about their students information desires and sources. Business departments, particularly marketers, may have to lead by actions to convert less market oriented administrators. Success can only come through intuition until comprehensive research is conducted. This study has attempted to provide a starting place for research into information sources and types used by students in their university selection process.

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THE VALUE-ADDED CONTRIBUTION OF A CORE MARKETING COURSE - A PRELIMINARY ASSESSMENT

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Abstract

Preliminary attempts have been made to measure the value-added contribution of a core marketing course. An examination was compiled to match guidelines set by an independent study outline, and test questions were selected from three texts recommended by the outline and also used in teaching the course at various times. A control group and two experimental groups were used to pre-test the examination. Students showed a 21.8 percent improvement after taking the marketing course, which dropped to 14.1 percent improvement prior to graduation; both results were significant at the 0.005 level. Students appeared to retain the more practical aspects of their instruction--planning and the marketing mix, while performing less satisfactorily in some of the "softer areas" --the role of marketing in society, buyer behavior, and the marketing concept.

Background

Interest has been expressed in evaluating the contribution curriculum and specific courses have on students' knowledge. Educators of course believe that courses significantly raise students' comprehension of subject matter, and it would be comforting to establish that improvement does occur. In the area of business studies, AACSB has a committee whose responsibility is to ascertain the viability of measuring the value-added component of business school's core curriculum. Consequently, a faculty committee was set up at our university to study the possibility of measuring the "value-added" contribution of specific core business courses, and two meetings were held in the Fall of 1985 to discuss testing methods. Because this activity was an initial effort to measure value-added, the operational aspects of these meetings focused upon the content of examinations and potential sources of questions for these examinations. The purpose of this report is to describe an attempt to measure the value-added contribution of our core marketing course with a preliminary examination. The nature of results give insights into both students' retention of subject matter and testing itself.

Little apparently has been written recently concerning attempts to quantitatively and systematically evaluate the value of a course. A preliminary computer-assisted search that used "Course Evaluation" and "Colleges" as keywords in the Dialog System located 164 articles. Only two, however, related to this topic. Rather, recent emphasis has been placed on attempting to assess students' satisfaction with courses or instructors. Wilson, for instance, evaluated students' perceptions of five undergraduate marketing courses (1979). No significant difference was found between using general scale and class-specific scales in assessing perceptions. Some suggestion was found that moderate-inference items were more appropriate for evaluating instruction than high-inference items.

An exception to this type concern for students' perceptions and more in line with a value-added approach to evaluation was Weidenaar and Dodson's assessment of economics instruction in two and four year educational institutions (1972). Responses of 677 junior college students were compared with 473 four-year college and university observations. A Test of Understanding in College Economics (TUCE) was used as a criterion in assessing impact. Post-course scores averaged 58 percent for four-year students, which represented a 40 percent improvement over pre-course average scores of 42 percent. Multiple regression results showed that age, ACT results, and pre-score on the exam, as well as taking the course, could be significantly associated with test scores. Johnson and Lucas went a step further in their evaluation. (1981) In a follow-up study of students majoring in banking at a junior college it was found that 84 percent of respondents were employed full-time. Fifty-eight were in management and were receiving about $3000 more than the all alumni average. One course taken by 93 percent of respondents, Principles of Financial Institutional Operations, was ranked as very beneficial by students in their work.

Composition of Examination

The examination was compiled to match guidelines set by the ACT Proficiency Study Guide for Marketing: Level 1. (1984) This Guide was selected because it served as a good summary of the syllabi collected as a convenience sample from twenty colleges that offer a beginning marketing course in their business core; this sample was taken as part of the committee responsibility. The study guide also had the added advantage that it is recognized as a standard for students who wish to obtain college credit by independent study. Twelve topics were included in this Guide that ranged in content from the Role of Marketing in Society and the U.S. Economy to specific elements in the Marketing Mix. Weightings of these topics ranged from 5 to 12.5 percent of total coverage; these weightings were incorporated into the examination in terms of questions included on a given topic.

Examination questions were selected from Instructors' Manuals accompanying three separate texts recommended as being suitable for independent study and also used over a two year period. (McCarthy & Perreault 1984; Evans & Berman 1985; Pride & Ferrell 1985). Sixty-seven questions were selected from each manual in weights as closely as possible adhering to the suggested weights of the independent-study outline. Texts were rotated to produce questions on specific topics. The selection of these questions was

somewhat at the discretion of this author, but in making selections questions were chosen that were rather basic and not peculiar to the text being used. If a topic was not covered in the text that was designated by the systematic approach, the next text was searched and the original order established as soon as possible. When more questions than topics were appropriate, the systematic approach was reapplied starting with the first subtopic in the given section until the required number of questions was obtained.

This procedure perhaps deserves some elaboration. The Guide had a certain emphasis associated with each topic. For instance, History of Marketing might have a five percent weighting. In a 200 question exam, this weighting meant that 10 questions would be required. Thus, if one started with textbook A, four questions on this topic would be selected from "A", three from "B", and three from "C".

These 201 objective questions from the three Instructor's Manuals were compiled into one personal computer file and split into two 100 question exams on an odd-even basis. Coverage of the original twelve topics was thus captured in each exam in the 5 to 12.5 percent weightings suggested in the independent study outline.

Pretest of Examination

The examinations were pretested on three groups of business students. Groups 1 and 2 were comprised of students who had not had the Fundamentals of Marketing course. Group 1 received a pre-test before taking the course and then a post-test after taking the course. By having two exams, post-tests could be different from pre-tests and still cover the same material with this same group. Group 2 took the exam at about the same time in the semester as Group 3 to simulate a class that had not taken a marketing course. Group 3 took the examination at about the same time as Group 2 and represented a group of students who took a Fundamentals course some time in the past and were now in a position to graduate. They thus replicated a group that demonstrated the "value-added" of a marketing course; that is, their business education was nearly complete in all subjects. Group 1 in their pretest, on the other hand, replicated a group of incoming students to the School of Business. The experimental design of the study is given in **Table 1**.

TABLE 1
EXPERIMENTAL DESIGN OF STUDY

Group 1	Pre-test	Course	Post-test
Group 2	--	--	Post-test
Group 3	--	Course	Post-test

At the time of the examination, both the Pride & Ferrell and Evans & Berman texts had been used at the University; McCarthy & Perreault was to be used in the upcoming quarter. One of these texts had been officially adopted by the Department and thus had been used by most students in the sample. At least four professors had taught the course over the time period in which the students had taken the course, and the study was conducted entirely at our University. Although educational background was not controlled in the pre-test group, it seems unlikely that any student had the benefit of a high school or junior college course in marketing. The student body at our University is ninety-five percent commuter, and no school in the area offers such a course. As an incentive to get Group 3 to take the examination seriously, exam scores were weighted into the grades for the course they were taking at that time as a "homework" grade. This practice was possible because the exam was given during an open period in their course. In the future, should this exam become institutionalized, thought has been given to including these grades as separate items in student transcripts.

The hypotheses associated with this experiment were:

H(1) - The post-test scores of Group 1 will tend to be higher than the pre-test scores due to the content of the course.

H(2) - The post-test scores of Group 2 will tend to be the same as the pre-test scores of Group 1 in the absence of a course in marketing.

H(3) - The post-test scores of Group 3 will tend to be higher than the pre-test scores of Group 1 because of the past course in marketing.

H(4) - The post-test scores of Group 3 will tend to be lower than the post-test scores of Group 1 because of a tendency to forget a portion of course material.

Results and Discussion

Test of Experimental Hypotheses

Results from the four applications of the examination supported the original hypotheses. That is, a positive value-added appeared to exist for taking the Fundamentals of Marketing course in both the short and long term. Students registered a 56.15 percent average immediately after taking the course, which compared to a 46.11 percent baseline indicated a 21.8 percent improvement over the baseline. Scores from students taking the examination at least a quarter after taking the course average 52.60 percent, an increase of 14.1 percent over baseline.[1]

These results deserve some reflection. It may be thought that a larger difference between the "uneducated" baseline and final results may have

[1] Because of the preliminary nature of this research, the time between course and test for this group was not controlled. Both these results were significant at the 0.005 level. The result that some forgetting occurred over the one to seven quarter time period between the course and examination was significant at the 0.10 level. Group scores are shown in **Table 2**.

been expected -- preferably with a higher mean for the students who had taken the course. Two items must be considered. At the same time that students were being evaluated, a test instrument was being developed. That is, at the time the test was used there was no certainty that it would distinguish between students that had and had not taken the course. It is comforting that a significant difference was measured, which shows that the approach for testing for value-added has merit. In drawing from prepared instructors' manuals, however, questions were selected from sources that routinely carry the authors' caution concerning use. McMillan recently has reflected on the nature and imperfection of some of these questions. (1986) Thus, the scores undoubtedly were impacted by problems in question formulation. In the two 100 question exams used here, for instance, 31.5 percent of questions showed a pre-course bias. That is, a tendency existed for students who had not had the course to answer questions more correctly than students who had taken the course. There thus was some question of validity in the test instrument. Weidenaar and Dodson showed similar concerns in using the TUCE examination in their study. (1972) It should be noted, however, that although no direct results exist for comparison, the 40 percent improvement referenced by Weidenaar and Dodson represent a 58.3 percent final score compared to a 41.5 percent baseline for four year students in their study. Thus, the 52.6 to 46.1 comparison of this study may not be at variance with expectations from the one reference most comparable to this work. Further, a rather high baseline may be expected. Students entering a school of business not only register a preference of study, but also interest and probably some prior learning or experience in marketing. Thus, base results above, perhaps considerably above, the 20 percent associated with random selection are to be expected. Results for graduating students, however, may be below, perhaps considerably below, the 75 percent that frequently is arbitrarily set as a mean standard for a course. Students naturally forget items that are easy to objectively test, i.e., the percentage of workforce included in marketing. Further, different instructors emphasize different information in a course. A test, therefore, that has a 40 percent baseline and 60 percent average for graduating students may be a very good examination.

TABLE 2
RESULTS OF TEST SCORES

	Pre-test	Post-test
Group 1		
mean	46.11	56.15
std. dev.	10.91	9.02
number	35	27
Group 2		
mean	--	45.31
std. dev.	--	10.55
number	--	29
Group 3		
mean	--	52.60
std. dev.	--	8.49
number	--	52

Selective Retention

With due reservations about examination problems, it nonetheless is interesting to note areas of apparent long-term learning retention. The twelve section composition of the examination permitted analysis of students' apparent learning experiences on subtopics. Retention was greatest in marketing planning, social issues, market research, the marketing mix (except for distribution) and international marketing. No significant difference existed between the scores of the two groups in the role of marketing in society, buyer behavior, marketing management and the marketing concept, and analysis of markets. Results are shown in **Table 3**.

TABLE 3
CONTENT SCORES FOR GROUPS

CONCEPT	CONTROL	EXPERIMENTAL	t-value
Role in Society	45.9	45.0	0.16
Management & Concept	33.7	32.1	0.28
Buyer Behavior	50.5	51.4	0.18
Analysis of Markets	48.9	51.9	0.68
Market Research	50.3	59.8	1.74**
Products	50.5	58.0	1.59*
Pricing	39.6	48.7	1.86**
Promotion	50.1	59.4	1.75**
Distribution	46.9	53.2	0.90
International	47.9	54.7	1.50*
Social Issues	33.9	43.4	2.23***
Planning	37.4	53.9	3.16****

* significant at 0.100 level
** significant at 0.050 level
*** significant at 0.025 level
**** significant at 0.005 level

"Experimental" -Post-test Group 3
"Control" -Pre-test Group 1

It would appear that students tend to retain the more practical aspects of their marketing course-planning and the strategic aspects of the marketing mix. If redirection is necessary in instruction, it may be required in the "softer" aspects of marketing -- marketings' role in society, buyer behavior, and the marketing concept. Thus, if some direction of emphasis is in order, it would appear to be in these areas.

Toward a More Discriminating Examination

Results suggested that a more discriminating examination might be developed, and the process for development would involve not much more than ensuring that questions were good questions; the content of the examination appeared suitable from parts 1 and 2 above. "Good" in this context means questions whose answers might be unambiguously differentiated by knowledgeable respondents. To illustrate, the following question was answered correctly by 65 percent of graduating students and by 22 percent of entry students. Although a hard question, it apparently focused

on an item covered in most classes and the correct answer, d., could be selected from the other four.

The major difference between merchant wholesalers and the other wholesalers is that they:

a. offer fewer wholesaling functions.
b. are more aggressive at selling than agent middlemen.
c. are willing to perform retailing functions.
d. own (take title to) the goods they handle.
4. have the lowest operating expenses as a percentage of sales.

Twenty-five such questions could be identified from the examination in which a 33.6 percent differential existed over a 34.5 baseline, an apparent 98 percent improvement with exposure to the course. These questions thus might be used to evaluate transfer students or students that might wish to "examine out" of a course.

It was not really the intent of this study to identify "bad" examples of test questions. In fact, unambiguous questions would have been much preferred. Examples of tricky questions nevertheless did occur. The following question is an example in which 18 percent of graduating students selected the correct answer, while 40 percent of incoming students answered correctly. The flaw in distinguishing the correct answer, b., appears to be associated with forcing from selections that appear very close to students with some marketing background.

Storing:

a. must be provided by all channel members.
b. is necessary when production does not match consumption.
c. is related to Place -- but not to price.
d. creates time and place utility.
e. all of the above.

As indicated previously, over 60 such questions were identified in the pretest of the 200 questions. Although it may not be fair to remove these questions from the examination, i.e., purposely bias the examination toward graduates, it would seem reasonable to review the ambiguity of responses. Some rewriting of questions as they now stand would thus appear in order from the results of this study. In particular, "all of the above" should be carefully considered as an alternative in these questions.

CONCLUSIONS

An examination has been developed that produces statistically significant differences in scores between students who have taken a core marketing course and those students who have not. The difference, although within the range that might be expected, was less than might be desired. The overall discriminating value of the examination could undoubtedly be improved by working on making specific question responses less ambiguous, which is desirable in any examination. Coverage can be judged as adequate and recommendations might be made toward emphasis of some of the more conceptual, or "softer", aspects of marketing theory. Results also could conceivably be used in faculty evaluation and AACSB accreditation.

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MARKETING MANAGEMENT

DIFFERENTIATION AND POSITIONING ARE REALLY A TYPE OF SEGMENTATION

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Abstract

There are a number of different strategies which can be used in approaching the market place. The oldest of these seems to be product differentiation and market segmentation, the current one seems to be positioning. There have been many in between. The purpose in writing this paper is to put all of these strategies in proper perspective and describe an overall strategy.

Introduction

Product Differentiation, Market Segmentation (Smith, 1956 and 1982); U.S.P. (Reeves, 1961, Ch. 13); Differential Advantage (Alderson, 1965, Ch. 8); Differentiated Marketing, Undifferentiated Marketing, Concentrated Marketing (Kotler, 1967, p. 57); Multi-brand Strategies (Young, 1967); Benefit Segmentation (Haley, 1968); Product Segmentation (Barnett, 1968); Product Positioning, Behavioral Life-Style Segmentation (Alpert and Gatty, 1969, p. 65); Behavioristic Segmentation (Alpert and Gatty, 1969, p. 65; Kotler, 1980, p. 202); Perceptual Mapping (Johnson, 1971); Positioning (Trout and Ries, 1972); Life Style Segmentation (Plummer, 1974; Belch, 1982; Bushman, 1982); Competitive Positioning, Market Positioning (Kotler 1980, p. 84); Geographic Segmentation, Behavioristic Segmentation (Kotler, 1980, p. 200 and 202); Niche Strategies (Kotler, 1980, p. 285-87); Brand Positioning (Fennell, 1982, p. 97); Category Positioning, Selling Positioning and Commercial Positioning (Ennis, 1982); Person Situation Segmentation (Dickson, 1982); Mass Marketing, Product-Differentiated Marketing, Target Marketing (Kotler, 1983, p. 213); Image Mapping (Koten, 1984, p. 35), Competitive Advantage (Porter, 1985) and still other terms are used by different authors to describe a basic fundamental marketing strategy.

Each of these terms is supposed to represent a different strategy or a different aspect but there are probably more similarities than there are differences between the terms. Some of these terms are favored because they are old and familiar. Others are favored because they are new and faddish. Certainly they all have their own separate definitions. In reality there is only one strategy: segmentation. The rest are just different names for segmentation or define the basis for segmentation or the number of segments. This is a controversial position. It will be very hard for some readers to accept this concept. It reflects a common problem we have in marketing (and in other fields). Marketing people cannot agree on how to define terms and frequently use different terms to describe the same process. Academics do not agree with other academics, practitioners do not agree with practitioners in other industries and academics do not agree with practitioners (Rayburn, Cooke, Abercrombie, 1985). Nowhere is this more obvious in marketing than in the subject of segmentation (Fennell, 1982). The claim is made here that despite all the different names there is only one strategy, segmentation. A rose by any other name is still a rose. If for no other reason this is important for simplicity in theory formation.

The purpose in writing this paper then is to make the argument that all these concepts reduce to segmentation. There are two preliminary comments:

1. It is not necessary in making the argument presented in this paper, to define every one of the synonyms for segmentation listed in the first paragraph.
2. The argument is built on the idea that sellers sell and buyers buy a marketing mix, rather than a thing or product (Cooke, 1983). This is a key concept in making these arguments.

Some Basic Principles

It is necessary to state some basic current principles:

1. For almost every significant market (product category) it is not possible today to satisfy the wants and needs of every buyer with the same marketing mix.

There are two reasons for this. The first is that consumers have different wants, needs and desires. The second is the existence in almost every market of at least several competitors. If all competitors use the same marketing mix (undifferentiated or mass marketing) it would give at least one competitor a differential advantage (Alderson, 1965, Ch. 8) with some portion of the overall market, if that competitor changes their marketing mix (by changing any part of any element) to better meet the wants, needs and desires of the buyers which are not being satisfied by the existing marketing mix. This part of the argument is based on the different wants, needs and desires of buyers.

2. The market for a product category is made up of a number of segments which can be called target markets.
3. Each target market is best reached with a marketing mix specifically designed for that target market.

These two really follow from the first principle. It is not important to this discussion if one firm's strategy is to go after all target markets with a different mix for every target market (differentiated marketing) or to go after only one (or a few) target markets (concentrated marketing) with a special mix for that one market.

4. In the extreme, the number of target markets could equal the number of buyers in the overall market. In other words, every individual wants a different marketing mix.

Economically, it is impossible for sellers to provide that many marketing mixes which leads to

another point, which is that increases in overall market size and technological developments make it possible to economically satisfy many more target markets today that was possible thirty years ago. This is one reason why product differentiation which was once relevant may no longer be relevant.

5. Target markets overlap, that is, target markets are not mutually exclusive.

If individuals are grouped into larger target markets, but each individual wants a different marketing mix, then the marketing mix for that target market will be geared to the one individual who is the average for that aggregated target market. As a result, those individuals who are at the edge of the target market will also be potential customers for adjacent marketing mixes (see the Appendix). As an example, assume that there are only three brands of automobiles in the market place: Chevrolet, Buick, and Cadillac. Some individuals will buy only one of these brands and will not consider the other two, but there will be a sizable group (maybe a majority) who will have trouble deciding between the Chevrolet and the Buick or between the Buick and the Cadillac. In each case, it would be profitable for some seller to bring out a brand in between each pair.

6. It is the buyer, not the seller, who decides what segment they are in.

The buyer makes that decision when the buyer buys and the buyer switches segments with changes in marketing mixes.

To summarize these principles, there is a demand for many different marketing mixes in almost all product categories, there are enough competitors to put pressure on sellers to provide a wide variety of marketing mixes, it is economically feasible to provide a wide variety of marketing mixes and finally, there is no one single marketing mix that will satisfy all buyers in a given product category.

The Difference, If Any

The purpose in writing this paper is to put differentiation, segmentation and positioning in the proper perspective and to describe an overall strategy for the seller. The overall strategy is to segment, that is to determine what target market will be served by the seller. There are several different ways to identify a segment (target market). A seller can use any combination of these methods. Whatever method(s) is used will also help in designing the marketing mix itself.

The two major methods of segmentation are by geographic and other demographic or psychographic characteristics (market segmentation) and by product characteristics (product segmentation). Some of the other types of segmentation are listed in the first paragraph of this paper.

Differentiation and Positioning

Once a target market has been established and a marketing mix designed for that target market, the seller can expect that eventually a competitor will try to serve the same target market with an allegedly identical marketing mix. This is sure to happen if one seller has found a mix and target market that is profitable. When this happens, product differentiation is said to occur, but it will be shown below there is no longer any product differentiation. Product differentiation is defined as the strategy of taking a homogeneous marketing mix and making it appear different (better) in the mind of the buyer through the use of mass selling techniques (which are part of the mix) (Cooke, 1984; Simon and Cooke, 1986; Cooke and Simon, 1986).

Incidentally, product differentiation (Smith, 1956; Cooke, 1984; Simon and Cooke, 1986; Cooke and Simon, 1986) is not the same as product-differentiation marketing (Kotler, 1983, p. 213) which as a matter of fact is almost the opposite. A reviewer of another paper confused the two terms, apparently did not even know the meaning of product differentiation. This is only mentioned because it illustrates the problem with having in current usage so many terms that address the same area of marketing strategy but can be obsolete, confusing and/or contradictory. As mentioned before, the purpose in writing this paper is to simplify the concept by showing that today there is really only one strategy, it is called segmentation.

The market for a general product category consists of a series of overlapping target markets with each separate target market served by one or more allegedly identical marketing mixes. The allegedly identical marketing mixes for one target market differ from the allegedly identical marketing mixes for the other target markets. This means there are a series of marketing mixes with gaps in between them. The gaps can be filled by designing a new marketing mix for a new target market whose average member is in the center of the distance between the two existing different marketing mixes - see the Appendix. Carried to the extreme, there would be a different marketing mix for every individual in the market which as noted above is not economical. The answer is to position one of the allegedly identical mixes in the gap. Positioning is defined as a strategy of positioning your marketing mix in relation to the competitors' marketing mixes, in the mind of the buyer, through the use of mass selling techniques (which are part of the mix) (Cooke, 1984; Cooke and Simon, 1986). The argument is being made here that there is no real difference between product positioning and product differentiation (Maggard, 1976). The purpose of positioning as defined by Trout and Ries (1972) is to say that the seller's marketing mix is different even though it is not. This sounds just like product differentiation.

Segmentation

To some extent, positioning is a practitioner's term while segmentation is an academic's term (Fennell, 1982). The procedure described in this paper may not be consciously followed by most practitioners. Instead, in the real world

there is a continuum (assuming, for the sake of discussion, only one dimension) of different marketing mixes for a given market (see the Appendix). A practitioner may see a gap in this continuum great enough to be a separate target market, and the practitioner may try to position a marketing mix to fit that gap. The practitioner may try to do this with changes (real or perceived) in the product part of the mix. Although the practitioner thinks in terms of positioning, what is really happening is some form of segmentation, a different product (therefore a new marketing mix) for the gap which is a new segment. The issue is whether this is just a question of semantics or a question of a significantly different approach.

Differentiation

As for product differentiation, in reality, there is no longer such a strategy. If two marketing mixes are allegedly identical, but through mass advertising and the resultant image created in the mind of the consumer, one marketing mix is perceived as being different then it is a new marketing mix, a different marketing mix, which appeals to a somewhat different segment (see the Appendix). Since advertising and the resultant image are part of the marketing mix (Cooke, 1983) it is impossible to have totally identical marketing mixes. Because of the different wants, needs and desires of buyers it is not possible to have several different mixes directed to the same target market because a difference in the mix means a difference in the target market but with substantial overlap in the target markets.

The Segmentation Strategy

The overall marketing strategy suggested in this paper is to:

1. Identify a target market. This is called segmentation. The type of segmentation is determined by the variables used to identify the target market. A variety of different variables can be used alone or in combination.
2. Design a specific marketing mix for the target market. The variables used to identify the target market will be helpful in designing the mix. For example, demographic variables will be useful in selecting promotional media and benefit or product attribute variables will be useful in designing the product and developing the promotional message.
3. If a competitor approaches the same target with an identical marketing mix it will be necessary to differentiate. Successful differentiation means a different (new) marketing mix which is really further segmentation since somewhat different mixes appeal to different but overlapping segments.

Both the automobile and cigarette industries are excellent examples of simultaneous execution of these traditional (Smith, 1956, 1982) strategies of segmentation and/or differentiation. The only difference between what Smith described and what exists today is the manner in which the two strategies are carried out. The segmentation concept has been expanded and successful differentiation is really further segmentation. Positioning is an interesting concept, but it is certainly not new. In reality a new position is just another segment, a new target market being satisfied by a new marketing mix. Salem and Kool apparently appeal to the same segment but in actuality there are significant differences in taste and in the two segments.

If some of the marketing mixes differ only in minor detail or in consumer perceptions, there will be considerable overlap in segments. The closer the competitive marketing mixes are to each other in each individual element, the more overlap there will be between segments, to the extent that identical mixes (if such a thing is possible) serve identical segments. The existence of overlapping segments is another key part of this argument.

Conclusion

Once upon a time there was product differentiation and market segmentation. Coke and Pepsi tried to appeal to everyone with one product, one size, one marketing mix. Some observers considered this to be differentiation, but originally it was segmentation with Pepsi using a price appeal (two full glasses for a nickel) for the cost-conscious consumer segment and Coke trying to ignore Pepsi. Eventually Coke became very price competitive because of loss of market share to Pepsi. Meanwhile, both started to segment, first in container type and size, and then in numerous variations and combinations (Coke, Classic Coke, Diet Coke, Cherry Coke, Diet Cherry Coke, plus Tab, plus caffeine-free versions, plus non-cola carbonated beverages in cans, glass and plastic, from six ounces to four liters not counting syrup sales). This is clearly segmentation.

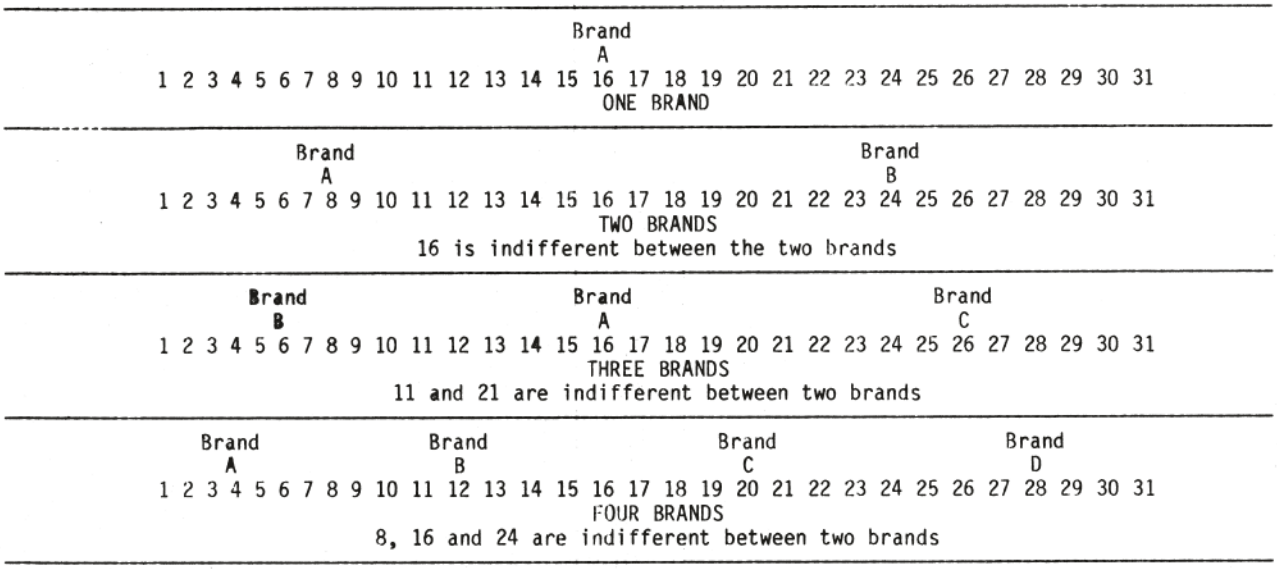
Anyone who wants to be in this market must for competitive reason, start with some segment whether they realize it or not. They may try to appeal to the entire market, but their marketing mix will appeal only to a segment because Coke and Pepsi and several others already have numerous different marketing mixes. Because of the existence of so many mixes the total market consists of many overlapping segments. The carbonated beverage market is very large and therefore can and does support a large number of different mixes as do many other markets.

Appendix

To illustrate the points being made in this paper, assume a market with thirty-one individual buyers is being served with one marketing mix (brand A) - see Table 1. The wants, needs and desires of this market (product category) can be expressed (assuming only one dimension) with a range (continuum) of one to thirty-one. Only one buyer will be fully satisfied with brand A and the farther away a

FIGURE 1

MAXIMUM SATISFACTION FOR VARIOUS NUMBERS OF BRANDS IN A MARKET



buyer is from the brand A marketing mix, the less the buyer is satisfied with brand A.

It can be shown mathematically that maximum market satisfaction will occur if brand A is aimed at the sixteenth buyer assuming that the differences in needs, desires and wants are linear. Assuming the seller of brand A knows this and aims the brand at buyer sixteen, then buyer one and thirty-one will have no choice since there are no alternatives. (Note that the assumption of one linear dimension is used only to simplify the discussion. The realities of many, not necessarily linear, dimensions only illustrates the many possible different overlapping segments and actually makes for a stronger argument. The logic would be the same, but this explanation is certainly easier using one linear dimension).

Knowing that there are some dissatisfied buyers and assuming that brand A will not be shifted, it will pay some seller (including the seller of A) to introduce new brands. Assuming sellers understand the market and want to maximize satisfaction two new brands will be introduced, B aimed at buyer six and C aimed at buyer twenty-six (see Three Brand model). Brand B will satisfy buyers one to eleven. Brand A will satisfy buyers eleven to twenty-one. Brand C will satisfy buyers twenty-one to thirty-one. Note that two buyers (probably more), eleven and twenty-one, are indifferent between two of the brands. All of this is clearly segmentation (target marketing) but can also be called positioning. If the new brand is positioned between any two other brands, it is obviously segmentation. If the new brand is positioned at one of the existing brands, this would be differentiation, but in reality successful differentiation is slight segmentation because these are marketing mixes where the product (or thing) may be identical, but the total package (the marketing mix) is in reality different due to image and perception (Cooke, 1983). In other words if the buyer thinks it is a different mix than it is a different mix.

Finally, note that some prospects are overlapped because they are indifferent between brands, for example, eleven and twenty-one in the three brand example. Others overlap because some of the time they prefer one marketing mix and other times another marketing mix. Still others react to real or perceived changes in marketing mixes.

There is a pronounced tendency to think only in terms of the seller designing a marketing mix for a specific target market (segment). This ignores the fact that every marketing mix ends up satisfying a segment (target market) that is based on the buyer's decision to be in that segment (target market). The buyer makes that decision when the buyer buys the marketing mix. The buyer may decide not to buy that marketing mix the next time, not because there was a change in the marketing mix (real or perceived) but because some other marketing mix has become more appealing (real or perceived). This other marketing mix may be new or it may have undergone some change. The point is that buyers may be in more than one segment at a time or shift from one segment to another. This is another explanation of how it is possible to have a number of marketing mixes which are not identical, yet are competitive, with each marketing mix appealing to a specific segment that overlaps other segments.

At any given moment the segment (target market) is those people buying the specific marketing mix. Thus at a moment in time there are no overlapping segments. Segments overlap in that buyers may shift from one marketing mix to another.

The degree to which two sellers directly compete is a function of segment overlap. If it were possible to have two sellers serving 100% identical segments they would be totally competing. Because of segment overlap two sellers serving totally different segments can still be in competition because the action of one can effect the other as buyers shift segments and sellers to intervening segments react.

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PERCEIVED RISK IN BUYING APPAREL FROM SELECTED RETAIL PATRONAGE MODES

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Abstract

The notion of perceived risk as an important influence on consumer behavior has been well documented. This study examines the perceived risk associated with nine apparel categories purchased from six retail patronage modes. The findings indicate that there are significant differences in the amount of risk associated with purchasing apparel from the different retail modes. Similarly, apparel products purchased from the same retail mode also exhibited significant differences.

Introduction

An emphasis on product and brand selection rather than store selection is common in the marketing literature. Nevertheless, a preoccupation with product and brand selection may represent a suboptimal allocation of effort. In many cases, consumers may select a retail patronage mode prior to considering particular brands (Darden 1980). Thus, in instances where consumers move from need recognition to selecting a retail mode, attitudes toward alternative retail outlets constitute an important influence on the buying process.

Central to the study of attitudes toward retail patronage modes is the determination of the amount of risk associated with various alternatives. That consumers can be biased towards some retail outlets and not others, and that this bias is transferred to products, introduces an element of risk into the retail patronage decision. Moreover, bias can be store-specific, whereby the consumer displays a consistent like or dislike for all products from that store, or it can be product-specific, where risk may be high for one product and lower for another. A plausible explanation for consumer bias is that it represents the end result of the perceived risk the consumer associates with purchasing products from a specific retail mode.

Perceived Risk and Retail Patronage

Bauer's (1960) initial conceptualization of perceived risk stimulated extensive research in the area. Horton (1976) points out that perceived risk research is "one of the very few research areas in consumer behavior which can properly be said to have a research tradition" (p. 694). Although perceived risk is not the sole explanatory factor in buyer behavior, it has been established as an integral part of the purchase decision. As a result, one can better understand the consumer buying process if it is examined in light of the consumer's attempt to handle the risk associated with the purchase.

The areas of research on perceived risk are numerous. Research has focused on the conceptualization and structure of the construct, the components and dimensions involved, its measurement, and the risk reduction strategies chosen by consumers (Ross 1975). The construct has been studied in light of its relationships to many of the functional aspects of marketing (e.g. advertising effectiveness [Barach 1969], new product trial [Popielarz 1967], brand importance [Taylor and Rao 1980]). Perceived risk has also been related to many familiar topics in the consumer behavior literature (e.g., group influence [Perry and Hamm 1972], personality [Schaninger 1976], self-confidence [Zikmund and Scott 1973], information processing [Lutz and Reilly 1973; Nicosia 1967]). Despite the popularity of the topic, only a few studies have examined the risk consumers perceive when selecting a retail patronage mode.

Cox and Rich (1964) examined the perceived risk associated with telephone shopping. They concluded that the higher risk associated with this shopping mode discouraged shopping by phone. Spence, Engel, and Blackwell (1970) reported that purchasing by mail was perceived riskier when compared with instore (or direct from a salesperson) shopping across 20 product categories.

Hisrich, Dornoff, and Kernan (1972) examined whether the acquisition of additional information was a more salient or a less salient risk reducing tactic than repeat patronage (store loyalty). They concluded that the quantity of information sought was a direct function of the patronage risk perceived. Moreover, store loyalty was not employed as a risk-handling tactic.

Prasad (1975) reported that for products having high levels of social risk, the upper socioeconomic strata held significantly less favorable attitudes toward purchasing these products from discount stores. Similarly, Dash, Schiffman, and Berenson (1976) reported that specialty store patrons experienced lower levels of perceived risk in the purchase of audio equipment. However, Granzin and Schjelderup (1980) concluded that perceived risk is a situational specific phenomenon that does not have an impact on the retail patronage modes selected by consumers.

Although these studies have contributed to our understanding of how risk relates to the retail patronage selection, the perceived risk area is very complex and warrants further inspection. Moreover, to date no study has examined the perceived risk attributed to a full range of retail patronage modes including in-store methods (e.g., specialty stores, department stores, and discount stores), and non-store shopping methods (e.g., catalogs, direct mail, and media advertisements) across product categories. Neither has the degree of risk attributable to different products purchased from the same retail mode

been studied. The purpose of this research is to investigate these issues.

Methodology

Sample

The data for this study were gathered as part of a national survey in which a self-administered questionnaire was sent to a sample of 1800 households drawn from the Market Facts Consumer Mail Panel. A total of 1462 completed questionnaires were obtained. After eliminating those with missing data, 1143 were usable for this study.

The resulting sample, similar to other studies utilizing mail panels, contained some biases when compared with the national population (in parenthesis). For example, there were more married respondents, 82 percent (71 percent); more females, 69 percent (51 percent); and the median age is 51 (30) with 20 percent (11 percent) being 65 or older. The sample was somewhat higher educated (high school graduates, 33 percent [37 percent]; college degree or graduate work 34 percent [17 percent]); and unskilled workers represented 9 percent (28 percent) of the sample. Income levels were consistent with characteristics of the national population.

Survey Instrument

Respondents were asked to indicate the amount of perceived risk associated with the purchase of nine different apparel categories from six different retail patronage modes. The apparel categories consisted of suits/dresses, sports jackets/blazers, dress slacks/ skirts, dress shirts/blouses, jeans, casual slacks/skirts, women's lingerie, accessories, and shoes. Apparel was chosen as the specific product class because it is purchased from a variety of patronage modes, and it should engender sufficient and measurable perceived risk due to its socially visible nature (Prasad 1975). Respondents should also be familiar with this product class due to purchase frequency. Moreover, different apparel categories should have different levels of risk (i.e. suits would be perceived as riskier than jeans).

The patronage modes examined represented a nearly comprehensive set of retailing alternatives when purchasing apparel. Three in-store retail modes (specialty stores, department stores, and discount stores) and three non-store retail modes (store catalogs, other catalogs and direct mail, and media advertisements) were utilized in the study.

Perceived risk was measured using a modification of the Cunningham (1967) scale. The respondents were asked to indicate for each apparel category within each patronage mode the certainty of satisfaction on a three-point scale (not certain [1], somewhat certain [2], and very certain [3]) and the seriousness if it were unsatisfactory also on a three-point scale (annoying but not serious [1], somewhat serious [2], and very serious [3]). This measurement approach is similar to one used by Dash, Schiffman, and Berenson (1976). An index was created by following the scoring approach of Cunningham (1967) and scaled to a five-point index from low (no) risk (1) to very high risk (5). Cunningham (1967), Zikmund et.al. (1982), and Lumpkin and Massey (1983) have provided convincing arguments in support of the validity of this measurement approach.

Analysis Procedure

The first stage in the analysis was to determine whether the perceived risk associated with the nine apparel categories exhibited significant differences across the retail patronage modes. Multivariate analysis of variance (MANOVA) was employed to determine the significance of differences. MANOVA is a useful technique when there are multiple interval scaled criterion variables (perceived risk of apparel categories) and one categorical predictor variable (retail patronage mode) (Green 1978). MANOVA is similar to univariate analysis of variance except that differences between group centroids are examined (Cooley and Lohnes 1971).

If overall differences exist between the groups, further analysis will be conducted to determine the source of these differences. Two procedures will be utilized. A univariate analysis of variance will be conducted of each criterion variable to determine where differences occur. Multiple discriminant analysis (MDA) will also be utilized to help determine the direction and intensity of each criterion variable's impact on the overall group differences.

The second objective of this research was to determine whether the perceived risk associated with the nine apparel categories exhibited significant differences within a specific retail patronage mode. The same analytical procedure will be applied: a MANOVA will be completed and if significant results are forthcoming, a MDA and univariate F tests will be conducted to identify the nature of these differences.

Analysis

The results of the MANOVA examining the overall perceived risk images of the retail patronage modes are presented in Table 1. The multivariate test across groups was significantly different at the .000 level. Consequently, it can be concluded that there were statistically significant differences in the amount of risk associated with purchasing apparel from the various patronage modes.

A MDA was conducted to examine the nature of this difference. The varimax rotated canonical loadings are provided in Table 1. The differences appear to be manifested in three dimensions. Based on the canonical loadings, the following dimensions were identified: casual clothing, dress clothing, and shoes. The differences in the perceived risk associated with purchasing apparel products from the six patronage modes can be broadly classified along these three dimensions.

TABLE 1
Differences in Risk Associated with Apparel Categories Across Retail Patronage Modes

	F-Value	Canonical Loadings I	II	III
Multivariate				
F Approximation	103.31[a]			
Univariate				
Jeans	602.84[a]	.8306	.1462	.3403
Accessories	539.04[a]	.7572	.3236	.1666
Casual Slacks/Skirts	683.78[a]	.7566	.4546	.1863
Women's Lingerie	586.37[a]	.6043	.5361	.1456
Suits & Dresses	793.60[a]	.2324	.7901	.4140
Dress Slacks/Skirt	802.15[a]	.4345	.6739	.3626
Sports Jackets/Blazers	793.30[a]	.3534	.6378	.4593
Dress Shirts/Blouses	723.79[a]	.5733	.5659	.2775
Shoes	806.67[a]	.2161	.3018	.9078

[a] Probability is less than .001.

An examination of the univariate F tests reveals all criterion variables differ across the patronage modes. The F tests results are provided in Table 1. The group means of the perceived risk measures are provided in Table 2. Specific differences in the perceived risk attributable to retail patronage modes across product type was tested using the Scheffé test at the .05 significance level.

The results of the Scheffé tests determine if any subsets exist among the six retail patronage modes. Specialty stores and department stores did not differ significantly in any product category. Moreover, respondents indicated that perceived risk of these alternatives was very low when compared to the other alternatives examined.

The second significant grouping was determined to be discount stores and store catalogs. Respondents perceived similar levels of risk associated with purchasing 8 of the 9 product types studied. These patronage modes can be best described as intermediate or moderate risk patronage modes.

Finally, the riskiest retail patronage alternatives were determined to be media advertisements and direct mail, respectively. These results, while not surprising, provide strong evidence that various shopping modes present differing amounts of perceived risk when purchasing apparel products.

The results of the MANOVA examining the overall perceived risk associated with each product category are presented in Table 3. The multivariate test across products was significantly different at the .000 level. Consequently, it can be concluded that there were statistically significant differences in the amount of risk associated with purchasing different apparel from the same retail mode.

The discriminant analysis examining this overall difference across the apparel categories with respect to the six retail patronage modes produced three functions that were significant at the .001 level. The varimax rotated canonical loadings are provided in Table 3. Based on these canonical loadings, the second dimension reflects the riskiness associated with purchasing different apparel products from discount stores, the third dimension reflects the risk associated with products purchased via a store catalog, and all other retail modes are reflected in dimension one.

An examination of the univariate F tests reveals all criterion variables differ across the product categories. The F tests results are provided in Table 3. The group means of the perceived risk measures are provided in Table 4. Specific differences in the perceived risk attributable to product types within each patronage mode was tested using the Scheffé test at the .05 significance level.

The results of the Scheffé test determine if any subsets exist among the nine product categories for each retail mode. The unique dimensions identified by the MDA are likely explained by the subgroupings associated with discount stores and store catalogs. Unlike other retail modes, there appears to be a distinct difference in the

TABLE 2
Mean Perceived Risk[a] of Apparel Categories Across Patronage Modes[b]

Product Category	Specialty Stores	Department Stores	Discount Stores	Store Catalogs	Direct Mail	Media Advertisements
Jeans	2.436_1^1	2.430_1^1	3.246_2^2	3.387_2^3	3.843_3^4	3.947_4^4
Accessories	2.177_1^1	2.142_1^1	2.971_2^2	3.059_2^2	3.485_3^3	3.670_4^4
Casual Slacks/Skirts	2.354_1^1	2.319_1^1	3.229_2^2	3.281_2^2	3.744_3^3	3.900_4^4
Women's Lingerie	2.319_1^1	2.278_1^1	3.242_2^2	3.251_2^2	3.709_3^3	3.868_3^3
Suits and Dresses	2.614_1^1	2.654_1^1	3.822_2^2	3.736_2^2	4.151_3^3	4.244_4^4
Dress Slacks	2.484_1^1	2.484_1^1	3.585_2^2	3.562_2^2	3.976_3^3	4.113_3^3
Sport Jackets	2.580_1^1	2.608_1^1	3.731_2^2	3.707_2^2	4.109_3^3	4.215_4^4
Dress Shirts	2.419_1^1	2.415_1^1	3.438_2^2	3.447_2^2	3.888_3^3	4.044_4^4
Shoes	2.674_1^1	2.787_1^1	3.927_2^2	4.003_2^2	4.278_3^3	4.350_3^3

[a] Ranges from 1 to 5, where 1 indicates low (no) risk and 5 indicates very high risk.
[b] For a given product category, patronage modes with same superscripts are not significantly different from each other. Read, for example, the risk for jeans purchased from a specialty store (2.436_1^1) is not significantly different from jeans purchased from a department store (2.430_1^1). However, specialty stores (2.436_1^1) differ significantly from discount stores (3.246_2^2).

perceived risk associated with casual and dress apparel products purchased from discount stores. Similarly, shoes purchased from a store catalog are significantly riskier than other apparel purchased from this retail mode. Although some differences in subsets occur, a consistent pattern of groupings can be identified. These apparel products can be classified along a continuum (i.e., shoes [high risk], dress clothes, casual clothes, accessories [low risk]).

TABLE 3
Differences of Risk Associated with Patronage Modes Across Apparel Product Categories

	F-Value	Canonical Loadings I	II	III
Multivariate				
F Approximation	24.17[a]			
Univariate				
Specialty Store	40.43[a]	.6815	.2206	.2375
Department Store	67.17[a]	.6001	.2432	.5471
Discount Store	112.07[a]	.2742	.8579	.3137
Store Catalogs	101.29[a]	.3151	.4394	.7665
Direct Mail	92.07[a]	.7686	.4473	.3894
Media Advertisement	83.43[a]	.6065	.5526	.2835

[a] Probability is less than .001.

Discussion

These research results clearly indicate that varying amounts of perceived risk are associated with purchasing products from different retail modes. Apparel products in specialty stores and department stores were perceived to be less risky when compared to other retail modes. These instore modes were expected to have a lower perceived risk image. Similarly, the nonstore retail modes of direct mail and media advertisement were perceived to be riskier than the other alternatives.

An interesting result was that discount stores and store catalogs received similar perceived risk profiles despite the different nature of the alternatives (i.e. instore vs. nonstore). Moreover, store catalogs have significantly greater perceived risk than their instore counterpart (i.e. Sears catalog vs. Sears retail outlet). If in-home shopping is to become the viable alternative it is forecasted to be, these retailers must take the steps necessary to reduce the risk associated with their products. One step is to recognize risk-taking as an integral part of consumer behavior, and that the degree of risk is likely to be a deciding factor in purchasing clothing. Thus, retailers must take the perceived difference among retail patronage modes into consideration when formulating their strategies.

For those retail modes perceived as high risk for a particular product, a strategy of risk reduction should be implemented. That is, the overall perceived risk image of the retailer should be improved. One strategy could be aimed at minimizing the perceived risk by reducing the consequences of the product's perceived failure to meet consumers' needs. Money-back guarantees, better-than-average warranties, improved product assortments, and acceptable prices, to encourage retail patronage and to keep dissonance to a minimum, are all possible. Another approach is to provide positive information about the product (i.e., friendly salespeople, effective advertising campaigns).

With products offered by retail modes which are perceived less risky, the image of the retail store could be stressed in marketing communication efforts. A premium-pricing strategy might be implemented, possibly enhancing the favorable product image as well as taking advantage of low-perceived risk to earn additional profits for both the manufacturer and retailer.

The perceived risk of apparel offered by a retail mode does depend upon the product category. In general, shoes and dress clothes engender a greater amount of risk than do accessories or casual clothes. These results provide strong evidence that perceived risk is product specific and as a result the overall risk image associated with a retail mode should not be generalized across product categories.

Finally, what is essential for successful retail marketing is to fully understand the degree of perceived risk associated with a retail patronage mode and individual product offerings. Moreover, marketing decision-makers must examine the interaction effects of perceived risk associated with specific product categories and retail patronage modes. For example, marketing high risk products (i.e., shoes, suits) in high risk outlets (i.e., catalogs, media advertisements) could compound the impact of perceived

TABLE 4
Mean Perceived Risk[a] Across Product Categories[b]

	Suits/ Dresses	Jackets/ Blazers	Dress Slacks/ Skirts	Dress Shirts/ Blouses	Jeans	Casual Slacks/ Skirts	Lingerie	Access- ories	Shoes
Patronage Mode									
Specialty Store	$2.614^{4,5}_{6}$	$2.580^{4,5}_{5}$	$2.484^{3,4}_{4,5}$	$2.419^{2,3}_{2,3,4}$	$2.436^{2,3}_{3,4}$	$2.354^{2,3}_{2,3}$	$2.319^{2}_{1,2}$	2.177^{1}_{1}	2.674^{5}_{6}
Department Store	$2.654^{5,6}_{6}$	$2.608^{4,5}_{5,6}$	$2.484^{3,4}_{4,5}$	$2.415^{3}_{3,4}$	$2.430^{2}_{3,4}$	$2.319^{2}_{2,3}$	$2.278^{2}_{1,2}$	2.142^{1}_{1}	2.787^{6}_{6}
Discount Store	3.822^{6}_{6}	$3.731^{5,6}_{5,6}$	$3.585^{4,5}_{4,5}$	$3.438^{3}_{3,4}$	$3.246^{2}_{2,3}$	3.229^{2}_{2}	3.242^{2}_{2}	2.971^{1}_{1}	3.927^{7}_{7}
Store Catalogs	$3.736^{5,6}_{6}$	$3.707^{4,5}_{4,5}$	$3.563^{3,4}_{4,5}$	$3.447^{3}_{3,4}$	$3.387^{2,3}_{2,3}$	3.281^{2}_{2}	3.251^{2}_{2}	3.059^{1}_{1}	4.003^{6}_{7}
Direct Mail	$4.151^{6,7}_{7}$	$4.109^{5,6}_{6}$	$3.976^{4,5}_{5,6}$	$3.888^{3}_{3,4}$	$3.843^{2,3}_{2,3}$	3.744^{2}_{2}	3.709^{2}_{2}	3.485^{1}_{1}	4.278^{6}_{7}
Media Advertisement	$4.244^{6,7}_{7}$	$4.215^{5,6}_{6}$	$4.113^{4,5}_{5,6}$	$4.044^{3,4}_{4}$	$3.947^{2,3}_{3}$	3.900^{2}_{2}	3.868^{2}_{2}	3.670^{1}_{1}	4.350^{7}_{7}

[a] Ranges from 1 to 5, where 1 indicates low (no) risk and 5 indicates very high risk.
[b] Read, for example, the risk for suits/dresses (2.614^{4}), jackets/blazers (2.580^{4}), dress slacks/skirts (2.484^{4}) purchased from a specialty store are not significantly different.

risk on the buying process. This dual (product and retail mode) examination could lead to more appropriate risk reduction strategies directed at the more salient aspects of perceived risk. Failure to recognize that consumers distinguish between apparel offerings on the basis of inherent product attributes and retail patronage mode will result in less than optimal marketing strategies.

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NEW DEALER CHOICE: THE BUYER PERSPECTIVE

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Abstract

This report describes the results of an exploratory expert interview and a new car dealership employee focus group followed by a two-wave mail survey of area customers who had recently purchased a new car. Dealership choice factors were the focus of the research. Choice criteria were identified and placed in rank order for various subgroups of the sample. The grouping was done on the basis of sex, marital status, income and education. Differences of note were found among the various segments. A summary of suggested research-oriented and practical business implications are also provided.

Introduction

How do customers choose viable candidates from among potential new car dealers? This is a question of theoretical value to the scholar who wishes to understand the new car buying process more fully. It is also a question of practical value to new car dealership owners, managers and salespeople, since it has the potential to lead them to more customer-oriented behavior -- and greater customer satisfaction.

When one scans the literature, one finds a lack of informationspecifically aimed at understanding new car dealership choice. Certainly there are articles in the popular press that deal with peculiar dimensions, such as after sale service (Business Week 1983), or trust-related concerns (Nakashima 1985). However, the only article found was one whose authors attempted to look at the relative importance of a single dimension factor set. It was concerned with how a single dealer performed on fourteen (14) repair service attributes (Martilla and James 1977). Their study was essentially technique-oriented rather than focused on theory or practical application.

The work reported in this article goes well beyond that published to date. It yields not only the dealer choice factors used by individuals who have purchased new cars in the recent past, but it also isolates differences among buying publics on the basis of sex, marital status, education and income.

Objectives

1. Identify the factors that new car purchasers use in choosing an automobile dealership from which to buy.

2. Determine the relative importance of the new car dealer choice factors as a function of a new car buyer's sex, marital status, education and income.

Methodology

Exploratory Research

A two step approach to data gathering was executed in the exploratory phase. First, the Distribution Research Manager of a major U.S. automobile manufacturer was contacted to see what the results of previous research on new car dealership choice factors had been. Second, a focus group was conducted. It consisted of the owners, sales manager, sales people and service managers from a single dealership. A number of these people had extensive experience with other dealerships, as well as their present employer.

Since the author was faced with funds and time limitations, it was not possible to do any primary exploratory research with the customer base. It is realized that the lack of such effort is a limitation of the study.

The results of the two exploratory data collection steps were used to construct a nine-factor array. This array was the basis for the survey research project that was then carried out. The factors found were the following:

1. I have had past experience with the dealer (EXPERIENCE)1
2. You can trust the people there (TRUST).
3. The dealer was recommended to me by someone else (RECOMMEND).
4. They give the best new car price deal in town (PRICE DEAL).
5. They sell the brands of cars I like most to buy (BRANDS).
6. The dealer gives excellent repair service (REPAIRS).
7. The people who work there are friendly (FRIENDLY).
8. The dealership is clean, neat and attractive (CLEAN).
9. The dealer's advertisements helped me to decide to go there (ADS HELP).

Not included was location of the dealership. This was seen as a major factor by all concerned. However, if location is a "given," as it is in most instances, the other factors just presented become dominant.

Survey Phase

Data Collection. A two-wave mail survey, the second wave being sent 10 days after the first, was conducted among the seven dominant ZIP Codes in a midwestern Metropolitan Statistical Area (MSA). The boundaries of the MSA were essentially the boundaries of a new car retail trading area. The mailings were made to a

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1The words in parentheses will be used to represent the phrases preceding them.

sample of 940 individuals who were drawn from the County New 1983-84 Car and Truck Sales Recap. Only those persons who had purchased a new automobile from a dealer in the trading area were eligible for selection. The sample was drawn in reverse chronological order, starting with the month of December 1983 until the sample goal was reached. The last week of sales from which a draw was made was August 12-18, 1983. The dealer represen- tation proportions were parallel with actual new car sales by the firms in the trading area over the four and one-half months sampled.

A total of 254 usable responses were received. This was a response rate of 27 percent. There was no attempt to compare the non-respondents with the respondents. However, as will be noted later, the sample profile was seen as representative of the new car buying universe in the study area.

The Sample. There were 155 males and 99 females in the sample. Of this group 74 percent were married, 17 percent were single-never married, 5 percent were divorced and 5 percent were widowed.

Table 1 contains a summary of the educational profile of the 250 respondents who provided information. Note that 94 percent of these people were at least high school graduates. One might expect such a circumstance since the author would speculate that highly educated people would

TABLE 1

HIGHEST LEVEL OF FORMAL EDUCATION

Educational Level	Number and Share (%) of Respondents
Elementary School Graduate	1 (1)
Some High School	13 (5)
High School Graduate	41 (16)
Some College	72 (29)
College Graduate	58 (23)
Some Graduate School	24 (10)
Graduate Degree	41 (16)

n = 250

be more likely to complete a mail survey such as this than the less educated. This assertion is based on the assumption that people with greater written language facility would be more apt to participate. Note also that almost half of the participants were college graduates. Within the study area there is one university and two colleges which fact, one could assert, probably contributed to the disproportionate share of college graduates among the sample.

Turning to income, 225 people offered information. The sample income profile will be found in Table 2. The respondent group is definitely "upscale." Typically, about one-third of the metro area residents/families earn $35,000 a year or more. Whereas in the sample 44 percent were in this category.

In sum, one could argue that the sample profile is generally representative of the new car buying public within the geographic area of con cern since such a group would be more upscale than the average population members.

TABLE 2

FAMILY OR PERSONAL INCOME

Income Level	Number and Share(%) of Respondents
Less than $10,000	9 (4)
$10,000 - $19,999	45 (20)
$20,000 - $34,999	73 (32)
$35,000 - $49,999	60 (27)
$50,000 or More	38 (17)

n = 225

Data Analysis. All data from the questionnaire were processed using the Statistical Package for the Social Sciences (Nie et al. 1970) computer analysis software. Frequency distributions, along with appropriate statistics were generated for each question, as necessary. Chi-square analysis was also used to compare groups of individuals (Green and Tull 1978). Various ratios and indexes were also constructed and used. These will be described at appropriate points in the report.

Results and Conclusions

The respondents were asked to rank order the nine factors previously mentioned as reasons for selecting a new car dealership at which to buy. A summary of these rankings is found in Table 3.

TABLE 3

NEW CAR DEALERSHIP FACTOR IMPORTANCE ORDER
TOTAL SAMPLE

Factor	Mentions in the Top Three	Rank Order	Factor Class
BRANDS	65%	1	Product
REPAIR	41	2	Product
PRICE DEAL	40	3	Price
EXPERIENCE	36	4	Experience
FRIENDLY	32	5	Personnel
TRUST	29	6	Personnel
CLEAN	19	7	Product
RECOMMEND	18	8	Promotion/WOM
ADS HELP	10	9	Promotion/Paid

Based on share of first, second and third place mentions. WOM means word-of-mouth.

Note also that the type or class of each factor is identified. Additionally included is the share of first, second or third place rankings for each factor. The most important factor is that the dealer sells the brands of cars a person is looking for (BRANDS). The next most important criteria are excellent repair service (REPAIRS) and new car price deal (PRICE DEAL) which are, for all intents and purposes, tied when considering first to third place mentions. Then, experience with the dealer (EXPERIENCE),

friendly (FRIENDLY), and trustworthy people (TRUST), a neat and clean dealership (CLEAN) and recommendations by others (RECOMMEND) impact choice of dealer, in the order mentioned. Finally, advertising (ADS HELP) is in ninth place.

Concerning whether advertisements helped people to go (or not to go) to the dealership, the author would argue that the full impact of promotional activities is often either not realized by the buyer or he or she refuses to admit to such influences. Hence the result was not unanticipated.

Choice Factors by Subgroup

Analysis on the basis of the total sample is instructive. However, consideration of choice factors to see if a person's sex, marital status, education and/or income result in differences is of value also. Such information allows the sales force to better know how to qualify and deal with each person that enters the dealership and points toward marketing mix variable adjustment.

The impact of the sex of the respondent on choice factors will be examined first. The rank orderings of choice factors for men and women separately are presented in Table 4. The reader will note that the dealer being able to sell the brand of car sought is most important to both groups. Men place excellent repair service,

TABLE 4

CHOICE FACTOR IMPORTANCE ORDER BY SEX

Rank Order	Male	Female
1	BRANDS	BRANDS
2	REPAIRS	PRICE DEAL
3	EXPERIENCE	FRIENDLY
4	PRICE DEAL	TRUST
5	FRIENDLY	EXPERIENCE
6	TRUST	REPAIRS
7	CLEAN	CLEAN
8	RECOMMENDED	RECOMMENDED
9	ADS HELP	ADS HELP
	n = 143	n = 94

experience with the dealer and the best new car price deal as second third and fourth priority. Women, on the other hand, rank price deal second with the staff of the dealership being friendly and trustworthy in positions three and four in importance. The latter finding appears reasonable since most women do not earn as much as their male contemporaries today. Further, a truly friendly and trustworthy dealership may be more important to women than men because of the inexperience that, particularly single, women have in the auto buying arena. It could be argued that the two, three and four importance factors are reflections of current times and will most assuredly change to some degree in the future.

On the marital status variable people were divided into four groups as noted earlier. These classes were married, divorced, single-never married and widowed. Choice factor importance order for these divisions are found in Table 5.

TABLE 5

CHOICE FACTOR IMPORTANCE ORDER BY MARITAL STATUS

Rank Order	Married	Divorced	Widowed	Single-Never Married
1	BRANDS	BRANDS	PRICE DEAL	BRANDS
2	REPAIRS	REPAIRS	REPAIRS	PRICEDEAL
3	EXPERIENCE	PRICEDEAL	EXPERIENCE	REPAIRS
4	PRICEDEAL	EXPERIENCE	TRUST	FRIENDLY
5	FRIENDLY	FRIENDLY	BRANDS	EXPERIENCE
6	TRUST	TRUST	FRIENDLY	CLEAN
7	CLEAN	RECOMMEND	CLEAN	RECOMMEND
8	RECOMMEND	CLEAN	RECOMMEND	TRUST
9	ADS HELP	ADS HELP	ADS HELP	ADS HELP
	n = 170	n = 12	n = 12	n = 39

Except for the widowed, the dealer selling the brand that the person wanted most to buy was the greatest in importance among the choice factors. Also, excellent repair service and the need for a strong price deal were rated very highly. Note the similarities between those respondents who were married and those divorced. One may also see the concern of the widowed for price and repair service. This follows from lower income and less frequent auto replacement problems. One could assert that the single-never married group probably is more influenced by the sex of the individual than marital status. In fact overall the 60-40 split of male to female buyers is probably skewing the results toward the male position. Caution must be used in interpreting the "divorced" and "widowed" data since the sample cells are small.

Turning to Table, 6, one notes the relationships among the highest levels of formal education and choice factors. As in the previous data summaries, having the brands of cars desired is most important across all categories. Generally, more highly educated respondents (car buyers) place greater emphasis on repair service. The need to find the best price deal on a new car is particularly important for those people who are, at the least, college graduates. This concern with repair service may be tied to the increasing value of time for the more educated. Work that requires additional trips to be satisfactorily completed or work not done when promised creates a more irritating circumstance for this group. These individuals are more knowledgeable and informed and expect more value for their money, hence a good price deal perception is important to them. Also, there is generally a decreasing need for friendliness at the dealership. One could argue that the more educated people possess greater self-reliance, and may or may not identify themselves with the sales people. Hence it would appear that respect is probably more important than friendliness.

It should be noted that the least important factors are recommendations from others and perceived, or admitted, advertising impact on the

decision to go to a particular dealer. Again the reader is cautioned to use prudence in interpreting the "some high school" group data since the sample size is but 12.

TABLE 6

CHOICE FACTOR IMPORTANCE ORDER BY EDUCATION

Rank Order	Some High School	High School Graduate	Some College
1	BRANDS	BRANDS	BRANDS
2	EXPERIENCE	FRIENDLY	REPAIRS
3	CLEAN	PRICE DEAL	TRUST
4	FRIENDLY	REPAIRS	EXPERIENCE
5	REPAIRS	EXPERIENCE	PRICE DEAL
6	PRICE DEAL	TRUST	FRIENDLY
7	TRUST	CLEAN	ADS HELP
8	ADS HELP	RECOMMEND	RECOMMEND
9	RECOMMEND	ADS HELP	CLEAN
	n = 12	n = 38	n = 65

Rank Order	College Graduate	Graduate School
1	BRANDS	BRANDS
2	PRICE DEAL	PRICE DEAL
3	EXPERIENCE	REPAIRS
4	REPAIRS	EXPERIENCE
5	FRIENDLY	TRUST
6	CLEAN	FRIENDLY
7	TRUST	RECOMMEND
8	RECOMMEND	CLEAN
9	ADS HELP	ADS HELP
	n = 55	n = 64

The last area of interest is income impact on the relative importance of dealership choice factors. Table 7 contains this data. These data illustrate that having the brand sought is again consistently the most important factor. As income increases, there is a decreasing emphasis on achieving the best price deal. However, it is still in the top three rank positions for four out of five of the income categories. Repair service becomes more important as a choice factor as income level rises but, at the same time, there is a decreasing need for friendly sales people or other staff. Note how these findings parallel those for education. Such should be the case since there is a general relationship between these two variables. Again the least important factors are recommendations from others and perceived, or admitted, advertising impact on dealer choice.

New Car Dealership - Current Choice

Respondents were then asked which dealer in the area they would go to if they were to buy a new car on the day they filled out the instrument. There was no statistically significant difference between where they had purchased their last car and where they would buy one "today." The test used to support this finding was Chi-square analysis. One could assert that a result other than this would have been suspect in most instances. Since it would imply that people had made the wrong choice of dealer and/or car. This would have been a negative reflection on their judgment.

TABLE 7

CHOICE FACTOR IMPORTANCE ORDER BY INCOME ($1,000)

Rank Order	Less Than 10	10 - 19.9	20 - 34.9
1	PRICE DEAL	BRANDS	BRANDS
2	BRANDS	PRICE DEAL	PRICE DEAL
3	FRIENDLY	FRIENDLY	REPAIRS
4	REPAIRS	REPAIRS	EXPERIENCE
5	ADS HELP	EXPERIENCE	TRUST
6	CLEAN	TRUST	FRIENDLY
7	RECOMMEND	CLEAN	RECOMMEND
8	TRUST	RECOMMEND	ADS HELP
9	EXPERIENCE	ADS HELP	CLEAN
	n = 7	n = 43	n = 69

Rank	35 - 49.9	50 or More
1	BRANDS	BRANDS
2	EXPERIENCE	REPAIRS
3	REPAIRS	PRICE DEAL
4	FRIENDLY	EXPERIENCE
5	PRICE DEAL	FRIENDLY
6	TRUST	TRUST
7	CLEAN	RECOMMEND
8	RECOMMEND	CLEAN
9	ADS HELP	ADS HELP
	n = 55	n = 38

The participants in the survey were next asked for reasons why they would likely buy a car form the dealer they cited as "today's dealer choice." This was an open-ended question. As expected, some of the factors already mentioned earlier in the questionnaire were used. However, respondents added other choice reasons not previously presented.

The following is a list of factors that respondents gave as reasons for choosing a dealer from which to buy a new car "today."

Brand of Car	Salespeople are Friendly
Type of Car	Salespeople are Helpful
Good/Quality Car	Salespeople are not High High Pressure
Only Buy a Certain Brand of Car	Salespeople are Honest/ Trustworthy
Selection of Cars	Experience with the Dealer
Service-Repairs	Dealer Recommended by Others
Service-Personnel	A Friend or Relative Works at the dealer
Price is Good/Fair Deal is Best/Good/ Fair	Dealer Reputation
	Dealer is Reliable
	Dealer Location

If one considers that relative importance is approximately related to the relative number of choice factor mentions within the sample, the first step is to group responses into similar categories. The following is such a grouping.

Product (118 mentions)		Salespeople (70 mentions)	
Brand	52	Friendly	43
Type	31	Honest	13
Quality	17	No High Pressure	8
Selection	1	Helpful	6
Only Buy a Certain Brand	17		

Service (52 mentions)		Price of Deal (49 mention)	
Repairs	49	Price Good/Fair	30
Personnel	3	Deal Best/Good Fair	19

Experience/Recommended (37 mentions)	
Experience with Dealer	27
Reputation	7
Recommended	3

The ratios of importance among the five categories just isolated are summarized in Table 8. Notice that the product factors are most important with salespeople reasons next and service and price together in third/fourth position. One other consideration is the array of top-rated

TABLE 8

NEW CAR BUY "TODAY" REASONS IMPORTANCE

Reason	Number of Mentions	Reasons Share (%)	Ratio
Product	118	36	3.3
Salespeople	70	21	1.9
Service	52	16	1.5
Price	49	15	1.4
Experience/ Recommended	37	11	1.0

individual factors. They were, with number of mentions in parentheses,: they sell the brand I like (52), repair service is excellent (49), salespeople are friendly (43), they have the type of car I am looking for (31), price is good/fair (30) and previous experience with the dealer (27). These findings are in line with those summarized in Table 8, as would be expected.

Implications

There are both research and practical implications from this study.

First, this research is not fully generalizable. One would have to reach out and survey different geographic regions of the United States to verify or disprove the findings. Certainly the cells for marital status would also have to be expanded numerically to assure more valid statistical comparisons. There is no assurance that segmentation by age, marital status, education and income is an optimum approach. The general lack of independence between income and education is a concern too. Segmentation by psychographic or, life style, variables or social class may prove useful.

Other analysis techniques to confirm/deny relative importance could be used. Dealer choice could be analyzed using a conjoint analysis method to determine relative factor importance (Crow and Lindquist 1982). A non-metric multidimensional scaling dealership space could be constructed to aid in factor determination and relative importance (Lindquist 1980).

The practical implications for the findings are also of interest. Dealers could use the results of the work to determine those factors that should be emphasized when providing service to customers. The results could also be used to help shape communications to both present and potential customers. Further, the executives of the dealership could have their operation analyzed, from the customer's perspective, to see how the firm rates on the nine factors presented. Strengths and weaknesses could be identified and necessary reshaping could be begun, if necessary.

Competitive analysis of the marketplace on these nine criteria could also be pursued so that a dealership would know how it "stacked up" with respect to competing dealerships.

Finally, the results of this research might serve as a foundation for the education and training of the members of the sales force so that they might more effectively carry out their functions.

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ADVERTISING AND THE ELDERLY CONSUMER: A REVIEW AND MANAGERIAL IMPLICATIONS

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Abstract

The senior citizen market has received increased attention from advertisers. Surprisingly, very little research has been conducted on differences in cognitive reactions to advertising among different age groups. Information processing and cognitive age differences literature is reviewed along with existing work on segmentation of the elderly market. Managerial implications and directions for future research are presented.

Introduction

Marketers have recently discovered the senior citizen market. Special discount programs for elderly consumers have been incorporated into the marketing mixes of drugstores, department stores, hotel and restaurant chains, airlines, and others. Clara Peller has been a successful spokesperson for Wendy's featured in an appeal directed to all age groups. Older celebrities and authority figures, such as Joe DiMaggio and John Houseman, have been hired to promote coffeemakers, stockbrokerage houses, and cooking oil.

The recent interest in the so-called senior citizen market and the incorporation of elderly persons into advertisements for a wide range of products and services may be largely explained by this market's size and discretionary income. The U. S. Bureau of the Census (1984), for example, estimated the number of persons aged 65 and older in 1985 to be 28.6 million. By the year 2000, the number of elderly Americans is expected to increase by 22 percent to 34.9 million. Population growth in the 65 and over age category will be second only to growth in the 35-to-44 age group in the decade of the 1980s (French and Fox 1985). As a group, the elderly are not poor. This segment of the population has an average after-tax per capita income that is $335 higher than the national average. This translates into an estimated annual purchasing power of between $60 and $200 billion (Schewe 1985).

Despite the size, growth, diversity, and spending potential of the senior citizen market--and businesses' increasing efforts to appeal to this market--very little published research has been conducted on the elderly as a target audience for advertising (Phillips and Sternthal 1977, Mauldin 1976, French, Crask 1977, and Schewe 1985). Consequently, marketers may fail to understand underlying differences and similarities between the elderly and other age groups regarding information processing capabilities, media habits, and susceptibility to advertising appeals in market-place behavior. This article reviews extent research on segmentation and information processing with a view to providing marketing and advertising practitioners with empirically-based managerial implications in the area of communication with the 65 and older market.

Segmentation of the Elderly Market

Demographics

The senior citizen market is far from homogeneous. (Towle and Martin 1975, French and Fox 1985, Greco 1984). Historically, the most popular segmenting base in the business literature has been chronological age (Meadow, Cosmas, and Plotkin 1980; Schewe 1985, Lazer 1985, Phillips and Sternthal 1977). Based on Neugarten's (1975) work in social gerontology, two age-based market segments have been identified in the business literature--the "young-old" and the "old-old" (Schewe 1985). The young-old range in age from 65-74 and are generally characterized as active and healthy. Members of this age group constitute a market for a wide variety of goods and services including luxury cars, vacation travel, lawn care service, financial planning, and restaurants (Gelb 1982). The young-old numbered about 17 million in 1985. The old-old, aged 75 and older, are more likely to fit the traditional stereotype of the "frail" elderly and therefore may have special health-related product needs. However, other members of the old-old group remain active if they are healthy and financially secure. In 1985, the old-old category accounted for nearly 12 million persons.

While chronological age is nearly always used in descriptive consumer behavior studies or in attempts to segment consumer markets, chronological age does not lend itself well to functioning as a predictor variable (Barak and Schiffman 1980). Although 65 is the age commonly used to indicate psychological, social, and physical changes, it is not always clear at what specific age these changes actually do take place. Nor is it clear what types of changes take place and how they affect different individuals (Neugarten 1975, Phillips and Sternthal 1977). This lack of understanding can be traced to differences in life-histories, educational backgrounds, family upbringing, and the timing of critical life events such as retirement, loss of spouse, and the onset of chronic illness (Baltes and Willis 1977, Rentz, Reynolds, and Stout 1983). Thus, as Baltes and Willis (1977) suggest, chronological age represents only an approximation of the identification of behavior change and therefore runs the risk of being theoretically impotent.

In view of the problems associated with chronological age, it is in the marketer's interest to consider additional or alternative means of segmenting the senior citizen market. At least three alternative segmentation bases have been suggested in the marketing literature--cognitive age, patterns of adjustment to retirement, and shopping orientation (Barak and Schiffman 1980; Barak and Stern 1985, French and Fox 1985, Lumpkin 1985).

Cognitive Age

Cognitive age is based on how people perceive themselves (Barak and Schiffman 1980, Sutherland 1984). As conceptualized by Barak and Schiffman (1980), cognitive age reflects an individual's self-concept in terms of "feel-age," "look-age," "do-age," and "interests-age." Senior citizens who see themselves as younger than their actual age tend to be opinion leaders, more non-traditional in outlook, have higher morale, are more concerned with their personal appearance, are more likely to have more formal education, and have fewer health limitations (Barak 1979). It is quite likely that persons would tend to consume many products according to their perceived age, and not according to their chronological age (Barak and Schiffman 1980).

Barak and Schiffman's (1980) view of cognitive age as a construct focusing on age-role reference groups is supported by research in social gerontology. Bultena and Powers (1978), for example, found that the elderly who enjoyed good health and financial independence most often identified themselves with the middle aged. In fact, more than one-third of the 269 subjects in their 10 year longitudinal study identified themselves with middle aged adults, even though they were over 70 at the completion of the study.

Adjustment to Retirement Patterns

A recent approach to segmenting the senior citizen market is based on patterns of adjustment to retirement living (French and Fox 1985). French and Fox (1985) used gerontologists' ratings of adjustment patterns to arrive at five distinct adjustment pattern groups among persons aged 65 and older. The three largest segments include: (1) The reorganizer-focused segment whose members are active and involved, place a high volume on self-esteem and wish to be perceived as part of the mainstream of society; (2) The constricted/succorance seekers segment comprised of persons who are concerned about their health and lack self-confidence in making decisions; (3) The apathetic, angry, and self-blaming segment whose members have not adjusted well to retirement living, have low self-esteem, and are not easily influenced by others. These three segments make up 40, 24, and 17 percent of the market respectively. The two remaining segments, the holding-on and the disengaged, each represent about 10 percent of the elderly population. The holding-on group values self-esteem, prefers to be self-sufficient, and is reluctant to try anything new. The disengaged are calm and contented, self-confident and independent, and less concerned about appearance. Different segments suggest that different advertising appeals may be needed to effectively communicate with different segments of the elderly market.

Shopping Orientation

Lumpkin (1985) has suggested the segmentation of the elderly market on the basis of shopping orientations of elderly apparel shoppers. Using cluster analysis, a three group taxonomy of shopping orientation was developed. The three shopping orientation groups are distinguished by their use of newspapers, friends, and salespersons as sources of information. Group 1 consists of the "apathetic" or "uninvolved" consumer. These persons, 24 percent of the population, spend the least on clothing and they utilize all forms of information to a lesser extent in keeping with their lower shopping activity. Group 2, 42 percent of the population, represents the "economic" shopper who is price conscious and is somewhat interested in fashion and conformity but does not enjoy shopping activity and checks advertisements less often. Group 3 the "active apparel shoppers" are the most socially active and are fashion innovators, opinion leaders. Of the three segments they have the most interest in clothing. The dominant source of information for this group is newspapers, followed by friends and salespersons. As opinion leaders, they are likely to exchange information with their friends. These consumers represent about 35 percent of the population.

While these findings are based on apparel shopping activity, they nevertheless indicate that subsegments of the elderly population are present and should be investigated further.

Information Processing

Information processing is relevant to the development of communication strategies since it involves the consumer's information seeking behavior, learning, problem solving, and influenceability. Research findings in these areas can provide useful promotional implications.

Several studies have investigated the information sources of the elderly. Schiffman (1971, 1972, 1973) found that product discussions and evaluations occurred among residents of a senior citizens' community. It was also learned that the higher the perceived risk, the less likely the product trial. This finding is supported by Reid, Teel, and Vanden Bergh's (1980) work which indicated that elderly females do not attempt risk reduction by seeking additional information when purchasing new products. In general, information seeking was found to decrease with age, with more reliance placed on past experience than on external sources. Klippel and Sweeney (1974) found newspapers, televisions, and radio along with friends, neighbors, family, and salespersons to be important in making purchase decisions. Professional recommendations and word-of-mouth were found to be important information sources for brands of cold remedies (Michman, Hocking, and Harris 1979). Lumpkin and Greenberg (1982) found friends and spouse to be influential sources of information sources among elderly apparel shoppers. In the same study it was revealed that the mass media were less important to the elderly than to younger age groups. Specifically, newspapers were the most influential sources and radio and television the least. Dove (1984) also found that older shoppers do not rely heavily on television advertising when making store selections, and consistent with Lumpkin and Greenberg's findings, Dove found that older consumers rated every information source lower in importance than did members of younger age groups.

French and Crask (1977) found that the elderly perceive no differences in the source credibility of advertisements carried by different media. That study also found that the elderly possessing an active lifestyle placed more importance on ads than did the persons with passive approaches to retirement.

Memory, Learning, and Influenceability

Phillips and Sternthal (1977) investigated age differences in information exposure, learning, and influenceability. Based on their review of the behavioral science literature, they concluded that the elderly, like their younger counterparts, rely on mass media as a source of information, and also on the extended family. Regarding learning, they concluded that age decrements are apparent regarding continuous attention and processing speed and where the task involved information outside the elderly's experience. In other words, the ability to learn is reduced when the information is presented in a rapid fashion and when the pace is controlled by someone else. Learning was reduced, too, when the information included irrelevant data. Conflicting findings were obtained regarding the influenceability of the elderly relative to younger persons. Influenceability appears to be situation-specific and could be confounded by social isolation or self-perceived incompetence in a particular area.

Ensley (1983) more recently reviewed the gerontological literature on remembering, learning, and problem solving. She found that in studies testing memory and learning, the older subjects had more difficulty than younger subjects in remembering material under conditions of externally controlled pacing. The elderly acquire new information more slowly than younger persons, meaning that the elderly take more time to learn something. But if they are given more repetition of the material, a fast pace may not be detrimental if the material is within perceptual bounds. Also, if the elderly are familiar with the material, their performance is improved (Poon and Fozard 1978). In studies of organization and recall of information, differences between young and old were non-existent or slight when natural rather than laboratory settings were used (Botwinick 1978). Thus, while performance in many cognitive areas decreases in old age, the efforts can be compensated for by manipulating aspects of the learning situation (Hultsch and Pentz 1980, p. 303).

The problem solving capability of the elderly can be improved in several ways. If given practice and training in problem solving many of the observed differences between young and old subjects disappear. As well, older persons with higher intelligence, more formal education, and better health show fewer declines in memory, organization, and problem-solving.

An experiment by Stephens (1982) corroborated the findings of Phillips and Sternthal (1977) that elderly adults may experience a decline in information processing ability. Stephens (1982) found that in both time-compressed and normal television commercials, young adults recall more commercials, products, and selling points than middle-aged and elderly adults. This finding supports previous research suggesting that the elderly suffer in their ability to process information when they cannot control the pace.

On the other hand, Stephens and Warrens (1983-1984) later found, contrary to expectations, that no differences occurred between younger and older adults in television advertisement recall and recognition at the same frequency level. Older adults displayed higher recall and recognition at the highest levels of exposure than at lower levels, as did younger adults. Overall, age did not significantly influence recall and recognition scores, even when three different frequency levels were tested.

Media Patterns

A number of studies have investigated the media usage patterns of elderly persons. Kubey (1980) noted that, among the elderly, television viewing accounts for the single most time consuming leisure activity, especially among these with lower income and educational levels. Bernhardt and Kinnear (1976) found that the elderly are twice as heavy viewers of TV as other age groups between 6 to 9:00 a.m. The elderly are also heavy viewers between 6 to 7:00 p.m. Not only are older Americans frequent viewers of TV but they also regard it as an important and trusted media source (Stephens 1981, French and Crask 1977). Other research suggests that television is an important source of purchase-related information for the elderly (Stephens 1982, Mason and Bearden 1978, Samli and Palubinskas 1972, French and Crask 1977, Phillips and Sternthal 1977).

In the marketing literature, Klippel and Sweeney (1974) found newspapers, television, and radio along with friends, neighbors, family, and salespersons to be important sources of information in making purchasing decisions for television sets and headache remedies. Lumpkin and Greenberg (1982), on the other hand, found that the mass media were less important to elderly apparel shoppers than to members of younger age groups, the elderly relying more on friends and spouse as information sources. Similarly, Dove (1984) found that older shoppers in general do not rely heavily on television advertising when making store selections. Consistent with Lumpkin and Greenberg (1982), she found that older consumers rated every information source lower in importance than did their younger counterparts.

Newspapers are also an important source of information for the elderly (Kubey 1980). According to Schramm (1969), there appears to be a considerable increase in both television and newspaper exposure beyond the age of 60. In product-related settings, Mason and Bearden (1978) found that after TV, newspapers were the most important source of information for consumers 65 and over, while Lumpkin and Greenberg (1982) found newspapers to be more important sources of information for elderly apparel shoppers.

Bartos (1980) reported that older persons are heavy listeners to radio news at all times of the day, while Bernhardt and Kinnear (1976) and

French and Crask (1977) found that the most frequent listening time was between 6 and 9:00 a.m. in the home.

Among persons 65 and older, preference in magazine reading shifts from entertainment to information (Schramm 1969, p. 364). Gelb (1982) suggests that such a shift helps explain the success of age-specific magazines such as Prime-Time, 50 Plus, and Modern Maturity. Other newspapers with a large elderly readership include U. S. News & World Report, Southern Living, Travel/Holiday, McCalls, and Ladies Home Journal (French and Fox 1985).

The elderly are not isolated from formal mass communication. The above research findings suggest that there is substantial potential among the elderly for exposure to advertising messages.

Conclusions and Managerial Implications

The existence of subsegments within the senior citizen market and differences in information processing, media habits, and susceptibility to advertising appeals among the elderly suggest the need for different advertising approaches to appeal to different parts of this market. Advertisers who wish to target messages to the elderly should keep the following recommendations and examples in mind.

1. Chronological age, by itself, is an inadequate indicator of self-perception and market behavior. Elderly women, in particular, tend to deny their chronological age and consider themselves to be younger (Barak and Stern 1985). This is especially true if they are healthy and financially secure (Bultena and Powers 1978). Elderly persons viewing themselves at a younger cognitive age are likely to belong to French and Fox's (1985) Organized - Focused and Holding-On segments. Both of these groups place a high value on self-esteem and self-sufficiency. Since these two segments comprise one-half of the senior citizen market and are relatively affluent, they appear to be viable segments for marketers of a variety of products.

Because the members of these two segments place a high value on self-esteem, they do not wish to be patronized. Advertisements featuring only old people as spokespersons may be considered insulting (French and Crask 1977). These senior citizens do not want to be labeled "old." This perspective may help account for the failure of products divided specially at "old" people, such as Heinz senior foods and the initial rejection of Affinity Shampoo when it was advertised to be for people over 40.

At least two different advertising approaches can be used to appeal to these senior citizens. One technique is to address the consumer at his or her cognitive age. In other words, for apparel or cosmetic products, the advertiser should use models or spokespersons who are middle-aged. An example is Germaine Monteil Cosmetiques Corporation's ad featuring 45-year old Tish Hooker, a nonprofessional modeling for the first time. Oil of Olay ads feature a middle aged woman and man, with the subtle message that Oil of Olay "can help you look younger, too." Helena Rubinstein's ads featuring 50 year olds saying "Beauty doesn't have to end at 50," didn't do well with 50 year olds but appealed instead to those 60 years and over (Albin 1985).

Another approach to reach the Reorganized-Focused and Holding On segments is the transgenerational approach. This technique minimizes the risk of insulting the elderly and can be used for a variety of products and services. Georgette Klinger Salons has used cosmetic ads featuring a mother and daughter together (Barak and Stern 1985). An Archway ad for cookies showed an attractive woman portraying a grandmother, along with a child, and the headline "Kids of all ages love Archway." (Barak and Stern 1985). A similar approach was used for Quaker's Mother's brand of cereal (French and Crask 1985). In this ad a senior citizen is centered in the ad and is surrounded by four middle aged men. Everyone in the ad is shown enjoying the cereal. Differences between generations are minimized in this approach.

The transgenerational approach with an emphasis on children and grandchildren may also be a way to reach the smaller (17 percent of the elderly market) angry/self-blaming/apathetic segment (French and Fox 1985). The Archway ad would be likely to make a good impression with this group of senior citizens as would the Country Time lemonade mix commercial featuring an older spokesperson with his grandson.

2. Financial appeals seem to be viable approaches to reaching many senior citizens including the large reorganizer - focused segment (French and Crask 1985). Eastern Airline's senior citizens passport has successfully used this appeal. Sears' Mature Outlook program offers discounts on a variety of products and financial services and has been very successful, as has the Colonial Penn Insurance Company.

3. Appeals focusing on physical, societal, and financial security should be used to reach French and Fox's (1985) constricted/succorance seekers market. Testimonials and documentation can be successfully used. Lorne Green has been a successful spokesperson for Secure Care, a medicare insurance supplement. Another example is an AARP Motoring Plan ad for nationwide emergency road service. Testimonials featuring quality products at affordable prices would appeal to the financial concerns of this segment.

4. Appeals focusing directly on some type of diminished capacity may be effective when directed to the disengaged segment of the senior citizen market. Such appeals should be used with care, not only because the disengaged represent only 9 percent of the market, but also because of the majority of elderly persons find appeals of this nature to be insulting or embarrassing. The disengaged, however, accept aging and are

receptive to "old age" appeals without fear of social stigma. This perspective is reflected in one elderly man's motto, "You are not as old as you feel, but you are as old as you are."

5. In designing advertisements directed to the elderly, especially the old-old, decrements in information processing must be taken into consideration when selecting media and when planning the message itself. Much of the information processing literature suggests the usage of self-paced media such as newspapers and magazines for the elderly because of their relatively slow learning ability. At the same time, there may be no need to abandon externally paced media such as radio or TV if the elderly are exposed to more repetitions of the messages because of greater time spent in viewing, or if the messages use terminology that is familiar to the elderly. To illustrate the latter, Hershey, in a television commercial, featured an elderly man unpacking a bag lunch and finding Hershey's chocolate kisses. He then asked the rhetorical question, "Could it be that she (his wife) still thinks I'm the cat's meow?"

Future Research

Most of the research involving advertising and the elderly has been descriptive, often focusing on media habits and self-reports of the importance of advertising on product/brand decisions. More input from older consumers is needed regarding the types and ages of spokespersons preferred in advertisements for different types of products and services. The experimental method needs to be more frequently used to further investigate learning and other cognitive differences between the elderly and younger age groups.

Because of the problems associated with chronological age, it must be determined if age-based market segments are more useful than differences in, say, health, education, discretionary income, and lifestyle. It is worth repeating that demographic variables such as age are seldom the cause of attitudes and behaviors.

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SPECIALTY ADVERTISING: THE OVERLOOKED MEDIUM

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INTRODUCTION

The sixth largest advertising medium in the United States is Specialty Advertising. This medium ranks only behind newspapers, television, direct mail, magazines, and radio. Annual billings for specialty advertising approach four billion dollars (Specialty Advertising Association Internation, 1984). In fact, the Specialty Advertising medium has been among the fastest growing of all forms of advertising and sales promotion, registering a sales volume growth of 342 percent between 1970-79 (Herpel and Slack, 1982). While much attention has been paid to other media, very little attention has been devoted to Specialty Advertising. A review of advertising textbooks shows either no coverage or, at most, a one-page discussion of this medium. It continues to have an image problem, as many people envision specialty advertising as consisting of cheap novelty "games and gadgets."

Academic researchers essentially have not investigated specialty advertising in their studies. While specialty advertising appears to be a very important medium for marketers who vie for consumer attention in an increasingly cluttered media environment, it has been overlooked by the academic community. As a consequence of this dearth of information, promotional opportunities to exploit specialty advertising's potential have been overlooked. This medium may provide the setting needed for researchers to determine the relationship between advertising levels and consumer purchases. Research on this fascinating medium is needed, given that targeted media are becoming more essential in an era of segmentation and fractionalization. The purposes of this paper are to explain the nature of specialty advertising and to chart a course for future research.

SPECIALTY ADVERTISING

Specialty advertising involves useful articles of merchandise imprinted with and advertiser's message and distributed without obligation to the recipient (Miller and Borgard, 1984; Specialty Advertising Association International, 1984). The key is that all items are given gratis to the carefully defined existing or potential customer or employee as a goodwill offering. The recipient incurs on obligation. In this respect specialty advertising can be contrasted to a premium which obligates the consumer to take some sort of action and which need not include an imprinted message. A common type of premium is the gift a bank gives as an incentive for a certain level of deposit. The obligation of the customer is to deposit money into the bank account. What about imprinted cups sold with cola beverages at ball parks or events? If the consumer pays one dollar and there is seventy-five cents of cola in the cup, this is a premium. The consumer had to pay twenty-five cents for the cup.

As true of any medium, specialty advertising has been billed as "the medium that remains to be seen"), high recall (average about 70 percent) due to long use, felxibility (over 20,000 advertising items are available), and a message which is readily accepted (not selectively discarded) due to its material value. IN short, specialty advertising is efficient, effective reminder advertising which provides an excellent complement to the more well known media.

However, every medium also has its weak points. For this medium these include its limitation to a brief message and difficulty of measuring effectiveness. However, concerning the latter, specialty advertising has been categorized into a dichotomy consisting of passive items, where results are virtually unmeasurable, and non-passive items, which are designed to stimulate immediate action.

In short, a specialty advertising item has three distinguishing characteristics: (1) an advertising or promotional message, (2) placed on or with a useful itme, (3) given with no strings attached (Bagley, 1979).

Specialty advertising has been around since 1845 when an insurance agent in Auburn, New York distributed calendars to potential clients (Bagley 1978). Today, there are 20,000 articles of specialty advertising which can be grouped into three classes: advertising specialties, business gifts and advertising calendars.

The first class, advertising specialities, are useful articles that are nominal in cost and bear the business firm's logo, name, or message. These novelties include key chains, ballpoint pens, writing pads, items of clothing (wearables), plactic cups, appointment books, ice scrapers, rulers and plastic shopping bags; and they represent approximately 70 percent of the industry's volume (Bagley 1978). Recall that these items are distributed free of charge.

The second class is business or executive gifts, which account for about 15 percent of the industry's volume. These are more expensive and seldom carry the advertiser's imprint or message. This is because the receipient is aware of who sent the gift. With the advent of new imprinting techniques, this may change. They are

frequently personalized for the receipt and are distributed as gesture of goodwill or as a thank you for a customer's patronage. Examples of business gifts include expenisve pens, desk sets, leather writing pad covers, calculator and attache cases. They have sometimes been criticized as bordering on being bribes.

The thrid class is calendars, also comprising about 15 percentof the industry's volume. These include plastic wallet calendars, desk calendars, wall calendars and watch calendars. Calendars have the advantage of constant and continuous exposure. People look at calendars every day of the year. They are visible to all members and visitors to a household or office. When looking at the calendar, the viewer is subject to the advertising message.

INDUSTRY STRUCTURE

The industry is basically composed of suppliers, who manufacture products, and of distributors who sell the products (see **figure one**). The distributor deals with the customer. Unlike most other advertising media, advertising agencies rarely involve themselves with specialty advertising.

Suppliers/Manufacturers

Ther are approximately 1,000 firms that are the primary suppliers or manufacturers of specialty advertising items (Specialty Advertising Association Internation, 1982). Suppliers may manufacture one or many products. However, they tend to confine their manufacturing to a single material, e.g., wood, vinyl, plastic. The suppliers may make their lines available to everyone. Some wil limit their lines to a few distributors in order to create an exclusive image.

Specialty supply houses tend to establish the price at which products are sold to ultimate consumers (Herpel and Slack, 1983). However, the price to the customer is negotiated between a distributor (see below) and the customer.

Suppliers rarely have their own sales force. In order to promote their goods, suppliers usually issue a catalog. The catalog shows the goods, prices, and size of the imprint area. Suppliers also exhibit at a semi-annual trade show, advertise in industry publications and solicit by direct mail. Suppliers do not usually sell to the final customer. They sell to distributors who sell to the customer. Ocassionally the manufacturer will operate a direct house, whereby he sells directly to final customers via his own sales reps.

Distributors

There are approximately 4,500 distributors (a.k.a. specialty advertising counselros) in the United States. Their objective is to solve the specialty advertising needs of the customer. They do this by helping him to identify his advertising objectives, identify his target audience, and determine a message and media (distribution) strategy. They devise campaigns by their knowledge of the suppliers' catalogs and by creative marketing. Not all problem solving items are available in a catalog. The distributor may have to work with a supplier/manufacturer to create a new item in order to solve the customer's problems.

The distributor obtains an crder from the customer. He/she will then plce the order with a supplier. The suppler will then drop-ship the merchandise to the customer, usually under the distributor's label. The distributor will then bill the customer and the supplier will bill the distributor. The difference between these two bills is the distributor's profit. Distributors are responsible for collecting from the customer and therefore assume financial risk. Distirbutors maintain no stock. They rarely see the goods except for a few sample copies sent by the suppliers.

Both suppliers and distributors are members of the Specialty Advertising International. Most members of the Association will not deal with either suppliers or distributors that are not also members of the Association. This policy tends to eliminate large customers from dealing directly with manufacturers. Also, manufacturers do not have the staff to work with customers in order to solve their problems. The distributor is equipped to perform this function.

Customers

Customers purchase specialty advertising items from a distributor in order to distribute without obligation to their actual or potential customers, and ocassionally to employees. They negotiate a price with the distributor and are not aware of the cost that the distributor pays the supplier. If problems arise, the customer deals with the distributor who will deal with the supplier. The customer is generally not aware of which company is the supplier or manufacturer.

Special advertising is distributed for a specific objective. Some objectives are: create good will; create an image; inform of a name change of a company; develop new customers; promote store openings; increase order quantities; motivate employees; use as a sales force aid; introduce new staff members; introduce new products; develop trade show traffic; and increase store traffice, among many others.

The distributor will work with the customer to create a specialty advertising campaign. The campaign is based on the objective, budget, and number of items needed.

SPECIALTY ADVERTISING RESEARCH

Research is needed on specialty advertising. In this section, a path for this research will be

developed. Research can be characterized as going through three stages (Woodruff, Cadotte, and Jenkins). (See Figure Two).

In stage one, ther are the beginnings of descriptive research and the emergence of a theoretical framework. Recall tests of specialty advertising items can be conducted. Consumers can be asked if they use specialty advertising items. They can be asked if they have any. Researchers can determine how often, where and when consumers receive these items. Also, the level of satisfaction obtained from these items can be measured. The final result would determine which items consumers would like to receive. Consumer perceptions need to be researched. For example, do consumers percive a lower qualtiy of the item because they receive them for free? Do consumers perceive an obligation or do they feel they are not obligated?

Another example of descriptive research is involved with the companies that use specialty advertising. How widespread is specialty advertising? What type of companies use specialty advertising? Are there size, regional, or industry differences? How do these companies view specialty advertising vis a vis the other major media in terms of efficiency and effectiveness?

In this stage, research needs to be conducted on relationships. Concepts need to be developed. For example, research needs to be conducted that examines the effectivenss of specialty advertising. It needs to be determined if increased sales is the measure of effectiveness, or if reserachers should use a different measure, e.g., recall of the company, interest in the company and its products/services, preference, etc. Information response models of the hierarchy of effects genre such as those discussed by Smith and Swmyard (1982) could be employed. The relationship between imprint size and effectiveness needs to be examined. Research should be conducted on the type of item and effectiveness as well as type of item and use. From this research, the theoretical framework can be expanded. This will lead to stage three; maturity.

In stage three, theories and models will evolve. Research will examine conceptual relationships within the context of an expanded theory and/or model. An examination of this medium can be utilized to develop and test a model of advertising effectiveness.

CONCLUSION

Specialty Advertising represents an area of potential research for academic researchers. This medium is overlooked even though it is one of the largest advertising media in the United States and has many advantages not offered by other media. Researchers in this area can be utilized by researchers of other advertising media. If a test of the effectiveness of this medium can be developed, it can be utilized to measure the effectiveness of other media.

Research in this area will aid suppliers, distributors and customers. It will aid all marketing managers in their ability to make better advertising decisions. It is hoped that specialty advertising will not continue to be the overlooke medium. Specialty advertising may provide the conerstone upon which a determination of advertising effectiveness can be made. It is improtant for academci researchers and marketing managers to understand the relationship between levels of advertising and consumer purchases.

FIGURE ONE
STRUCTURE OF SPECIALTY ADVERTISING INDUSTRY

Supplier	Distributor	Customer
Manufactures items	Obtains order from customer	Purchases items to give out
Prepares catalogs	Places order with supplier	Pays distributor
Ships goods to customer	Bills customer	
Bills distributor	Pays supplier	

FIGURE TWO
RESEARCH STAGES

1. **Introduction**
   - **Descriptive Research**
   - **Emergence of a Theoretical Framework**
2. **Growth**
   - **Descriptive Research**
   - **Concept Relationships**
   - **Expansion of Theoretical Framework**
   - **Applications**
   - **Concern for Reliability/Validity**
3. **Maturity**
   - **Measurement Relationship**
   - **Theory Testing**
   - **Models Developed**

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AN EXPLORATORY STUDY OF RETAILERS' PERCEPTIONS OF ISSUES RELATED TO THE VIABILITY OF THE OFFER OF CASH DISCOUNTS

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Abstract--The purpose of this paper was to explore the retailers' view regarding selected issues related to the cash discount subject. From a directory of retailers located in a medium-sized city, 825 retail establishments were chosen through a stratified random sample by industry group. Responses to issues focusing on the surcharge/cash discount proposition were analyzed using analysis of variance and chi square techques. Type of retail institution and number of years in existence of the retail institution were explored as dimensions which potentially relate to retailers' perception of problems related to the operationalization of cash discount in a retail marketing environment.

The cash discount issue is as yet unresolved and, therefore, continues to be a critical concern to the retail industry. When one considers the several activities that have import for this issue, the cash discount concern becomes even more an issue for the future of retailing. Activities occurring such as the use of debit cards and the increased cost of using charge cards both to the company honoring them and to the consumer using the card(s) raise the question anew--"Why not offer cash discounts?"

The controversy surrounding the cash discount vs. credit surcharge issue will continue to be debated for some time, particularly should Congress again be forced to decide on the issue. One stance states that a surcharge (adding on to the retail cash price an amount to cover the cost of handling the credit charge by the retailer) would be inflationary and unfair to the credit card user; also, it is viewed as having the potential to drastically impact retail sales in a negative manner, since many retailers report that a sizeable percent of their retail sales are based on credit sales. Contrariwise, a second stance states that retailers are forced to make up the credit cost by increasing the retail price for everybody (ignoring the difference in the retailer's operating expense between the cash purchase and the credit card purchase.)

The Problem

It is at this point that one might conjecture that, regardless of the persuasion of the two schools of thought, the question undergirding the issue of cash discounts remains: "Why not?" additional questions are, "Why has it not been tried by a cross-section of retailers?," "What would influence the retailer to try it?," "What anticipated circumstances does the retailer expect to experience in a surcharge world?"

It is important to stress at this point that although the federal legislation presently prohibits a credit surcharge on retail prices, the retailer can practice "two-tier" pricing by presenting the credit card price as the "regular price" and then offering a discount if the purchase is made with cash. In essence the same result can be obtained under the currently condoned procedure as under the banned procedure.

For example, consider the following situation in a surcharge setting: A shirt is offered for sale to the ultimate consumer for $20. The customer can elect to pay for the shirt by using one of several credit cards honored by the retailer or by paying cash (or by check). If the customer pays for the shirt by charging the item, the price is $20 plus the appropriate sales tax; on the other hand, if the customer pays for the shirt by offering cash, the amount to be paid would be $20 less the discount percentage assigned to that classification of shirt (e.g., a discount of 5% = $1 discount; $20 - $1 = $19 to be paid for the shirt plus the appropriate tax).

The dilemma that arises when a situation such as this is encouraged through legislation is that consumer is suspect of the retailer and the retailer feels intimidated by the "catch-22" effect of, on the one hand, saying, "I have priced merchandise fairly" but, on the other hand, "For certain of you there will be an additional charge." If the price difference could be presented as a surcharge for the privilege of using the credit card choice, the customer would most likely view the additional cost as a cost incurred by the retailer for processing the credit sale as opposed to additional profit for the retailer. At present, it is feared by the retailer that this obvious deductive logic will not be made by the customer.

A surcharge is viewed as a way of equitably passing on the additional cost of the merchant's or other credit card program(s) and not inequitably burying the cost of the credit card program in the price of the goods that the cash customer pays. More simply, the surcharge insures that people who use the service of credit will pay for the service and, contrariwise, those who do not use the service of credit will not be required to pay for that service.

Under a "one-tier" system cash customers pay more than credit customers because they lose the use of their money at the time of the tranaction, while credit card customers will pay the same price but will get to use the money for approximately thirty days ("the float"). The cost incurred to honor credit cards is equally distributed to cash and credit customers alike. Even though the mechanism exists by which retailers can offer a modified "two-tier" pricing system, very few retailers participate in such a practice; the exceptions that are most notable among this group, of course, are the retailers in the petroleum industry.

Relevant Issues to be Formally Explored

It is the opinion of the researchers that inadequate attention has been received in the literature in the following two areas: First, type of retail institution is a dimension which appears to offer potential as an influence on the recommended method of operationalization of cash discount in a retail marketing environment; secondly, years in existence of the retail institution is a dimension which offers potential as an influence in a similar fashion. These variables are systematically explored as they relate to the six issues/dimensions itemized below.

1. The extent to which costs to retail businesses hinder their adoption of the cash discount concept.
2. The extent to which anticipated decreased credit sales hinder their adoption of the cash discount concept.
3. The extent to which anticipated decreased overall profits hinder their adoption of the cash discount concept.
4. The minimum cash discount figure necessary to entice the credit customer to elect the cash discount option.
5. The likelihood that the size of the sale would affect the retailer's willingness to offer a cash discount.
6. The preferences of retail businesses for presenting prices if cash discounts were offered.

Methodology

In order to provide insight as to the thinking of the retailer on this subject, 825 retail establishments were chosen at random from a directory of retailers located in a medium-sized city in the southeastern United States. The population was sampled by taking a stratified random sample by industry group (automotive; medical; real estate; general retail; finance; lumber/building; mass merchandising/department stores/discount stores; and other) yielding a total of 825 subjects. Table I below presents the frequency of the sample by types of business. A questionnaire was mailed to each of the 825 members; of the 825 questionnaires mailed, 353 (42.8%) questionnaires were returned.

The analysis techniques used in this study are the analysis of variance and chi square techniques. Analysis of variance is appropriate when one is relating variation in an interval scaled dependent variable with one or more categorically defined independent variables. Chi square analysis is appropriate when one investigates the existence of a relationship between two categorically defined variables.

TABLE I
A DESCRIPTION OF THE TYPES OF RETAILERS REPRESENTED AND THEIR RELATIVE FREQUENCY IN THE SAMPLE

Type of Establishment	Percent
Automotive	17%
Medical	14%
Real Estate	1%
General Business	20%
Finance	4%
Lumber/Building	11%
Mass Merchandising/Dept. Stores	2%
Other	31%
Total	100%

A questionnaire was developed to provide a variety of data which might serve to expand the knowledge base of the cash discount subject. Hypotheses were developed and addressed in this study based on the six previously named topics.

Results

Six key questions were posed to the retailers. Through the statistical analyses described in the methodology section, the results will be presented based on the analyses of the responses to the questions posed to the retailers. The summary (conclusion) section will address the issues vs. responses of the participants.

Increased Costs as a Result of Cash Discounts

HYP. 1. The extent to which costs to retail businesses hinder their adoption of the cash discount concept depends upon (a) the type of retail institution and (b) number of years the retail institution has been in business.

Finding. There was no significant difference by type of business (Pr. = .18) or number of years the business (Pr. = .55) had been in existence. The mean was 2.46 on a four-point scale--this fell between "somewhat important" and "quite important." This means that the respondents had some concern over the anticipated increase in cost to their businesses if cash discounts were offered. As one might expect, the financial group felt that the anticipated costs to their businesses would be "quite important." As cash discounts increase, credit transactions would decrease and, therefore, the cash discounts have the potential to dramatically effect the profit picture for this particular group.

Decreased Sales as a Result of Cash Discounts

Hyp. 2. The extent to which anticipated decreased credit sales hinder their adoption of the cash discount concept depends upon (a) the type of retail institution and (b) number of years the institution has been in business.

Finding. There was a significant difference by type of business (Pr. = .03) as to the degree of importance to the establishment concerning an anticipated decrease in sales. Although the mean of 1.85 suggests that the respondents felt that the anticipated decrease in sales was nearer to "somewhat important" than to "not at all important," the financial group reported that it was between "somewhat important" and "quite important." There was no significant difference as to how the respondents perceived the degree of importance on the anticipated decrease of sales based on the length of time the firm had been in business (Pr. = .58).

Anticipated Decreased Profits as a Result of Cash Discounts

HYP. 3. The extent to which anticipated decreased overall profits hinder the adoption of the cash discount concept depends upon (a) the type of retail institution and (b) number of years the institution has been in business.

Finding. There is no significant difference by type of business (Pr. = .24) or years of existence of the business of the respondents (Pr. = .68) in the degree of importance placed on the anticipated decrease in profits serving as an explanation for lack of adoption of the cash discount concept. The mean of 2.58 does indicate that the respondents felt that the explanation of anticipated decrease in profits as an impediment to the adoption of the cash discount concept was mid-point between "somewhat important" and "quite important."

The Appropriate Size of the Cash Discount

HYP. 4. The minimum cash discount figure necessary to entice the credit customer to elect the cash discount option depends upon (a) the type of retail institution and (b) number of years the retail institution has been in business.

Finding. There was a significant difference by type of business (Pr. = .04) and years of existence of the businesses of the respondents (Pr. = .01). The two types of business that had the highest group means were "general retail" (9.9% discount) and "medical" (10.7% discount). The overall group mean was 7.8% discount. Respondents from firms who had been established longer indicated a lower cash discount would be an acceptable option to entice the credit customer to elect the cash discount option. For instance, managers of firms that had been in existence five years or less reported that a 10.6% would be necessary to influence the credit customer to purchase by cash instead of credit. Managers of firms that had been in existence ten or more years indicated that, on the average, a 6.8% discount would be sufficient to convert the credit customer into one who makes purchases using a cash option.

Would the Size of the Sale Affect the Cash Discount Option?

HYP. 5. The likelihood that the size of the sale would effect the retailer's willingness to offer a cash discount depends upon the type of retail institution.

Finding. There was no significant difference as to type of business (Pr. = .07). The overall group mean was 2.57 placing it between "perhaps" and "probably" that the size of the sale would affect the willingness of the retailer to offer a cash discount. An inspection of the data indicated that one could not make a clear-cut decision on the responses received. (Number of years was not tested.)

How Should Prices Be Presented to the Customer?

HYP. 6. The preferences of retail businesses for presenting prices if cash discounts were offered depends upon the type of retail institution.

Finding. The respondents were to indicate their preference for one of three methods for presenting prices while offering cash discounts: (1) post the credit price and show the percentage discount available for cash, (2) post both the credit price and the cash price, (3) post no price and show only the percentage discount for cash.

There was a significant difference (Pr. = .000) among the groups as to the method preferred by which the retailer would present prices to the customer when offering cash discounts. The application of chi square analysis indicated that the method preferred by most of the respondents (38.5%) was the third method--post no price and show only the percentage discount for cash. Next, the second method was preferred by the respondents (32.6%)--post both the credit price and the cash price. Last, the first method was preferred by 28.9% of the respondents--post the credit price and show the percentage discount available for cash.

Of the eight groups, several groups had means which were substantially different from the overall group mean. The automotive group's mean (61.3%) indicated that this group had a strong preference for the third method (post no price and show only the percentage discount for cash) while the lease desirable method was the second method (post both the credit price and the cash price); the mean for this method was 12.9%. The medical group mean (53.3%) indicated that this group had a strong preference for the third method also. The medical group's least preferred method was the first (post the credit price and show the percentage discount available for cash); the mean for this method was 13.3%. The finance group reported that 70.6% preferred the second method (post both the credit price and the cash price) while the "other" group reported that 44.2% preferred the first method (post the credit price and show the percentage discount available for cash).

Summary

In general, the results of the tests of the hypotheses indicated that the impact that the implementation of the cash discount option has on selected operational variables depends upon the type of retail institution and the number of years the retail institution has been in business. Type of retail institution impacts the retailers' perceptions regarding decreased sales stemming from the cash discount option (HYP. 2). Type of retail institution impacts the retailers' opinion regarding the size of the cash discount (HYP. 4). Type of retail institution impacts the retailers' decision as to the method by which price would be presented in situation where the cash discount was an option (HYP. 6). Number of years the retail institution has been in business impacts the retailers' opinion regarding the necessary size of the cash discount in order to entice the credit customer to elect the cash discount option (HYP. 4).

From a broader perspective (apart from the specification of the hypotheses) an assessment of the mean values of the operational variables addressed indicates that the respondents consider increased cost and decreased profit to be more important as an impediment to the retailer adopting the cash discount concept than the potential for decreased sales serves as an impediment.

In reviewing the overall group means, there is no overwhelming evidence that retailers as a whole will embrace the two-tier pricing system. On the other hand, there was not a definitive explanation that could be attributed to retailers not embracing the two-tier pricing system. Retailers remain suspect of the consequences of implementing a surcharge (two-tier pricing system).

One preference noted was that if the retailer was participating in a two-tier pricing system, the retailer would prefer to display the price to the consumer by posting no price but showing the percent discount for cash. Although this method was preferred it was not overwhelmingly endorsed by each industry group.

The retailers agreed that the size of the discount would affect customer acceptance. At the same time, the longer the business was in existence the lower was the discount prescribed.

The emergence of a solution to this issue does not appear to be imminent. Naturally, a strong customer endorsement will accelerate the acceptance process on the part of the retailers.

MARKETING BUDGETING PRACTICES: AN EMPIRICAL STUDY

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Abstract

Although marketing budgeting is an important task for the marketing manager, it has received relatively little attention from researchers. This study addresses the issue of marketing budgeting. The objectives of the study were to determine: marketing budget-setting methods, marketing budget appropriation and allocation, and marketing expenses levels.

The budget-setting method most frequently used is the historical marketing budget, a method that has rarely been mentioned in previous studies. It is followed closely by the objective and task method, and the percent of anticipated sales method. Almost 60% of firms allow 3% or more of their sales for marketing expenses; sales is the most important marketing budget item. The study also found that the percent of sales allocated to marketing budget is higher in larger firms which spend more on advertising, have a more positive attitude toward their management and employees, and have a less unionized work force.

Introduction

Budgeting and planning are important tasks of marketing managers. A survey of the literature reveals a relative paucity of empirical research on marketing management practices in general. Marketing planning procedures and processes have received relatively more attention than marketing budgeting. Studies on marketing planning fall into two broad categories: content and organization. The first category includes normative or descriptive studies (Caldwell 1977; Goetsch 1979; Hopkins 1981; Kehoe 1983; Luther 1982; Makens 1986; McDonald 1984; Nascenzi 1984) but little empirically-based research. The second category is characterized by studies of individuals involved in marketing planning (Cossé and Swan 1983) organizations (Hopkins and Bailey 1971; John and Martin 1984), or procedures (Paul 1981; Stasch and Lanktree 1980).

Participation in marketing budget-setting (Brownell 1985) and usage (Hardy and Orton 1982) have been investigated. Advertising budget-setting practices have also been the subject of study by various researchers (Blasko and Patti 1984; Lilien, Silk, Choffray and Rao 1976; Patti and Blasko 1981; Permut 1977; San Angustine and Foley 1975). But little information is available on marketing budgeting practices. This study is an attempt to add to the current base of information on marketing budgeting. Specifically, our objectives have been to:

a) investigate the methods of marketing budget-setting currently used;

b) determine the ratio of marketing expenses to total annual sales and the relative amount of budget allocation to the key marketing functions; and

c) analyze the level of marketing expenses with regard to characteristics of firms and managers.

Methodology

The sample frame for this study consisted of firms located in Quebec, Canada, and listed by Dun and Bradstreet. A random sampling procedure was used to select 5 000 firms. A total of 819 questionnaires were returned; 762 were suitable for analysis. The questionnaire was composed of four blocks of questions. In the first block, respondents were asked to describe their firm in terms of type of industry, total sales, number of employees etc. In the second block, organizational characteristics of the marketing function were ascertained. In the third block, managers were asked questions about their marketing management practices and activities; they were given a list of the five most common methods of budget-setting, as determined through personal interviews carried out in the preliminary phase of the research. Respondents were requested to check off all the methods currently used by their firm. The fourth block focused on psychological and socio-demographic characteristics of the respondents. Because of the large number of items (a total of 184 variables) contained in the questionnaire, it was judged most appropriate to do the survey by mail. A questionnaire, covering letter and postage-paid return enveloppe were sent to the marketing manager or the highest-ranked officer listed for each firm in Dun and Bradstreet.

Results

Following a description of the operation characteristics of the firms the following marketing budgetary practices were analyzed:

1) methods of marketing budget-setting;

2) ratio of marketing expenses to total annual sales and budget allocation to key marketing functions; and

3) level of marketing expenses.

Operation Characteristics

Small, medium and large-sized firms, as determined by both total annual sales volume and number of employees, are represented in the sample (**Table 1**). Although questionnaires were sent to an equal number of manufacturing and service firms, more manufacturing firms replied (58.3% vs 41.7%). Of the firms which responded, 21.1% evaluate their financial results as very satisfactory while 50.3% find them satisfactory.

TABLE 1

OPERATION CHARACTERISTICS OF FIRMS

Total Annual Sales Volumes (Percentage of firms)		Number of employees (Percentage of firms)	
$1 million or less	7.3%	20 or less	4.1%
$1.1 - $2 million	12.2%	21 - 50	32.5%
$2.1 - $5 million	22.1%	51 - 100	23.4%
$5.1 - $10 million	20.1%	101 - 250	21.3%
$10.1 - $50 million	25.5%	251 - 1000	13.5%
$50.1 million or more	12.8%	1001 or more	5.2%
	100%		100%
	n=757		n=756

Marketing Budget-setting Methods

Five possible marketing budget setting methods were presented to respondents; there was also an open-ended question to allow for other methods. The marketing budget-setting methods proposed were similar to the advertising budget methods most commonly found in the literature, except for the historical budget which was defined as the total amount of the firms budget previously allocated to marketing expenses. Results show that most firms somehow use the above methods concurrently and that other methods are seldom used. The most frequently used method (42.6% always, 37.1% occasionally) is the historical marketing budget (**Table 2**). This is an interesting finding as the historical marketing budget is seldom discussed in the literature on budget-setting. The historical method is followed closely and almost equally by the objective and task method and the percent of anticipated sales method. These results reflect the findings of Patti and Blasko (1981) in the case of advertising budget-setting, with regard to the greater use of the percent anticipated sales and the objective and task methods and the lesser interest in the affordable and the match competition methods. Finally, it should be noted that 80.2% of the responding firms do not use any method for setting their marketing budget other than the five mentionned above. As expected, there is a relation between the use of budgeting and planning. The five budget-setting methods are used more often (.001 level in each case) by firms which carry out an annual marketing plan than by those which do not. However, there are no significant differences in budget method use between manufacturing and service firms; similarly, no significant statistical differences were found between firms which are satisfied or dissatisfied with their financial results.

TABLE 2

BUDGET-SETTING METHODS

	Usage			
	Never (1)	Occasionally (2)	Always (3)	n
	(Percentage of firms)			
Historical marketing budget	20.3%	37.1%	42.6%	699
Percent of anticipated sales	28.8%	37.5%	33.6%	675
Match competition	83.1%	15.2%	1.7%	652
Affordable	50.4%	32.7%	16.9%	661
Objective and task	27.1%	40.4%	32.5%	679
Other methods	80.2%	12.3%	7.5%	106

The historical marketing budget method and the objective and task method are used significantly more often by larger firms, as determined by either total annual sales volume (.001) or the number of employees (.001). The percent of anticipated sales (.001) and the match competition (.052) methods are used less frequently in industrial marketing. The match competition method is generally not used, and even less so by firms with larger total annual sales (.019). The characteristics of the users of these various methods were also analyzed. The historical marketing budget method is used more often by older managers (.043) with a higher level of education (.001); the objective and task method is preferred by managers with higher incomes (.044) and higher levels of education (.016). The percent of anticipated sales method is used by older managers (.014) who have been on the job for a longer time (.033) and have had more working experience.

Marketing Budget Appropriation and Allocation Practices

Two specific aspects of marketing budgeting were investigated: 1) marketing budget appropriation expressed as the ratio of marketing expenses to total sales; and 2) budget allocation to key marketing functions.

The analysis of marketing appropriation reveals that a total of 509 firms, or 69.3% allow 3% or more of their sales for the marketing budget (**Table 3**), and 20.5% of the firms allow 11% or more for that function. It is of interest to note that, except for the match competition method, the usage of the four other methods

increases significantly at the .001 level, with an increase in the marketing budget as a percent of sales. Information about budget allocation to key marketing functions (**Table 3**) was more difficult to obtain, since the respondents were asked to write the exact amount allocated to each function, which obliged them to refer to budgets or financial statements. It is, therefore, not surprising that, for that question, the number of respondents decreased. It should be noted with regard to that question, that all firms do not necessarily perform all marketing functions. **Table 3** shows that, on average, sales is the most important function and accounts for 47.4% of the marketing budget; advertising and promotion is the second most important budget item (24.6%). Budget allocation for customer service follows closely; the reported relative importance of customer service is of interest, as in the literature it receives nowhere near the attention that advertising and sales receive. Half of the firms which reported their marketing budget allocation do not formally allocate any amount for planning, research and other functions. For those which do, it accounts for 8.0% of average marketing expenses.

TABLE 3

BUDGETARY PRACTICES

Marketing Expenses as Percentage of Total Annual Sales (Percentage of firms)		Average Marketing Budget Allocation to Key Functions (Percentage of average (total budget)		
			%	n
0 - 2%	30.7%	Sales	47.4%	475
3 - 5%	27.8%	Adv. and promotion	24.6%	483
6 - 10%	21.0%	Customer service	20.0%	362
11 - 20%	15.0%	Planning, research and other functions	8.0%	235
21% or more	5.5%			

n=734

Marketing Expenses Level

In order to investigate the relative level of marketing expenses (or the ratio of marketing expenses to total annual sales), a factor analysis was performed on the independent variables mentioned, reflecting the firm profile and the marketing organization profile (marketing function and personnel). After rotation, the varimax option provided seven factors, explaining 43.3% of the total variance (Table 4). The most significant factors were:

Factor 1: Advertising effort. This factor explains 13.3% of the total variance and is characterized by various types of advertising practices.

Factor 2: Characteristics of personnel. Explaining 7.2% of the total variance, this factor refers to the total number of employees, the number of production and marketing employees, and the absence of unionization.

Factor 3: Characteristics of managers. This factor is mainly related to such characteristics as total work experience, experience in the present job and in the firm, and income; it explains 5.9% of the total variance.

Factor 4: Sales effort. This factor explains 5.7% of the total variance and refers to various sales activities, such as meetings with salesmen and intermediaries, exhibitions, price lists, etc.

TABLE 4

FACTOR ANALYSIS OF FIRM CHARACTERISTICS

	FACTORS			
	1	2	3	4
Type of business	.29570	-.10098	.19432	.29628
Export	-.06933	.32011	-.07335	.16529
R & D Expenses	.12258	-.03048	.08829	-.00303
Financial results	-.09793	-.07519	-.21430	.18460
Industry technology level	-.00280	-.36695	-.13508	-.09039
Firm technology level	-.20027	-.20630	.00011	-.13112
Industry activity level	.13934	.03395	.06846	-.14033
Firm activity level	.22051	-.09691	.05283	-.23235
Industry activity level (next 5 years)	-.31948	-.02400	.11185	.18408
Firm activity level (next 5 years)	-.32798	-.05744	.06541	.27823
Total number of employees	.22329	.90218	-.08610	.07012
Number of employees (production)	.03299	.83452	-.13011	-.04046
Number of employees (marketing)	.31938	.51014	.06043	.06670
Union	-.03902	-.43548	.24160	.20181
Marketing influence (past 5 years)	.11354	.00677	.03959	.04786
Marketing influence (next 5 years)	.06514	.24741	.01360	.03040
Economic environment	.26518	.14433	.05118	-.08974
Political environment	.15540	.14423	.16701	-.14789
Marketing function	-.00287	.03945	.16538	-.09477
Firm relations with customer	.02343	.00255	-.08190	-.06381
Firm relations with management	.05501	-.03197	-.00420	-.23477
Firm relations with employees	.12228	-.13805	-.11929	-.06265
Continuing education	.18716	.37650	.14168	.32469
Association membership	.10935	.23111	.16321	.32157
Journal	.34778	.22344	.10758	.31130
Historical data method	.13848	-.24024	-.00341	.08879
Objective and task method	.29821	.23683	.04656	.37056
Marketing planning	-.46797	-.23842	-.00604	-.07189
Catalogue	.27230	-.00292	-.16711	.32207
Price list	.13785	.00934	-.12699	.24099
Sales meetings	.32603	-.02602	-.07566	.51806
Distribution meetings	.21546	-.10346	-.01127	.54497
Attendance at exhibitions	.17609	-.03737	-.00911	.69228
Participation in exhibitions	.04629	.21756	-.08301	.71838
TV and radio advertising	.44810	.11644	-.00927	-.20479
Newspaper advertising	.72352	.01493	-.03868	.14611
Magazine advertising	.65345	.06792	-.02133	.19795
Tele-marketing	.54883	.02100	.01484	.21376
Years in job	.41422	.00367	.05752	.22578
Years in firm	-.17137	-.19457	.60086	-.12166
Years of work experience	.05136	-.00523	.66041	.03440
Education	.02447	-.03894	.91127	-.00818
Age	-.06528	-.22482	.36256	-.05431
Income	.06880	.00967	.87809	.03342

The factor scores of all factors were entered as independent variables in a linear regression analysis, whose dependent variables were the ratios of marketing expenses to total annual sales volume. Results show that the R^2 is .3143 (F=4.9767, p=.0001). The most significant factors explaining the dependent variables were:

1) Advertising effort on TV and radio, in newspapers and magazines (t=3.402, p=.0011);

2) Characteristics of personnel, in particular, the total number of employees and the number of employees in production and marketing, and the absence of unionization (t=2.025, p=.0464);

3) Positive attitude toward management and employees (t=4.186, p=.0001);

4) Constant = 23.006 (p=.0000).

The level of marketing expenses (ratio of marketing expenses to total annual sales volume) is thus related to the level of advertising expenses as well as to the size of the firm, a positive attitude toward employees and management and the absence of unions. It appears that larger firms, which spend more on advertising and which have a positive attitude toward their personnel, among whom there is less unionization, have higher marketing expenses to sales ratios than others.

Conclusion

The present study has determined that three methods of setting marketing budgets are very popular: the historical marketing budget, the objective and task, and the percent of anticipated sales methods. The historical marketing budget is the most popular method and is used more often by larger firms, together with the percent of anticipated sales and the objective and task methods. The affordable, and the match competition methods are less favored. The above methods are often used concurrently and other methods are seldom used. The results of this study also confirm the expected relation between budgeting and planning activities in firms. Firms which prepare an annual marketing plan make greater use of the budget-setting methods. And, except for the match competition method, firms which use the most common methods more often are more likely to have a higher ratio of marketing expenses to total sales.

It appears that marketing budget-setting methods are rather similar to those used to set advertising budgets, except for the historical marketing budget method. This method, although rarely mentioned in the advertising context, is the most popular of all for setting marketing budgets. Furthermore, many of the budget-setting methods are used concurrently. With regard to marketing budget allocation, the results of this study show that the largest share of the budget goes, on average, to sales, followed almost equally by advertising and promotion, and customer service. The relative budgetary importance of customer service is noteworthy, considering that this subject is not as well covered in the literature as the others.

Finally, the level of marketing expenses is related to communication efforts (advertising and sales), and to a number of characteristics of personnel and managers. The ratio of marketing expenses to total annual sales is larger in large firms, which spend more on advertising and have a more positive attitude toward their personnel, who are less unionized.

This empirical study provides interesting information to managers, but it also points out the need for further research into marketing management generally, and marketing budget-setting practices in particular. The relative importance of customer service in the marketing budget identifies the need for further research on that subject. There are methodological questions to be considered, such as multicollinearity and the direction of causality in the regression equation relating marketing expenses levels to firm and manager characteristics. There are also managerial issues to be further investigated, such as the relation of budget methods to the individual characteristics of the manager as well as the relation of budget practices to the type of industry. Nevertheless, the present study gives a better understanding of the usage of marketing budget-setting methods, provides empirical information on marketing budget appropriation and allocation, and offers some insights into the level of marketing expenses as related to various exchange activities of firms.

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ECONOMIES OF SCOPE AND TYING AGREEMENTS[1]

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Abstract

This article broadens the concept of cost in tie-in agreements. It is shown that the relevant economic criterion to be used in evaluating the tie-in agreements is not the price of the tied goods. Instead, where multiproduct buying is involved, it is the total acquisition costs of tied-in products which should be used as the relevant economic criterion.

Introduction

The franchise system of distribution has experienced a phenomenal growth in the past two decades. In 1986, 478,000 franchise outlets in the U.S. are expected to generate retail sales of about $576 billion[2] (U.S. Department of Commerce, 1986). Parallel to this growth is the deluge of legislation and litigation both at the state and federal levels concerning franchising. Most of the major legal restrictions confronting franchising fall into four areas: (1) territorial and location restrictions, (2) purchasing restriction (tying agreements), (3) disclosure requirements, and (4) the onerous termination provisions in the franchise agreements (the "capricious termination" problem) (Hunt and Nevin, 1975; Hackett, 1977).

Research by Hunt and Nevin has estimated that over 70 percent of franchisees are required to purchase at least some of their operating supplies from the franchisor. (Such requirements are referred to as "tie-in-arrangements"). Many of these franchisees (47%) believed that they paid higher prices to the franchisors than they would in the open market (Hunt and Nevin, p. 24).

Critics of tying agreements argue that preventing the franchisee from buying on the open market harms the franchisee, the third party supplier, and the consumer (Brown, 1973). Courts and the anti-trust enforcement agencies appear to favor tying agreements only if such arrangements insure quality control. For example, in a lawsuit against Carvel the court ruled the Carvel's ingredient-supply restrictions were justified by the need for quality control connected with the problem of ingredient secrecy (Susser v. Carvel, 1964). In the case of Dunkin' Donuts, the court stated that such tying agreements may be justified not only when the franchisor is attempting to maintain product quality, but also when it is attempting to enter a new market or industry or to preserve its market identity (Ungar v. Dunkin' Donuts of America, Inc., 1975; see also Trombetta and Page, 1978). In a lawsuit against the Chock Full O' Nuts Corporation the court ruled that the franchisor "successfully proved its affirmative defense (to tying charges) of maintaining quality control with regard to its coffee and baked goods." (Chock Full O' Nuts Corp. Inc., 1973). On the other hand, the tying of unrelated items appears to be less defensible in the courts on the grounds that such buying policies would result in lessening competition and harm the consumer (see for example, Siegal, et al. v. Chicken Delight 1971 and Siegal v. Chicken Delight, 1970).

Proponents of tying agreements argue that tying agreements result in lowering prices to the franchisees because the franchisor can buy the supplies in volume, therefore cheaper and pass these savings to the franchisees. Opponents of the tying agreements refute such claims by citing numerous cases where tie-in agreements resulted in higher prices to the franchisees. For example, "A gallon of maraschino cherries costing $1.50 was relabeled by Howard Johnson and priced at $14.50. Shakey's charged $21.50 for the spice blend which cost them $3.00" (Hunt, 1975).

Review of literature concerning the economic impact of tying agreements reveals that the majority of these studies compare the prices of tied-in goods with the prices of similar items in the open market (see for example, Hearings, 1970; Brown, 1973; Hunt, 1975). Based on this comparison the obvious conclusion reached is that tie-in agreements increase the prices of products purchased by the franchisee and therefore are harmful to the final consumer. This article broadens the concept of cost in tie-in agreements. It shows that the relevant economic criterion to be used in evaluating the tie-in agreements is not the prices of the tied goods. Instead, where multiproduct buying is involved, it is the total acquisition costs of tied-in products

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[1] The term "economies of scope" was coined in Panzar and Willig (1975). Economies of scope in multiproduct buying exists if

$$C(q_1,q_2,\ldots,q_n) < C(q,0),\ C(q_2,0),\ldots C(q_n,0)$$

$$q_1<0,\ q_2<0,\ldots q_n<0$$

where $C(q_1, q_2,\ldots q_n$ is the firm's (minimized) acquisition cost of units of products q_1, $q_2,\ldots q_n$ jointly at parametically given prices.

[2] Total sales volume and the number of franchise organizations should be viewed with caution. Many franchise arrangements prohibit any precise statement of the total number of firms involved or their dollar sales.

which should be used as the relevant economic criterion.

The paper is organized into three sections. The first section explains that a firm buying two or more products from a seller can realize substantial economic gains due to the "economies of scope." The second part deals with the economic implications of "economies of scope" to the tying agreements. The last part delineates public policy implications of "economies of scope" regarding economic policies and antitrust laws.

"Economies of Scope" in Multiproduct Buying

Economies of scope in multiproduct buying result from several sources such as: volume discounts, lower delivery cost, reliability of supply, consistency of product quality, lower inventory and search costs. Williamson (1971) has termed these savings under a broad heading of transaction economies. This paper focuses on "economies of scope" in two of the above sources, search cost (ordering cost) and inventory carrying cost in the multiproduct case. For simplicity two products and a simple inventory model are considered. The results may be extended to more complex inventory models.

Let Q_1 and Q_2 be the quantities demanded per period for product 1 and 2, respectively. H_1 and H_2 are the respective inventory carrying costs. S is the search or ordering cost, which is generally considered as a fixed cost per order. L_1 and L_2 are the optimal lot sizes obtained by minimizing total inventory costs IC $(Q_1,0)$ and IC $(0,Q_2)$ for products 1 and 2, respectively. Therefore, when the two products are bought separately from two different firms the inventory costs are:

$$IC(Q_1,0) = \frac{H_1L_1}{2} + \frac{SQ_1}{L_1} \quad \text{and} \quad IC(0,Q_2) = \frac{H_2L_2}{2} + \frac{SQ_2}{L_2}$$

The optimal lot sizes and the minimum inventory cost are derived as follows:

$$L_1 = [2\ SQ_1/H_1]^{\frac{1}{2}} \text{ and } IC\ (Q_1,0)$$

$$= (2\ SH_1,Q_1)^{\frac{1}{2}} \qquad (1)$$

$$L_2 = [2\ SQ_2/H_2]^{\frac{1}{2}} \text{ and } IC\ (0,Q_2)$$

$$= (2\ SH_1,Q_2)^{\frac{1}{2}} \qquad (2)$$

When the two products are bought jointly from one seller a single order can be placed; therefore, the scheduling period t = L/Q for the two products must be equal. That is:

$$\frac{L_1}{Q_1} = \frac{L_2}{Q_2} \qquad (3)$$

The optimal lot sizes and hence the joint inventory cost must now satisfy the additional constraint given by (3). Note the lot size for product 1 not only depends upon the demand for item 1 but also depends upon the demand for item 2. This interdependence results in "economies of scope" when they are bought jointly. The joint inventory cost IC (Q_1,Q_2) is given by:

$$IC\ (Q_1,Q_2) = \frac{H_1L_1}{2} + \frac{H_2L_2}{2} + \frac{SQ_1}{L_1} \qquad (4)$$

Using (3) and solving the first order condition for minimization of (4) yields:

$$L_1 = [2\ SQ_1^2/(H_1Q_1 + H_2Q_2)]^{\frac{1}{2}} \quad \text{and} \qquad (5)$$

$$L_2 = [2\ SQ_2^2/(H_1Q_1 + H_2Q_2)]^{\frac{1}{2}} \quad \text{and}$$

$$IC\ (Q_1,Q_2) = (2SH_1Q_1 + 2SH_2Q_2)^{\frac{1}{2}} \qquad (6)$$

It is easy to see that the second order conditions are also satisfied. A comparison of the joint inventory cost equation (6) to inventory costs when two products are bought separately, equations (1) and (2), show that,

$$IC\ (Q_1,Q_2) < IC\ (Q_1,0) + IC\ (0,Q_2)$$

The reduction in total cost is due to lower ordering as well as inventory carrying costs. Generalizing this result to n products, it can be shown that:

$$IC\ (Q_1,Q_2 \ldots Q_n) = (\Sigma\ 2SH_iQ_i)^{\frac{1}{2}} \text{ and}$$

$$IC(Q_1,0,0,\ldots.) + (0,Q_2,0,\ldots.) \qquad (7)$$

$$+ \ldots. = \Sigma\ (2SH_iQ_i)^{\frac{1}{2}}$$

Thus it is easy to see that:

$$IC\ (Q_1 + Q_2,\ldots Q_n) < IC\ (Q_1,0,0,\ldots)$$

$$+ IC\ (0,Q_2,0,\ldots) + IC\ (0,0,0_3\ldots).$$

In effect the following is proven: Proposition I--for any buyer, the total inventory cost of buying n products from one seller is always lower than the combined inventory cost of buying them separately from n different sellers (n ≥ 2).

We define the "degree of economies of scope," S_c, as:

$$S_c = [IC\ (Q_1,0) + IC\ (0,Q_2)$$

$$- IC\ (Q_1 + Q_2]/[IC(Q_1,Q_2) + IC\ (0,Q_2)]$$

This is the proportion by which inventory costs decrease when a buyer purchases both products from a single firm.

Economic Implications of "Economies of Scope"

In this section the effects of economies of scope on tying agreements are analyzed. Essentially after tying agreements are enforced one of the following three situations could result: (1) tying agreements are neutral, (2) tying agreements result in a higher price for

tied goods only, and (3) tying agreements result in change in both prices. Each of the cases are analyzed below.

(1) Tying agreements are neutral. When tying and tied products are used in fixed proportion, as noted by Bowman and others, tie-in does not affect prices and hence quantities demanded of tying and tied goods do not change. In this case as concluded by Bowman:

"Where fixed proportions are involved, no revenue can be derived from setting a higher price for the tied product which could not have been made by setting the optimum price for the tying product. The imposition of tie-in under these circumstances determines the identity of the seller, but the amount of the tied product actually sold will not differ at all from that which could be sold if the optimum price for the tying product were set. Another monopoly is not created. The seller has only established a new method of exercising his already existing monopoly in regulated product. Leverage, therefore, does not exist when the proportions of the two products are fixed." (emphasis added) (Bowman, 1957, p. 23)

When the proportions are fixed, the franchisee does not have to pay a higher price for the tied product whether he buys it from the franchisor or from any other firm in the market, the total purchase cost of the two products remains unchanged when tying agreements are enforced. However, as shown in Section I, tying agreements result in "economies of scope" in inventory costs and hence the sum of purchase and inventory cost would be lower with tying agreements than without tie-ins--a welfare gain. Tying agreements in fixed-proportion cases are neutral only to the seller. As far as buyers or consumers are concerned they are economically desirable. From a societal point of view tying agreements in this case would increase consumer welfare.

(2) Higher Price for Tied Good Only. As shown by Burnstein (1960), when the tying and the tied goods are independent in demand (cross price elasticity of demand being negligible), then tie-in will not affect the demand for the tying product; that is, the tyee will not reduce his rate of purchase of product 1 at existing price p_1. The tying monopolist however, by charging monopoly price for the tied good, can convert some of his "victim's" consumer surplus into profits. In this case tie-in is not more neutral. The buyer experiences "diseconomies of scope" due to higher prices for the tied good and at the same time can realize "economies of scope" due to lower inventory cost. In this case whether tie-in results in overall reduction in cost would depend upon the relative magnitudes of "diseconomies of scope" and "economies of scope." Let P_{2c} be the price (competitive) of a tied product if it is bought from the market and P_{2m} be the price (monopoly) if it is bought from the tying monopolist. Noting that the price (P_1) and quantity (Q_1) of tying product remain unaffected, tying agreements would be economical if:

$$(P_{2m}-P_{2c})\,Q_2 < (2HSQ_1)^{\frac{1}{2}} + (2HSQ_2)^{\frac{1}{2}} - (2HSQ_1+2SQ_2)^{\frac{1}{2}}$$

$$\frac{P_{2m}\,Q_2}{\eta_2} < S_c\ IC\ (Q_1,Q_2), \text{ since } P_{2c} = \frac{\eta_2-1}{\eta_2}\ P_m$$

$$\frac{P_{2m}\,Q_2}{IC(Q_1,Q_2)} < \eta_2$$

Where η_2 is the price elasticity of demand for the tied good and S_c is the degree of "economies of scope."

(3) Both Prices Change. Burnstein has shown that if tying and tied goods are either independent or complementary in demand (the substitutional case is uncertain), the price of tying goods will fall after tie-in. Upon establishment of a tie-in, the demand for the tying product will decrease since a non-discriminating tie-in would result in complete withdrawal of some customers. However, the net profitability of a price decrease tends to be higher than before to the extent that it encourages more customers to stay, permitting collection of more profits from the sales of tied goods. Therefore, it is clear that if tying agreements are enforced the profits of the tying monopolist will increase. The important question that has been overlooked and used to be unanswered is, how does the total cost to a firm change when it accepts the tie-in and it results in changes in both the prices.

Let Q_1 and Q_2 be tyee's profit maximizing requirements of tying and tied goods respectively and p_1 and p_2 be the corresponding prices before tie-in. For a small change in both prices, the change in cost can be written as $Q_2dP_2 - Q_1dP_1$ (the first term denotes the increase in cost on tied goods while the second term represents decrease in cost on tying product). With little algebraic manipulations it is easy to see that total cost will be unchanged if:

$$\frac{P_2Q_2}{P_1Q_1} = \frac{\alpha_2}{\alpha_1} = \frac{\epsilon_{12}}{\eta_1}$$

That is, if the ratio of expenditure on tied and tying goods is equal to the ratio of cross-price elasticity of demand and price elasticity of demand for the tying good. Since tie-in will always reduce inventory cost, there is overall reduction in total costs--a welfare gain. One interesting case that calls for further analysis is when the change in purchase cost is positive (total purchase cost after tie-in goes up). In this case tie-in is desirable if:

$$\frac{Q_2 dP_2 - Q_1 dP_1 < 2HSQ_1)^{\frac{1}{2}} + (2HSQ_2)^{\frac{1}{2}}}{\Delta c} < Sc$$
$$IC\ (Q_1, Q_2)$$

The above relationship states that if the ratio of increase in total cost, due to tying agreements and joint inventory cost of tying and tied goods, is less than the degree of economies of scope, tying agreements increase the total welfare--the tying monopolist can increase his profits and the tyee can lower his total cost. How often this condition is satisfied is, of course, an empirical question.

Discussion

As pointed out by Baumol and Fischer (1978), and as is also evident from this analysis, in a multiproduct situation in which "economies of scope" are present conclusions regarding the economic efficiency of the market structure cannot be drawn by considering either the cost or the price of each product separately. When a firm either produces or buys a single product the cost and the price of that product are the most important economic variables that determine the industry's structure. However, in a multiproduct situation, because of technological and demand interdependence, it is the total cost of the industry's total output that determines its structure. Even if we ignore the assurance of uniform quality control and steady and reliable supply provided by the franchisors, it is difficult to imagine that the overall cost of buying thirty-one flavors of ice cream from thirty-one independent suppliers will be lower than that of buying them from one supplier. Therefore, although it is not necessarily true that franchising is always the least costly form of market organization, it would be highly surprising if there were not a rough correspondence between its economical nature and what actually occurs.

The courts have emphasized primarily the maintenance of quality standards in their rulings in favor of tying agreements in franchising. The courts have also ruled against tying agreements, in general, because they yield prices higher than the competitive prices for the tied goods. However, as has been shown in this analysis, the economic effects of a tie-in cannot be evaluated solely on the bases of the prices of the tied products. When multiproduct production or buying is involved, the total cost of the total industry's output is the appropriate economic criterion.

In merger guidelines recently issued by the Justice Department (June 1982) and a detailed study completed by Fisher and Sciacca (1982) at the Federal Trade commission, the efficiency gain due to vertical integration has been clearly recognized. It is true that in some cases vertical mergers may have anti-competitive effects. Empirically it is extremely difficult if not impossible to prove. As a result, in the new merger guidelines not only "per-se illegal" attitudes towards vertical merger are abandoned but there is also a clear softening of attitude towards challenging the vertical mergers in the court. Tying agreements or requirement contracts are a form of vertical integration. As shown above, there are certainly efficiency gains possible in many cases. Realizing there are many similarities in terms of their economic effects on the market performance between vertical mergers and tying agreements. It seems appropriate that the same general guidelines should also be applicable to tying agreements and requirement contracts.

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PRICE AND ADVERTISING EFFORT OVER THE PRODUCT LIFE CYCLE: THE B.C.G. AND DORFMAN-STEINER APPROACHES

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Abstract

The relative importance of the price and advertising variables in the total marketing mix is expected to vary over the product life cycle. The Boston Consulting Group's share-growth matrix, as well as the Dorfman-Steiner Theorem can be useful in providing direction to strategy. The implications of the two approaches are analysed. Although both approaches provide somewhat similar directions, they diverge in terms of their implications for the decline stage of the product life cycle.

The Dorfman-Steiner Theorem (Dorfman and Steiner 1954) and the Boston Consulting Group approach with respect to price and the level of advertising during the (a) growth, (b) maturity, and (c) declining phases of the product life cycle can provide differing directions to marketers. First, the implications of the two approaches are presented individually, and then their differences are analyzed.

The Dorfman-Steiner Theorem

The Dorfman-Steiner Theorem (DST) is intended to be an aid in identifying the optimal level of controllable marketing variables, including price and advertising, and it provides necessary but not sufficient conditions for optimality, as it may indicate a local rather than global maxima. (This shortcoming, though, is avoidable through a modified analysis; see Kotler 1971). The approach aims at short-term profit maximization only. The theorem states that for profit maximization, the advertising budget and price should be chosen such that increase in gross revenue resulting from a dollar increase in advertising expenditure is equal to the ordinary elasticity of demand (Dorfman and Steiner 1954). This in turn, leads to:

$$e(p)=\frac{P.Q}{A}\, e(a) \qquad (1)$$

where A represents the level of advertising expenditure, P is the price, Q the quantity sold, e(p) the price elasticity, and e(a) the advertising elasticity (Kotler 1971).

Stated differently, this leads us to:

$$\frac{e(a)}{e(p)} = \frac{A}{P.Q} = \text{advertising/sales ratio} \qquad (2)$$

Thus, for profit maximization, the advertising/sales ratio should be set equal to the proportion between the elasticities for advertising and that for price. This, therefore, becomes a general "guiding principle", as inferred from the DST.

It must be borne in mind that the DST is based on a number of assumptions, and it is best that we explicate the major assumptions at this stage:

1. The Marketing variables are independent, with no interactive effects.
2. Competitive reactions can be ignored.
3. There are no lagged effects of marketing variables.
4. The firm is faced with highly elastic demand, so that all quantity produced can be sold.

All these assumptions rarely, if ever, are valid in the real world. It has, therefore, been suggested that the theorem be used only as a "rule-of-thumb" to achieve short-term profit maximization (Kotler 1971).

In order to establish the optimal level for price and advertising, one should:

1. Use the sale response function for price to calculate the response function for the contribution to profit and fixed costs for price.
2. Calculate the price that gives the highest contribution to profit and fixed costs.
3. Use this price to calculate the response function for contribution to profit and fixed cost due to advertising.
4. Find the level of advertising expenditure that gives the highest contribution to profit and fixed costs.

But, since Dorfman and Steiner(1954) have made no effort to tie their theorem to the product life cycle, the above procedure is not sufficient for our present purpose. Therefore, the "guiding principle" developed earlier, viz, ratio of the two elasticities = A/S ratio becomes useful. For estimates and trends in the values of elasticity for different marketing instruments over the stages of the product life cycle, see Mickwitz (1959). There is some empirical (and other) evidence to believe that elasticities for different marketing instruments tend to vary over the different stages of the product life cycle (Anderson and Zeithaml 1984; Arora 1979; Day 1981; Kotler 1971; Mickwitz 1959; Parsons 1975). We now use this, in combination with DST, to look at the three major stages of the product life cycle:

Growth stage: the market is relatively more sensitive to advertising (Parsons 1975), which plays an important role in getting the early majority of consumers to accept the product. Since e(a) is large compared to e(p), the advertising/sales ratio should be quite high. Another way of looking at it would be that given a reasonable advertising level, the price should be set such that it maximizes total revenue (PQ). Thus, even as the total revenue increases rapidly during this stage, advertising should keep pace. Since price elasticity is still low, the price would tend to be moderate/high.

Maturity stage: by the time this stage is reached, most buyers who are price-insensitive have already tried the product, and competitors are vying with each other for customers. Efforts are being made to bring in the (new) price-sensitive customers by lowering of price in-

dustry wide. Thus price has the highest elasticity at this stage, followed by advertising. Hence, by our "guiding principle", the advertising/sales ratio would be relatively lower, at this stage, while total sales are peaking. In absolute terms, advertising should level off. It should be noted here that this is exactly the same as what happens under the commonly used percentage-of-sales method of setting advertising budgets.

Decline stage: here the problem is one of finding new product uses or markets and advertising them (Kotler 1971). Also, price cuts will have virtually no impact (low price elasticity), while advertising elasticity will be high. Hence, the advertising/sales ratio will tend to be relatively high, even though on a smaller total revenue base.

The Boston Consulting Group (BCG) Approach

As opposed to the DST, the approach focuses on market share in the initial stages, with expectations of reaping higher profits at a later stage. This sales oriented strategy can be useful for companies with high fixed costs, and where high use of production capacity is needed to offset such costs. In general, sales oriented strategies will tend to have lower prices, and higher advertising/sales promotion expenditures compared to "profit now" strategies.

The product protfolio strategy of the Boston Consulting Group is built upon the experience curve (Cox 1975), and uses two market measures: market share, and market growth rate. Depending on their location on the matrix, products are classified as Cash Cows, Stars, and Problem Children or Dogs. Each of these four basic categories has an associated set of strategic postulates (Cox 1975), that are generally applicable to the individual entries. Thus higher investment is postulated in a high growth market to increase market share. High investment in low-growth market is not recommended as there are few opportunities in such a situation for improving the market share or for high future profitability. The implications of these postulates (specifically related to price and advertising) for the different stages of the product life cycle are examined here.

Growth stage: here the market growth is high, and depending upon the relative market share (RMS), the product could either be a Star (RMS$>$1) or Problem Child (RMS$<$1). Stars require to maintain or increase market share, which requires reinvesting earnings in the form of high advertising or a moderate price level, or both. Problem Children require increases in Market Share, which also require high promotional inputs.

Maturity stage: here the market growth is low or declining. The product could either be a Cash Cow (RMS$>$1) or a Dog (RMS$<$1). A tendency to overinvest in Cash Cows should be resisted. That is, promotional efforts (including advertising) should be limited to just maintaining the dominant market share, while pricing should be along the experience curve (Dolan and Jeuland 1981), passing on benefits of the cost reductions achieved to consumers through gradual reduction in prices. This is of crucial importance because of mounting pressure from the competition. Even for Dogs, it is postulated that promotion should be minimized, aimed at eventual exit from the market.

Decline stage: here the situation is similar to the above (same two quadrants of the matrix), except that the position is being eroded faster. It is postulated that the Cash Cows would be "harvested", i.e., milked for as much cash as possible, while putting in only minimal inputs in the process. A rapid exit should also be made from the Dogs category, to cut losses to a minimum.

Comparisons

Growth stage: The implications of the Dorfman-Steiner Theorem (DST) as well as that of the Boston Consulting Group (BCG) philosophy are that the firm should have a high level of advertising, as well as competitive pricing, to achieve a high market share. Even though the two perspectives (DST and BCG) are radically different, we find that their implications in terms of operational strategy are the same.

Maturity stage: here again the implications are the same: lower price, and limited/moderate advertising. In one case the reason for lowering price is to pass on benefits of the lower costs resulting from the experience curve (BCG), while in the other it is to attract the more price-sensitive buyers (DST).

Decline stage: This is where we find a difference in the two approaches: BCG calls for minimizing promotional inputs and deliberately staging an exit from the market, while the other (DST) calls for increasing the advertising/sales ratio in order to communicate new/extended uses and/or to new segments of the market (viz., Arm and Hammer's baking soda).

Thus, we find that both the Dorfman-Steiner Theorem as well as the Boston Consulting Group approach lead to fairly similar operational guidelines. The only difference occurs at the market decline stage of the product life cycle. In the above analysis we have attempted to take a rather simplistic approach, in order to facilitate easier comparison between the two approaches. Complicating factors like competitive pressures and reactions to changes in marketing inputs have largely been ignored. (Some suggested marketing action implications of the various stages of the product life cycle may also be found in Wind 1982).

It is felt that the DST can be used as a decision aid to clarify managerial thinking, though its severe limitations must be borne in mind. The BCG approach must also be used carefully, since dimensions other than market growth and relative market share play an important role. The firm's willingness to take risk, changes in competitors position and resources, access to International Markets, and financial strength, should also be taken into account.

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RETAIL PATRONAGE PROFILE: REBATE USERS VERSUS NON-USERS

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Abstract

This study examines and compares attitudes of consumers who take advantage of rebate offers with those who have not used such deals. Specifically, consumer attitudes toward store attributes and shopping are examined. The findings suggest that rebate users are more price sensitive and less store loyal than non-users. They look for stores with frequent price promotions and seek information about such stores by monitoring retail advertisements. Planning and strategic issues for the retailer are discussed.

Introduction

During the past ten years popularity of rebates has grown substantially. Although all of the members of the distribution channel have become active in offering such deals, manufacturers have been the most active. Rebates which are frequently in the form of cash refunds are intended to increase short term sales, encourage brand switching, and stimulate forward buying. As with any promotional activity, its success depends on gearing it to the market sector most sensitive to this type of purchase incentive. Determining a profile for rebate users is one way to look at this segment. Just as important, however, is understanding how and where they shop, and whether they maintain any degree of store loyalty. Therefore, if the retail store characteristics that rebate users seek can be determined, a more efficient rebate promotional program can be designed by the manufacturer as well as the retailer. Likewise, if we can determine why non-users of rebates ignore this promotional opportunity, rebate programs may be redesigned to be more compatible with this group of consumers so as to increase the effectiveness of the campaign.

This study attempts to uncover store patronage characteristics of rebate users. Based on data gathered through a survey of 250 respondents to a questionnaire addressing their shopping habits and preferences, it attempts to isolate the rebate user from the non-user by examining a series of attitudinal measures.

As the literature review will show, a number of consumer surveys have been conducted. However, their focus has not been one of creating a retail patronage profile. Most have placed their main thrust on the classification aspects of rebates, and to some degree their users, and less on retail store patronage considerations.

In a manner of definition, rebates are differentiated from other forms of promotion such as coupons and discounts although some rebate promotions include cents-off coupons. In this study, we refer to rebate as the type of refund that requires the purchaser to collect one or more forms, complete and mail them to the issuer to receive a cash payment sometime after the purchase. These refunds are generally larger in amount than cents-off coupons because in addition to stimulating a purchase behavior the value refunded must warrant the effort and expense required in applying for them. In addition to increasing product/brand sales, a large rebate amount is also commensurate with the length of time a customer has to wait for a refund.

Literature Review

Background

The literature covering rebates and rebate users is very limited. Articles on the subject have most frequently appeared in trade journals and are often in the form of news releases and corporate activity. No significant research finding was uncovered as a result of an extensive literature search. For example, such topics as characteristics of the rebate user, store patronage issues, or implications for the distribution channels are yet to be researched. However, it is apparent that companies that have actively been involved in offering rebates have conducted proprietary research to assist them with this task.

The surge in popularity of rebates with manufacturers and consumers in the late 1970s has been attributed to the high unemployment and inflation at the time (Alsop 1982, More Consumers.. 1980). It was during this period that more sophisticated rebate users formed rebate swap groups, subscribed to refund bulletins and purchased rebate books (Slesin 1981).

Rebates, or cash refunds as they are also referred to, moved to the forefront of consumer awareness when a troubled auto industry started using them to improve sales of automobiles in the 1970s. Since then, they have been used extensively by package goods companies as part of their promotion strategy (Haugh 1980).

Not only are companies offering an increasing number of rebates (More Consumers.. 1980), on a widening range of their product line (Johnson 1982), but the rebate itself is taking on different forms. It need not be confined to a mail-in form with proof of purchase, it can be combined with cents-off coupons, or cross merchandised with a number of products manufactured by different companies (Trager 1985). As manufacturers of package goods have increased

the number of rebates available to consumers, so have redemption rates (Meyer 1985).

Rebates as Viewed by the Retailer/Distributor

From the manufacturer's standpoint the most obvious reason for offering rebates is to stimulate sales; and by achieving a higher sales volume, increase profits (Mack 1984). By promoting brand-switching and by borrowing from future sales, manufacturers can achieve certain short-term objectives. However, manufacturers rely on their channels of distribution members, particularly the retailer for administering their rebate programs.

Although retailers appreciate the role of rebates in increasing store traffic, they find them to be impractical and, to some extent, retailers have become disenchanted with the use of rebate promotions (Rebates.. 1985). Rebate offers increase paperwork and handling costs for the retailer because they are often shipped separately from the product and thus can be misplaced. When customers do not find the forms necessary to claim a rebate, they generally blame the store. In some cases, a special rebate "troubleshooter" has to be hired by the store thus increasing expenses (Johnson 1985).

Ironically, popularity of this promotional tool has encouraged some chain stores and distributors to develop their own type of rebate. Firms such as AT&T, Citibank, Mastercard, and department store frequent-shopper programs are aimed at building customer loyalty and differentiating their services from the competition (Belkin 1985).

The proliferation of rebate offers would seem to lend credence to the belief held by some that rebates have been proven to move merchandise (Belkin 1985). Yet the opinion is mixed about their benefits. There is concern that the use of rebates is good only for temporary sales gains and do not build any long term loyalty (More Consumers.. 1980). In other words, rebate promotions are basically a one-time shot in the arm (The Great.. 1975) that may instead be damaging the consumer franchise for branded product built up at considerable advertising expense aimed at creating brand loyalty, by inducing "cherry picking" for price (Williams 1983).

Many executives worry that rebate sales may be achieved at the cost of future non-rebated sales (The Great.. 1975) as consumers precipitate (or delay) their purchases to coincide with rebate offers, thereby becoming unwilling to make purchases at non-rebated prices (Simison 1982). This is already evident in some product categories such as smoke alarms where few brands are sold without a rebate (Haugh 1980). Therefore, the claim that rebates always increase sales (or profits) may be disputed (Johnson 1982).

Surveys taken by such firms as A.C. Nielsen Company and Manufacturer's Marketing Services conclude that consumer use of rebate offers has increased since the mid-1970s as has their use by manufacturers (Haugh 1982). Nielsen has found that rebate responses had increased from 27% in 1977 to 45% as of 1981, with a parallel increase in households that had claimed between four and twelve refunds in 1981.

Methodology

The major objective of this study was to delineate shopping attitudes and behavior of rebate users as compared to non-users. A self-administered questionnaire was distributed among 250 individuals in a major midwestern city. Most of the questions were gathered from a list of AIO (attitudes, interests, and opinions) questions. About one-third of the questions were generated by the authors such that they complemented a set of pre-tested AIO questions and more specifically addressed issues dealing with attitudes toward rebates and customers' store patronage profile. The questionnaire was pre-tested using marketing research experts as well as a group of students. The final form was then distributed among respondents.

Two-hundred and thirty eight usable responses were collected (95%). Data were collected over a period of four months and, therefore, it is likely that later respondents might have been biased to some degree by the "recency" effect of newer rebate offers vis-a-vis earlier respondents whom might have been exposed to fewer rebate offers.

Since the objective was to develop a general store patronage profile of rebate user, the questionnaire was not industry nor product specific. It was designed to address consumer attitudes towards shopping in general. The items included purchase motivation, work and effort expended prior to the actual purchase, and considerations entering into the final purchase decision. This is followed by several questions regarding store preferences and reasons for such preferences.

Results

Validity of certain assumptions about rebate users was verified by analyzing available data. A major hypothesis of this study has to do with the considerable work required to apply for a rebate, as opposed to use of coupons. Therefore, it was expected that rebate users would have certain predispositions as compared to non-users. These personal characteristics would include greater planning, organization, and looking for the best way to get the most out of each dollar spent. Because rebates require planning ahead, rebate users are not likely to be impulsive buyers.

Data were analyzed using chi-square statistics and t-test with respect to store patronage and preference profile of rebate users and non-users. A rebate user was defined as one who has taken advantage of a rebate offer. Ninety-three respondents (39%) indicated that they had taken advantage of rebates. This figure is slightly

lower than Nielsen's estimate; however, their unit of analysis was the household and not the individual.

Store Attribute Dimension

Importance level of store attributes were measured on a six-point scale. The results were compared for users and non-users of rebates and are presented in Table I:

Table I
Importance of Store Attributes: Users vs. Non-users

Attribute	Mean Users	Mean Non-Users	Probability
Frequent price promotions . . .	2.778	3.174	p<.004
Knowledgeable sales clerks	2.444	2.420	p<.802
Up-to-date fashion	2.622	2.488	p<.304
Overall price levels	2.168	2.333	p<.109
Top quality merchandise . . .	1.950	1.951	p<.990
Store's contribution to community . .	3.756	3.763	p<.959
Location convenience	2.775	2.955	p<.169
Layout convenience	2.022	2.132	p<.282
Store atmosphere	2.417	2.247	p<.125
Liberal return policy	2.034	2.209	p<.125

1 = Very Important 6 = Not Important At All

Only one variable, availability of frequent price promotions by the store, was significant in distinguishing between users and non-users of rebates. Rebate users' mean of 2.78 is significantly lower than non-users' mean of 3.17; i.e., retailers' price promotions are more important to rebate users. This difference in the way the two groups view price promotions is in line with expected shopping behavior of rebate users; i.e., one would expect price deals and their dissemination to be more important to this group.

Knowledgeable sales clerks are generally considered to be an asset to any retail store. However, the results of this study suggest that rebate users and non-users on the average tend to place little emphasis on this attribute ($p<.8$).

Five other store attribute variables, although not statistically significant, have alpha levels of .169 or lower. These variables might suggest some underlying ways in which stores are viewed by these groups. For example overall price levels are more important to rebate users ($\mu=2.17$) than non-users ($\mu=2.33$). This dimension is in agreement with frequency of price promotions discussed earlier.

As with any retail operation, store location has major implications for sales and profitability. In differentiating between users and non-users of rebate offers, it was expected that the user group would be willing to endure certain inconveniences (including travel time) to take advantage of a store with a profile that is compatible with this group's behavior. As a discriminating variable, store location had a probability level of .196. It is interesting to note, however, that store location was relatively more important to rebate users ($\mu=.278$) than non-users ($\mu=.295$).

Store atmosphere, was generally important to both groups, but had a probability of .128. One would have expected rebate-users to be less sensitive to atmospheric elements of retail establishments. Although insignificant at the .05 level, store atmosphere is in fact relatively less important to the user group ($\mu=2.417$) than the non-user group ($\mu=2.247$) as measured by the mean values.

Merchandise return policy is somewhat more important to rebate users ($\mu=2.034$) than non-users ($\mu=2.209$). It was expected that rebate users' more prudent and possibly venturesome shopping behavior would place more weight on this variable. Although as a differentiating variable return policy is statistically insignificant, relatively lower mean value of the user group provides some support for this conjecture.

Shopping Behavior Dimensions

Only three shopping behavior variables were statistically significant ($\alpha = .05$) in differentiating between rebate users and non-users. Another four had significance levels of less than .15 and thus warrant some consideration. Table II contains the description and results for these factors.

Table II
Shopping Behavior Dimensions: Rebate Users Vs. Non-users

Dimension	Mean Users	Mean Non-users	Probability
Disloyal to store	2.413	2.784	p<.001
Store advertising	2.263	2.576	p<.004
Use of Cents-off coupons	2.905	3.476	p<.000
Fashion awareness & trial	3.689	3.502	p<.076
Store Service preference . .	2.743	2.526	p<.054
Price as the most important purchase factor	2.950	3.146	p<.149
Buying big ticket items on sale	2.520	2.700	p<.133

1 = Strongly Agree 5 = Strongly Disagree

Data suggest that rebate users are less characterized by store loyalty than non-users. They also appear to favor stores that do frequent advertising through which information about their prices are disseminated. As one might expect, rebate users look for retail establishments that accept cents-off coupons. This

group, because of their deal proneness tendencies, differ significantly in behavior along this dimension.

Conversely, fashion awareness and trial as well as a desire for good service are not as important for rebate users as compared to non-users. Since the probability levels of these factors are only slightly greater than .05, they warrant a closer examination by retailers seeking to take advantage of rebate offers to increase store traffic, sales, and profits. Based on this information rebate users appear to be somewhat less sensitive to fashion trends than non-users. However, as the relatively high mean values for the two groups suggest, the sample as a whole considers fashion awareness and trial as somewhat unimportant in their shopping behavior. Likewise, the non-user group requires less in-store attention and therefore service level is not what they primarily seek.

Rebate users tend to put more emphasis on the price variable of the retailer's marketing plan. On the average more rebate users agreed that price is the most important shopping variable than non-users. Also, as suggested earlier, rebate users are more likely to plan their purchases, thus allowing them to gather information and seek their desired merchandise on sale.

Conclusions

This study sought to determine existing differences between rebate users and non-users as they pertain to store patronage and shopping behavior attributes. Understanding consumer typology insofar as their reaction toward rebate offers is concerned can play a major role for strategy formulation by the retailer. Increasing store traffic is one aspect of this strategy. Although not an objective of this study, available evidence suggests that increase in store traffic will increase sales of non-promoted merchandise. Additionally, retailers may emphasize their own buying strategy to receive a better price, advertising support, discounts, and payment terms from their suppliers for rebate merchandise.

The results of this study indirectly suggest that rebate users are more price-conscious in nature and hence seek price information through store advertising. They are also more deliberate in their purchasing behavior than non-users of rebates. In addition rebate users are less loyal to any particular retail establishments than non-users. They seek stores that have frequent price promotions and because they use cents-off coupons, they patronize stores that accept such coupons. These findings suggest that to attract the rebate prone customer retail establishments must implement a continuous promotional strategy making use of rebate offers.

The absence of brand loyalty by rebate users does not imply that store should pay little attention to this promotional method. To the contrary, collectively, the results may imply that users do their shopping at stores with similar characteristics possibly at a random fashion (e.g., they gravitate among discount department stores). In this case relevant retail establishments can gear their promotional programs to attract, at least, a portion of this group.

This study because of its exploratory nature does not address profitability issues related rebate offers. It is evident from the literature that in the past rebate offers have been a point of tension in the distribution channel, particularly with retailers. There are also some reports of consumer disenchantment with such deals. To this end, more focussed studies are needed to shed light on these aspects of rebates.

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DO RETAILER PRICING STRATEGIES AND THE PERCEIVED COMPETITIVE SITUATION INFLUENCE RETAILING SUCCESS?

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Abstract

The primary objective of this study was to explore the relationship between the employment of selected pricing strategies and the financial success of the member stores of a retail grocery cooperative. For the purposes of the study, the perceived competitive situation of the retail grocery stores was also entered into these relationships.

Introduction

Effective merchandising has sometimes been defined as having the right product, in the right quantities, in the right place, at the right time, at the right price, by the right appeal (Lewison and Delozier 1986). Ideally, the targeted consumer's wants and needs will match the merchandising strategies of the retailer. The major thrust of this paper is to investigate the "right price" aspect of this basic formula for retailing success. Specifically, this study will only evaluate a select group of pricing variables which are utilized within the retailing mix of the average grocery retailer. In addition to average frequency of use analysis, the research study examines these pricing variables in relationship with five selected retail store performance ratios of success. For the purposes of the study, the perceived competitive situation of the retail grocery stores was also entered into these relationships.

Practitioners and academicians have often theorized about the impact of various pricing strategies on business success. Numerous studies have been done in the area of retail pricing. Pricing studies have included testing alternative prices for the introduction of a new product, testing the effect of a change in price of an existing product, the effect of label-off promotions on sales of the brand and even cross branding of products to encourage trial. In most applied situations, the relative performance of different price levels have been utilized for decision making criteria. Research in recent years has given greater consideration to price-quantity relationships and price elasticity (Lipstein 1981). Current pricing research includes unit pricing (Aaker and Ford 1983), comparative pricing decisions (Berkowitz and Walton 1983), odd, even prices (Whalen 1980), consumer price perceptions (Boynton 1982), and consumer response to in-store price information (Zeithaml 1982). This research study examines pricing strategies utilized by retail grocery stores within their retail strategy mix. Specifically, the percentage usage of psychological pricing, multiple pricing, cost-plus pricing, stockturn pricing, suggested list pricing, and leader pricing strategies are determined. The emphasis of the Pricing "P" within a retailer's retail strategy mix is also examined. In addition, the researched retailers competitive pricing strategy (above, with, or below competition) and method used for mark-up calculation are also investigated.

To assess the success of the researched retailers, five retailing ratios of success are utilized as the dependent variables of the study. These primary ratios include percent gross profit margin (GPM), percent net profit margin (NPM), gross margin return on inventory investment (GMROI), net profit return on inventory investment (NPROI), and stockturn rate per year. Gross profit margin is defined as sales minus cost of goods sold and net profit margin is defined as gross profit margin less operating expenses. The stockturn rate is the number of times the average inventory is sold annually. Gross margin return on inventory is a single comprehensive ratio that allows retail management to review inventory results from a return on investment perspective (Sweeney 1973). GMROI is obtained by multiplying gross profit margin by the stockturn rate. Accordingly, net profit return on inventory investment (NPROI) would be a logical extension of this retail productivity ratio. Thus, NPROI equals net profit margin multiplied by the stockturn rate. This latter ratio reflects the same basic components of the classic duPont system of return on investment (VanVoorhis 1981). These five profitability ratios were selected as representative performance measures that might reflect the operating success of the responding retail establishments.

Sample and Methodology

The members of a selected grocery retail-cooperative supplied the primary research data. The retailer cooperative is composed of multi-type retail grocery establishments that jointly own and operate a wholesale grocery corporation. Even though the retailer-cooperative is

operated by professional managers, the member stores operate as individually owned independent merchants. Since each member store employs a unique retail marketing mix strategy, the members of the cooperative were considered appropriate for the research study.

Pretested questionnaires were mailed to 630 members of the retail-cooperative. Two mailings were sent out. The number of usable returns was 379, representing 60.2 percent of total questionnaires mailed.

In the mail questionnaire, the owner/managers of the retail establishments were asked to indicate: 1) percentage use of psychological or odd pricing strategies; 2) percentage use of multiple pricing strategies; 3) percentage use of cost-plus-average pricing strategies; 4) percentage use of stockturn-demand pricing strategies; 5) percentage use of suggested list prices; 6) percentage use of leader pricing strategies; and 7) the pricing method utilized when calculating markup (percent of cost, percent of selling price or suggested list price). The retailers were also asked to indicate their competitive pricing strategy (above, meet, or below competition). In addition, the owner/managers were asked to rank six selected retail mix variables in order of relative importance within their retailing strategy mix. The variables were to be ranked on a scale from 1 to 6, with 1 being highest in importance. The Pricing "P" was one of the listed six retail mix variables. The other retailing strategy mix variables used in conjunction with the Price Variable were Promotion, Customer Service, Store Location, Merchandise Assortment, and Quality of Store Personnel (Engel et al. 1978).

The questionnaire also obtained each retail establishment's average gross profit margin, percent operating expenses, stockturn rate per year, yearly dollar sales, and store type. In addition, each retailer was asked to indicate their perceived competitive situation (weak or below average, moderate, strong, or vigorous). The 379 usable cases were analyzed by SPSS Subprogram Frequencies, and Subprogram Spearman Correlation (Norman Nie et al. 1975).

Results

Frequencies Analysis

Each retailer was asked to indicate the perceived competitive situation of his retail establishment. By their perceptions, the respondents are classified into the following four competitive situation categories: 1) weak or below average, 2) moderate, 3) strong, and 4) vigorous. Table I presents the retailer owner/manager's percentage usage of the selected pricing strategies. The table also reflects the average percentage usage of the selected pricing strategies for all the responding retailers.

Table II reflects the means of the five ratios of retailing success by competitive category. The table also indicates the average retailing success ratios for all the responding retailers.

TABLE I

RETAILER USAGE OF SELECTED PRICING STRATEGIES BY PERCEIVED COMPETITIVE SITUATION

Retailers Grouped by Perceived Competitive Situation	Retail Strategy Emphasis of Pricing Variable			Competitive Pricing Strategy			Mark-Up Calculation Techniques			Percentage of Owner/Managers Who Used Pricing Strategy for More Than 60 Percent of Pricing Decisions					
	% 1/2 Strategy Emphasis	% 3/4 Strategy Emphasis	% 5/6 Strategy Emphasis	% Who Price Above Competition	% Who Price With Competition	% Who Price Below Competition	% Who Use Cost As Base	% Who Use Price As Base	% Who Use Recommended Price	Psychological Pricing	Multiple Pricing	Cost-Plus Pricing	Stockturn Pricing	Suggested List Pricing	Leader Pricing
Weak or Below Average (N=47)	53.3	31.1	15.6	6.5	69.6	23.9	30.4	45.7	23.9	69.6	23.9	34.8	47.9	77.4	45.6
Moderate (N=75)	24.6	27.7	47.7	16.4	63.1	20.5	38.9	44.4	16.7	83.6	30.1	45.8	47.3	52.8	45.9
Strong (N=124)	36.2	39.9	23.9	16.1	70.2	13.7	29.0	58.9	12.1	77.4	28.2	51.2	47.2	65.3	59.3
Vigorous (N=129)	43.4	40.0	16.6	13.5	72.2	14.3	29.4	54.0	16.7	77.6	23.0	29.4	47.6	57.9	57.1
Means of all Retail Respondents (N=379)	38.7	36.6	24.7	13.9	69.7	16.4	31.7	52.2	16.1	77.7	26.0	40.8	47.6	60.8	53.7

TABLE II

MEANS OF FIVE INDICES OF RETAILING SUCCESS BY PERCEIVED COMPETITIVE SITUATION

Retailers by Perceived Competitive Situation	N	Percent GPM	Percent NPM	Stockturn Rate	Percent GMROI	Percent NPROI
Weak or Below Average Competition	47	22.9	7.1	13.780	314.3	86.4
Moderate Competition	75	23.7	6.1	16.034	353.2	75.0
Strong Competition	124	21.9	5.5	15.840	335.6	83.2
Vigorous Competition	129	22.2	4.8	15.732	341.6	75.2
Indice Means of all Retailer Respondents	379	22.5	5.6	15.561	337.9	79.2

TABLE III

CORRELATION ANALYSES BETWEEN RETAILER PRICING STRATEGIES AND FIVE INDICES OF RETAILING SUCCESS

Retailer Success Indices	Retail Strategy Emphasis of Pricing Variable	Competitive Pricing Strategy	Mark-Up Calculation Technique	Usage of Psychological Pricing	Usage of Multiple Pricing	Usage of Cost-Plus Pricing	Usage of Stockturn Pricing	Usage of Suggested List Pricing	Usage of Leader Pricing
All Retailer Respondents (N=379)									
GPM	# .2747**	-.0087	.0143	.0473	-.1966**	-.1378**	.0039	-.3071**	-.3432**
NPM	# .0747	-.0015	-.1038*	-.0014	-.1230*	-.1270**	-.0460	-.1362**	-.3075**
Stockturn Rate	# .0923*	-.1549**	-.1479**	-.0946*	.1554**	.1867**	.1038*	.1350**	.2316**
GMROI	# .2126**	-.1263*	-.1045*	-.0699	.0715	.1565**	.0967*	.0182	.0744
NPROI	# .1097*	-.0809	-.1025*	-.0329	-.0333	.0066	.0020	-.0593	-.1314*

*P ≤ .05
**P < .01
Negative coefficients indicate a relationship of high variable importance with higher store performance

Correlation Analyses

Tables III and **IV** reflect correlation analysis between a retailer's emphasis of a particular pricing variable and retailing success. For the emphasis of the pricing variable (in relationship with other retailing strategy variables) within the retailing strategy mix category of the study, an inverse relationship is reflected for significant relationships within the tables. Thus, a significant positive relationship indicates that the responding retailers who rate the pricing variable as having a high priority within their retailing strategy mix tend to have less successful store performance.

Table III reflects correlation analyses between the pricing variables and the five ratios of retailing success for all the responding retailers.

Table IV reflects correlation analyses with the responding retailers grouped by competitive situation.

TABLE IV

CORRELATION ANALYSES BETWEEN RETAILER PRICING STRATEGIES
AND FIVE INDICES OF RETAILING SUCCESS BY PERCEIVED COMPETITIVE SITUATION

Retailers by Perceived Competitive Situation	Retail Strategy Emphasis of Pricing Variable	Competitive Pricing Strategy	Mark-Up Calculation Technique	Usage of Psychological Pricing	Usage of Multiple Pricing	Usage of Cost-Plus Pricing	Usage of Stockturn Pricing	Usage of Suggested List Pricing	Usage of Leader Pricing
Weak or Below Average (N=47)									
GPM	# .2414*	-.0415	.2530*	.0756	-.1632	-.0061	.1349	.1450	-.2080
NPM	# -.0024	-.0723	.1119	.0406	-.3250*	-.0119	-.1852	-.0241	-.4112**
Stockturn Rate	# .2596*	-.3778**	-.2893*	-.1014	.2675*	.1203	.0358	.1588	.3402*
GMROI	# .2840*	-.3593*	-.2710*	-.0136	.2280	.2271	.0187	.1678	.2423
NPROI	# .1988	-.2752*	-.0742	.0127	-.0520	.1008	-.1878	.1565	-.1177
Moderate (N=75)									
GPM	# .4806**	.0141	.3839**	.1811	-.4622**	-.4154**	-.4498**	-.5294**	-.4335**
NPM	# .0910	.0979	.3482**	.0408	-.4293**	-.4086**	-.3045**	-.3896**	-.3301**
Stockturn Rate	# .1098	-.3522**	-.3578**	.0007	.3842**	.2466*	.2017	.2711*	.2551*
GMROI	# .2756*	-.3088*	-.1653	.0318	.1821	.0885	.0464	.0162	.1592
NPROI	# -.0269	.0104	.3237**	.0189	-.3799**	-.3966**	-.2543*	-.3822**	-.1885
Strong (N=124)									
GPM	# .2176*	-.0699	-.2344**	-.1026	-.1826*	-.2022*	.1487*	-.4770**	-.4419**
NPM	# .2274**	-.0044	-.3628**	-.0436	-.0764	-.2137*	.1810*	-.2279**	-.3512**
Stockturn Rate	# .1377	-.1443	.0449	.0340	.0550	.1893*	-.0562	.0696	.1061
GMROI	# .2679**	-.1131	.0090	.0048	-.0014	.1488	-.0445	-.0859	-.0551
NPROI	# .2850**	-.0642	-.1886*	-.0175	-.0670	-.0196	.0889	-.1311	-.2361*
Vigorous (N=129)									
GPM	# .1887*	.0204	.0542	.0978	-.0637	.0185	-.0229	-.1609*	-.2791**
NPM	# -.0084	-.1324	-.1859*	.0106	.1019	.0134	-.0590	.0673	-.1351
Stockturn Rate	# -.0684	.0814	-.1754*	-.3088**	.0578	.1129	.2123*	.1823*	.2737**
GMROI	# .0803	.0797	-.0980	-.2657**	.0315	.1244	.2969**	.1292	.0988
NPROI	# -.0616	-.0718	-.2098*	-.1239	.1464	.0818	.1396	.0630	-.0067

*P ≤ .05
**P ≤ .01
Negative coefficients indicate a relationship of high variable importance with higher store performance

Conclusions

What conclusions can be made from the findings of the study? One conclusion would be that a majority of the retailers tend to "price with competition". The results of correlation analyses seem to indicate that this is a much safer strategy to use than "pricing below competion" as far as profitability is concerned. Another safe assumption is that a majority of the retailers use the "price as base" method of retail mark-up calculation. The correlation analyses indicate that with the exception of the moderate competition category, an increased usage of the method tends to have a negative effect on retail profitability.

The study also points out the negative aspects of putting too much emphasis on the price "P" within a retailing strategy mix. The forty-three percent emphasis (1/2) of the price variable within a retailing mix by the vigorous competitive category can be understood but the high fifty-three percent emphasis (1/2) by the weak or below average competitive category could hurt profitability as reflected in Table IV. Too much emphasis on the leader pricing strategy variable also reflects negative or mixed positive/negative correlations.

The psychological pricing strategy variable received the high percentage usage in Table I. The vigorous competition category had the only significant "bottom line" correlations and they were negative. Perhaps retailers are mistaken in their high regard for this pricing variable. The suggested list pricing strategy variable received the next high percentage usage by the responding

retailers. The results of the study reflect either negative or mixed positive/negative significant correlations for the increased usage of this strategy variable. Thus, this could be another pricing variable that retailers need to investigate.

An increased usage of the multiple pricing strategy variable either reflects negative or positive/negative correlations. The results of the study seem to reveal why this pricing variable is the least used pricing strategy by the retailer respondents. The study also seems to indicate positive results for the usage of the stockturn pricing stategy by only retailers who are in a vigorous competitive situation. The cost-plus pricing strategy variable while moderately favored by most of the responding retailers either reflected negative or mixed positive/negative results for the majority of the retailers. This is one more "textbook" noted pricing strategy that needs further investigation as far as profitability.

The study findings may be interpreted to mean that the overall pricing portion of the retailing mix may be over emphasized as a means for obtaining "bottom line" profitability. Perhaps "Price" is not the most important Retailing Mix "P" for the retail grocer. Further research which combines pricing strategies with other retailing variables seems to be needed. Since a variety of retailers are increasingly relying on retail strategy variables for competitive or differential advantage, it appears that significant benefits may be derived from generating more empirical data on the subject for grocery or other types of retailers.

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NEW INSIGHTS INTO SECOND-ORDER GOODS RETAILING

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Abstract

The retailing of second-order goods by profit-seeking organizations has been growing dramatically in the United States. Previous studies of second-order goods retailing have focused exclusively on the not-for-profit or personal sales sectors. Moreover, most studies have used student samples or a case format, thereby limiting the generalizability of previous research findings. This study attempts to provide information from a more generalizable research format and addresses, for the first time, the for-profit segment of the second-order goods market, at the same time providing sound validation for previous research finding.

Introduction

A continuing phenomenon in U.S. retailing is the rapid growth of second-order goods retail outlets. Second-order retail outlets are those retail settings that sell second-hand or recycled merchandise. These merchants represent a retailing segment long present in North America. Such not-for-profit organizations as Goodwill Industries, the Salvation Army, and local civic groups have traditionally operated retail stores as a means of generating income to support their service offerings. But it is only recently that profit seeking second-order goods retailers have emerged as a significant force in the market place.

The beginnings of profit oriented second-order retailing can be traced to the phenomenon of the garage sale and the almost simultaneous development of the flea market. To be sure, garage sales and flea markets are still potent forces in the economy, but what has been an even faster growing phenomenon is the profit oriented second-order retailer based upon the more traditional retail structure of the store or more permanent retail location.

It is this rapid growth in profit oriented second-order goods retailing that is the focal point for this paper. Not only do profit-oriented second-order goods retailers need to understand their marketplace, but the rise of the profit oriented second-order goods retailer puts expanding pressure on the not-for-profit segment of the retail structure. Goodwill and Salvation Army stores and civic group retail outlets must now compete on a different level of excellence to assure their survival.

Unfortunately, despite the need for information about second-order markets very little information is available in the marketing literature. What can be referred to as seminal studies of the second-order market were conducted by Dovell and Healy (1977). In-depth personal interviews with garage sale patrons were conducted to gain insights into their basic demographic and life-style characteristics and their reasons for shopping. Yavas and Reicken (1981) conducted a case study in the not-for-profit sector by examining the characteristics of eight-two heavy, medium, and light shoppers of Goodwill Industries in one community. They reported that the typical shopper was a married female in her mid twenties to mid forties and from a lower income group. Riecken et. al. (1979) explored the not-for-profit area more generally, identifying the characteristics of patrons of three not-for-profit retail outlets. The typical not-for-profit shopper in this study was a married female in her mid twenties to mid forties and from a lower income group. Yavas et. al., (1981, 1982) used a student sample of 178 undergraduates to explore the nature of perceived risk in second-order goods purchases. A more recent study analyzed the psychological and situational variables of second-order clothing shoppers (O'Reilly et. al., 1984). The author used a multimethod sampling technique involving random telephone interviews and shopper intercepts in the form of personal interviews at garage sales. A key finding of the research was the identification of a more economically upscale person as a significant component of the garage sale market. Other findings paralled the research of Dovell and Healy, and Reicken et. al.

Purpose of the Study

Previous research has reported that second-order not-for-profit goods shoppers are similar in many respects to traditional retail shoppers. The confirmation of these findings generally comes from studies involving student samples or garage sale patrons. The purpose of this study is to explore the nature of the second-order goods shopper in what might be called traditional retail outlets (non-personal sales) using a more generalizable research format.

The first hypothesis to be tested explored the relationship between the second-order goods retail shopper and the non second-order goods shopper.

H1: There is no difference in the demographic profile of the second-order goods shopper and the non-second-order goods shopper.

The second and third hypotheses test relationships among second-order goods retail patrons.

H2: There are no differences in demographic profile among light, moderate, and heavy second-order goods retail shoppers.

H3: There are no differences in patronage motives among light, moderate, and heavy second-order goods retail shoppers.

Methodology

To collect the data for this study a questionnaire was devised, pretested, and revised. The final version consisted of a limited number of both open- and closed-ended questions. Data were obtained concerning patronage motives, usage rates and demographics of buyers and non-buyers of second-order goods. Since the questionnaire was short and because of the nature of the data solicited, a telephone survey was chosen as the mode of data collection. By using random digit dialing in two Southeastern SMSA's, a total of 709 usable returns were obtained. The two SMSA's contain 34.3 percent of the population of the state, according to the 1980 census data. This should allow some generalizations, taking into account the shortcomings of the data collection procedure.

The first hypothesis, addressing the nature of the demographic profile of the second-order goods shopper versus the non second-order goods shopper, was tested through the use of chi-square analysis. Hypothesis H2 and H3 were analyzed after first segmenting the second-order shopper into three categories based upon patronage frequency. The light shopper was defined as making one visit a year to a second order retailer. The moderate shopper was defined as making two to five visits per year. The heavy shopper was defined as making more than five visits to second-order retailers per year. The chi-square statistic at the alpha = .05 level was used to test each hypothesis.

Results

Of the 709 households sampled, 53 percent identified themselves as patrons of second-order goods retail locations (see Exhibit One). Females accounted for seventy-six percent of all second-order retail shoppers in the survey. This is 14 percent more than the typical population sampled who said that they were non-shoppers. With respect to age, second-order shoppers were identified as being younger (under 50 years old) than the non-second-order shopper part of the sample. These findings are consistent with the findings of other second-order goods shopper research studies.

Other demographic findings concerning family size indicate the second-order shopper is not very different from the non-shopper. The only statistically significant difference is that the three-member family household is more likely to shop second-order retailers. Significant differences evident in employment status are that the second-order goods shopper is more likely to be employed part-time and less likely to be retired than the non-second-order shopper.

A totally unexpected finding was that the income levels of second-order retailer shoppers were higher than income levels previously identified in other studies. Thirty percent of second-order shoppers in the study reported incomes of over $30,000; an additional 29 percent had incomes of between $18,000 and $30,000; and 26 percent had incomes of between $10,000 and $18,000 (see Exhibit One). Of the households sampled, the second-order shopper is more likely to be economically upscale and less likely to be very poor. The lack of identification of this higher income second-order shopper in previous research may be the result of using student samples (Yavas et. al., 1981, 1982) or using a case study (Yavas and Reicken, 1981) for the research base. Another explanation simply may be that as the retail institution of second-order stores has developed over time, it has attracted a broader customer base of more mainstream shoppers.

EXHIBIT ONE
A COMPARISON OF THE SAMPLED SECOND-ORDER GOODS SHOPPER VERSUS THE NON-SECOND GOODS SHOPPER ALONG DEMOGRAPHIC CHARACTERISTICS

	Percentage of Second-Order Shoppers	Percentage of Non-Second Order Shoppers
a. Sex*		
Male	24	38
Female	76	62
b. Age*		
Under 20	8	6
20 to 34	42	34
35 to 49	30	25
50 to 64	15	21
65 and above	5	14
c. Family Status*		
One member	14	18
Two members	27	30
Three members	26	19
Four members	20	18
Five or more members	13	15
d. Employment Status*		
Part-time	22	13
Full-time	53	49
Retired	7	16
Not employed	18	22
e. Household Income*		
Under $5,000	5	10
$5,000 to $9,999	10	12
$10,000 to $17,999	26	24
$18,000 to $29,999	29	25
$30,000 and above	30	29

*represents a significant difference at the alpha = .05 level using the chi-square statistic.

N = 373 N = 336

In summary, hypothesis H1 is generally not supported. There are differences between the second-order goods shopper and the non-second-order goods shoppers sampled. A general profile of the second-order goods shopper is a working female between 20 and 50 years old from a family

of 2 to 4 individuals who can be classified as economically average to economically upscale. In essence, this profile approaches the profile of the typical mass market customer.

Before proceeding to the analysis of hypotheses H2 and H3, it is beneficial to identify selected shopping related characteristics of the second-order goods retail outlet shopper (see Exhibit Two). In general, the second-order goods shopper makes less than five visits a year to second-order retail locations. There is a tendency to visit one store per shopping trip with roughly 82 percent of the retail locations selected being of a for-profit nature. The typical distance traveled to these retail locations is under ten miles. Criteria generally used for store selection are low price and the draw of advertised items. The reason for their most recent purchase was low price and product quality. The typical second-order shopper learned about the particular store from friends and/or seeing a storefront sign. Having thus described the typical or average behavioral profile of the secon-order shopper, the stage is now set to explore the final hypotheses.

Hypothesis H2 is generally supported, in that no significant demographic differences were found among light, moderate and heavy second-order goods retail shoppers. However, hypothesis H3 was not supported, since statistically significant differences were identified across certain patronage motives (behavioral differences). The specific behavioral profiles identified vary among light, moderate and heavy shoppers.

The Light Shopper

The light shopper, comprising 29 percent of the market, can best be described as the safe shopper. They are more likely to go to a privately owned second-order goods retail location than are the other second-order shopper categories. Their reasons for store selection and subsequent purchase are price and quality. They are a one-store shopper, and prefer to visit a store close to home (under 5 miles travel distance).

The Moderate Shopper

The moderate shopper, comprising 48 percent of the market, shop all second-order retail settings. But, they are especially drawn to the flea market setting. Their primary criterion for purchase is low price. Their travel distance is under 10 miles and they typically are a one-location shopper per shopping trip.

The Heavy Shopper

The heavy second-order goods shopper represents 23 percent of the market for second-order goods. This segment is the mainline second-order shopper, making over five second-order goods shopping trips per year. Although they shop all second-order settings, they are the group likely to choose not-for-profit stores (Salvation Army, Goodwill, Hadassah, Women's Leagus, etc.) and flea markets. They are more likely to be a social shopper; i.e., they will go shopping with friends and they are more likely to be a multiple-shopper on each shopping outing (2-5 stores per trip). They are willing to travel over 10 miles on their shopping trips and are not as price conscious as the other shopper categories in their purchases. The heavy shopper is also more likely to be a collector of antiques and enjoy haggling over prices.

EXHIBIT TWO
SELECTED SHOPPING CHARACTERISTICS OF
THE SECOND-ORDER RETAIL INSTITUTION SHOPPER

Characteristics	Percentage
a. Shopping frequency:	
once a year	29
2 to 5 times a year	48
over 5 times a year	23
b. Number of stores visited per trip:	
one	66
2 to 5	31
more than 5	3
c. Type of store shopped:	
privately owned retail location	31
flea market	30
antique store	21
not-for-profit retail store	15
other	3
d. Source of information about store shopped:	
word-of-mouth	37
storefront signs	31
newspaper	20
shopper's guide	5
radio	4
yellow pages	3
e. Distance willing to travel to shop:	
under 1 mile	8
1 to 5 miles	39
6 to 10 miles	28
over 10 miles	25
f. Criteria for store selection:	
reputation for low prices	28
items advertised for sale	23
reputation for quality	19
reputation for assortment	15
distance from home	9
sponsoring agency (not-for-fit)	6
g. Reason for most recent purchase:	
low price	44
quality of product	20
impulse	14
item no longer available	8
others	14

N = 373

Discussion

This study attempts for the first time to explore in a generalized format the nature of the second-order goods retail shopper. The results

of the study support, to a large extent, previous studies which used student samples and the case method as a basis for data collection. The most significant difference from prior studies was the finding that the second-order goods shopper is more economically upscale than previously believed. It appears that second-order goods shopping is becoming a part of the mainstream American retail shopping experience.

A second area of the study explored differences among light, moderate and heavy second-order retail shoppers. The study found no demographic differences among second-order retail shoppers. Differences were found along patronage motives and, therefore, the behavioral dimension of second-order retail shoppers. Because the behavioral dimension plays such an apparently large role in shopping patterns of the second-order retail shopper, these shoppers appear more complex than previously thought. Based upon past research with the dominant conclusion that only the poor shop second-order retail locations, a simplicity has evolved to addressing this market. That is, the variable of price is most important, and location decisions for the retail merchants are based upon locating in the poor parts of the community. The findings of this study support price as being important; however, the typical shopper is not from the poor segment of the market, but the more typical mass market-oriented consumer. Therefore, strategic decisions such as location need to be considered in terms of mass market-oriented consumers and their needs and preferences. Moreover, the finding that the heavy shopper of second-order retail locations is more ethical (i.e., more likely to shop at not-for-profit type stores) also calls for a restructuring of strategy with respect to optimal methods of serving this important market segment.

It appears that the behavioral dimension of the second-order goods market is a promising avenue of additional research investigations. Psychographic profiles may prove to be a useful technique for providing a better understanding of this apparently complex market.

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QUALITY CONSISTENCY: A PREDICTOR OF GENERICS PRUCHASE?

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Abstract

This study empirically investigates the relationship between quality consistency of national, private, and generic branded products with how much is spent on generic food products. Additionally, demographics are used to characterize the difference between non, light and heavy users of generic food products. Nine products were measured in terms of quality consistency. The major finding of this study was that the heavy and light user groups perceived greater quality consistency in private and generic brands than the non purchasers of generic food products.

Introduction

Since the inception of generic products in 1977, the survival of these products was questioned as much as their potential for success. Nonetheless by 1985, it was abundantly clear that generics were here to stay. With a steady market share of 2% in sales, generics have somewhat successfully competed with national and local or private brands (Private Label, 1983). Thus, it is safe to assume that generics have found a niche in the market place which is witnessed more by their longevity than the share of the market for grocery items.

With the onslaught of generics filling the isles and end displays of grocery stores throughout the country, researchers and practitioners have found a need to better understand the purchaser of generic products. To date, several hundred publications have appeared in trade journals stressing the growing importance of generics in the retailers product mix. These publications have been supplemented by comprehensive reviews on the phenomenon of generic products (McEnally and Hawes 1984; Neidell, Boone and Cagely 1984). The psychographic characteristics of generic purchasers have been investigated fairly extensively. They include among others, brand loyalty and price consciousness. Some studies indicate that a generics buyer has a low level of brand loyalty (Anvik and Ashton 1979; Bellizi et al. 1981; Cagely et al. 1980; Granzin 1981; Hawes and Kiser 1980). This may be partly because consumers who are less loyal to any brand are willing to try other types of products such as generics. Further, Anvik and Ashton (1979) and Granzin (1981) indicate that a generics purchaser is more innovative or venturesome. This may be an alternative explanation for why some consumers are less loyal to national brands and are willing to try new brands that may offer benefits not being currently received from national brands.

Moreover, the generics purchaser's higher price sensitivity has been reported by Granzin (1981) and Hawes and Kiser (1980). Also, the Hawes and Kiser (1980) study demonstrates that the generics purchaser is an information seeker. His/her concern for nutrition was discovered by Cagely et al. (1980). However, the study did not measure how the purchaser's concern for nutrition was transformed into his/her desire for information. None of these studies have pinpointed what kind of information does a generics purchaser seek in reference to the quality of the generics products.

Only two characteristics of a generics purchaser have been consistently reported (i.e., more price consciousness and less brand loyalty). The finding with respect to income is quite inconsistent. Faria (1979) and Granzin (1981) found the generics purchaser to have lower incomes. However, Bahn (1982) and Strang et al. (1979) found them to be of mid-range income. Whereas Cagley et al. (1980) reported that generics buyers are upscale in income. Finally, Murphy and Laczniak (1979), Anvik and Ashton (1979), and Cunningham et al. (1982) found income to be unrelated to the purchase of generic products.

However, as yet scholars have paid little attention to the issue of quality consistency of generic products. This paper focuses on the issue of quality consistency, a construct which may have predictive power in terms of segmenting the generics purchaser from the non generics purchaser. The purpose of this paper is to investigate the relationship between the perceptions of quality consistency of generic brands, national brands, and private brands as predictors of the amount of dollars spent on generic food items. What follows is a conceptual scheme of the construct quality consistency.

Conceptual Background

The notion of quality consistency has received little attention in the literature focusing on potential segmenting variables for generics. Yet, this variable is often discussed in many trade publications as a variable having importance to the central success of generic products. To date, the literature has suggested results linking quality consistency to purchase of generic products (Bellizzi, Krueckeberg, and Hamilton 1981; Wilkes and Valencia 1985).

The Bellizzi et al. (1981) and Wilkes and Valencia (1985) studies investigated quality consistency on national brands, private brands, and generics, as one measure of perceptions towards the different branding schemes. As might be expected, the Bellizzi study found national brands to be perceived higher in consistent quality than the other two types of brands under investigation. Wilkes and Valencia (1985) found that the heavy segment of generic purchasers rating of quality consistency of generic goods was higher than the non purchaser groups' rating.

The present study is an extension of these two studies in that respondents were asked to rate quality consistency of nine products found in all three categories of branding schemes offered in the market place. Unlike the other studies, where a single perception represented all products within a branding scheme, this research project investigates quality consistency within and between branding schemes. Some consumers may prefer certain products that are under the generic brand based on perceived quality consistency but other consumers may prefer products that either national or private brands. This study specifically focused on these proposed differences. With the knowledge of this information, retailers may seek to optimize their product mixes. Therefore, the main purpose of this study was to determine the difference, if any, among three groups of generic purchasers in relation to their perception on quality consistency of national, private and generic brands.

To further delineate the segments of generic purchasers, demographic variables were also considered in this study. Demographics have been useful in the past and should provide additional, supplemental information useful to managers whose responsibility it is to develop strategy aimed at specific target markets.

Methodology

Research Design

The design of this specific project was descriptive. Descriptive research is appropriate when the research problem focuses on perceptions and demographics. Descriptive research seeks to describe the phenomenon under investigation by determining the relationships, if any, between dependent and independent variables. For this study, the independent variables were: (1) quality consistency of national, private and generic brands, and (2) demographics. The dependent variable for the study was the amount of dollars spent on generic food products. This research is solely dependent on primary data in which 464 households were surveyed.

Quality consistency of each of the three brands was measured by asking respondents to rate the degree of perceived quality consistency for nine products. The scale ranged from 1, very low consistency to 7, very high consistency. The dependent variable, generic food purchase, was broken down into three groups, non users, light users (i.e., spend $1-$10 on generic food products) and heavy users (i.e., spend more than $10 on generic foods for an average month; Bahn 1982; Granzin 1981). Demographics were measured by asking respondents fixed choice alternatives and open ended questions on six items used in previous studies of a similar nature.

Data Collection

The data were collected by a self-report personal interview method comprising a small city in the Southwestern area of an Eastern state. The population was defined as those adults (18 years of age and older) living in the designated area described above. The small city was subdivided into sixteen housing sections used by municipal government for planning purposes. A quota was set within each section proportional to the total number of households in the geographic area of the study. Each interviewer was given a specific area of town to interview. They were instructed to go to every 2nd street, every third house until the quota for that specific area was complete. Thus, a cluster systematic random sample was employed. The interviewers were also instructed to leave the questionnaire with the subjects and then return within one hour to pick-up the completed questionnaire. Four hundred and seventy five surveys were attempted and four hundred and sixty four were usable. This represents 97.6% return rate.

Data Analysis

A multiple discriminant analysis was performed in order to characterize potential target markets. This analysis was appropriate as the dependent variable was categorical and the four sets of independent variables were continuous. Subjects were classified into non patrons, light patrons, and heavy patrons of generic food products based on the amount of purchases in a typical month. This analysis matches up the four independent constructs with the dependent variable. The purpose of this analysis was to (1) discern if a relationship exists between the sets of independent variables and the criterion variable, and (2) characterize market segments in terms of demographics and perceived differences on quality consistency.

Results

Table 1 presents the results of discriminant analyses in which consumer segments were characterized in relation to total dollars spent on generic food items during a typical month. One of the sets of quality consistency measures was not significant at .05 level, and therefore was not presented in the table. Each discriminant analysis was analyzed in two steps: (1) a univariate F test in which each independent variable was analyzed with its 3 group criterion variable and Duncan's multiple range test was performed on the statistically significant relationships found, and (2) a multivariate discriminant analysis in which all items of each independent construct were analyzed with the 3 group dependent variable. Variables to be deemed important in explaining a statistically significant function in the multivariate case was based on an absolute value of .30 or greater.

The first analysis considers the relationship between quality consistency of generic brands and non, light and heavy purchasers of generic food products. In the univariate case all 9 measures were significant at the .05 level. Additionally, one function at the multivariate level was significant at the .05 level. The function describes the perceptions of the heavy purchaser group more than the light or non purchaser group. The function characterizes the heavy purchaser as perceiving the greatest amount of consistency in

TABLE 1
CHARACTERISTICS OF THREE SEGMENTS OF GENERIC FOOD PURCHASERS

Variables	Group Means None (n=159)	Light (n=182)	High (n=123)	F Ratio	p	Differing Groups	Canonical Loadings
Quality[a] Consistency of Generic Brand (1=low, 7=high)							
Canned Vegetables	3.84	4.20	4.63	10.19	.00	N from L and H	.87
Juices or Sodas	4.18	4.61	4.76	5.75	.00	N from L and H	.61
Condiments	4.20	4.59	4.97	9.56	.00	N from L and H	.84
Dry Packages Food Products	4.31	4.70	5.02	8.67	.00	N from L and H	.80
Paper/Plastic Products	4.43	4.91	5.08	7.05	.00	N from L and H	.67
Canned Fruits	3.94	4.16	4.64	8.72	.00	H from N and L	.81
Peanut Butter or Jelly	4.15	4.45	4.92	9.19	.00	H from N and L	.83
Baking Products	4.21	4.66	4.96	9.16	.00	N from L and H	.81
Detergents	4.42	4.82	5.06	6.36	.00	N from L and H	.67
Centroids	-.27	-.01	.36				
Quality[b] Consistency of Private Brands (1=low, 7=high)							
Canned Vegetables	4.63	4.99	5.13	7.02	.00	N from L and H	.86
Juices or Sodas	4.89	5.23	5.21	4.01	.02	N from L and H	.65
Condiments	4.89	5.19	5.30	4.62	.01	N from L and H	.71
Dry Packages Food Products	4.90	5.31	5.26	5.54	.00	N from L and H	.74
Paper/Plastic Products	5.14	5.38	5.36	1.75	.18		.42
Canned Fruits	4.69	4.96	5.12	5.15	.01	N from L and H	.74
Peanut Butter or Jelly	4.84	5.26	5.25	5.83	.00	N from L and H	.78
Baking Products	4.96	5.36	5.21	4.82	.01	N and H from L	.62
Detergents	5.09	5.42	5.34	2.81	.06		.51
Centroids	-.25	.10	.21				
Demographic[c] Variables							
Sex (1=Male; 2=Female)	1.58	1.59	1.62	.21	.81	---	---
Marital Status (1=Single; 2=Married)	1.53	1.47	1.37	3.31	.04	H from N and L	---
Education (1=High School or less; 5=Doctorate)	2.72	2.74	2.61	.64	.53	---	---
Home (1=Own home, 2=rent dwelling)	1.92	2.07	2.23	3.88	.02	N and H from L	---
Income (1=Under $10,000; 8= Over $40,000	4.08	3.55	2.82	6.69	.00	H from N and L	---
Occupation	48.56	48.7	43.03	2.87	.06	---	---

[a]The first function was significant at p=.01.

[b]The first function was significant at p=.05.

[c]The first function was non-significant at p=.05, therefore, no loadings were reported.

all products measured, followed by the light and non purchase groups.

The second analysis presented in Table I reveals the results and investigated the relationship between perceptions of quality consistency of private brands and total dollars spent on generic food items during an average month. In the univariate case, seven of nine variables were significant at the .05 level. Paper and plastic products and detergents failed to discriminate between the three user groups. One function was significant at the .05 level in the multivariate case. Again, all nine variables (product categories) have explanatory value. In this analysis, the function is explaining the perceptions of the heavy user group toward the consistency of private brands. Undoubtedly, the heavy user group perceives each of the nine products to be very high in quality consistency. For this analysis, the light user group is closer in their perceptions of private brands to the heavy user group, where as in perceptions of generic brands, the light user group is closer to the perceptions of the non-user group.

The analysis between the three user groups and quality consistency of national brands produced no significant functions at the .05 level and at the univariate level, and only one variable (detergents) was significant at the .05 level. The nonuser group perceived detergents to be of high consistency.

The last analysis presented in Table I considers the relationship between demographics and the three user groups. Three variables were significant at the .05 level in the univariate case. Heavy and non users appear to rent their dwelling, while heavy users are typically single and have lower incomes than the light or non user groups. The multivariate analysis was non significant at the .05 level.

Discussion

Considering the four sets of predictor variables, those variables that have found the most general applications in a wide variety of market structures again showed the best predictive power. Perceptions of the quality consistency of both private and generic brands, and demographics to a lesser extent claimed the strongest links to users of generic food products. Unfortunately, the relationship between quality consistency of national brands and the three group criterion variable was not supported. Detergents, the only product to discriminate between the three user groups at the univariate level, was perceived as being of high consistent quality by the non user group.

Thus, the heavy user group appears to be of lower economic status. This person is of lower income, education, and occupational rating, is single and probably rents his/her dwelling. This target group seems to fit the image of those who have had little success within the American social and economic system. One explanation could be due to age of the respondent (data on age not collected) or another explanation could be that some people might emphasize other facets of life unrelated to socio-economic status.

Considering perceptions of nine different products related to generics, national and private brands, light users of generic food products were closer in their perceptions to the heavy users versus the non user group. The light user group was closer to the heavy user group in their perceptions of private brands than to generic brands. This is witnessed by the group centroids extracted from the multivariate discriminant analysis. This result has direct implications for retail managers in that promotional efforts could be developed to emphasize the quality consistency of private brands in addition to generic brands.

It is quite obvious from the univariate analysis that generic food purchasers are brand loyal to generic and private labeled products. At the very least it could be stated that the user groups have high degree of confidence in the quality of products over time that comprises their shopping list.

The non user group, as shown in previous studies (Granzin 1981; Wilkes and Valencia 1985), seems to typify the consumer who is not much interested in the products that are less expensive, as these products may be of lesser quality. This group is of higher income, own their home, fairly high occupational rating and are single. Frankly, this non user group is probably part of the yuppie market aspiring to brands which carry a national reputation.

In conclusion, results from this study should provide decision makers with information useful for developing strategies for increasing the usage of generics and private brands. Future research should investigate the relationship between the number of trials of specific products in the three branding schemes discussed in this paper and perceptions of brand quality over time. edited and moved

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IMPLICATIONS OF CUSTOMERS' INTEREST IN NUTRITION FOR THE RESTAURANT INDUSTRY

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Abstract

This study investigated the link between active interest in nutrition and the requirements for marketing benefits that customers place on restaurant management. Multiple discriminant analysis was used to relate nutrition group membership to requirements for 30 restaurant benefits at lunchtime. The segment high in nutrition interest expressed a stronger desire for a formal dining atmosphere, higher requirements for the human elements of dining, and more interest in a menu featuring low-calorie foods, but a lower demand for large quantities of food.

Introduction

The restaurant industry is a major part of the retail sector of our economy. In recent years, Americans have rapidly increased the percentage of their disposable income spent on eating out, spending over 124 billion dollars on food and alcoholic beverages consumed away from home in 1983 (Rogers 1984). Americans now eat away from home an average of 2.1 times per week (Dunn 1985). During the recent rapid growth in this market, the restaurant industry has become even more competitive. The number of restaurants has actually declined since 1972, and today a higher proportion of these existing outlets belongs to chain organizations than ever before.

To achieve profitability in an industry that annually ranks at or near the top in business failures, restaurant managers can benefit from implementing a market segmentation strategy. A segmentation strategy requires them to select a potentially profitable market, to identify the needs of a target segment, and to serve these needs in a profitable manner (Taylor 1982). Several previous studies have shown the usefulness of required benefits to characterize segments in the restaurant industry. A focus on benefits recognizes that restaurants provide a much broader service than merely cooking and serving food. They often provide such benefits as a form of entertainment, a place to relax, and a setting for customers to conduct business or to socially interact with others (Frumkin 1985). In one view, restaurants sell an experience (Restaurant Business 1982).

Haley popularized the use of benefits to describe market segments (Haley 1968; 1971), and subsequent research has shown the benefits they require to be a useful way to characterize a market (Sawyer and Arbeit 1973; Name of present author withheld). This concept holds that customers consider the benefits that are salient at the time of purchase and respond favorably to the market offering that best meets their requirements as customers. Thus, by focusing on the benefits customers require, restaurant managers can design their market offering to meet their needs.

Accepting the use of benefits as one viable means of considering the restaurant market, the question then becomes: "What other variables having usefulness for marketing strategy can be used to further characterize segments in the restaurant market?" One possible candidate variable having growing importance in this country stems from the interest Americans are showing in the link between a nutritious diet and good health. As this relationship has become more widely understood, more and more individuals have expressed concern over the food they are eating (Andres and LaBell 1982; Seligman and Gosnell 1984; FDA Consumer 1985). Americans are changing their eating habits to include food they consider more healthful and nutritionally sound, with a view toward alleviating existing health problems and avoiding future troubles (Jones 1977).

The potential profitability of capitalizing on this increasing interest in nutrition has not gone unnoticed. Major restaurant chains are changing menu items to place more emphasis on nutrition. Foods with a light and healthful image are finding their way onto more and more menus as the trend toward more nutritious offerings grows (Bartlett 1986).

Despite this trend toward greater interest in nutrition, published research that has linked market behavior to nutrition interest is rare. And, research into the relationship between nutrition interest and requirements for benefits appears nonexistent. Thus, this research question emerges: "Can knowledge of their customers' interest in nutrition be used in conjunction with knowledge of the benefits they require to help marketers better understand a target market segment?" The purpose of this study is to provide evidence on the extent to which target segments in the restaurant market can be better understood by considering their active interest in nutrition.

Method

Data Collection

A quota sample of 289 respondents was obtained from the largest metropolitan area of a western state. The sample was selected to represent the general population proportionately with respect to its age and sex characteristics as reported in the most recent census. Interviewers were also assigned to all major sections of the area to ensure representation with respect to socioeconomic characteristics. Respondents completed a self-administered questionnaire in the presence of trained interviewers who were fully knowledgeable about the purpose of the study.

Measurement of Nutrition Interest

Respondents' nutrition interest was evaluated by their score on a multi-item nutrition scale. To

devise this scale for measuring nutrition interest, thirteen statements relating to nutrition were conceived. To improve construct validity of the resulting scale, factor analysis was used to identify its dimensions. Three factors emerged from the factor analysis. The first dimension reflected overt behaviors that an individual can adopt to assure a more nutritious diet. The second factor represented attitudes that an individual might hold about the overall importance of nutrition in a diet, and the third factor portrayed concern for weight control.

All items loading on the first factor, presented in Table 1, were used to create the nutrition scale. In general, these items reflect activities individuals perform to improve their diet. These statements identify a commitment to nutrition that goes beyond beliefs. Some individuals may feel nutrition is important to their health, but not be willing to act on this belief. But these indications of overt behavior seem to represent a higher level of active interest in nutrition.

Respondents were asked to indicate the extent to which they agreed with each statement on a six-point Likert-type scale. The scores on all seven items were summed to create their total score for nutrition interest, where a higher score represents a stronger interest. The Cronbach's alpha of .84 suggests that the scale is reliable in measuring that aspect of nutrition interest expressed through reports of overt behavior.

TABLE 1
COMPONENTS OF THE SCALE FOR INTEREST IN NUTRITION

Variables	Loading	Mean
1. I seldom eat red meat.	.49	3.08
2. I try to only eat food that is of high nutritional value.	.74	3.55
3. I never eat junk food.	.65	2.66
4. I try to only eat foods that are low in fat.	.73	3.41
5. I make sure that I eat plenty of high fiber foods.	.76	3.63
6. I read labels to make sure the food I buy is nutritious.	.68	3.13
7. Good nutrition is important to me when I eat out.	.64	4.07

To create clearly defined market segments for further analysis, three groups based on nutrition interest were established on the basis of clear breakpoints on the resulting continuum of respondents' scores. The sizes of the resulting groups were: Low, 91; Medium, 103; and High, 95.

Measurement of Required Benefits

Thirty benefits commonly provided by restaurants were investigated. These benefits were chosen because they were observed to be readily available from restaurants in the area studied. To measure required benefits at restaurants, respondents were asked to report the importance of each benefit when selecting a restaurant for lunch. Lunch was selected for use in this study because of the great variety in benefits available for this meal. Lunchtime patrons are an important temporal segment of the restaurant market because their purchases represent 39 per cent of the food eaten away from home, (Dunn 1985).

These thirty benefits were also factor analyzed by the method described above to identify dimensions useful for describing the structure underlying this market in terms of required benefits. The results of the factor analysis of required benefits are presented in Table 2. To simplify the presentation, only the primary loadings are shown in the table.

TABLE 2
FACTOR STURCTURE OF THIRTY BENEFITS

Variables	Factor Loadings
A. Formal Elements Of Dining	
Waited on at table	.49
Fancy desserts	.46
Reservations taken	.59
View from windows	.61
Soft music	.62
Quiet surroundings	.63
Low lighting	.64
Fancy table settings	.80
Interesting decor	.78
High-class customers	.68
Variety of Menu	.37
B. Trouble-Free Dining	
Friendly service	.63
Clean dining room	.81
Clean restrooms	.80
Convenient parking	.58
C. Value While Dining	
Large servings	.81
All-you-can-eat specials	.76
D. Elements Found In Lounges	
Dancing	.78
Live music	.76
E. Monetary Savings	
Lowest possible price	.63
Discount coupons	.77
F. Light Foods	
Salad bar	.76
Low-calorie plates	.73
Homemade breads	.54
G. Extra Amenities	
Alcoholic beverages	.39
Credit cards welcome	.69
Games for children	.62
Quick service	-.37
H. Human Element In Dining	
Crowded dining area	.52
Servers in special outfits	.69

Although the reader can readily interpret the nature of these factors from the data in the table, a short summary of each factor may be useful:

A. Formal Elements of Dining: the benefits

of a relatively formal restaurant;
B. Trouble-free Dining: the salient characteristics of a well-run restaurant;
C. Value in Dining: an emphasis on quantity;
D. Elements Found in Lounges: music and dancing;
E. Monetary Savings: inexpensive meals;
F. Light Foods: food for diet-conscious patrons;
G. Extra Amenities: a set of miscllaneous extra services;
H. Human Element in Dining: features of the human aspect of dining.

The differences between the Low, Medium, and High nutrition interest groups were analyzed on both a univariate and a multivariate basis using ANOVA and multiple discriminant analysis. To express the nature of the multivariate relationship, loadings of an absolute value of .30 or greater were used to evaluate the contribution of each variable to the canonical discriminant function.

Results

Table 3 presents the results of the statistical analysis involving the three nutrition interest segments. At the univariate level, the statistically significant results generally cluster by factors underlying the set of benefits, and will be reported in that fashion. Nine of the eleven variables that loaded most highly on the Formal Elements of Dining factor reached the .05 significance level on a univariate basis: being waited on at the table, nice view from the window, soft music, quiet surroundings, low lighting, fancy table settings, interesting decorations, having high-class customers, and variety on the menu. Only the benefits of fancy desserts and having reservations taken did not reach significance. These results show the High group most interested in fine dining, even at midday, and the Low group least interested.

One of the two benefits loading most highly on Value while Dining reached significance at the univariate level: interest in large servings. The Low group expressed the greatest interest in this benefit, and the High group the least interest. Two of the three benefits associated with the Light Foods factor reached significance: low-calorie plates and homemade breads. For both of these variables, the High group expressed the greatest interest, and the Low group the least interest. The third variable, interest in a salad bar, was significant at p=.07.

Both of the variables associated with the Human Element in Dining reached significance: eating in a crowded dining room and having servers in special dress. For all three of these benefits, the High group reported the greatest interest. The Medium group reported the least interest in a busy restaurant and variety in menu items, and the Low group the least concern for the dress of servers.

The first function of the multiple discriminant analysis reached significance, this at the p=.000 level. Variables that loaded at or above an absolute value of .30 were: low-calorie plates, quiet surroundings, interesting decorations, fancy table setting, soft music, homemade breads, nice view from the windows, waited on at the table, and high-class customers. This function clearly denotes an interest in fine dining and in light foods, as the nine benefits come exclusively from the Formal Elements of Dining and the Light Foods factors. The centroids for the nutrition groups were: Low, -.82; Medium, -.02 and High, .81. Thus, this function shows the High group to require benefits of fine dining, and a menu consisting of light foods.

Discussion

This discussion interprets the results to characterize the restaurant market as segmented by interest in nutrition and described by required benefits. It also offers possible hypotheses for further research into this market by speculating further about the nature of the market segments delineated by this study. That is, these speculations suggest some quite tentative characteristics of the segments that have been analyzed by this research, with the hope these characteristics can be examined more closely through future research.

The results of this study suggest that persons with high interest in nutrition differ from those with less interest in terms of the benefits they require from restaurants. Generally speaking, these differences among groups relate to services far removed from providing the nutritional ingredients in food. While restaurateurs have often recognized that dining out is an experience, this study suggests that their degree of nutrition orientation will influence the nature of the dining experience that customers desire.

Findings from the multivariate analysis suggest restaurant patrons who are interested in nutrition emphasize those benefits concerned with some aspects of the food, but not others. They are concerned with various elements of the eating environment, particularly those having visual appeal. The univariate results confirm this finding, and also suggest that the High nutrition group desires a menu with a variety of food offerings, crowded dining areas, and servers in special costumes. Both of the analyses indicate restaurants that provide a more formal eating experience for lunch will be preferred by those individuals who have a stronger orientation toward nutrition.

To reinterate, persons who are more interested in nutrition are more concerned about the environment in which they eat. They desire a setting that is more visually stimulating. They feel that decorations, costumes, table settings and nice views are more important than do the less interested patrons. Visually interesting surroundings can be considered a form of entertainment, as they can occupy the patrons' attention while they are waiting for and eating food. Customers less interested in nutrition have a lesser concern with the visual surroundings. To speculate, they may

TABLE 3
MEANS FOR LUNCHTIME BENEFITS REQUIRED BY THREE NUTRITION SEGMENTS

Benefits	Nutrition Segment Low	Medium	High	F	p	Loadings
Formal Elements of Dining						
Waited on at table	3.60	3.92	4.40	6.21	.002*	.31
Fancy desserts	2.52	2.55	2.71	.48	.619	.08
Reservations taken	2.29	2.38	2.61	1.17	.312	.13
Nice view from windows	3.34	3.57	4.08	6.66	.002*	.32
Soft music	2.27	2.71	3.26	11.02	.000*	.42
Quiet surroundings	3.12	3.55	4.24	13.01	.000*	.46
Low lighting	1.93	2.34	2.53	5.24	.006*	.28
Fancy table settings	1.93	2.45	2.88	11.36	.000*	.43
Interesting decorations	2.51	2.87	3.51	12.08	.000*	.44
High-class customers	2.64	2.95	3.36	5.54	.004*	.30
Variety on the Menu	4.63	4.39	4.78	3.09	.047*	.08
Trouble Free Dining						
Friendly service	5.18	5.22	5.30	.40	.669	.08
Clean dining area	5.48	5.45	5.48	.06	.938	.00
Clean restrooms	5.23	5.38	5.54	2.64	.073	.21
Convenient parking	4.67	4.50	4.93	2.67	.058	.13
Value while Dining						
Large servings	3.94	3.61	3.46	3.23	.041*	-.22
All-you-can-eat specials	2.95	2.63	2.62	1.21	.300	-.12
Elements Found in Lounges						
Dancing	1.46	1.66	1.68	1.16	.189	.12
Live music	1.94	2.22	2.28	1.68	.189	.15
Monetary Savings						
Lowest possible price	4.02	3.87	3.72	.87	.500	-.12
Discount coupons	3.48	3.08	3.11	1.78	.171	-.14
Light Foods						
Salad bar	3.46	3.54	3.93	2.68	.070	.20
Low-calorie plates	2.08	2.68	3.29	17.34	.000*	.53
Homemade breads	2.91	3.27	3.78	8.38	.000*	.37
Extra Amenities						
Alcoholic beverages	1.98	2.10	2.12	.19	.827	.05
Credit cards welcomed	2.77	2.98	3.07	.66	.519	.10
Games for children	1.68	1.96	1.72	1.28	.281	.02
Quick Service	5.30	5.06	5.06	1.50	.226	-.13
Human Element in Dining						
Crowded dining area	2.51	2.41	3.03	4.13	.017*	.20
Servers in special dress	2.09	2.33	2.63	3.44	.034*	.24

*Denotes variables significant in univariate analysis. In multivariate discriminant analysis, the first function was significant at p=.000. Centroids for nutrition segments are: Low, -.82; Medium, -.02; and High, .81.

be more concerned with the process of eating itself than with the eating environment.

Those with a high interest in nutrition also seem concerned with their fellow patrons; they have a stronger desire to eat in busier restaurants that appeal to high-class customers. To speculate, those with less concern for nutrition may not pay much attention to the other customers. They may not care who they are, or may find them a hindrance to their own eating process. Here again, less interested customers appear less concerned with another aspect of their surroundings. For them, lunch may be mainly a time to eat; the benefits gained from a restaurant should pertain to the food, the major item in the eating process. The physical and aesthetic aspects of how it is provided become incidental to obtaining the food.

Those customers more interested in nutrition are also more interested in a peaceful dining experience. They desire soft music, quiet surroundings and low lighting. These "mood" variables may help these customers feel more relaxed during these moments at midday away from the daily routine. To speculate, the patrons with less interest in nutrition may not see lunch as a time to relax, but rather as a time for sustenance.

Beyond the surroundings, the greater desire for variety in food items expressed by the nutritionlly-oriented customer may stem from knowledge that eating a variety of foods has been recommended by nutritional experts (Lecos 1985). However, it may also represent a deeper need for variety in the total experience of "eating out."

After all, they could add variety to their diet by preparing a wide range of food items at home. They could also eat at a number of different restaurants each offering a specialized menu. But a single menu with variety is more interesting to look at and choose from than one with a narrow range of items. This benefit would add to a more interesting dining experience.

Also regarding food, the customers more interested in nutrition require low-calorie meals and homemade breads. Restaurants can easily serve these items, and others in this vein that could not be investigated by a study of this scope. These items would provide salient attractions for a target segment oriented toward nutrition.

Taken together, these findings suggest some specific aspects of marketing strategy for managers who aim for the nutritionally-oriented segment of the restaurant market. They should provide their customers with elements of fine dining. They should create a menu with a variety of selections, some of which are low-calorie dishes. The size of the servings of food can be modest and still satisfy the needs of nutrition oriented customers.

Children of various ages have previously provided a large market for fast-food restaurants. But as these youthful patrons grow older, many of them change the benefits they require of restaurants. Managers of these fast-food restaurants who seek to retain their patronage must realize that as their market matures, they must change the decor, atmosphere, and service elements of their offering or lose these customers to other outlets (Edwards 1983). Besides fast service, these adults have been demanding greater menu variety, waitress service, real tableware, and more subtle, interesting decor. This study relates these demands to a greater concern for nutrition. Present findings suggest that fast food operators can thus segment their market on a basis other than age. For them, and for other restaurateurs, interest in nutrition provides a viable alternative base for market segmentation.

Summary and Conclusions

This study investigated the link between interest in nutrition and the benefits customers required from a restaurant at lunchtime. The segment most interested in nutrition seeks a more formal dining atmosphere, requires certain human elements related to dining, and has more interest in a menu featuring low-calorie foods. But it has a lower demand for large quantities of food. In short, interest in nutrition is relevant to the strategic choices being made by marketers to serve their target market segments, and restaurateurs must be educated to recognize this relationship.

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PRODUCT LIABILITY: AN IMPORTANT DIMENSION OF MARKETING STRATEGY

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ABSTRACT

Marketing decision makers are faced with a crisis in product liability law which impacts virtually every area of marketing decision-making. A brief review of the current crisis is presented and underlying causal factors are identified. Strategic implications are emphasized and the prospects for federal product liability reform are discussed.

Monitoring and adapting to environmental forces is basic to the strategic planning process. Marketing decision makers must anticipate environmental developments and fashion productive responses if the organization is to survive and meet its long-run objectives. Legal and political trends, an important dimension of the organization's "macroenvironment," have a direct and immediate impact on marketing decisions and must, increasingly, be anticipated in the firm's strategic planning efforts. Indeed, as noted by Sturdivant and Green (1985), the legal environment can be both a threat as well as a significant source of opportunity when the organization is able to link, or integrate, an effective legal and corporate strategy.

No single area of law more vividly reflects the needs for heightened legal awareness and an effective legal strategy than product liability. Marketing managers are, today, truly confronted with a "crisis" in product liability law -- a crisis which potentially impacts every area of marketing decision making: pricing, product development, promotion, and distribution. The purpose of this paper is to review the current crisis in product liability, discuss underlying causal factors, and identify major implications for strategic marketing planning. A brief review of product liability theory will be presented initially, followed by a discussion of the prospects for product liability reform. Attention will be directed toward the strategic significance of product liability actions and reform as they relate to marketing planning and decision-making.

Review

Product liability is defined by Oran (1983) as the responsibility of manufacturers and/or sellers of products to pay for harm caused by defective products. In the present context, "harm" refers to a physical injury resulting from product use and would exclude, for example, noninjury-related economic losses associated with product failure or malfunction. Liability actions may be brought against the organization by a purchaser, user, or a bystander (i.e., an injured party not directly involved in either the purchase or the use of the product). Commonly, suits are brought against both manufacturers and resellers (i.e., wholesalers and/or retailers) of the product in question.

Payments made to injured parties in liability cases may include both "compensatory" (i.e., compensation for actual loss or damages) and "punitive" (i.e., penalties for wrongful conduct designed to punish the defendant) awards. An important distinction can be made in this regard between damages which can be objectively assessed and those which are determined subjectively; i.e., awards for "mental anguish," or "pain and suffering" are subjectively determined. Many punitive awards, it has been argued, are subjectively determined and may, thus, bear no logical relationship to any measurable standard of "damage," per se. Significantly, punitive awards, which are often based on an implicit ability to pay standard, have increased dramatically in relation to total liability awards in recent years (Riggs, 1986).

Widespread agreement exists today that more and more organizations are facing a liability crisis; both the number of liability suits and the size of average settlements have increased significantly in recent years. Malott (1983), reported that the number of product liability suits grew at an average rate of 28 percent between 1974 and 1981 and Morgan (1982) noted that average settlements increased by 100 percent from the periods 1965-69 to 1970-75. Reinforcing these trends was the earlier report of the Commerce Department's Interagency Task Force (ITF) on Product Liability (1977). Among other findings, the ITF was able to document increases in product liability actions, increased average cost of settlements and escalating insurance premiums for liability coverage. Finally, "Nightline," a television news series, recently reported (Dec. 26, 1985) on the ever-increasing "liability explosion" in America, noting that insurance companies paid out $101 billion in total liability claims in 1984. Predictably, the insurance industry contends that claims are currently exceeding premiums by an ever-increasing margin -- a situation which is rapidly giving rise to a "crisis" in the insurance industry. Authorities generally agree that two major factors underlie the crisis: (1) increased recognition and acceptance of strict liability standards by the courts and, (2) the absence of uniform standards -- a consequence of the tort-based, state-by-state approach to product liability regulation.

Strict Liability

In establishing liability, organizations can be held at fault under any one of a number of liability theories or standards; i.e., negligence, warranty, or strict liability. Of the various liability standards, negligence is, perhaps, the most straightforward test and the one which marketing decision-makers are most familiar with. Under a negligence standard, liability can be established based upon a product's manufacture, design, or installation. Negligence, in concept, implies a careless or

reckless action on the part of the defendant and, for years, cases were decided largely on the basis of this criterion.

By contrast, strict liability asserts that responsibility simply attaches to the product and negligence or breach of explicit warranty need not be a condition for liability to exist; in effect, liability without fault. Under this theory, the focus is upon the product, per se, and not necessarily upon the actions--or culpability--of the seller and/or producer. As noted by Wade (1984, p. 344), "... a manufacturer (or reseller) may be held strictly liable in tort even though it is not aware of the dangerous condition of the product and even though it was not negligent in failing to become aware of that condition." Thus, under strict liability, a producer could be held at fault even though a product was produced in complete compliance with all applicable standards, was free of defects, and no evidence of negligence was present.

Absence of Uniformity

The second causal factor underlying the liability crisis, absence of uniformity, compounds the problems facing marketing decision makers. Liability cases are decided on a state-by-state basis and uniform federal standards are generally absent. The net result of this approach is a phenomenal degree of interstate variability in the resolution of liability cases. Senator Robert Kasten, a leading proponent of federal liability reform, observed (1985, p. 40):

> "The present product liability system is a rational person's nightmare. If you were injured today or sued by someone hurt by your product, your case would be decided largely on where it was bought. Each state can set up its own product liability system, one differing from the other. The results: confusion, waste, and grossly unfair verdicts."

The interplay of these two factors, strict liability and interstate variability, have combined to produce a very unbalanced and turbulent legal environment. The determination of liability for products is often biased against the producer or seller as a result of the application of strict liability criteria and the inherent uncertainty in the state-by-state approach to liability enforcement. Both factors function to make strategic marketing planning vastly more difficult and complex than need be the case.

Liability and Marketing Decisions

What are the implications of the present product liability morass for marketing decision makers? What effects do strict liability standards and interstate variability have on marketing decisions? For planning purposes, the most pronounced effect of the present system is the creation of a high degree of uncertainty. As noted by Reed (1984) this uncertainty has both economic and psychological dimensions. Economically, uncertainty functions to increase the costs associated with the production and marketing of products; e.g., legal research costs; costs of liability insurance. Psychologically, uncertainty contributes to stress and increases reaction time--factors which both potentially function to impair the quality of marketing decision making. For example, the perception of uncertainty may clearly lead to overly cautious decisions and a reluctance to innovate.

Certain specific outcomes, all reflecting uncertainty and instability, associated with the current liability crisis can be identified:[1]

1. Increased insurance expense and limited insurance availability, particularly among small firms in high risk industries.

2. Increased transaction costs throughout the marketing channel.

3. Decreases in the rate of new product development and/or introduction and a reluctance to improve existing products where safety might be an issue.

4. Premature product abandonment as producers/sellers seek to avoid potential liability associated with existing products.

5. Significant pressure exerted upon prices and margins as organizations attempt to absorb increased legal and insurance expense.

6. Decreased geographic market expansion as producers and sellers seek to avoid "tough" liability states.

7. Increased difficulty in attracting marketing intermediaries who may be reluctant to add certain products to their merchandise mix, given their potential liability. Note, in this regard, that resellers (i.e., retailers and wholesalers) are commonly included in liability suits, even though they may have played no role in the design or manufacture of the product in question.

8. Increased burden on marketing communication systems. Increasingly, promotion must inform buyers/ users about inherent product characteristics, design, maintenance, and operation as they relate to safe use.

From a macro or societal perspective, it can also be argued that the present system is costly

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[1]Many of the observations in this section are based on Reed's (1984) excellent discussion of the need for product liability tort reform.

and inherently unfair to both business and the consumer: Consumers are denied access to new products; awards in liability cases are not widespread, but benefit only a small number and; the enforcement of justice is often very uneven relative to its costs. As noted by Tracy Mullin of the National Retail Merchants Association in his remarks before a Congressional subcommittee (Hearings, S-100, 1985, p. 185):

> The current system is a morass. The complexity of present law and its considerable variance from state to state benefits neither consumers, manufactures, nor retailers. In many instances, consumers who suffer substantial losses recover nothing, either because the laws in their states preclude suit or because the extent of their injuries is insufficient to support a contingency fee, and the cost of prosecuting such a claim is too great to justify the expense.

Finally, it can be noted that the present system is believed to contribute directly to the rate of business failure--a problem found to be significant by the ITF (1977) among smaller organizations in high risk industries.

Prospects for Reform

Substantive steps in the direction of product liability reform date back to the mid 1970's. Two basic approaches to product liability reform have been pursued: (1) a "model act" approach and, (2) various attempts during the last three sessions of Congress to draft a Federal product liability bill which would supercede much of the authority presently retained by the states.

Regarding the first approach, in 1979 the "Uniform Product Liability Act" (UPLA) was passed and represented, perhaps, the first substantive step in the direction of reform. The UPLA was a "model act" intended for voluntary adoption by the states. Had UPLA been adopted as drafted, considerable uniformity would have been achieved and much of the uncertainty associated with product liability regulation would have been removed. Unfortunately, such was not the case and no single state to date has fully adopted the U.P.L.A.

Given the failure of the model act approach, there have been several recent attempts at drafting a Federal product liability statute. Senator Robert Kasten of Wisconsin has been the leading proponent of federal reform and has introduced product liability bills in the last three sessions of Congress. Although Senator Kasten's latest effort, S-100, is still under debate and, in all likelihood, will not be passed during this session, (Wall Street Journal, Sept. 18, 1986, p. 18) the prospects for a future Federal statute, nevertheless, appear promising.

Stripped to their essentials, most of the proposals to date for statutory reform call for the following changes, among others:

1. Creation of uniform standards across the states. In many areas of law, state authority would be superceded.

2. Restrictions on strict liability and increased recognition of negligence standards. Comparative fault would also be recognized; i.e., the claimant's conduct (or negligence) would be considered in assessing responsibility and apportioning damages.

3. Establishment of statutes of repose and statutes of limitations. The former would limit the time during which a suit could be brought to a specified period; i.e., manufacturers would not be held indefinitely liable for their products. Statutes of limitation generally limit the period during which a claimant can file suit from the time of injury; i.e., an injured consumer would be required to take action within a specified number of years from the time an injury occurred. Both of these changes effectively increase certainty by better defining the liability period or planning horizon.

4. Certain rules of evidence would be changed. Specifically, corrective measures effected by a manufacturer could not be used as evidence of a prior wrongdoing. Note that, at present, subsequent product improvements may be used as evidence of prior negligence.

5. Limitation or "caps" on punitive damages may be established; e.g., limitations on awards for "pain and suffering" or "psychological losses."

6. Finally, resellers (e.g., distributors and retailers) would generally be excluded from product liability suits except in those cases where responsibility can be traced directly to the intermediary; i.e., the intermediary has modified or altered the product in such a way as to make it unsafe.

Collectively, these reforms are intended to achieve a better balance between the interests of consumers and business. From a marketing perspective, Federal reform would provide greater certainty and stability for marketing and production planning. For example, producers and resellers should be able to achieve better estimates of their potential liability; the duration of the liability period will be better defined and; marketing and production expense should be lowered. Federal reform should also provide a positive stimulus to new product development and reduce the vulnerability of small businesses which are often leaders in product innovation.

Conclusion

Marketers are currently facing a crisis in product liability. As noted in the preceding sections, this crisis has far-reaching effects, impacting virtually every area of marketing planning and decision-making.

Three major implications are noteworthy. First, it is vitally important for marketing analysts to continuously "track" product liability actions and theories as they evolve; monitoring the legal environment must be an integral part of the organization's marketing information system. Second, effective legal strategies, or "scenarios," must be formulated in light of existing liability information. For example, under the present situation, it may be prudent to "shelve" certain new product ideas or avoid distribution in certain states, given the inherent risks. Finally, marketing decision makers must, as a part of their legal strategy, take an active part in legislative reform; i.e., management must be "proactive" in its legal posture. In this regard, Zeithaml and Zeithaml (1984) point out that "environmental management" must be made an explicit part of the strategic planning process and, toward this end, both "proactive" (i.e., change inducing) and "reactive" (i.e., adaptive) strategies can be pursued. Clearly, it would appear that marketers would be well advised to adopt a proactive posture in moving toward Federal liability reform.

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THE ROLE OF CONSUMER PRODUCT WARRANTIES AND OTHER EXTRINSIC CUES IN REDUCING PERCEIVED RISK

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Abstract

Recent attempts to demonstrate consumer product warranties reduce perceived risk have yielded mix results. The present paper extends previous research by investigating the effectiveness of warranties and other selected extrinsic cues as reducers of perceived performance and financial risk. The results indicated that a full warranty and favorable store image did reduce these components of risk but price and private test certification did not.

Introduction

Despite increased research efforts over the past decade, the consumer product warranty remains one of the least understood aspects of a product strategy. According to Kelley (1986), this condition exists for three main reasons. First, much of the warranty research has been fragmented into a myriad of topics. Second, with the exception of attempts to analyze the readability of warranties, previous research has not been replicated. Third, generalizations about the nature and influence of warranties on consumer behavior have not been possible because much of the empirical research has yielded mixed results.

Several research questions need to be answered before consumer product warranties are more fully understood. Additional attempts at theory discovery and justification, research on the provisions of the Magnuson-Moss Warranty Act, and an investigation into what effect extended warranties have on perceptions of express warranties are topics that future research should address. Another topic that needs further research is how consumers use expresse warranties when making purchase decisions. Some evidence exists that warranties may reduce certain components of perceived risk (Bearden and Shimp 1982; Shimp and Bearden 1982). However, replication and extension of this research is necessary before the results can be generalized. The purpose of the present study is to investigate whether warranties, when combined with other extrinsic cues (e.g., price and store image), reduce selected components of perceived risk.

The remainder of the paper is organized into five sections. First, the relevant literature related to warranties and perceived risk is briefly reviewed. Second, the hypotheses are stated. Next, the methodology employed in the study is presented, followed by a discussion of the results. Finally, the marketing and public policy implications of the results are highlighted.

Background

Bauer (1960) suggested every purchase decision involves an element of perceived risk. Conceptually, perceived risk is thought to be a function of the amount of uncertainty and magnitude of the consequences surrounding a particular act (Cox 1967; Humphreys and Kenderdine 1979; Taylor 1974), and it may be financial, performance, social, psychological, or physical in nature (Jacoby, Kaplan, and Szybillo 1974). Although the relative importance of each of type of risk depends on the nature of the product and purchase decision, performance (P-risk) and financial (F-risk) risk are usually the most important (Ross 1975).

Much of the research in marketing that has investigated perceived risk has focused on ways to reduce risk. Most of this research has found mix results. For example, Roselius (1971) found that brand loyalty and brand image had the greatest effect on reducing all components of perceived risk across several product classes. Warranties, endorsements, word-of-mouth, store image, and private testing were found to have little or no effect on reducing perceived risk. However, Roselius's (1971) results cannot be generalized since the reliability of the single-item scales used in his study could not be assessed. In addition, Roselius (1971) did not study whether the above extrinsic cues might interact to reduce perceived risk.

Price also may reduce perceived risk in the absence of other product information (Monroe 1973; Olson 1977). However, little evidence exists which supports this hypothesis. For example, price did not reduce P-risk or F-risk in a series of experiments conducted by Shimp and Bearden (1982).

The fact that various extrinsic cues may not act independently could be the reason for the lack of evidence that extrinsic cues reduce perceived risk. Jacoby, Olson, and Haddock (1971) found that price and perceived quality of a product were related. Evidence that warrantor reputation and warranty quality interact to reduce P-risk and F-risk also exists (Bearden and Shimp 1982; Shimp and Bearden 1982). However, the interactive effect that three or more extrinsic cues have on reducing perceived risk has not been addressed. The present study extended earlier perceived risk research by investigating the combined effect that express warranties, price, store image, and private test certification had on reducing P-risk and F-risk.

Hypotheses

Marketers have used warranties to reduce perceived risk (Feldman 1976). But is the amount of risk reduced dependent on the terms of a warranty? A consumer should perceive less P-risk and F-risk when purchasing a product with a full warranty vis-a-vis a limited warranty because a full warranty provides more coverage. Partial

support for this hypothesis exists (Bearden and Shimp 1982; Shimp and Bearden 1982). However, additional tests are needed before generalizing this hypothesis. Therefore, the first hypothesis is:

H_{1a}: A high-quality warranty will result in less P-risk than a low-quality warranty
H_{1b}: A high-quality warranty will result in less F-risk than a low-quality warranty

Although they did not find any support for their hypothesis, Hisrich, Dornoff, and Kernan (1972) argued that store image might act as a surrogate risk reducer for product cues if the product was ambiguous. It can be inferred from their argument that consumers would reduce perceived risk by shopping in stores that had a favorable image. Thus, one would expect that P-risk and F-risk would decrease with increasing store image. Stated formally, the second hypothesis is:

H_{2a}: A more favorable store image will result in less P-risk than an unfavorable store image
H_{2b}: A more favorable store image will result in less F-risk than an unfavorable store image

Marketers have also used seals or certificates issued by private testing organizations, such as Underwriter Laboratories, in their marketing communications as a means of reducing perceived risk. Certification should assure the consumer that the product has met certain performance standards. Thus, a seal of approval issued by a reputable organization should reduce P- and F-risk, whereas certification by a disreputable organization should have little effect on reducing P- and F-risk. Hence, the third hypothesis is:

H_{3a}: Certification by a reputable private testing organization will result in less P-risk than certification by a disreputable private testing organization
H_{3b}: Certification by a reputable private testing organization will resulting less F-risk than certification by a disreputable private testing organization

Consumers may impute product quality from the price (Monroe 1973; Olson 1977). Although the relationship may vary by product class, higher prices should reduce P-risk. At the same time, a higher price should increase F-risk. These relationships have not been supported in previous research but may hold in the presence of several extrinsic cues. Thus, the final hypothesis is:

H_{4a}: A high price will result in less P-risk than a low price
H_{4b}: A high price will result in more F-risk than a low price.

Methodology

Two levels of warranty quality (low and high), two levels of store image (favorable and unfavorable), two levels of private testing (favorable and unfavorable), and two levels of price (low and high) were manipulated in a 2 x 2 x 2 x 2 between-subjects factorial design. A sample of 320 students enrolled in beginning marketing classes consented to participate in the study. The subjects were randomly assigned to the 16 treatments and were exposed to the experimental manipulation in groups of 25 or less. Each treatment included 20 subjects.

It was thought that the experimental product needed to be somewhat technical and complex in order for P-risk to be manifested (Shimp and Bearden 1982). Pretesting indicated that stereo speakers fulfilled this requirements.

Independent Variables

Shimp and Bearden (1982) manipulated the words full and limited and the duration of coverage to define the warranty cue. Warranty quality was operationalized similarly in the present study. The high-quality warranty was described as a 3-year full warranty. The low-quality warranty version was described as a 6-month limited warranty.

Pessemier (1981) and Menezes and Elbert (1979) identified several store characteristics that shape store image. Using a list compiled from these studies, the present study used descriptions of location, availability of service, product selection, and length of time in business to operationalize store image. A favorable store was described as one that had (1) been in business for an extended period of time, (2) a strong reputation for customer and product service, (3) a large selection of brands, and (4) convenient store locations. Conversely, the unfavorable store was characterized as one that had (1) been in business for a very short period of time, (2) a questionable reputation for customer service, (3) a limited selection of brands, and (4) inconvenient store locations.

Private testing was operationalized as either being a highly reputable and creditable testing organization or as a questionable and incredulous testing organization. The reputable manipulation source was Consumer Reports while the disreputable testing source was described as Stereo Facts, a fictitious testing organization established by the manufacturers of audio equipment.

Price was operationalized as high ($249) or low ($49) similar to Shimp and Bearden (1982).

Dependent Variables

P-risk and F-risk were each measured with a five-item Likert-type scale. The items measured the two dimensions of perceived risk: uncertainty and consequences. Examples of these items included, "considering the investment involved, purchasing the pair of advertised stereo speakers would be (very risky . . . not very risky)" and "after reading the ad, how certain are you that the advertised speakers will perform satisfactorily (uncertain . . . certain)."

Procedure

An advertisement was developed for the experimental product. An effort was made to allocate the same amount of space to the manipulation of each independent variable such that demand effects would be minimized. No extraneous text material was included in the advertisement.

Booklets containing a cover page of instructions, the experimental advertisements, and the questionnaire were distributed to the subjects. The instructions stated that the subjects were selected to participate in a pilot test of an advertisement being developed for a manufacturer of stereo equipment. The subjects were then thanked for their participation and asked to read the experimental advertisement and respond to the short questionnaire. The test was self-administered, but an attempt was made to maintain a controlled environment by asking the subjects to remain quite until everyone had a chance to finish the test. Once all of the subjects had completed the questionnaire, the booklets were collected and the subjects were debriefed.

Results

Manipulation Checks and Reliability

Price, store image, and private testing were measured with separate two-item, seven-point Likert-type scales. Warranty quality was measured with a single-item, seven-point Likert-type scale. Illustrative of the items was the item for warranty quality. "The warranty attached to the advertised speakers is (very unsatisfactory . . . very satisfactory)." Separate independent t-tests indicated that manipulations were successful. The scales also possessed a high degree of internal reliability as measured by Cronbach's coefficient alpha. **Table 1** summarizes the t-test and coefficient alpha results.

The P-risk and F-risk scales also possessed an acceptable level of internal reliability. Cronbach's coefficient alpha for these scales was .86 and .85, respectively. (See **Table 1**.)

Experimental Findings

The treatment means are summarized in **Table 2**. The four hypotheses were tested using a multivariate analysis of variance (MANOVA). The results of the MANOVA are shown in **Table 3**. (See **Tables 2** and **3**.)

Hypotheses H_{1a} and H_{2a} were partially supported. The significant interaction of store image and warranty indicated that together these variables reduced P-risk ($F = 3.96$, $p. < .015$). A plot of the interaction is shown in **Figure 1** and a Tukey test ($p = .05$) indicated that the following differences existed. The high-warranty/favorable store image treatment resulted in less P-risk than the high-warranty/unfavorable store image treatment or the two low-warranty treatments. The high-warranty/unfavorable store image treatment had significantly less P-risk than the low-warranty/unfavorable store image treatment. The low-warranty/favorable store image treatment differed from the low-warranty/unfavorable store image treatment. Finally, there was no difference between the high-warranty/unfavorable storage image and the low-warranty/favorable store image. (See **Figure 1**.)

The main effects of warranty quality ($F = 13.99$, $p < .000$) and store image ($F = 13.83$, $p < .000$) were significant for F-risk; thus, fully supporting H_{1b} and H_{2b}.

Hypotheses H_{3a}, H_{3b}, H_{4a}, and H_{4b} were not supported. The reputable testing treatment did not result in less P-risk and F-risk compared to the disreputable testing organization ($F = 1.33$, $p < .264$) and the higher price treatment did not reduce P-risk or increase F-risk relative to the lower price treatment ($F = 296$, $p < .120$).

Discussion

This study contributes to a growing body of evidence that consumer product warranties reduce perceived risk. A high-quality warranty and a favorable store image combined to reduce the amount of P-risk that was associated with the purchase of a pair of stereo speakers. Individually, a high-quality warranty and a favorable store image reduced F-risk. Price and private test certification were not found to be significant risk-reducing cues.

Perhaps the reason store image and warranty quality reduced P-risk and F-risk was that they were some of the more salient cues tested. Someone would immediately form an image of a store upon noting the location, inventory selection, and service. In addition, the terms of express warranties must be disclosed prior to the purchase as a condition of the Magnuson-Moss Warranty Act of 1975. Consumers may now be more aware of warranty information and considering it in their purchase decisions.

The reasons a certificate of testing may not reduce perceived risk are (1) that the literature suggests consumers seldom consult third-party information sources before making a purchase (Beales, et al., 1981), (2) the certification seal may not be readily visible to the consumer (e.g., the Underwriter Laboratories tag may be taped to an electric cord), and (3) even if the seal is acknowledged, the consumer may not understand what it means.

The fact that price failed to exhibit a main effect on P-risk and F-risk reinforces the results of previous studies. Perhaps price only effects perceived risk only in the presence of extrinsic cues not included in this study or when no other extrinsic cues are present.

Possible marketing implications of the results of this study include the development of marketing communications and the selection of channel members. A high-quality warranty might be disclosed in a print advertisement or point-of-purchase display in an effort to reduce F- and P-risk. The print medium would be the most

appropriate vehicle since the amount of information contained in a warranty would take a considerable about of time for the consumer to process. In terms of channel decisions, it is important for the manufacturer to determine how consumers view a particular store or chain before selecting the store or chain as a distribution outlet. The image of the store must be consistent with the image the manufacturer is trying to generate through the other elements of the marketing mix. For example, a manufacturer may want to use a high-quality warranty to differentiate itself from the competition; thus, requiring arrangements to be made with the store to service the warranty. If consumers do not perceive the store as being a reputable service provider, the strategy may fail.

The evidence that warranties reduce perceived risk may also influence efforts to develop theories that explain the purpose of warranties. One such theory is the Market Signal Theory which proposes consumers infer the reliability of a product from its warranty. Perhaps this theory might be modified to include warranties as reducers of P-risk and F-risk.

From a public policy perspective, the fact that warranty information could be relied on in making purchase decisons reinforces the need for the Magnuson-Moss Act. If consumers rely on warranty information supplied by the marketer to reduce the risk of purchasing a particular product, the warranty information should be truthful and disclosed prior to the purchase.

Conclusion

The present study is not without limitations which affect the generalization of the results. First, the experiment involved a homogeneous sample and one product. Additional research is needed to determine the extent these cues influence purchase decisions across a variety of product classes and consumer segments. Second, even though steps were taken to minimize demand effects, no measure was included in the questionnaire that attempted to identify the presence of such effects. Third, several extrinsic cues (e.g., brand loyalty and brand name) were not included in the study. It is conceivable that different combinations of cues might yield somewhat different results. However, this would require a more extensive study than the one described in this paper.

Despite these limitations the study has contributed to marketing's understanding of the ability of selected extrinsic cues to reduce P-risk and F-risk. Only through continued replication and extension efforts will marketing decisions concerning the cues used in this study become clearer.

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TABLE 1

MANIPULATION CHECKS

Variable	Number of Items	T-Value	Probability	Alpha
Price	2	4.99	0.025	.80
Store Image	2	6.23	0.012	.77
Testing	2	4.89	0.027	.87
Warranty	1	13.54	0.000	---

TABLE 3

MANOVA RESULTS

Independent Variable	DF	Dependent Variable	ANOVA SS	F-Value	Probability
Price	(2,303)			2.96	.120
		F-Risk	87.15	4.49	.086
		P-Risk	8.77	0.31	.576
Store	(2,303)			6.91	.001*
		F-Risk	407.25	13.83	.000*
		P-Risk	169.65	6.05	.014*
Testing	(2,303)			1.33	.264
		F-Risk	63.90	2.17	.141
		P-Risk	7.50	0.26	.605
Warranty	(2,303)			13.09	.000*
		F-Risk	559.15	18.99	.000*
		P-Risk	693.25	24.75	.000*
Testing X Store	(2,303)			0.73	.479
		F-Risk	11.62	0.39	.530
		P-Risk	2.62	0.09	.759
Testing X Price	(2,303)			1.97	.140
		F-Risk	116.40	3.95	.047
		P-Risk	47.27	1.68	.194
Testing X Warranty	(2,303)			1.08	.338
		F-Risk	8.77	0.29	.585
		P-Risk	10.15	0.36	.547
Store X Price	(2,303)			0.53	.586
		F-Risk	1.95	0.06	.796
		P-Risk	22.57	0.80	.369
Store X Warranty	(2,303)			3.96	.019*
		F-Risk	14.02	0.47	.476
		P-Risk	116.75	6.95	.015*
Price X Warranty	(2,303)			0.56	.567
		F-Risk	14.87	0.50	.477
		P-Risk	31.87	1.13	.286
Testing X Store X Price	(2,303)			0.61	.543
		F-Risk	9.45	0.32	.571
		P-Risk	2.27	0.08	.771
Testing X Store X Warranty	(2,303)			0.02	.982
		F-Risk	0.90	0.03	.861
		P-Risk	0.15	0.10	.941
Texting X Price X Warranty	(2,303)			2.04	.131
		F-Risk	93.52	3.17	.075
		P-Risk	104.65	3.73	.054
Store X Price X Warranty	(2,303)			0.11	.888
		F-Risk	6.32	0.21	.643
		P-Risk	5.25	0.18	.665
Testing X Store X Price X Warranty	(2,303)			2.39	.092
		F-Risk	91.37	3.10	.079
		P-Risk	131.32	4.68	.031

Note: Wilks lambda was used to approximate the F-value.

TABLE 2

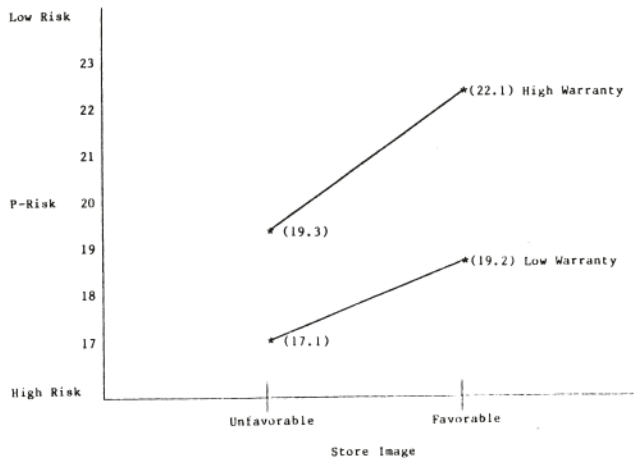
TREATMENT MEANS

Treatment	Testing	Store	Price	Warranty	P-Risk X	P-Risk SD	R-Risk X	R-Risk SD
1	Stereo Facts	Favorable	$ 49	Limited	18.5	5.6	16.2	5.1
2	"	"	"	Full	21.9	5.1	21.7	4.3
3	"	"	$249	Limited	19.2	5.8	18.8	5.4
4	"	"	"	Full	21.1	6.7	22.7	5.2
5	"	Unfavorable	$ 49	Limited	15.2	6.0	16.0	6.0
6	"	"	"	Full	19.5	4.5	20.6	4.5
7	"	"	$249	Limited	17.9	5.0	19.2	7.1
8	"	"	"	Full	17.6	4.4	18.3	5.1
9	Consumer Reports	Favorable	$ 49	Limited	19.5	4.4	18.0	4.9
10	"	"	"	Full	23.7	4.5	22.9	4.4
11	"	"	$249	Limited	19.4	5.0	18.8	5.9
12	"	"	"	Full	21.7	5.2	19.6	5.3
13	"	Unfavorable	$ 49	Limited	20.0	4.5	19.6	5.3
14	"	"	"	Full	20.4	6.3	18.6	5.2
15	"	"	$249	Limited	15.2	6.6	16.7	4.6
16	"	"	"	Full	19.7	5.6	19.9	5.4

Note: P-risk and F-risk range 5 (high risk) to 35 (low risk).

FIGURE 1

PLOT OF STORE BY WARRANTY INTERACTION



SALES FORCE MANAGEMENT-INDUSTRIAL MARKETING

PROTOCOL ANALYSIS: AN APPROPRIATE METHODOLOGY FOR THE STUDY OF SALESPERSONS

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Abstract

The use of protocol analysis as a methodology to study the making and use of strategies by salespersons is presented. The manner in which the methodology can be adapted to a salesperson's context is suggested. Finally the implications and possible contributions of protocol analyses in the area of sales management are discussed.

Introduction

The area of Sales management has generated a diversified body of research, the core of which could be attributed to studies dealing with the type of strategies and tactics used by salespersons. This stream of research has generated interesting results, especially concerning the main dimensions which underlie the strategies and tactics used by salespersons. Table I provides a short summary of these results.

Table I

A Summary of the Main Dimensions Which Underlie the Strategies and Tactics Used by Salespersons

Dimensions	Authors
The use of quality as the main argument	- Spiro and Perreault (1979) - Capon and Swasy (1977) (1981)
The use of the price as the main argument	- Farley and Swinth (1967) - Capon (1975) - Capon and Swasy (1977) (1981)
The use of other advantages (else than quality or price)	- Farley and Swinth (1967) - Capon (1975) - Swasy (1977) (1981)
The salesperson's uses of his(her) competence as a selling argument	- Woodside, Taylor, Pritchet and Morgenroth (1977) - Obermiller and Sawyer (1981) - Brock (1965) - Woodside and Davenport (1974) - Spiro and Perreault (1979) - Capon and Swasy (1981)
The use of a personalized relation with the customer	- Woodside, Taylor, Pritchet and Morgenroth (1979) - Brock (1965) - Woodside et Davenport (1974) - Capon (1975) - Spiro et Perreault (1979) - Capon et Swasy (1977) (1981)
The salesperson's demonstration of the efforts he/she puts to satisfy the customer	- Spiro and Perreault (1979)
The salesperson's capacity to adapt to different situations and/or customers	- Farley and Swinth (1967)
The use of standardized strategies and tactics across situation and/or customers	- Jolson (1973) (1975)
The salesperson's honesty	- Spiro and Perreault (1979) - Clopton (1984)
The degree to which the salesperson tries to keep the control over the interaction	- Pasolo (1975) - Willet and Pennington (1966) - Olshavsky (1973) - Clopton (1984) - Schurr and Ozanne (1985)
The use of pressure to close the sale	- Reizenstein (1971) - Capon and Swasy (1981) - Clopton (1984) - Schurr and Ozanne (1985)
The use of sale accessories (phamphlets, catalogs, etc.)	- Spiro and Perreault (1979)

It is interresting to notice that these results have all been generated on the basis of two major methodologies: The use of questionnaires or in depth interviews and the use of non-participant observations. Although these methodologies have been used in several research they are not without structural problems. Given the fact that the making and the use of strategies and tactics by a salesperson is a complex process which is dynamic and highly personal, it has been suggested (Bonoma 1985) that these methodologies might not be appropriate to understand such process. Funkhouser (1984) claims that the use of participant observations doesn't say much about the processes which are undertaken by the salespersons and that the strategies and tactics could only be inferred by the researcher. For in depth interviews, the author suggeststhat although less obstrusive than observation, the methodology could be affected by a problem of memory and that, unless the interview is made immediatly after the interaction between the client and the salesperson, it could be hard for the salesperson to distinguish between what he did during the interaction and what he thinks he did.

In order to gain a better comprehension of the different dimensions underlying the strategies and tactics used by salespersons, the present paper argues for the use of a methodology based on protocol analysis.

Background

Since the process of making and using strategies and tactics could be considered as a type of decision process, the potential for protocol analysis to serve as a methodology in the area of sales is worthconsidering. In the past, the study of human problem solving, has generated a large body of research. Using protocol analyses as their main methodology, Newell and Simon (1972) and Ericsson and Simon (1980, 1984) have shown how this approach can generate a good comprehension of the processes used by individuals to solve a problem. In marketing literature, protocol analyses have been used to study consumer' decision processes: (Wright, 1975; Bettman and Kakkar, 1977; Lussier and Olshavsky, 1979; Bettman and Park, 1980; Shimp and Bearden, 1982; Archibald, Haulman and Moody, 1983); industrial purchaser's decision processes (Crow, Olshavsky and Summers, 1980, Stiles, 1972); and decision processes among marketing organizations (Hulbert, Farley and Howard, 1972). Strangely very little has been done on the use of protocol analysis as a methodology to study the decision processes of salespersons (Desormeaux, 1986). The interest of using this methodology to study the strategies and tactics used by salespersons from the work of Ericsson and Simon (1984). The authors, based on strong theorical considerations as well as several empirical results,

suggest that subjects can accurately and completely report on their mental processes when:

1- The information to be reported is the focal point of awareness.
2- The processes to be reported are not overly automized.
3- The time period between the occurence of the process and the reporting is relatively short.
4- There is no information overload.
5- There are few distractors.
6- Complete reporting is encouraged.
7- Subjects are not asked to theorize about the processes.
8- The reports are oral rather than written.

Since all these conditions could be met within the context of sales management, the methodology was used to study the decision processes of salespersons. The methodology used in this study is presented.

The Sample

A total of twelve industrial salespersons were recruited to take part in the study. Each salesperson had a working experience of at least one year in his current position. Each salesperson was asked to provide protocols for 15 randomly selected sale situations, thus generating a total of 180 protocols. All protocols were based on real situations, which were defined as a real dyadic interaction with a customer. Since situations can vary in nature as well as in complexity, and in order to generate a random sample of situations, respondants were asked to select every fourth sale interaction.

The Procedure

Since sale strategies are often planned prior to the dyadic interactions, each protocol consisted of two separate parts. The first part took place before the interaction. Prior to the meeting with a customer each salesperson was asked to verbalise the strategies and tactics he was planning to use. In order to help the verbalisation, the salespoerson was asked to consider the following aspects which were presented in the form of questions:

1- Give a brief description of the client you are about to meet and the context in which the meeting is going to take place.
2- What is(are) the objective(s) you have? Which result are you expecting? Why do you make this call?
3- How are you going to behave with the customer in order to reach your objective(s)? What are you going to do or say in order to convince him(her)? Which arguments are you going to use?

In the same manner, <u>right after the meeting</u>, each salesperson verbalised the strategies and tactics used during the dyadic interaction. Again in order to help the verbalisation, salespersons were asked to consider the following aspects:

1- How long did the visit last?
2- What happened during the visit? How did you behave? What was the customer's reaction to your approach?
3- Was your approach different of what planned? If so how and why?
4- What are the outcomes of the meeting? Was your call useful?

Each protocol consisted of both verbalisations. These verbalisations were tape-recorded by the salespersons themselves right before and right after each interaction. Salespersons were alone while generating their protocols. On the average each respondant took 47 days to produce all 15 protocols, the shortest period was 10 days and the longest 91 days. Overall it took close to 18 months to collect all 180 protocols. On the average protocols were 69 minutes long.

The Coding

Following the usual procedure used to code verbalisations, each protocol was first typed. In the study the average protocol had a lenght of 38 pages (double spaced). As a second step, as suggested by Ericsson and Simon (1985), each protocol down into different rubrics. A rubric consisted of a major theme encountered in protocols. Protocols were thus divided into eleven rubrics. Each rubric consisted of a theme such as: The nature of the situation, the stated objectives, the tactics which were to be used, the tactics which were actually used etc. Using these rubrics, protocols were actually broken down and put back together so that each idea or sentence could be classified. Then each rubric was itself broken down into several variables. For example the rubric "stated objectives" was broken down into 5 variables: initiate a new deal, keep on good relations, get an order, establish a new relation, improve an unsatisfactory situation. In essence these variables are short form summaries of key ideas which were often found in protocols. Overall 106 variables were thus generated. A matrix, crossing all 106 variables with the 180 protocols was then constructed. Protocols were thus recorded in a "quantitative" manner. When a variable was present in a protocol, a value greater than 0 was attributed to that variable. The magnitude of the value was to show the relative importance of that variable within the protocol. Inversly when a variable was not present in the protocol a value of 0 was attributed. This coding scheme provides a data bank which could be used for exploratory purposes as well as for hypothesis testing. For example it provides interesting opportunities to study how planned strategies vary across salespersons and/or situations.

The Validation and the Validity of the Methodology

The last step of the procedure consisted in writing, for each salesperson, an individual profile. A profile is a text of about 18 pages long which

describes how the salesperson makes decisions and generates strategies given a certain situation. These profiles are based on the "Variable by Protocol" matrix described earlier. Each profile is written using an "I" form just like if it had been written by the salesperson himself.

Each individual profile was submitted to the respective salesperson who was asked to react to the profile by saying the degree to which it was congruent with his was of working. This approach was favored over the more traditional approach of asking two independant researchers to reclassify all the protocols. The decision was based on two reasons: First given the complexity and the lenght of the pr-tocols, it would have been difficult to find two independant researchers who had both the time and the competence to go through the process. Second, because of the high degree of complexity which characterizes salespersons' protocols (in comparison to consumer's protocols) a classification by multiple judges could result in a higher degree of reliability but not necessarily of validity. Advocating for this position Kassarjian (1977) suggests that the use of multiple judges puts pressure on the researcher to generate a simple (often simplistic) classification scheme in order to obtain a high degree of consensus among judges. This procedure results in a high degree of inter-judges reliability but, because of the simplistic classification, in a low degree of validity. In the present case the degree of agreement expressed by salespersons toward their profile was used a measure of validation. The measure was based on 13 questions presented in **Table 2**.

Table 2

Questions Used to Validate the Protocols

1- Are there any elements in this text which are not clear? If so which ones?

2- Are you in agreement with the elements presented in this text? If not what are the aspects with which you disagree?

3- If your colleagues, superiors or customers were to describe the manner in which you behave on the job, would their description be different from this one?

4- Do you think that you would have generated a different set of protocols if the study had been done a month earlier? A month later?

5- Are you surprized by the content of the text? If so, how?

6- Which are the most important aspects of this text?

7- Do you think that the text adequately covers you behaviors across all situations which you usually encounter? If not what are the aspects that are missing?

8- Do you think that the text gives a good description of the way you decide how to behave? If not what are the elements that are either wrong or missing?

9- Are there important aspects of the way you behave that are not in the text? If so, which ones?

10- Are there any elements which are over-emphasized in this text. If so which ones?

Overall the majority of salespersons showed a high degree of agreement between the profile that was presented to them and the way they usually go about setting their strategies and tactics. An interesting aspect of the procedure is the fact that one salesperson did not want to be interviewed for the validation of his profile. The interest comes from the fact that the profile of this salesperson was dramatically different in comparison to the others, moreover the average lenght of his protocols was considerably shorter. Because we were able to weed out invalid cases our faith in the procedure was enhanced. Finally three elements helped warranting the face validity of the procedure. First all salespersons volunteered for the project. Since they were not to be evaluated or assessed and since they were going to be given a feed back, they had an incentive to generate honest and reliable protocols. Seconds, since each salesperson had to generate 15 protocols, the risk of a conscious biais was reduced. In other words the procedure was such that it was easier for the salespersons to report accordingly on what happened with the customers than to fabricate on what should or could have happened. Finally the analyses provided support for the taxonomy of strategies presented in the literature and reported in **Table I**. The twelve strategies presented in **Table I** accounted for close to 80% of the protocols content. Of most interest the other 20% contained strategies not often considered by researcher, thus revealing the exploratory dimension of the proposed methodology. Among such strategies the search for informations about the customer's needs was a prevailing strategy.

Implications and Conclusions

The use of protocol analysis to study the making and the use of strategies by salespersons seems a promising methodology. In addition to provide a new methodology for validation purposes as suggested by the multi traits-multi methods approach, the methodology in itself appears to be especially well suited for the study of salespersons. It has the advantage of being specifically adapted to the study of human problems solving. Also it provides interesting data that can be easily coded and on which several hypotheses can be tested. Finally it can also serve as an exploratory tool which reveals aspects of salespersons strategies not often studied.

The authors of the present paper strongly feel that protocol analysis could be as beneficial to the study of salespersons' behaviors as it has been for the study of consumers' behaviors or for the study of industrial buying behaviors.

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RETAIL SALES CLERK EVALUATION METHODS

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Abstract

A literature review serves as the basis for the construction of a consumer-oriented sales clerk evaluation methodology. Most current evaluations are from a managerial perspective and focus on store image or store patronage rather than measure sales clerk effectiveness.

Introduction

The importance of sales personnel in consumer decision making and purchase behavior is widely recognized. Yet, surprisingly, the role of sales personnel in influencing consumer store and product choice has received relatively modest attention. This is of critical importance in an era in which consumer confidence in sales personnel appears to be declining and there is a shift in many large retail establishments toward self-service (Weiner 1981). Traditionally, self-service has characterized most low-involvement products and salespeople played a key role with increasing high involvement purchases (Weitz 1981). Stores that have not elected to cut costs by emphasizing the strategy of self-service have stressed more effective sales training (Business Week 1980). Sheth (1983) has suggested "professionalism of employees" as an important retail strategy to enhance survival in the coming decades.

Literature Review

Store/Shopping Center Image

The vast majority of studies have focused on sales personnel as an important component of store image. Berry (1969) found salespersons to be one of the three (out of 12 tested) most important attributes of retail image. Store personnel was one of three attributes included within the dimension of market posture in a study of consumer perception of shopping centers (Nevin and Houston 1980). Service and clientele encompass sales personnel as two of nine attributes identified in the determination of store image (Lindquist 1974). Marks (1976) considers thirty dimensions by which consumers judge retail stores. Salesmanship, consisting of friendliness, courteousness, helpfulness, and knowledge of merchandise, was found to be very important for the speciality clothing store. James, Durand, and Dreves (1976) study of a men's clothing store in a college town found six salient attributes in consumer store perception, but service ranked only fourth, and personnel was fifth. Berry (1969) hypothesizes twelve components of department store image. Among these components is that of sales personnel. This dimension is found to be important in both favorable and unfavorable senses for retail stores. Kelley and Stephenson (1967) ask potential customers to compare food stores and a hypothetical ideal store on eight sets of characteristics, the dimension of store personnel consists of the following attributes: courteous/ discourteous, cold/friendly, unhelpful/ helpful, adequate number/ inadequate number. Burnett, Amason, and Hunt (1981) explore salesclerk service as a dimension of store image to be modified or changed to accommodate the changing values and roles of women. Specifically, they were interested in the impact of the feminist movement on the behavior of the store clerk. How do different kinds of women view sales clerks and evaluate their behavior? This is one of the few studies that develops a scale to measure activities and behaviors of sales personnel. Items are based on a review of sales job descriptions, interviews with experts, and personal observations not on consumer perceptions. There are a total of 25 items reflecting 6 general categories and representing "key elements of the job": patience, sales techniques, habits and appearance, general attitudes, courtesy and product-related. In 15 of the 17 factors rated, there were significantly different attitudes toward several dimensions of the retail clerk's job.

Store Patronage

Helpfulness and knowledgeability of personnel were found to be important factors in store and shopping center choice for over 75% of consumer

respondents (Chain Store Age Executive 1978). Friendly sales personnel was one of seventeen variables explaining shopping mall patronage (Gentry and Burns 1977-78). Finally, Jolson and Spath (1973) discuss consumer ranking of fourteen determinants of store patronage and find salesclerk service to rank fourth. Retailer and consumer perceptions of patronage factors are compared. Sales clerk service including availability, competence, and congeniality are highly rated by consumers. But, in general, retailers and consumers were least similar in their responses to this variable. Almost no correlation was found to exist between retailer's knowledge of factors of store patronage and the fulfillment of consumer requirements. That is retailers were aware of consumer needs but did not act accordingly.

Clerk-Consumer Interaction

Several studies have focused upon the interaction process between sales personnel and consumers. These have identified product knowledge (expert power) and perceived similarity (referent power) as critical variables (Busch and Wilson 1976, Evans 1963, Woodside and Davenport 1974). For example, Brock (1965) found salesman expertise and perceived similarity (from the perspective of the buyer) important factors in influencing paint purchases. Interviewers were asked to rate salesmen on the Likert Scale for warmth, expertness, believableness, speaking effectiveness, and the likelihood of changing a consumer's decision. Stafford and Greer (1965) investigate the relationship between shopper personality type (dependent/independent) and salesman aggressiveness. To measure personality traits undergraduates completed a Edwards Personal Preference Schedule, and a Semantic Differential to determine their concept of ideal salesman. While the relationship is significant, a number of factors limit the applicability of the study.

Other Related Studies

Crask and Reynolds (1978) focus on the "heavy-user" department store shopper. They present a psychographic profile of this consumer segment. Emphasis is on consumer description, not sales personnel evaluation. Arora (1982) examines the relationship between levels of involvement and perception of retail stores. Fourteen attributes are rated, only one of these, "helpful people", pertains to sales personnel.

TABLE I
COMPARISON OF CHARACTERISTICS USED IN VARIOUS SALES PERSONNEL EVALUATIONS

Kelley & Stephenson	Brock
courteous/discourteous	warmth
cold/friendly	expertness
unhelpful/helpful	believableness
adequate/inadequate number	speaking effectiveness
likely decision influence	

Burnett, Amason, & Hunt	
patience	sales technique
habits and appearance	product
general attitudes	courtesy-related

Arora — helpful people

Stafford and Greer

friendly/unfriendly	domineering/lax
aggressive/defensive	excitable/calm
assertive/easy going	prompt/slow
serious/humorous	young/old
eager/indifferent	pushy/timid
intelligent/unintelligent	
square-dealing/sly-dealing	
courteous/discourteous	
pleasant/unpleasant	
attentive/unattentive	
interested service/or/sale	

Marks	Berry
friendly/unfriendly	attitude
courteous/discourteous	knowledge-ability
know/not know merchandise	number
helpful/not helpful	good/poor service

Jolson and Spath

availability, competence, congeniality

This literature review reveals that research has primarily emphasized the role of sales personnel in relation to store image and patronage. Few studies have focused upon consumer perceptions of signficant personnel attributes per se. Most evaluations of sales personnel are from a managerial perspective. The marketing concept requires a consumer orientation in personnel evaluation.

Procedures

The purpose of this research is to develop an instrument and methodology for evaluating retail salesclerk performance

from the viewpoint of the retail customer. The instrument developed was tested by interviewer-shoppers over a diverse group of store types. The stores and sales clerks surveyed were members of a midwestern city's downtown development corporation which agreed to participate in the survey. Participating stores also agreed to require all salesclerks to wear name tags over the four week evaluation period so as to permit ready identification of the clerks by the evaluation shoppers.

Forty-nine students enrolled in retail management classes, under the direction of the researchers, comparison shopped nineteen stores which agreed to participate in the evaluation. The stores were all located around a common downtown square.

Two hundred and eighty-seven shopping evaluations were made (averaging 5.86 shopping evaluations per interviewer). One hundred and fourteen clerks were listed by the participating stores and seventy were evaluated at least twice (61%). Clerks which were shopped only once were eliminated from the study in order to reduce personal bias of the interviewers. It was deemed inappropriate to go back for second evaluations without running into the Christmas shopping season.

The shoppers were instructed:

1) To shop between October 15 and November 21, (the shopping was not to be continued into the post-Thanksgiving peak shopping period).

2) To shop for a moderate cost item as a Christmas present for a friend or relative (the purpose being to put the student into a posture of a real shopper and not a 'suspect' shopper). Post survey checks with store managers showed that the stores were not aware of being shopped.

3) To make note of the salesclerk's name and, after leaving the store, to evaluate that clerk's performance on the evaluation form developed from a study of the literature. The students were given classroom credit for their efforts.

4) Finally, the students were given extensive counseling in the methodology to be used and how to go about shopping and evaluating the clerks performance in a valid way.

The evaluation form contained spaces for the date and time of day, the store's name, the clerk's name, the type of product shopped and whether or not an actual purchase was made.

The evaluation form was developed after a review of the research literature in marketing dealing with consumer evaluation of retail salesclerks. Approximately twenty journal reports were found listing forty-three plus attributes, all of which essentially agreed on seven basic attributes. In addition, focus group interviews were held with all participating retailer managements to help create a measurable and meaningful attribute list. These were built into a questionnaire using 7-point semantic differential rating scales. In creating this instrument, several future uses were visualized. For these purposes, parsimoney was considered to be desirable.

TABLE II
BASIC RETAIL SALES CLERK EVALUATION SCALE ATTRIBUTES WITH DESCRIPTORS

ATTRIBUTE	SCALE
Appearance/dress/grooming	Favorable/ Unfavorable
Approach to customer	Positive/ Negative
Attitude to problem	Helpful/ Not Helpful
Knowledge of Product	Complete/ Incomplete
Attempt to close	Strong/Weak
Attitude	Courteous/ Discourteous
Empathy to customer	Good/Poor
Overall Rating	Good/Poor

The Overall Rating was not a summation of the previous scales. Rather, the interviewers were instructed to compare the clerk's performance to every other sales clerk they had ever dealt with.

The collected data was analyzed by calculating the means of the aggregated scores. No attempt was made at this time to weight one factor higher than the others.

In developing this scale, reference was made to the listings displayed in Table I. The attribute of "Appearance/dress/ grooming" (Favorable - Unfavorable) is referenced by Burnett et al (1984). Interviewers were instructed that the attribute was to cover all aspects of the salesclerk's physical appearance.

"Approach to customer" (Positive - Negative) appears in Kelley and Stephenson (1967), Burnett et al (1984), Arora (1982), and Stafford and Greer (1965). Interviewers were instructed that the attribute referred to the clerk's initial impact on the customer.

Kelley and Stephenson list "Attitude to problem" (Helpful - Not Helpful) as do Arora, Stafford and Greer, and Marks (1976). Interviewers were instructed that the attribute was to be considered as a measure of the salesclerk's willingness to help the consumer in finding a solution to the purchasing problem.

"Knowledge of Product" (Complete - Incomplete) is suggested by Burnett et al and by Marks. Interviewers were instructed that the attribute was intended to be inclusive of all salesclerk knowledge necessary to assist the consumer in resolving their problem.

"Attempt to close" (Strong - Weak) as an attribute of interest was important to the retailer managements and also was indicated by Brock (1965), Burnett et al, and Stafford and Greer. Interviewers were instructed that the attribute was to include all of the selling ability and willingness to push to a satisfactory exchange.

"Attitude" (Courteous - Discourteous) is found by Kelley and Stephenson, Burnett et al, Stafford and Greer, Marks, Berry and by Jolson and Spath to be important. Courtesy/discourtesy was listed by a great majority of the literature sources as well as by the retailer managements. Interviewers were instructed that the attribute was to be a measure of the salesclerk's professional attitude.

"Empathy to customer" (Good - Poor) is considered by Brock, Burnett et al, Marks, Jolson and Spath and can be inferred from the Stafford and Greers list of attributes. Empathy, or the skill of putting one's self in the shoes of another (the buyer), is considered an important trait for sales people by all references, especially texts on sales management. Interviewers were instructed that the attribute was to reflect the clerk's willingness to understand (feel) the customer's side of the problem.

The "Overall Rating" (Good - Poor) was not a mere summation of the previous scores. Rather, the interviewers were instructed to compare the clerk's total performance to every other sales clerk they had ever dealt with and thus develop an independent judgement.

Conclusions and Recommendations

This is an exploratory effort which, hopefully, will lead to further analysis. The instrument developed requires further validation, however, early usage gives favorable results. Results which agree with the assessments of individual retailer management's opinions of their salesclerks. Recommendations for further research include validating the instrument across different store types and across differing consumer types. Also, verification of the dimensionality of the attributes through multidimensional scaling techniques should be done to insure the independence and unidimensionality of each attribute.

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THREE SPEECH COMMUNICATION THEORIES: POTENTIAL TOOLS FOR SELECTING AND TRAINING OF SALESPERSONS

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Abstract

This paper discusses three concepts developed in the Speech Communication Discipline (Reticence, communication apprehension, and unwillingness to communicate) which offer promise in the improvement of hiring and training of salespersons.)

INTRODUCTION

During the last 50 years, the problem of ineffective oral communication has received much attention by researchers in the field of Speech Communication. An increasing number of studies have focused on the causes, effects, and treatment of this problem. Work done specifically with communication apprehension (anxiety towards communication) and reticence (deficient skills) comprise the bulk of recent investigations in this area. Unfortunately, the body of literature or communication anxiety has not been absorbed within the sales and sales management literature, and the set of diagnostic and remedial tools have not yet been used in hiring and training of salespersons. One exception is the inclusion by Weitz, et. al. (1985), of public self-consciousness (Carver and Scheier 1981), as an area related to adaptability in social situations. This paper evaluates existing research and treatment concerning communication anxiety and communication competence to determine the differences between the various labels and between treatment of these problems.

EARLY DEVELOPMENTAL PERIOD -- STAGE FRIGHT (1936-1960)

Little research was done in this area until the mid-1930's, when research into stage fright was begun. Clevenger's synthesis of this research on stage fright resulted in the following definition: (1955, p. 30).

> Stage Fright is any emotional condition in which emotion overcomes intellect to the extent that communication is hampered, either in audience reception or in speaker self-expression, where the immediate object or stimulus of the emotion is the speech-audience situation.

This definition illustrates the concept of stage fright as miscommunication due to emotional dominance. Clevenger used stage fright as a catchall term capable of encompassing different problems and meanings. Contrasting definitions and interpretations of the term stage fright was a persistent problem in the research done during this period. In defining and measuring stage fright, three different types of measures available were (1) observer rating scales, (2) introspective measures, and (3) instruments designed to measure physiological changes during the presentation. Each instrument was found to measure different reactions to or manifestations of stage fright, while the self-report measures were indicative of cognitively experienced stage fright, and the mechanical devices measured physiological reactions to speaking (Clevenger 1959, p. 138).

Evaluation Measures

The main criticism of observer rating measurements was their dependency on the value judgements of the observers, creating the possibility of ratings being unconsciously influenced by characteristics of the presentor or the observer-rater. The subjective measures of presentor self-report included the Lomas questionnaire (1934) and several inventory tests, most notably the "Personal Report of Confidence as a Speaker" (PRCS). The PRCS was found to be fairly high in reliability in a study by Gilkenson (1942, pp. 141-160). The most reliable method used to measure stage fright was use of the physiological instruments, although this method was very costly and unwieldy to put into actual field use. Observer ratings, self reports, and physiological measures may all produce highly reliability results, although the observer reports may be influenced by the number, age, and experience of the raters (Clevenger 1957, p. 136). Personality problems, such as an inferiority complex, were considered to be a major cause of stage fright. Other causes suggested were the conflict between a withdrawal tendency and the urge to communicate, association of the speaking situation with previous unpleasant experiences, heightened emotion during the presentation situation, complexity of the presentation experience, and inadequate preparation for the presentation (Clevenger and Phifer 1959, p. 4).

Treatment Methods

A multitude of cures was offered including general techniques such as keeping physically fit, methods of presentation preparation, techniques to employ immediately before the presentation, and techniques to use while speaking. These techniques included programs of self-analysis, personality schemes, role-playing, and increase in the number of presentations (Clevenger and Phifer 1959, p. 4-5). Presentors were generally advised to remain as calm as possible, be thoroughly prepared, concentrate on

their strengths, and finish the presentation regardless of what the receiver reaction might be. Because of the conceptualization of stage fright as state or situation-specific anxiety the preferred treatment in dealing with stage fright centered on the speaking situation itself.

The Need for a Broader Context

This developmental period in the investigation of stage fright concentrated mainly on presentation situations before groups or audiences, rather than communication in other situations such as individual sales presentations. However, Clevenger set the stage for the expansion of the concept of stage fright into the related, but seemingly different concepts of communication apprehension, reticence, and unwillingness-to-communicate. Researchers realized that more precise operational definitions and concepts were needed if the research being done was to prove valid and capable of replication under varying communication situations.

State vs. Trait Anxieties

Recent communication anxiety research has broadened this concept to include anxiety experienced across varying situations, such as group meetings, interviews, and interpersonal relationships. The more recent concepts of communication apprehension, reticence, and unwillingness-to-communicate focus on fears produced by the prospect of actually communicating with others (trait anxiety) instead of the specific situation in which the anxiety is experienced (state anxiety).

DEVELOPMENT OF RETICENCE LITERATURE (1965-1980)

One major shift away from the term stage fright has been evident in the work of Phillips, who introduced the concept of reticence (1965). Reticence is conceptualized as the problem wherein people perceive that they gain more by remaining silent than by participation. Reticent individuals are those who are unusually quiet, are reluctant to discuss ideas and problems with others, are intimidated by superiors, are incapable of handling face-to-face contact with others, and are not able to socialize well. A reticent individual is aware of the problems he/she has and as a result the person attempts to avoid interaction and communication with others.

The concept of reticence represented the first major departure from the early definition of stage fright. Research in the area of reticence has focused on the presentor's lack of skills which results in an avoidance in many interaction situations.

Phillips' method of identifying reticent individuals is a combination of the use of trained observers in interview sessions, and the use of self report measures.

Researchers have also become more specific in offering treatment to deal with oral communication problems. The major program designed to deal with reticence is the rhetoritherapy program, which involves carefully planned, precise instruction in practical rhetoric. Rhetoritherapy is an individualized program which focuses on improving an individual's communication skills, tailoring the treatment to fit his needs and problems using a general guideline established by Phillips. (1977).

COMMUNICATION APPREHENSION--A NEW APPROACH

Research in the area of communication apprehension (CA) represents a major shift away from the limiting concepts of stage fright and reticence. CA is defined as "an individual's level of fear or anxiety associated with another person or persons" (McCrosky 1978, p. 194.) A person experiencing CA is one whose anxiety about or fear of communication with others outweighs any projected gains that might be realized from the communication situation in a variety of communication situations. CA differs from the concept of reticence in that anxiety is the causal agent in producing CA, whereas a lack of communication skills causes an individual to exhibit reticent behavior. CA departs from earlier research in oral communication because of the trait conceptualization of CA, the high CA would not only experience stage fright in front of a group, but would also feel anxious in other communication situations, including sales presentations. The Personal Report of Communication Apprehension (PRCA), a questionaire measuring anxiety due to communication, was first developed and used by McCrosky (1970). According to Porter, (1980) over 80 percent of the studies concerned directly or indirectly with CA have employed the PRCA.

The PRCA originally consisted of twenty items, eight of which were aimed at the public speaking situation. Criticism of face validity of the PRCA was that the eight items were too large a proportion of questions aimed toward the public performance setting, which would indicate state rather than trait measurement. Because of the criticism leveled against the PRCA-20, McCroskey added five items which focused on interpersonal behavior. According to McCroskey, the expanded measure, PRCA-25, has the advantages of being easy and inexpensive to administer; the capability to tap anxiety responses across a variety of communication situations; and that when properly administered, it is normally very reliable (McCroskey 1970, p. 272).

The PRCA-25 has proven to be a highly reliable measure of CA, consistently yielding reliability estimates above 90% McCroskey (1977, p. 83), Daly (1978, p. 216) conducted a study of the various methods of assessing communication anxiety which included the concept of CA and found the PRCA-25 to be one of the most reliable methods of measuring CA. The PRCA-25 was found to have the highest average correlation with all the other measures tested in the study, including the Lustig Verbal Reticence Scale, and the Unwillingness-to-Communicate Scale. McCroskey,

Simpson, and Richmond (1982) have found that females and males do not differ meaningfully in terms of general apprehension as measured by the PRCA.

After criticism was leveled at the PRCA-25 concerning its validity as a trait rather than state measure, recent research indicates that a newly revised PRCA-24 is relatively independent of the context based content of the items used (McCroskey, et. al., 1985). While the PRCA-24 directly tests four communication, contexts, public speaking, speaking in small groups, participation in meetings and speaking in dyads, it may also be used to predict anxiety in other communication situations. Thus, the PRCA-24 is capable of substantially predicting apprehension in contexts not represented directly in the earlier questionnaires.

Treatment of CA

Systematic Desensitization (SD) has been employed to help the highly anxious person overcome the problems associated with CA. SD, a behavior modification method, pairs aversive stimuli with relaxation, which reduces anxiety and enhances performance.

The two basic components of the SD process are a hierarchy of communication anxiety stimuli paired with deep muscle relaxation. A subject must successfully overcome the least anxious item on the hierarchy before moving to the successive stimuli. When the hierarchy is successfully completed, with the anxiety level lowered, the treatment ceases. McCroskey's claim that this method is capable of significantly reducing the high CA's anxiety has been supported by research conducted by Paul, Kondas, McCroskey and Nichols (McCroskey 1972, p. 255).

UNWILLINGNESS-TO COMMUNICATE

The concept of unwillingness-to-communicate (UTC) represents another area of recent oral communication research. This is broader than either CA or reticence. UTC has been termed a "global communication construct" in which there is a predisposition to avoid oral communication (Burgoon 1976, p. 60). A person experiencing this predisposition to avoid communication suffers from a nonspecific anxiety that is aroused in a broad range of contexts. Researchers in the unwillingness-to-communicate area argue that CA and reticence are only specific areas in which an individual has problems communicating. CA and reticence are seen as manifestations of a larger problem, which is the chronic tendency to avoid communication.

The study of presentation anxiety is not limited to the field of Speech Communication. Psychological research has also focused on the problem and treatment of speech apprehension. Oka, Cambra, and Klopf (1979, p. 430) through use of the PRCA, determined that approximately 20% of the students in major universities are highly apprehensive about speaking or performing in front of others.

The Helper Model

Fremouw and Harmatz (1975) attempted to assess the efficacy of a helper model for behavioral treatment of speech anxiety, with speech anxious subjects acting as behavior therapists for other speech anxious subjects, after having learned behavioral techniques for anxiety reduction in a training seminar. They hypothesized that a helper role may produce positive change for the helpers as well as provide inexpensive treatment for those being assisted. They reported that both helper and those being assisted reinforced each other's practice and improvement.

SUMMARY, APPLICATIONS, AND DIRECTIONS FOR RESEARCH

The early research into stage-fright has led to extensive development of three basic models, of communication anxiety. Of the three, only unwillingness-to-communicate has been described as a global, or all-encompassing concept. Because of its lack of specificity and because of the lack of validation studies, it may offer the least opportunities for development. Both of the other tools models may offer significant promise. Communication apprehension has a well developed set of measurement instruments. Some research exists concerning CA and occupational choice. Daly and McCroskey (1975) found a correlation between level of CA and preference for jobs requiring low levels of communication among a sample of 196 college students. Scott, McCroskey, and Sheahon (1978), in a study of 243 federal and state employees, found that the high CA's in this sample had a significant preference for occupations with low communication requirements.

Two studies (McCrosky and Richmond 1979 and Daly and Leth 1976), suggest that persons with high CA are systematically excluded in hiring. Using simulations involving students evaluating credentials of potential employees, those sets of credentials which suggested high CA were perceived as being less competent and significantly less likely to gain an employment interview.

The concept of reticence represents the antithesis of sales-presentation skills. To the extent that an individual is relatively low in CA, but high in reticence, basic sales presentation training using a helper model, may help in improving the individuals sales presentation skills.

There is a need for a systematic evaluation of the communication concepts of reticence and communication apprehension. The conceptualization, operational definitions, selection procedures, and treatment programs of communication apprehension and reticence need to be examined, in light of sales management needs. Knowledge gained from these programs needs to be reviewed to see what practical and theoretical value these programs hold for salesperson selection, training, and evaluation. Individuals with high levels of CA may not be capable of

becoming good salespersons without extensive psycholical systematic desensitization. Individuals with reticence problems may only need skills training.

Because the conceptualization of, selection procedures for identifying, and programs for treating communication apprehension and reticence seem so different, there clearly is a need for a detailed evaluation of the relative potential value of these approaches in applied situations.

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A RE-EXAMINATION OF THE EXERCISED/UNEXERCISED POWER SOURCES ISSUE USING PARTIAL CORRELATION ANALYSIS

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Abstract

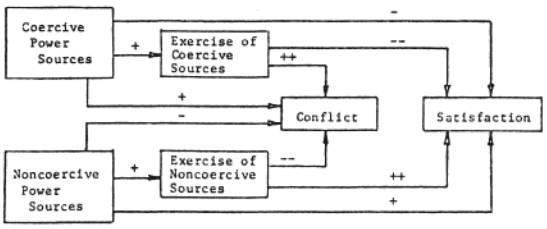
A re-analysis of the Gaski and Nevin (1985) data through the use of partial correlation allows the direct identification of the effects of unexercised reward and coercive power sources. Results suggest some adjustment of the original conclusions may be warranted.

Introduction

Recently, an article by Gaski and Nevin (1985) examined "The Differential Effects of Exercised and Unexercised Power Sources" in a channel of distribution. The essential approach was to measure reward and coercive "power sources" (i.e., dealer perception of a supplier's ability to grant rewards and impose punishments) as well as the exercise of those power sources, and then isolate any differential relationships between the respective independent variables and criteria such as channel conflict, supplier power, and dealer satisfaction and performance. Since the only conceptual difference between a power source (an ability, as perceived by a channel member) and an exercised power source (actual use of the ability) is purported to be the non-exercise of the power source (Gaski and Nevin 1985, pp. 133-4), any differences in relationships so derived should be attributable to unexercised power sources.[1]

In contrast to this indirect approach to identifying the effects of unexercised, or latent, sources of power in a marketing channel, it should be possible to examine them directly through partial correlation analysis. The basic form of the model of such relationships appears in **Figure 3** which is derived from the Gaski-Nevin (1985) models reproduced in **Figures 1** and **2**, sans the misprints of the originally published figures. By controlling for the effect of variable η_1, the exercise of a power source, through partial correlation analysis, the net impact of the unexercised power source can be isolated per the Gaski-Nevin logic (1985, pp. 133-4). That is, when exercise of a power source is taken away, all that is left is the unexercised part.

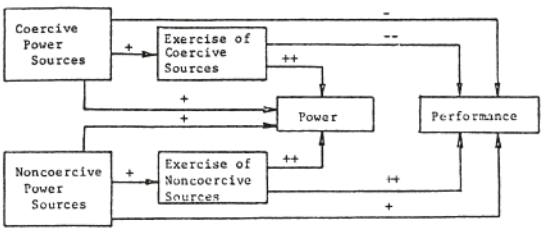
FIGURE 1
HYPOTHESIZED EFFECTS OF EXERCISED POWER SOURCES ON CONFLICT AND SATISFACTION



+/- indicates direction and strength of relationship.

Source: Gaski and Nevin (1985).

FIGURE 2
HYPOTHESIZED EFFECTS OF EXERCISED POWER SOURCES ON POWER AND PERFORMANCE



+/- indicates direction and strength of relationship.

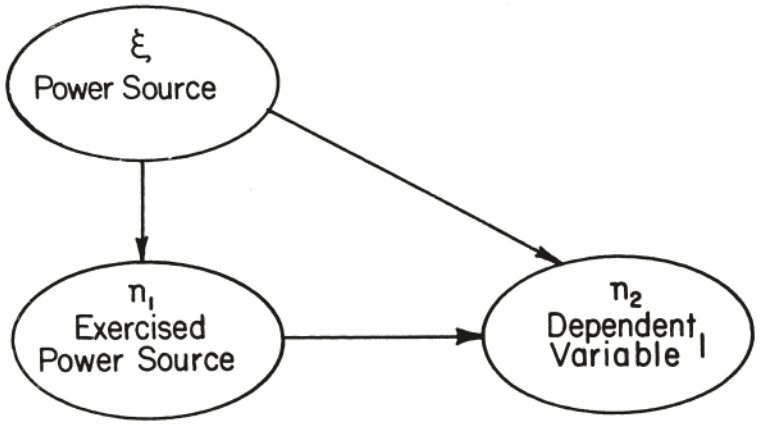
Source: Gaski and Nevin (1985).

The results of this type of analysis are described in the following section.

[1] A related conceptual issue suggests itself here. Reward and coercive power sources are defined (per French and Raven 1959) as one's perception of another's ability to grant rewards/impose punishments. On the other hand, exercise of these power sources refers to action, i.e., the actual rewarding or punishing by the other entity. Clearly, there is at least a conceptual distinction between such action and a channel entity's perception of the action, which is what has been measured by Gaski and Nevin (1985) and others in this area (such as Hunt and Nevin 1974, Lusch 1976, and Brown and Frazier 1978). However, the fact that perceptions (power sources) and actions (exercised power sources) are being compared (as in Gaski and Nevin) appears to be a rather innocuous incongruity. Since rewarding or punishing action by one channel entity would likely be very tangible, perceptible, and well-known to the target entity, there would be a very high degree of correspondence between the action and the perceived action. So defining the construct in terms of action, while measuring on the basis of perception, should be tolerable because the two would tend to be highly convergent. If one wishes to be perfectly literal, "exercised power sources" may be thought of as a shorthand expression for the perception of exercised power sources.

Conversely, power sources themselves are both measured and defined as perceptions, and there very well could be a substantial difference between one's actual ability to impose punishments or grant rewards and another's perception of that ability (see Gaski 1984). However, that question is not germane to the issue discussed here.

FIGURE 3
PARTIAL CORRELATION MODEL



[1] Dealer satisfaction, channel conflict, supplier power, or dealer performance.

Analysis and Results

The data used in this re-examination are the same as those used in the Gaski and Nevin (1985) study. The data are taken from the Clark Equipment Company's distribution system for front-end loaders. The original article explicates measurement and details evidence of validation of the sample (dealer response rate, 37.5%) and the constructs. Measured variables include

x_1. coercive power source: dealer perception of supplier's ability to impose punishment.

x_2. reward power source: dealer perception of supplier's ability to grant rewards.

x_3. exercised coercive power source: actual imposition of punishment by supplier.

x_4. exercised reward power source: actual granting of rewards by supplier.

x_5. power: supplier's ability to get dealer to do what he would not have done otherwise.

x_6. conflict: dealer perception that supplier is impeding his goal attainment.

x_7. satisfaction: dealer's overall approval of the channel arrangement.

x_8. performance: degree to which supplier's relationship with dealer contributes to fulfillment of supplier's objectives.

Table 1 presents the partial correlation coefficients between the power sources (x_1, x_2) and each of the dependent variables (x_5-x_8), controlling for the effect of exercise of the power source (x_3, x_4). This should isolate the impact of a non-exercised, or dormant, power source. The information in this table may contain some material insights, and would seem to force some revision and correction of the original Gaski-Nevin conclusions (1985, pp. 137-9).

TABLE 1
PARTIAL CORRELATION RESULTS

Effect of Unexercised Coercive Power Source on Dealer Satisfaction:

$r_{17.3} = -.054$ ($p = .414$)

Effect of Unexercised Reward Power Source on Dealer Satisfaction:

$r_{27.4} = .158$ ($p = .040$)

Effect of Unexercised Coercive Power Source on Conflict:

$r_{16.3} = .090$ ($p = .154$)

Effect of Unexercised Reward Power Source on Conflict:

$r_{26.4} = -.129$ ($p = .094$)

Effect of Unexercised Coercive Power Source on Supplier Power:

$r_{15.3} = -.029$ ($p = .678$)

Effect of Unexercised Reward Power Source on Supplier Power:

$r_{25.4} = .024$ ($p = .768$)

Effect of Unexercised Coercive Power Source on Performance:

$r_{18.3} = -.017$ ($p = .803$)

Effect of Unexercised Reward Power Source on Performance:

$r_{28.4} = -.061$ ($p = .455$)

Redress of Gaski-Nevin

Originally, Gaski and Nevin suggested that the significant difference between existence of the coercive power source (b_{17} = -.116) and its exercise (b_{37} = -.305), in terms of comparative impact on dealer satisfaction, indicated that "the non-exercise of coercive power sources is related positively to satisfaction" (p. 137). Actually, the partial correlation coefficient $r_{17.3}$ = -.054 from Table 1 here indicates that a correct assertion would have been, ". . . is either related positively to satisfaction, or is unrelated to satisfaction." Either condition would have produced a suppression of the coefficient associated with the existence of coercive power source (-.116 as opposed to -.305) and, evidently from the partial correlation analysis, it is the latter which prevails. (The Gaski and Nevin study employed standardized simple regression coefficients which, of course, are equivalent to correlation coefficients.)

Concerning exercised/reward power source and dealer satisfaction, it was posited that the non-significant difference between coefficients (.351 vs. .316) means "that the potential for reward may be virtually as satisfying to dealers as the realization of that potential." Recall, however, that the variable "reward power source" conceptually combines exercised and unexercised reward. So a comparison between reward power source and exercised reward power source is not the same as a comparison between unexercised and exercised reward.[2] As the coefficient $r_{27.4}$ = .158 from Table 1 shows, the dormant (unexercised) presence of the potential for reward (as perceived by the dealer) does not have as strong an impact on satisfaction as the application of reward (.351). The difference between the two coefficients is significant (t = 3.275, p < .01) according to the Fisher z-test.

In the case of intrachannel conflict and its antecedents, there is no quarrel with the original Gaski-Nevin statement about the "greater positive impact of exercise" of coercion (b_{36} = .428) relative to the existence of the coercive power source (b_{16} = .187). The partial correlation coefficient $r_{16.3}$ = .090 in Table 1 simply extends these findings to indicate that an unexercised coercive power source has no significant effect on channel conflict. (Again, this is in opposition to the coefficient b_{16} = .187 which relates to the presence, both exercised and unexercised, of the coercive power source.)

However, Gaski and Nevin interpreted the coefficients b_{26} = -.298 and b_{46} = -.367 as indicating that "the promise of reward is practically as potent in reducing intrachannel conflict as the actualization of reward" (p. 138). This language is problematic and misleading for the same reasons as expressed two paragraphs above, that is, a coefficient associated with reward power source is not the same as one associated with unexercised reward. By way of correction, see the partial correlation $r_{26.4}$ = -.129 in Table 1. Though only marginally significant itself, it is significantly different (t = 4.108, p < .001) from the relationship (-.367) between exercised reward and conflict. The proper conclusion, then, is that the actual granting of rewards does appear to have a greater impact on the lessening of conflict than the mere potential for reward.

In the original article, Gaski and Nevin claimed that "exercised reward power source is seen to have a stronger positive relationship with power than does the presence of reward power source." This statement was based on a marginally significant difference (p < .10) between the pertinent regression coefficients. Once again, the partial correlation from Table 1 provides more illumination. The non-significance of coefficient $r_{25.4}$ = .024 suggests that unexercised reward power source does not affect the level of power held by the supplier.

Gaski and Nevin also reported no significant difference between coercive power source and exercised coercive power source in terms of their relative impact on supplier power. The partial correlation $r_{15.3}$ = -.029 (p = .678) shown here is related to, but does not contest, that finding. The resultant implication would be that the dormant potential for punishment does not seem to have any effect on one's power.

Finally, concerning the relationships between exercised/power sources and dealer performance, the coefficients $r_{18.3}$ and $r_{28.4}$ of Table 1 provide no substantive amendment to the original results. Their non-significance simply suggests that the unexercised potential to grant reward or impose punishment does not have a measurable impact on performance.

Conclusion

The results presented here seem to require a few important modifications of the conclusions and interpretations contained in the Gaski and Nevin (1985) article. Specifically,

(1) Unexercised coercive power source, i.e., the dormant potential to impose punishment (by the supplier, as perceived by the dealer), is unrelated to dealer satisfaction.

(2) Unexercised reward power source, i.e., the dormant potential for reward (of the supplier, as perceived by the dealer), has a weaker positive effect on dealer satisfaction than exercised reward power source (actual granting of reward).

(3) Unexercised reward power source has, at best, a weaker inverse effect on intrachannel conflict than exercised reward power source.

Additionally, the partial correlations in this study extend and clarify some of the Gaski-Nevin work:

[2] This does not contest the point that "unexercised power sources are the difference between power sources and unexercised power sources" (pp. 133-4, 137). That remains valid. It is just that, while this difference does isolate non-exercised power sources, it is not correct to treat the construct "reward power source" as indistinct from "unexercised reward power source," as was mistakenly implied in the original paper.

•Unexercised coercive power source is unrelated to intrachannel conflict.

•Unexercised reward and coercive power sources are unrelated to supplier power and dealer performance.

Although the Gaski-Nevin approach of comparing the effects of power sources and exercised power sources does allow the isolation, by inference, of the effects of unexercised power sources, there were several occasions (related to points 1-3 above) when this was misstated as comparable to a direct comparison of exercised and unexercised power sources. (The distinction is one of exercised-existent vs. exercised-unexercised, in other words.) It is that irregularity which this paper addresses and attempts to rectify.

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SALESPERSON-CUSTOMER DYADIC INTERACTION REVISITED: A CALL FOR METHODOLOGICAL ECLECTISISM

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Abstract

This paper suggests that the literature on salesperson-customer dyadic interaction has prematurely concluded that an effect does not exist. The extant studies in the area are reviewed in detail and methodological shortcomings are pointed out. Since the methodological shortcomings are unlikely to be correctable within the framework of experimental or cross-sectional survey designs, research methodologies not commonly seen in the marketing literature are advocated.

Introduction

In statistical hypothesis testing, a Type I error is committed when a research hypothesis which is in fact false is accepted and the null hypothesis is rejected. A Type II error is committed when a research hypothesis which is in fact true is rejected in favour of the null hypothesis. The implication of making a Type I error is that consumers of the research (practitioners and researchers) will be using false information in planning practice and research. They will be "barking up the wrong tree". The implication of a Type II error is that consumers of the research will ignore a useful theory or approach because it has been empirically rejected. Both types of error are obviously important and we should be vigilant in our efforts to avoid them. Sometimes, however, the entire field of marketing appears to be committing a Type II error by dismissing a theory or approach when a number of studies have failed to find "effects" using the dominant research methodologies of the field. This paper examines the salesperson-customer dyadic interaction research literature and attempts to build the case that perhaps the dyadic interaction approach was abandoned prematurely due to research methodological shortcomings.

During the 1960's and 1970's salesperson-customer dyadic interaction was a popular approach to studying personal selling. Results of the studies were mixed and effects, if found, were small. Two review articles in the early 1980's dismissed dyadic research as not a useful approach to investigating personal selling effectiveness (Reeves and Barksdale 1984, Weitz 1981). Since these review articles no further studies of dyadic interaction have appeared in the major marketing journals. This paper first critically examines the correlational studies of dyadic interaction, then examines the experimental studies, and finally evaluates the entire research stream and discusses how it might be fruitfully revived.

Correlational Studies

Like the salesperson characteristics research (see Churchill, Ford, Hartley, and Walker 1985), dyadic interaction studies focus on static characteristics rather than on the personal selling process. What differentiates these studies from the salesperson characteristics studies is the fact that characteristics of the customer as well as those of the salesperson are considered.

The dyadic research stream got its start with a paper by Franklin B. Evans (1963). He observed that all the research and writing on personal selling dealt only with the salesman's point of view. He argued that in order to advance our knowledge of personal selling effectiveness, the unit of analyses in personal selling research should not be the salesperson alone but rather the interaction dyad, including both the seller and the buyer.

Evans drew on the psychological literature on interpersonal attraction to arrive at the hypothesis that the more similar the parties in the dyad are, the more likely a favourable outcome or sale. He tested this hypothesis in a field study of 86 male life insurance agents selected from three firms (Evans 1964). From records of all the face-to-face contacts they made during a four week period, a random sample of 168 sold and 183 unsold prospects were chosen.

On average, personal interviews were conducted with the sample eleven weeks after the date of the salesman's visit. Care was taken to minimize the chance of respondents' making a connection between the sales call and the interview. Sold and unsold prospects responded to a questionnaire covering the following classes of variables: attitudes and knowledge of life insurance and life insurance salesmen in general, attitudes and perceptions of the "last" insurance agent who had called on them, management of personal finances, demographics, background and physical characteristics, and personality needs. Salesmen received the same questionnaires but were asked to rate themselves on those questions where customers were asked to rate the "last" salesman who had called on them.

Evans found that when the three groups were compared to one another, the salesmen appeared to be more like the sold prospects than the unsolds. For example, the difference in mean ages between the salesmen and sold prospects was 1.2 years, while that for the salesmen and unsold prospects was 2.5 years. A similar pattern was observed with respect to numerous variables ranging from background and physical characteristics through personality needs. Objective measures indicated a greater similarity between salesmen and sold prospects, but sold prospects also perceived salesmen to be more like themselves than the unsolds did. Evans concluded, thus, that probability of a sale occurring was related to salesman-prospect similarity. In order to better understand the phenomenon he also investigated the intervening variable, liking. As expected, sold prospects evaluated the salesman more favourably than did the unsolds.

The sold and unsold prospects held a common and quite negative stereotype of the "typical" insurance salesman as an aggressive, fast-talking, untrustworthy type. However, the two groups did not share the same view of the particular agents who had called on them. Compared to the unsolds, the ratings of the particular salesman given by sold prospects were more positive and closer to the salesmen's own evaluations of themselves. This would suggest that salesman-customer similarity facilitated the development of a friendly relaxed interaction.

Since Evans' study was a correlational one utilizing data obtained after the sales call had taken place, whether the sold prospects' greater liking of the salesmen preceded or followed the sale cannot be determined. Evans' hypothesis would suggest that similarity caused the sale. However, an equally good case could be made for the argument that customers evaluate a salesman from whom they have just bought more positively than one from whom they had declined to buy (Davis and Silk 1972, Weitz 1981).

Similarly, the direction of causality can be questioned in the case concerning the relationship between prospect-salesman similarity and the occurance of a sale. Although it has been demonstrated experimentally that similarity leads to interpersonal liking, there is also a large body of evidence which indicates that persons tend to perceive others whom they like as similar to themselves (Davis and Silk 1972). Thus, an association between perceived similarity and purchasing could reflect causation in either direction. The objective similarity measures such as physical and personality characteristics, of course, cannot be questioned in this way, as the sales interaction would not change these stable characteristics.

Several other studies have taken a similar approach to that of Evans. Gadel (1964), in another life insurance setting, analyzed 22,000 policies sold. He found that sales tended to be concentrated among customers who were in the same age group as the salesperson. This concentration was greatest for young salespeople and tended to decrease with years of experience. If seller-customer similarity affects sales success, salespeople are likely to develop an awareness of this relationship. Since life insurance salespeople have some latitude in who they target as prospects, they can be expected to choose people who are like themselves. Since age is one of the most easily detectable characteristics of a possible prospect, salespeople might well use this as a preliminary similarity screening criterion.

Tosi (1966), in a study of wholesale pharmaceutical salespeople and retail pharmacists, focused on the extent to which customer and salesman share the same conception of the salesman's role. A group of 40 sellers and 103 regular customers were asked to indicate their perceptions of the ideal and actual behaviour of salespeople on a set of predetermined scales. Differences between the seller's and the customer's responses on the "ideal" scales were taken as a measure of role consensus. This referred to the extent to which the salesperson and customer agreed as to what the salesperson's behaviour ought to be. Discrepencies between the ideal and actual ratings given by either the salesperson or the customer were used as measures of expectation level. This construct referred to the degree to which the salesperson's actual behaviour was perceived to differ from that which was considered desirable.

Tosi hypothesized that both role consensus and expectation level would be related to sales performance. Two measures of sales performance were employed. One was the share of a given customer's business placed with the salesperson's firm, and the other was the number of other suppliers also serving the customer. Tosi found no support for his hypothesis that role consensus would be related to sales success, regardless of dependent measure used. However, buyers' expectation levels were shown to be related to the number of suppliers they purchased from but not to the share of business the salesperson obtained.

It seems thus that agreement between the customer and salesperson as to how the salesperson should behave did not have any bearing on the salesperson's effectiveness in obtaining sales, but the closer the salesperson came to meeting the customer's expectations of how a salesperson should function, the smaller the number of alternative suppliers he/she would be competing with. Tosi's operationalization of the constructs differed considerably from that of Evans (1963) and Gadel (1964), but his approach failed to provide strong support for the buyer-seller similarity - sales effectiveness relationship.

Churchill, Collins, and Strang (1975) conducted a correlational dyadic study which follows in the tradition started by Evans (1963). In this study the authors examined the relationship between similarity of retail salespersons and customers and the sales outcomes. Using Gower's (1971) coefficient of general similarity, four measures of similarity, each based on several variables, were calculated. Gower's coefficient is a cluster analytic statistic that assesses the resemblance between and among objects or people. Since it is an association coefficient, it allows for the incorporation of both qualitative (e.g. religious preference) and quantitative (e.g. age) variables within individual similarity indices.

Their first similarity measure was an aggregate measure of the important characteristics affecting purchase outcome according to Evans (1963). Specifically, education, religious preference, political preference, age, and height were used. The second similarity index used the same variables as the first, except that age and height were treated as continuous variables in the second index, making it more sensitive. The third similarity index substituted nationality, race, and sex for religious and political preference, since the latter two variables were not viewed as easily perceived in a typical retail store transaction. The fourth similarity index incorporated all eight of the variables that were used in the first three indices.

Two measures of sales outcome were used: purchase/nonpurchase and amount of purchase. When using the purchase/nonpurchase measure, only directional support for the similarity hypothesis was obtained. Less than one percent of the variance in the outcome measure was accounted for by any of the similarity indices. When the amount of purchase was used as the outcome measure, however, the third (visible similarity) and fourth (combined variables) indices showed significant relationships with the outcome measure ($p < .05$), although only two percent of the variance in the outcome measure was explained by each of the similarity indices. The weak relationships between the similarity indices and sales outcome were attributed to the brief nature of the retail sales situation and/or the fact that aggregate measures were used with single characteristics being given equal weight.

Riordan, Oliver and Donnelly's (1977) study built on the work of both Evans (1963) and Tosi (1966). They hypothesized that successful sales interview outcome should be related to a high degree of similarity between salesperson and prospect on selected attitudinal variables relevant to the buyer-seller dyad. Secondly, they hypothesized that a similar relationship should hold with respect to buyer and seller perceptions of role congruence. Subjects in the study were male life insurance salespeople working for one insurance firm, and recently contacted college student prospects, both sold and unsold.

Questionnaires were sent to 100 college-market salespeople requesting attitudinal and role congruence information and a list of names (and addresses) of 10 most recent sold and 10 most recent unsold prospects. These prospects were sent a similar coded questionnaire asking attitudinal and role congruence questions. Useable response rate for salespeople was 19 percent while that for sold prospects was 45 percent and for unsold prospects was 48 percent. Attitudinal and role congruence measures were largely taken from Evans (1963) and Tosi (1966).

Two group discriminant analyses of the three groups' attitudinal and role congruence data revealed that there was a greater attitudinal similarity between agents and sold prospects than between agents and unsold prospects. There were significant differences between all three groups but they were most pronounced between agents and unsold prospects. The most discriminating variables were those measuring prospect perceptions of agents, rather than those measuring attitudes toward the generic product, purchasing the product, or the company's specific offering. Role congruence was the second construct which proved to be discriminating between agent and unsold prospects. Sold prospects' perceptions of the salesman's role were closer to the salesman's than unsold prospects' perceptions.

These results support earlier findings but due to the correlational nature of this study, it is again not possible to ascertain whether the similarity caused the sale or whether the sale caused the perceptions of similarity. Especially troublesome in this regard is the fact that the most discriminating variables were those focusing on the salesperson himself and his role. These would be the same ones that could be expected to be most vulnerable to change as a result of the sales interaction if, in fact, the direction of causality is counter to that assumed by the researchers.

Experimental Studies

In addition to the correlational studies just discussed, there have been a number of experimental studies testing the dyadic similarity proposition. Brock (1965) carried out a field experiment in the paint department of a retail store. Over a five month period, two part-time salespeople attempted to influence 88 customers to purchase paint at a different price level from that which they initially selected. After a customer indicated an intention to buy a given amount of some brand of paint at a particular price, the salesperson tried to alter his choice by delivering one of two predetermined appeals. Half the time the salesperson represented himself (they were both male) as being similar to customers by emphasizing that the magnitude of his own recent paint consumption was the same as the amount being purchased by the customer. For the other half of the cases, the dissimilar condition was applied by having the salesman portray himself as having just used twenty times the quantity of paint the customer planned to buy. Attempts were made to influence some customers at higher prices and others at lower prices than they originally intended.

The results indicated that the similarity condition was more successful. While the dissimilar salesman could be perceived as more knowledgeable about paint due to his greater paint consumption, he was less effective than the salesman who identified his own paint consumption as similar to that of his customers. The differential effectiveness of the two approaches held up over attempts to persuade consumers to buy higher as well as lower priced paints.

Whereas Brock (1965) operationalized similarity and dissimilarity in a way that could lead one to interpret the dissimilarity condition as an "expert" condition, Woodside and Davenport (1974) operationalized similarity and expertise in such a way that they were quite separate and could be combined. In a music store setting they had a part-time saleswoman administer four different appeals and a control do-nothing condition to customers who came to the cash register to pay for music tapes. The appeals were to induce the customer to purchase a newly marketed taperecorder head cleaner which was displayed at the cash register.

In the "similar" condition the saleswoman commented after saying "I hope you enjoy them", that she had the same tapes as the customer was buying and enjoyed them often. She added that she particularly enjoyed that type of music. In the "dissimilar" condition the saleswoman commented after saying "I hope you enjoy them", that she didn't have any tapes like the ones the customer was purchasing. She added that she enjoyed a

type of music that was most dissimilar from that purchased by the customer (e.g. sacred choral music versus country and western). In the "expert" condition the saleswoman explained to the customer exactly how to use the cleaner, while in the "nonexpert" condition she claimed to not know how to use it and to never have used one herself. In the control condition no mention was made of the product, but the product was on display beside the cash register.

The sales responses of 150 customers were examined and it was found that all treatments differed significantly. The expert and similar combination treatment resulted in 80 percent purchase of the cleaner; the expert and dissimilar treatment resulted in 53.3 percent purchase; the nonexpert and similar treatment resulted in 30 percent purchase, and the nonexpert and dissimilar treatment resulted in 13.3 percent purchase, which was the same as the purchase rate of the control group. These results would suggest, thus, that whereas dyadic similarity may be useful in inducing sales, it is not as important as expertise, and it is most effective when combined with expertise.

Busch and Wilson (1976) conducted a laboratory experiment to investigate the effects of the similarity, or referent, and expert bases of social power of a simulated life insurance agent. A group of 171 college students were assigned to one control and four experimental groups based on manipulated expert and similarity conditions. Dyads were simulated by use of a videotaped salesman's message and the results of a Survey of Attitudes questionnaire ostensibly completed by the salesman. Similarity was manipulated by the match between the student subject's real Survey of Attitudes questionnaire data and the artificial salesman's questionnaire data. A variety of dependent variables were examined including trust, attitude change, and behavioural change.

The results showed that high referent (similar) and high expert salespeople were significantly more effective in generating trust, attitude change, and behavioural change than were salespeople low in similarity and expertise. However, from a dyadic research perspective, similarity (or referent power) clearly was less important than expertise. By the criterion of explaining variance as a measure of importance, expert power accounted for 20.7 percent of the variance in trust whereas referent power explained only 6.4 percent. The other dependent measures showed even more strongly the dominance of expertise over referent power.

Evaluation of the Dyadic Research Stream

Buyer-seller similarity has been an approach to personal selling effectiveness research which has seen a considerable amount of empirical work. The dyadic notion is one which makes some intuitive sense. Both correlational and experimental studies have provided some empirical evidence for the relationship. Recent review articles (Reeves and Barksdale 1984, Weitz 1981) have dismissed dyadic research as not a useful approach to investigating personal selling effectiveness. Their dismissal is based primarily on two issues. One is the fact that the correlational studies failed to control for the alternative explanation that similarity resulted from the successful sales interaction rather than the other way around. This is a legitimate criticism of the individual correlational studies. However, when taken together with the experimental studies' similar findings of an effect due to similarity, the concern with this issue need not be as great.

The second issue on which recent critics have focused is the fact that several of the experimental studies which examined both similarity and expertise found similarity to have a weaker effect than expertise. The implication of this criticism is that researchers should no longer focus on dyadic similarity, but rather should focus on the more important expertise dimension. Researchers appear to have heeded this advice since no articles have been published in the major marketing journals on this topic since the late 1970's.

This dismissal of dyadic similarity research may have been premature. In each of the studies the operationalization or manipulation of the similarity condition could be criticized. Taking as an example one of the experimental studies which reported a weaker effect of dyadic similarity than expertise (Woodside and Davenport 1974), it appears quite plausible that the expertise manipulation was a stronger manipulation than the similarity manipulation and that this accounted for the difference, rather than a weaker relationship between the constructs. In brief sales encounters, such as those in the retail and laboratory simulated life insurance sales settings, it is much more difficult to effect a relevant similarity manipulation than it is to effect a relevant expertise manipulation. Expertise is very product and situation specific while relevant similarity may well transgress situation specific attributes.

Woodside and Davenport's (1974) manipulation of expertise appears to be effective. For the purchase of a taperecorder head cleaner, the saleswoman who claims to own one and can give specific technical instructions on how to operate one is probably seen by most people as an expert on that product. On the other hand, a saleswoman who claims to own the same tape as one is purchasing, and claims to be a fan of that type of music, may not as universally be seen by customers as being similar. The tape may be a gift for someone else; the tape may represent one type of music in a customer's eclectic tape collection; music that one listens to may not be a very substantial aspect of one's self image on which similarity is based. The same arguments can be made about other studies' measures of similarity.

It is plausible that in a setting where a customer has an opportunity, over a longer period of time, to get to know the salesperson and determine his/her similarity, that dyadic similarity will be found to have as strong an effect as expertise. Settings which fit this description are

the traditional industrial sales settings where "relationships" are important[1]. Of course, it is much more difficult to test dyadic similarity in a controlled field experiment in this kind of a setting. It seems, thus, that in simple laboratory or retail sales experiments it is easier to construct an effective expertise manipulation than an effective dyadic similarity manipulation. As a result, expertise has been concluded to be more important and dyadic similarity has been essentially abandoned.

Alternative Methodological Approaches

The foregoing discussion suggests that dyadic interaction research was prematurely abandoned because the phenomenon does not lend itself well to empirical testing using cross-sectional correlational studies or experimentation, the two dominant research methodological approaches used in marketing. The fact that the existence of the phenomenon makes intuitive sense and that the existence of the phenomenon can be verified by casual observations in the field suggests that perhaps our research methodological shortcomings have caused us to conclude erroneously that the phenomenon does not exist.

In order to further develop the area of dyadic interaction we may need to turn to the qualitative research approaches recently advocated by Bonoma (1985) and Hirschman (1986). Bonoma (1985) argues that science implicitly relies on "interproject" triangulation to help accrue a body of knowledge satisfying the two goals of research, internal validity and external or ecological validity. Researchers pursuing similar topics may choose different methods and contexts. This cross-method, cross-project validation advances the field through research corroboration. He argues that this process of research corroboration is unnecessarily constrained in the field of marketing because research methods acceptable to the field are essentially confined to experimentation and cross-sectional surveys. This, he feels, results in a methodological one-sidedness that may impair the development and testing of sound theories. When a phenomenon such as dyadic interaction does not lend itself to investigation by these methodologies, it is abandoned.

Bonoma reports that many other fields such as economics, organizational behaviour, sociology, and medicine have recognized this problem in their fields and are turning to qualitative methodologies. He advocates that marketing researchers turn to clinical case research to address questions left unanswered by our dominant methodologies. The area of dyadic interaction appears to be an area which could benefit from further exploration using this type of approach.

Hirschman (1986), who is also dissatisfied with current theoretical development in marketing, goes further than Bonoma (1985). She argues that many shortcomings in the development of the field of marketing are due to the fact that the field traditionally has been based on positivist science. She calls for the founding of a parallel path of inquiry along lines of what she calls humanistic inquiry. She argues that what the marketing field needs in order to make strides in theory development is a group of researchers who are willing to lay aside the tools of positivist science borrowed from the physical sciences. They should adopt, instead, a set of tools related to participant-observation methods borrowed from fields such as ethnography, cultural anthropology, and sociology. Again, an area such as dyadic interaction, and other personal selling and salesforce management areas could probably profit from the adoption of research methods such as participant observation.

In conclusion, this paper suggests that the literature on salesperson-customer dyadic interaction has prematurely concluded that an effect does not exist. The extant studies in the area are reviewed in detail and methodological shortcomings are pointed out. Since the methodological shortcomings are unlikely to be correctable within the framework of experimental or cross-sectional survey design, research methodologies not commonly seen in the marketing literature are advocated.

Note

1. Classic business school case studies such as Westinghouse Electric Corporation and British Columbia Box Limited are examples of this type of industrial sales setting.

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PERSONAL INDUCEMENTS: SELECTED VIEWS FROM A SALES MANAGEMENT PERSPECTIVE

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Abstract

There has been a minimum level of research in personal inducements, a set of sales promotional techniques used in business-to-business marketing. Following a brief review of previous research, this paper describes the current thoughts and behaviors of national sales managers in various businesses with regards to personal inducements. The pervasiveness of the practice is clearly evident. The research indicates that most companies do not have formal policies for use of inducements. In addition ethical views toward inducements are positive, and especially so for those using them. In general it appears that sales managers are not sure if these activities have an effect on sales effectiveness.

Introduction

Personal Inducements is a term that was first coined by Dempsey, Bushman, and Plank (1980) and refers to a typology of sales promotional techniques that are used in business-to-business marketing, primarily by field sales people. The sales promotional techniques are grouped for study because each involves an appeal to the personal or individual aspects of a purchase decision, within a focus of two business entities who are actually engaged in the dyadic exchange process. Others have studied various aspects of some of these techniques, but the concept of personal inducements remains the only attempt at examining this group of activities based on appealing to individual decision makers.

Personal inducements have been studied in the past from the perspective of the purchasing half of the exchange dyad. Dempsey Bushman and Plank (1980) have examined the attitudes of purchasing agents toward the use of these activities. Other potential members of the buying center have not been studied, nor has a seller's perspective been examined.

The purpose of this paper is to report on these types of activities from the perspective of the top sales manager in a variety of business organizations. Following a brief review of the concept of personal inducements and its research base the results of a study of sales managers regarding their perceptions of the process, policies, effectiveness, and ethical perspectives will be outlined. Because of the difficulty of collecting survey data dealing with cash and large gifts this topic was not included in the study.

Personal Inducements

Personal inducements refers to a series of techniques which are generally present in business-to-business marketing situations and are, in effect, appeals used by the seller and aimed at the individual motives of the buyer. Briefly there are six techniques as follows: The business lunch: This refers to a buyer and seller having a breakfast, lunch, dinner, or drinks together, with one of the parties, almost always the seller, paying for both parties.

Advertising specialties: These are relatively inexpensive items such as pens, pencils, notebooks, and similar types of items which are given by the seller to the buyer. They have advertising messages on them and should cost under $4.00 each, but in actual practice often cost much more.

Sporting and entertainment tickets: This is where a seller gives a buyer tickets to some kind of entertainment such as professional sports, theater, or almost any other kind of entertainment.

Extensive entertainment: This refers to entertainment on a larger scale such as the use of the Super Bowl or hunting or fishing lodges. Also in this category would be the use of some sort of party where the seller invites one or more prospects or buyers.

Small gifts: This refers to the practice of the seller giving the buyer some sort of gift worth under $25. This commonly is a bottle of liquor or a gift for the home or office.

Large gifts or cash: This refers to the practice of a seller giving a buyer cash in any amount or giving a gift worth over $25.

Research into personal inducements in any form has been infrequent and highly fragmented. Halvorson and Rudelius (1977) examined the use of business lunches by a small sample of salespeople and established a benchmark for usage of that activity. Dempsey Bushman and Plank (1980) examined all of the categories from the perspective of the attitudes of purchasing agents towards offers of these inducements by sellers. It seemed clear that some activities are more acceptable then others. Plank (1980) estimated that the usage of all categories of personal inducements amounted to approximately $30 billion per year in the United States during the middle 1970's. Aside from several trade

studies there are only a few other academic studies that look at some of these activities. Zinkhan and Vachis (1984) looked at advertising specialties and business lunches from the perspective of selling aids impacting on new prospects. Finn and Moncrief (1985) looked at various entertainment activities used by the salesforce, which included lunches, tickets, and such. In the most recent study Schurr and Calder (1986) looked at the effects of the type of business lunch on the effectiveness of the activity. In addition there have been a number of articles, (Rudelius and Buchholz 1979, Dubinsky et al. 1980, Dubinsky and Gwin (1981) and Browning and Zabriske (1983) which have examined the ethics of marketing activities and which have included some of the personal inducements activities.

In sum, however, our knowledge as to the usage of these activities, company policies, perceived effectiveness and such is minimal. This paper attempts to extend our knowledge in this area by reporting on a study done to examine, from the perspective of national sales managers, the usage patterns of these activities.

Methodology

The data for this study was collected via a self administered questionnaire that was delivered to the respondent by students in sales management classes at the University of Arkansas and Rutgers University. The authors gave each student a list of three two digit SIC codes and instructed them to come up with a total of ten names of companies and national sales managers spread throughout the three codes. Most names came from directories, but in a few cases students provided names of people they knew and could get interviews with. From this list of 10 names each instructor choose five at random, spread through the three codes and sent a letter asking cooperation for a student research project. Students then called for an appointment to administer the questionnaire and to discuss in general the topic after completion. Students were instructed to just allow the respondent to fill in the questionnaire and not to discuss the project until after it was finished. Debriefing of the students after completion indicated that this was generally successful and that only six questionnaires had to be eliminated.

From a total mailing list of 450 names, 225 potential respondents were sent letters and had student phone contact. Student interviewers scheduled 118 interviews completing 116. Six questionnaires were deleted for interviewer bias problems and two others were deleted because certain portions of the questionnaire were not completed. Thus the total number of responses was 108 for a response rate of 48% of those contacted.

Due to the use of students, only companies within a 100 mile radius of New Brunswick, New Jersey and Fayetteville Arkansas were included in the sampling frame. New Jersey companies generated 34 responses while companies in Arkansas, Oklahoma, and Missouri generated the remaining 74 responses.

The questionnaire was developed by the authors with the students critiquing the document as part of their class assignment. Pre-testing of the questionnaire was accomplished by using a graduate class in marketing at Rutgers University which consisted of 35 graduate students, 31 of whom were employed full-time. The questionnaire was six pages and consisted of 35 questions, some having multiple parts. The first page of each questionnaire had a precoded two digit SIC code and five definitions of the personal inducement techniques that were studied. Questions on each of the five types of personal inducements were grouped together with a final set of demographic types of questions completing the instrument.

Specific Research Objectives

This research is generally attempting to provide information about the usage of five types of personal inducements. In particular this research sought to answer the following questions.

1. What is the usage of the five types of personal inducements and how much does it vary by types of inducements?

2. Do companies have written guidelines directed at how these activities are to be used?

3. What are the perceptions of the usage of these activities from an ethical perspective?

4. What are the perceptions of the usage of these activities in terms of how they contribute to the success of the sales function?

Results

Table 1 describes the respondents of the study. Frequency distributions from three categories are presented, SIC Codes, size of company in sales and size of company in terms of the number of salespeople. The SIC Code listing indicates the breadth of the types of companies that were queried on the subject. Manufacturing codes 20-39 represent approximately 68% of the total respondents. Most areas are represented, however. Smaller companies tend to dominate the respondents with 71 respondents or approximately 66% reporting sales of less than twenty five million dollars. A total of 70 respondents or 65% reported having less then 20 salespeople. This kind of response pattern is likely considering the overwhelming numbers of smaller firms. A major weakness is the lack of construction firms in the sample. In addition retail firms would not normally appear in such a study, but in this case these firms have a primary retailing business, but also do business-to-business kinds of exchange.

Table 2 addresses the usage of inducements issue. For each of the five inducements a question was asked of each respondent as to whether their company participated in this type of inducement.

Not surprisingly the business lunch is used by almost all of the respondents in the study. An additional question was asked of the respondents if it was their policy for the company to pay for the expenses incurred. Only 3 of the companies indicated that they did not pay for the expenses, but allowed their salespeople to use the technique if they paid for it. The use of business lunches seems ubiquitous as was also demonstrated by Finn and Moncrief (1985) The surprise was the heavy usage of small gifts. An additional question requesting respondents to categorize the gifts they gave found that the most popular gift was one for the office, followed by gifts of liquor and food.

TABLE 1
DEMOGRPAHIC PROFILE OF THE SAMPLE

Standard Industrial Classification Codes

SIC Category	Frequency	Percentage
Agriculture Forestry and Fishing 01-09	1	.9
Mining 10-15	1	.9
Construction 15-17	0	0
Manufacturing 20-39	73	67.7
Transportation 40-49	4	3.7
Wholesaling 50-51	14	12.9
Retail Trade 52-59	4	3.7
Finance Insurance and Real Estate 60-67	4	3.7
Services 70-84	7	6.5
TOTAL	108	100.0

Company Size in Sales Dollars

Sales in Dollars	Frequency	Percent
less than 5 million	38	35.2
5 million to 24.9 million	33	30.6
25 million to 99.9 million	13	12.1
100 million to 250 million	11	10.0
Over 250 million	13	12.1
TOTAL	108	100.0

Number of Outside Salespeople Employed

Salespeople Employed	Frequency	Percent
less than 5	35	32.4
6 to 19	35	32.4
20 to 49	18	16.7
50 to 99	6	5.5
over 100	14	13.0
TOTAL	108	100.0

TABLE 2
USAGE OF PERSONAL INDUCEMENTS

Inducement Type	Frequency of Users	Percentage Using
Business Lunch	106	98.1
Advertising Specialties	78	72.3
Entertainment Tickets	41	37.9
Extensive Entertainment	40	36.8
Small Gifts	65	60.2

TABLE 3
WRITTEN POLICIES ON INDUCEMENT USAGE

Inducement	Written Policy	
	YES	NO
Business Lunch	31	77
Advertising Specialties	20	88
Entertainment Tickets	20	88
Extensive Entertainment	20	88
Small Gifts	30	78

Table 3 addresses the issue of a formal policy for the use of personal inducements. For each type of personal inducement the question was asked does the company have a formal written policy to guide salespeople on the use of these inducements.

Again, not surprisingly, the majority of companies do not have written policies for salespeople to follow. For those inducements that are more likely to be used, ie. the business lunch and small gifts, there are more companies issuing written policies on usage. Examining the data further by using multiple table crosstabs it is evident that only 16 companies have written policies on all five types of inducements and that all of them fall into the category of over $100 million in sales or greater.

Table 4 addresses the issue of the perception of the ethics of a particular activity. As was noted in the brief literature review the issue of marketing ethics, or perception of whether or not a particular practice is ethical has been studied. In particular there are a number of articles, as noted, on the ethical nature of various sales practices. For each personal inducements technique a question was asked as to whether it was ethical or not. The question structure was changed from ethical to not ethical from category to category with the respondent being asked to agree or disagree on a five point scale. For purposes of comparison each question has been standardized to indicate a one (1) as being ethical and a five (5) as being not ethical.

TABLE 4
ETHICAL PERCEPTIONS OF PERSONAL INDUCEMENTS

Personal Inducement	Mean Score All Users	Mean Score All Nonusers	Difference at .05
Business Lunch	1.63	3.0	not computable
Advertising Specialties	1.65	2.65	yes
Entertainment Tickets	2.41	3.10	yes
Extensive Entertainment	2.64	3.81	yes
Small Gifts	2.06	3.24	yes

In general user sales managers perceived all of these activities to be ethical. In comparing sales managers to the purchasing agents of Dempsey, Bushman, and Plank (1980) it appears that sales managers perceive these activities as being much more ethical then do the purchasing agents. The research on general sales ethics came to the same conclusion. Not surprisingly the use of small gifts is perceived as being more ethical then either the use of tickets or extensive entertainment tickets. Small gifts are also used more then either entertainment tickets and extensive entertainment, at least in this sample. A simple crosstab of usage to ethics uncovers what is an obvious halo as those who use the device, consider it to be much more ethical on average then do those who do not. A two group T-Test comparing the means of users to nonusers comes to the same statistical conclusion.

Table 5 examines the issue of perceived success of the use of personal inducements. Personal inducements can be thought of as an investment, just as other promotional tools, and as such it would be expected to generate some sort of return. This is an important although, at this point exploratory issue. If personal inducements are used because they are perceived to be successful, then at least one explanation for their use is that they are successful. If they are used, but not perceived as successful then one must wonder why they are used.

To address this issue each inducement section had a question that asked if using this inducement helped or did not help sales effectiveness. A one (1) to five (5) scale was used with an agree/disagree format with reversing of the poles being achieved by the wording of the question. Responses for all respondents in table 5 are standardized with a one (1) being an effective technique and a five (5) being not effective.

TABLE 5
PERCEPTIONS OF PERSONAL INDUCEMENTS PERFORMANCE

Personal Inducement	Mean (users)		Mean (nonusers)		Difference at .05
Business Lunch	3.00	(106)	2.50	(2)	N/A
Advertising Specialties	3.22	(78)	3.32	(30)	no
Entertainment Tickets	3.23	(41)	3.35	(67)	no
Extensive Entertainment	3.14	(40)	3.11	(68)	no
Small Gifts	2.89	(65)	3.04	(43)	no

The results of this analysis are quite interesting. It seems that both users of the personal inducement and those who do not, think alike. The inducements are not particularly effective or ineffective. Standard deviations ranged from 1.20 to 1.37 indicating reasonable variation. An examination of the frequencies indicates almost normal curve types of response patterns with the sporting and entertainment tickets response indicating the most skewed response pattern.

Discussion

This research was meant to be exploratory and to produce some insights into the process of the use of personal inducements which could be useful in further research and to further our understanding of this practice. A number of insights are apparent and there are a number of questions that this research has provoked.

It does appear that the practice of personal inducements, at least in some of its forms, is almost ubiquitous. The business lunch and small gifts seem to be practices used by most firms with the business lunch used by almost all. The other inducements have substantial usage also. While the sample should be categorized as one of convenience, this research has agreed with past research in a number of areas where correspondence can be ascertained, specifically Dempsey, Bushman and Plank (1980), Dubinsky and Gwin (1981), and Finn and Moncrief (1985). This suggests that estimates by Plank (1980) of spending approaching $30 billion in the 1970's may have been reasonably correct. It does appear that large sums of money could be spent on these activities.

The finding of very few, relatively, written policies for salespeople to follow is interesting because it suggests that sales management may have little control over the actual use of the practices. While it is possible that a strong verbally communicated policy may exist, obviously the lack of a written policy suggests the more likely outcome of a minimum of control. In addition, it is likely that salespeople within the same company may have difficulty deciding when usage is appropriate and may have developed somewhat different rules of thumb. A related question asked in only the business lunch section asked if there was a separate budget for the

particular inducement. Only 30.2% of the respondents indicated that there was a separate budget. Presumably, for other companies, these expenses were lumped with others and would then be difficult to break out.

The ethics findings are not unexpected. People who use these activities are more likely to perceive them in an ethical manner than those who do not.

The perception of performance came up with not particular noteworthy conclusions. It does appear that both users and nonusers rate performance equally. If anything the results indicate that they probably don't know how effective the various activities are. This suggests a number of possible explanations for why they use inducements. Perhaps they use them because they feel they have to because of competition. Another rationale might be that they use it because if they stop using it they are afraid it may have adverse results. Perhaps they use it out of habit. Another possible reason is that the user gets psychic or other benefits from the use and are thus reluctant to give it up, such as a free lunch.

Conclusion

This research has suggested that the use of personal inducements is prevalent, yet there appears to be no particular understanding of why it is used nor, whether or not it is effective. Future research could go in two directions. One important direction is to determine how much is actually being spent and for what reasons. Another direction is to determine how successful these expenditures are and to develop some normative guidelines for how the resources should be used. Both directions are necessary if we are to understand the use of personal inducements and from marketing perspective, maximize their effectiveness.

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THE EFFECTS OF A SALESPERSONS' CREDIBILITY ON OTHER SALESPERSONS AND SALES MANAGERS

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Introduction

Selling is one of the major institutions in a viable competitive economy. The number of salespersons in the United States has grown by more than one million since 1980 and now numbers approximately seven million (Storholm 1982). Each year some 180,000 new university and college graduates join the ranks of salespeople (Futrell 1981). A large majority of these new salespeople will be employed as industrial salespersons.

The cost of training these new salespeople is approaching six billion dollars (Marken 1985). Because of this tremendous expenditure, one would expect to find a considerable amount of research into methods for improving the effectiveness of industrial salespeople. Yet surprisingly, when personal selling is compared to other marketing activities, one discovers a paucity of research in this area, particularly reliable research based on rigorous application of quantitative analysis (Parasuraman and Day 1977). The present study is an endeavor to partially overcome this lack of quantitative research by focusing on one of the most important elements associated with salesperson effectiveness --- salesperson credibility. One of purposes of this present study is to examine the attributes of salesperson credibility as perceived by other salespersons / sales managers. The second purpose of this study is to analyze the effects of these credibility attributes on industrial buyers' purchase intentions as viewed by other salespersons.

Background Perspective

Until recent times credibility was generalized as a personal, unchanging attribute and was envisioned as a static, objective characteristic of the source (salesperson). Until the classic work by Hovland, Janis and Kelley (1953), source credibility was assumed to be unidimensional--no attributes or structural dimensions within the concept had been identified. This early research concluded that there were only two attributes of source credibility: (1) perceived trustworthiness (the degree of confidence in the communicator's intent to communicate the assertion he or she considers most valid) and (2) perceived expertise (the extent to which a communicator is perceived to be a source of valid assertions). Hovland, et. al. further suggested that the ability of a source to persuade varies positively with credibility. This landmark study of source credibility focused not on this concept as a static, objective, unidimensional, characteristic, but upon the multidimensional aspects of the receiver's perceptions of the credibility of the source.

The advent of more sophisticated multivariate analysis techniques and the rapid expansion of the use of computers in the 1960's contributed to a group of studies that identified three statistically independent dimensions or attributes of source (salesperson) credibility: these attributes were safety or trustworthiness, competence or expertness, and dynamism (Berlo and Lemert 1961; Lemert 1963; Berlo, Lemert, and Mertz 1969-1970). To overcome the problem of generalizing about source credibility because of various contexts and settings used by the earlier researchers, Simpson (1976) developed a source credibility scale that was sales specific and that delineated four factors - - believability (trustworthiness), dynamism, expertness, and sociability. Simpson's scale captured 90.4% of total variance when using student respondents to measure the perceived credibility of insurance salespersons who sell college insurance plans. This scale was further clarified by Wynn (1982) when four factors - - dynamism, expertness, trustworthiness, and sociability were again delineated when using industrial buyer respondents to measure the perceived credibility of industrial salespersons selling petroleum lubricants.

Attributes

Dynamism was first introduced as an important attribute of the sales presentation by Levitt (1965) in his landmark study of the quality of sales presentations. This "presentation" effect or dynamism outlined by Levitt appeared in a factor analysis of data developed by Applbaum and Anatol (1972) as they sought to develop a scale for measuring source credibility. Dynamism has been linked with the qualities of personal energy, aggressiveness, forcefulness and frankness.

Believability or trustworthiness has long been suspected of being an important dimension or attribute of source credibility. Hovland, Janis, and Kelley (1953) isolated two dimensions of credibility in their study of that concept - - perceived trustworthiness and perceived expertness. The trustworthiness dimension continued to appear in research designed to evaluate credibility of the individual spokesperson (Bower and Phillips 1967, Whitehead 1968) Trustworthiness was identified by O'Shaughnessy (1971-1972) in his evaluation of interpersonal influences as they relate to salesmanship. This attribute was isolated in a study of communication effects of industrial purchase behavior (Levitt 1965; 1967). Trustworthiness is characterized by such qualities as reliability, honesty, safety, pleasantness and open-mindedness.

Expertness, like trustworthiness, has long been considered or suspected of being an important attribute or component of personal (salesperson) credibility. A number of researchers have demonstrated the link between expertness and perceived salesperson credibility with expertness often evaluated by using experience with a product as a surrogate dimension (Brock 1965; Woodside and Davenport 1974, 1976; Busch and Wilson 1976). Expertness or expertise was identified by O'Shaughnessy (1971-1972) as being one of the most important influences on selling

effectiveness. Expertness is characterized by such terms (applied to the salesman) as trained, expert, intelligent, skilled, qualified and professional.

Sociability was first identified or considered as an attribute of salesperson credibility by Simpson (1976). However, dimensions that could be linked to this very personal attribute of a salesperson's personality had been alluded to in previous research (Brock 1965; Farley and Swint 1967; O'Shaughnessy 1971-1972). Salespersons who like to be with other people and who are happy tend to be the best salespersons according to Miner (1962). Terms most often linked to the attribute sociability are friendly, nice, sociable, and non-gloomy.

Attribute Evaluation and Hypothesis

The sales specific Source Credibility Scale developed by Simpson (1976) and clarified by Wynn (1982) as his Salesperson Credibility Scale was used in this study to evaluate the credibility of salespersons as perceived by sales managers and other salespersons. Factor analytic techniques enable the researcher to determine the number and nature of the underlying variables so that the data may be "rearranged" or "reduced" to a small set of factors. For purposes of this study the principal factors technique will be used to extract the factors or attributes of the Salesperson Credibility Scale.

The factors (attributes) extracted will be evaluated for their effect on the dependent variable - - purchase intentions of industrial buyers as perceived by salespersons / sales managers. To purchase, a person must first form an intention. Kotler (1980) suggested that an industrial buyer's intention to purchase can be favorably affected by industrial salespersons who make the product attractive, weaken objections to purchase, and create a sense of urgency.

To measure the effects of relationships proposed in this study, the following hypotheses were tested after the attributes were identified.

H:1 Industrial salespersons / sales managers perceive that purchase intentions of industrial buyers increase with increasing levels of salesperson credibility.

H:2 Industrial salespersons / sales managers perceive that purchase intentions of industrial buyers increase with increasing levels of expertness on the part of the industrial salesperson.

H:3 Industrial salespersons / sales managers perceive that purchase intentions of industrial buyers increase with increasing levels of dynamism on the part of the industrial salesperson.

H:4 Industrial salespersons / sales managers perceive that purchase intentions of industrial buyers increase with increasing levels of believability on the part of the industrial salesperson.

H:5 Industrial salespersons / sales managers perceive that purchase intentions of industrial buyers increase with increasing levels of sociability on the part of the industrial salesperson.

Methodology

Design and Research Instrument

The major research instrument for this study was a three part questionnaire completed by industrial salespersons / sales managers (respondents) after viewing a fifteen minute videotape of an industrial salesperson making a complete industrial sales presentation. The first part of the questionnaire consisted of the 24 item Salesperson Credibility Scale. Respondents recorded their degree of agreement with each credibility statement (variable) on a five point Likert-type scale ranging from "strongly agree" to "strongly disagree."

The second portion of the questionnaire contained six questions requesting the opinions of the salespersons / sales managers relative to their perception of the purchase intention of the industrial buyer as well as other perceptions of the respondents toward the salesperson in the videotape. The last part of the questionnaire consisted of ten information and demographic questions about the respondent and his or her firm.

The industrial salespersons / sales managers were shown one of three videotapes, each depicting different levels of salesperson credibility. These different credibility levels were portrayed by manipulating selected credibility attributes (expertness and dynamism). Six videotapes were originally produced by varying dynamism at three levels and expertness at two levels and then using all combinations (3x2=6) of these different attribute levels. An earlier study had been conducted using industrial buyers that had assessed which of the six videotapes provided the best examples of high, medium, and low salesperson credibility. A "t" test was used on all combinations of the chosen tapes to determine that the industrial buyers in the previous study had perceived a significant difference between each sales presentation.

The videotapes were similar in that each videotape began with the industrial salesman entering the buyer's office and ended immediately after the salesman had left the office. Each video sales call depicted the same four elements (opening, presentation, including cost and money saving, solution, and close). Both the industrial salesperson (actor) and buyer (actor) had had previous experience in industrial selling and buying and both were the same in all videotapes. Possible distractions in appearance were minimized or eliminated. Each of the male "actors" wore neutral suits and ties with white shirts. The actors' hair was well trimmed and

neither wore a beard or glasses. Office surroundings, camera angle, and other environmental effects were consistent during all taping sessions.

Sample

The subjects for this study (respondents) consisted of a judgment sample of 213 industrial salespersons / sales managers. Various groups made up this sample including: (1) 107 industrial salespersons enrolled in salesperson training classes for industrial distributors of a large worldwide manufacturer; (2) 68 industrial salespersons / sales managers from three companies that agreed to participate in this study; and (3) 38 members of a large metropolitan chapter of Sales and Marketing Executives, a professional sales organization. The respondents were randomly assigned to experimental treatments (videotapes) so that a representative sample including 61 industrial salespersons / sales managers viewed a low credibility presentation, 93 a mid-range credibility presentation, and 59 a sales presentation of high credibility.

The study of credibility at the individual salesperson level is fairly new, especially using VCR technology. Industrial salespersons / sales managers can offer valuable insights and perspectives into salesperson / buyer research since sales managers and other salespeople are the ones who do most of the evaluation and training of industrial salespeople.

Findings and Discussion

The responses to the Salesperson Credibility Scale were subjected to a principal factors factor analytic technique with orthogonal rotation. Based on the previous research with industrial buyers and Eigen values of approximately 1.00, a four factor structure was developed as shown in Table 1.

The relevant factors in the scale -- expertness, dynamism, believability, and sociability -- paralleled somewhat the factors (attributes) of salesperson credibility delineated in earlier research (Simpson 1976, Simpson and Kahler 1980-1981, and Wynn 1982).

Expertness -- This factor or attribute accounted for more than one-half (50.3%) of the variance in the factor solution and consisted of these variables: trained, skilled, unqualified, safe, intelligent, worthless, trustworthy, very little experience, unpleasant, and unreliable. This attribute contained all five of the variables listed by Applbaum and Anatol (1972) in their credibility scale developement work. In addition, this factor included all variables listed by both Simpson (1976) and Wynn (1982) in their "expert" factor as they sought to expand and clarify the early efforts by Applbaum and Anatol. As shown in Table 1, three variables -- trustworthy, very little experience, and unreliable -- loaded on other factors, in addition to expertness, when considering the .40 factor loading criteria.

TABLE 1

SALESPERSON CREDIBILITY SCALE - FACTOR MATRIX
PRINCIPAL AXES ANALYSIS, VARIMAX SOLUTION

Variable	Expert	Dynamism	Believ-ability	Sociability
Expert				
Expert	.83	.22	.01	.21
Professional Manner	.82	.06	.26	.14
Trained	.79	.27	.10	.20
Skilled	.79	.26	.13	.16
Unqualified	.76	.28	.31	.17
Safe	.71	-.08	.35	.18
Intelligent	.70	.30	.27	.22
Information Worthless	.68	.30	.20	.24
Trustworthy	.66	.05	.48	.26
Very Little Experience	.62	.47	.26	.16
Unpleasant	.62	.11	.38	.23
Unreliable	.61	.25	.52	.10
Dynamic				
Passive	.13	.77	.14	-.17
Timid	.02	.73	.10	.10
Hesitant	.37	.65	.28	.16
Aggressive	.27	.62	-.23	.36
Energetic	.45	.58	.11	.41
Gloomy	.34	.48	.45	.19
Believability				
Dishonest	.38	.10	.64	.20
Cruel	.13	.14	.63	.49
Closed-Minded	.34	.25	.57	.26
Sociability				
Friendly	.17	.11	.25	.84
Sociable	.38	.13	.20	.70
Nice	.32	.03	.43	.62

Dynamism -- This factor or attribute accounted for 8.0% of the variance in the factor solution and contained all the variables, plus the variable "gloomy," appearing in the "dynamic" factor of the Applbaum and Anatol (1972) work. Variables making up the dynamism attribute are passive, timid, hesitant, aggressive, energetic, and gloomy. The variable "gloomy" also loaded on the attribute, "believability," under the .40 criteria for variable inclusion in the factor.

Believability -- This attribute accounted for 6.3% of the variance in the factor solution and consisted of three variables: dishonest, cruel, and closed minded. This attribute bears some similarity to the Applbaum and Anatol (1972) marker variable, "trustworthy," except this believability attribute has fewer variables. The three variables contained in this attribute were also contained in the Simpson (1976) "believability" attribute and the Wynn (1982) "trustworthy" attribute. However, the Simpson and Wynn studies contained nine and eight variables, respectively.

Sociability -- This factor contained only three variables (friendly, sociable, and nice) and accounted for 3.9% of the variance in the factor solution. This factor or attribute was first introduced in the Simpson (1976) study and may be unique to source credibility in personal selling situations. This attribute, from the present study, is similar to the Simpson (1976) and Wynn (1982) studies in that this present study and each of the previous studies contained either three or four of the following variables: friendly, nice, sociable and gloomy.

This present study identifies four attributes of salesperson credibility as perceived by other

salespersons / sales managers. As discussed above, the preceding studies are closely paralleled by this present study. This is a strong statement in favor of the attributes of salesperson credibility, as found in the present study, in that the Simpson (1976) study consisted of college students rating salespersons of college insurance plans and the Wynn (1982) study consisted of industrial buyers rating industrial salespersons. It should be noted that the first attribute, expertness, accounted for 50.3% of the variance and 12 of the 24 variables loaded most heavily on this attribute. This could indicate that salespeople may place more emphasis on being an expert than the attribute is worthy of. Salespeople may deduce that if they are perceived as an expert, they will also be perceived as more believable and more dynamic by their clients and customers, when in truth, they may not be perceived in this way.

TABLE 2

ANALYSIS OF VARIANCE FOR THE EFFECT OF SALESPERSON CREDIBILITY AND ATTRIBUTES ON PURCHASE INTENTIONS OF BUYERS AS PERCEIVED BY INDUSTRIAL SALESPEOPLE/SALES MANAGERS

Dependent Variable: Purchase Intentions of Industrial Buyers as Perceived by Industrial Salespersons / Salesmanagers

Source	D.F.	Mean Square	F-Value	P-Value
Credibility	2	50.09	43.54	.0001
Expertise	1	12.97	22.11	.0001
Expertise X Credibility	2	9.77	16.66	.0001
Dynamism	1	.50	.58	.4485
Dynamism X Credibility	2	1.57	1.83	.1629
Believability	1	6.55	7.78	.0058
Believability X Credibility	2	.00	.00	.9955
Sociability	1	.08	.10	.7558
Sociability X Credibility	2	2.23	2.64	.0740

Effects

The first hypothesis (H:1) states that perceived purchase intentions of industrial buyers increase with increasing levels of salesperson credibility. As Table 2 indicates, this hypothesis was supported. Findings in this study suggest that industrial salespersons / sales managers perceive that industrial buyers have significantly higher purchase intentions when exposed to a sales presentation from a more credible salesperson as compared to a salesperson with less credibility.

To make the attributes more robust, the output of the factor analytic technique was subjected to a "Proc SCORE" procedure with the SAS statistical package. The result of this procedure is an output data set containing the linear combinations of the factor scoring coefficients and the original data values. This output data set was used to examine the effects of the various attributes on perceived purchase intentions by an ANOVA procedure. The effects of each of the attributes were examined separately using the following model: $I = C + A + CA + e$

Where: I = perceived purchase intentions, C = credibility effect (high, medium, and low), A = attribute effect, CA = effect of interaction between credibility and attribute, and e = random error.

The first attribute hypothesis (H:2) states that perceived purchase intentions of industrial buyers increase with increases in expertness on the part of the industrial salesperson. Results of this analysis, as shown in Table 2, support this hypothesis. These results indicate that industrial buyers are perceived to have significantly higher purchase intentions when exposed to a sales presentation from a salesperson that is perceived to be more expert as compared to a salesperson with less expertise. Although there was no hypothesis concerning the interaction between expertise and perceived salesperson credibility, findings suggest that respondents perceive that buyer's purchase intentions will be positively affected by this interaction.

H:3 postulates a positive relationship between purchase intentions of industrial buyers and industrial salespersons' / sales managers' perceptions of dynamism on the part of the industrial salesperson. As indicated in Table 2, there were no significant differences in perceived average purchase intentions of industrial buyers by industrial salespersons / sales managers due to differences in dynamism on the part of industrial salespersons.

The third attribute hypothesis (H:4) suggests that there are significant differences in industrial salespersons' / sales managers' perceptions of purchase intentions due to differences in believability on the part of the industrial salesperson. Table 2 confirms this hypothesis. These findings indicate that industrial buyers were perceived to have higher purchase intentions when exposed to a sales presentation from a salesperson that was considered more believable as compared to a less believable salesperson.

H:5 implies that perceived purchase intentions of industrial buyers increase with increases in respondents' perceptions of the sociability of industrial salespersons. As indicated in Table 2, there are no significant differences in perceived purchase intentions of industrial buyers due to differences in the perceived level of sociability of the industrial salesperson.

Implications and Conclusions

There are minor qualifications that should be noted prior to considering the implications of this study. The use of a Likert-type scale results in discrete data, thus masking somewhat the continuity assumption necessary for a parametric test such as the F test. This sample does not represent the entire population of industrial salespersons / sales managers, even though it did represent a sizable number of respondents from different corporations. The use of the videotape may tend to obscure the results

that might have occurred during an actual sales call, thus limiting somewhat the ability to completely generalize the results of this study. Considering that this study may be more exploratory than conclusive in nature, the limitations are not necessarily overpowering.

Perceived purchase intentions of industrial buyers are strongly influenced by the credibility of industrial salespersons / sales managers. This finding is in agreement with the Wynn (1982) study and Levitt's (1967) finding that "the quality of a sales message and the way it is presented is capable of moderating the influence of this effect" (p.21). The selection, training, and evaluation of industrial salespersons might well benefit from the consideration of perceived industrial salesperson credibility.

Industrial salespersons / sales managers (respondents) feel that certain specific impressions that they make on a buyer can affect the purchase intentions of that buyer. Specifically, this study suggests that respondents believe that being recognized as an "expert" is very important. The importance of this attribute, expertise, may be perceived by the salespeople as being even more salient to the industrial buyer than it actually is. The present study suggests that industrial salespersons / sales managers perceive that buyers assign measures of believability and dynamism to the salesperson whom the buyers consider to be an expert.

This study opens up the possibility of a comparison between the salesperson credibility attributes that the buyers actually consider important and the salesperson attributes that industrial salespersons / sales managers perceive the buyers considering important. This comparison might well have major impact on future selection, evaluation, and training of industrial salespersons, especially if the buyer's most important attributes and the salesperson's / sales manager's perceived buyer attributes do not coincide.

In conclusion, this study reinforced the delineation of the four (4) salesperson credibility attributes of expertness, dynamism, trustworthiness or believability, and sociability. In addition, it examined the effects of salesperson credibility and effects of the attributes that industrial salespersons / sales managers perceive as important to their clients and customers.

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COLLEGE STUDENT INTEREST IN A SALES CAREER: THE GAP NARROWS, BUT PROBLEMS REMAIN

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Abstract

A primary investigation was undertaken to determine whether past positive trends in student perceptions toward selling careers is continuing. A convenience sample of 236 students, each enrolled in marketing classes at one of three universities, was surveyed. The results indicate that when individual attributes are investigated, this increasingly positive trend continues. Yet when asked to rate their preference for selling careers vis a vis other marketing careers, the careers involving sales are rated lowest. Possible explanations for this phenomenon are hypothesized, and suggestions for future research are given.

Introduction

For some time, the lack of college student interest in careers in personal selling or sales management has provided a stumbling block to companies bent on recruiting for those positions on college campuses. This college student aversion to sales has been documented in both journals and marketing textbooks. The earliest notice of the problem came from sales trade journals. Both The American Salesman and Sales Management (Churchill 1981) published articles depicting the problems students were having with the choice of a sales career. Both articles found that students held a rather negative perception of a sales career, and that a majority would prefer nonsales positions upon graduation. A possible explanation was found in the fact that a majority of the respondents agreed that their contact with sales personnel had largely been limited to door-to-door and retail store personnel.

John Mason (1965) brought this problem to the prominent attention of marketers via the Journal of Marketing. His 1965 article discussed the low prestige of personal selling, and summarized the literature to that date as follows: "The principal findings of all such surveys have been approximately the same; and they may be summarized as follows:

1. Many students, usually the vast majority, do not and/or would not want to become a salesman.
2. Many of these same students have some very uncomplimentary things to say about the occupation of personal selling."

He suggested that the lack of prestige accorded sales was due in part to the absence of formalized educational requirements to enter the selling profession, and a lack of authority. Although educational requirements do not formally exist today, there has been an interest on the part of businesses to upgrade the caliber of their sales forces. This desire to upgrade reflects a change from the role of the salesman as "order taker" to "problem solver," and has manifested itself in the increased interest in recruiting for sales and sales management positions on college campuses.

Since that time, marketing educators have tended to track college student perceptions of and interest in sales-related careers. Paul and Worthing (1970) stated that the single recurrent finding of their study was the general low esteem in which students held both a sales career and the task of personal selling. They also found that this feeling prevailed (in some cases to a greater extent) among business students as well as among those enrolled in engineering, education, or sociology problems. They further found that personal selling was viewed as a unitary role rather than as many different roles depending upon the particular industry or company.

Dubinsky (1978) issued "a call for action" at the Midwest Business Administration Association Conference, and followed that up (1980) with a survey of college student attitudes. This time, the results surprisingly found that a majority of students have a relatively favorable image of personal selling, with males being slightly more favorably disposed than females. Dubinsky continued this research stream publishing, articles in 1981 and 1983. He found that students' perceptions of a sales position were significantly different (and generally more negative) than the perceptions of persons currently employed in the sales profession (Dubinsky 1981). He further found that student perceptions varied depending on the type of sales position under consideration (Dubinsky 1983, O'Connor and Dubinsky 1983).

The focus of the present study is to continue the tracking of student perceptions of a sales career, and to determine whether the positive shift found by Dubinsky in 1980 has continued.

Hypotheses

Based on a review of the literature and the authors' combined experience with teaching and student counseling in the area of personal selling and sales management, the following hypotheses were developed to guide the research:

1. The trend toward improved attitudes toward a selling career will continue.
2. College students will continue to prefer careers in fields other than those related to sales.

3. The attitudes toward personal selling can be generalized across universities.

Methodology

A convenience sample of 296 students attending classes in the Colleges of Business Administration at Ohio University, Cleveland State University, and the University of Toledo were administered a three-part questionnaire. Three universities were chosen to improve upon the earlier studies which focused on respondents from a single university. In this case, the universities were selected to give geographic dispersion (from northwest to southeast) and a metropolitan-commuter versus rural-resident representation in the state of Ohio. The use of the three schools improves the external validity of the study.

The first part of the questionnaire contained a list of attributes (see Table 1), most of them negative, which in past studies have been associated with sales career. The typology for the attributes was obtained from the two most recent editions of the Churchill, Ford, and Walker (1981 and 1985) sales management text. Students were asked to indicate on a five point scale from one (strongly disagree) to five (strongly agree) the degree to which each attribute is associated with personal selling. In addition, respondents were asked to indicate their degree of interest in a selling career, and whether their exposure to sales personnel was primarily limited to retail store clerks.

The second part of the questionnaire contained ten marketing careers obtained from the "careers in marketing" appendix of Pride and Ferrell's (1981) introductory marketing textbook. The purpose of that portion of the questionnaire was to see if the career aspirations of students supported their answers to the general question contained in part one concerning their preference for a sales career. The respondents were asked to rate each career on a scale from one (least preferred) to five (most preferred). The results of this section are contained in Table 3.

The third part of the questionnaire contained a university identification and some additional demographics. The data were analyzed using MANOVA to determine whether the responses were influenced by the characteristics of the students choosing to attend each type of school.

Results

Table 1 illustrates the percentage responses to the first portion of the questionnaire. A majority of the respondents associated only two of the fourteen attributes with personal selling, and in only four cases did a plurality do so. This finding suggests that the change in student attitudes toward personal selling uncovered by Dubinsky has continued and strengthened. Table 2 compares the results of the present study with the results of the appropriate prior studies. The continued trend toward a more positive perception of a sales career is evident in the table. Of special note is the fact that low status/low prestige is no longer associated with a sales career by students in colleges of business at the schools sampled. This is a change from the Dubinsky study, and a significant departure from Mason's 1965 findings. The other change from the Dubinsky results is that low job security is also no longer associated with a career in sales. These changes may reflect the fact that a majority of students no longer suggest that their contact with salespeople has been limited to retail store clerks. This increased contact with nonretail store personnel may contribute to the overall improvement in the students' perceptions of a sales career.

TABLE 1

PERCENTAGE OF RESPONDENTS WHO AGREE, DISAGREE OR NEITHER AGREE OR DISAGREE WITH EACH ITEM

	Agree	Disagree	Neither Agree Nor Disagree
1. Students Associate Personal Selling With:			
a. Frustration	44%	18%	38%
b. Insincerity and Deceit	17%	59%	23%
c. Low Status/Low Prestige	15%	56%	29%
d. Much Traveling	62%	9%	29%
e. Salespeople are Money Hungry	27%	34%	38%
f. High Pressure/Force People to Buy Unwanted Goods	37%	32%	31%
g. Low Job Security	26%	39%	34%
h. Just a Job, Not a Career/ Little Professionalism	16%	66%	18%
i. Uninteresting	12%	73%	15%
j. No Challenge	4%	88%	8%
k. No Need for Creativity	4%	89%	6%
l. Personality is Crucial	91%	2%	6%
m. Too Little Monetary Reward	15%	44%	41%
n. Interferes With Home Life/ Little Leisure Time	32%	29%	39%
2. Students Prefer Nonsales Positions Much More Than Sales Positions	44%	29%	27%
3. Students' Contact With Salespeople Is Largely Limited to Door-to-Door And Retail Store Personnel	30%	50%	20%

The data were collected on a five-point scale from one (strongly disagree) to five (strongly agree). Scores of one and two were considered to disagree, scores of four and five were considered to agree, and scores of three were considered to neither agree nor disagree with the item.

On the negative side, Table 1 indicates that a plurality of the students in the present study would prefer a nonsales position, and Table 2 illustrates that their attitude has remained unchanged since 1957.

TABLE 2

SUMMARY OF THE FINDINGS OF FOUR SURVEYS OF COLLEGE STUDENTS' PERCEPTIONS OF, PREFERENCE FOR, AND EXPOSURE TO SALES POSITIONS*

	American Salesman (1957)	Sales Mgmt. (1962)	Paul and Worthing (1970)	Dubinsky (1980)	Present Study (1986)
1. Students Associate Personal Selling With:					
a. Frustration	DNI	Agree	DNI	DNI	Agree
b. Insincerity and Deceit	Agree	Agree	Disagree	DNI	Disagree
c. Low Status/Low Prestige	Agree	Agree	Agree	Agree	Agree
d. Much Traveling	Agree	Agree	Agree	Agree	Agree
e. Salespeople are Money Hungry	Agree	Agree	DNI	DNI	NAD
f. High Pressure/Forces People to Buy Unwanted Goods	Agree	Agree	DNI	Agree	Agree
g. Low Job Security	Agree	Agree	DNI	Agree	Disagree
h. Just a Job, Not a Career/ Little Professionalism	Agree	Agree	DNI	Disagree	Disagree
i. Uninteresting/No Challenge	DNI	Agree	DNI	Disagree	Disagree
j. No Need for Creativity	DNI	Agree	Disagree	Disagree	Disagree
k. Personality is Crucial	Agree	DNI	Agree	DNI	Agree
l. Too Little Monetary Reward	Disagree	Agree	Agree	Disagree	Disagree
m. Interferes With Home Life/ Little Leisure Time	DNI	Agree	DNI	Agree	NAD
2. Students Prefer Nonsales Positions Much More Than Sales Positions	Agree	Agree	Agree	DNI	Agree
3. Students' Contact With Salespeople Is Largely Limited to Door-To-Door And Retail Store Personnel	Agree	Agree	Agree	DNI	Disagree

*The table shows whether a plurality of the respondents in each study agree, disagree, neither agree nor disagree (NAD), or whether the study did not investigate (DNI) the item. The table is adapted in part from Churchill, Gilbert A., Neil M. Ford, and Orville C. Walker, Sales Force Management: Planning, Implementation and Control, Homewood, IL: Richard D. Irwin, 1981, p. 5, 1985, p.4.

TABLE 3

STUDENTS' ORDERED PREFERENCE FOR MARKETING CAREERS

MARKETING CAREERS	MEAN SCORE
ADVERTISING	3.76
PUBLIC RELATIONS	3.47
PRODUCT MANAGEMENT	3.29
DISTRIBUTION MANAGEMENT	3.13
RETAIL MANAGEMENT	3.13
MARKETING RESEARCH	3.09
INDUSTRIAL BUYING	2.95
MANUFACTURER SALES	2.81
WHOLESALE SALES	2.65
RETAIL SALES	2.60

1 = LEAST PREFERRED; 5 = MOST PREFERRED

Table 3 depicts the student preference for the ten marketing careers listed in order of decreasing mean score. Corroborating the answer to the career choice question in part one of the questionnaire, Table 3 illustrates that any market career with the word "sales" attached lands at the bottom of the preference list.

A MANOVA indicated that no significant differences existed in the responses given as broken down by school. Thus the geographic location, urban-commuter vs. rural-resident, and other characteristics of the schools investigated played no significant role in how the students viewed a career in sales. This suggests that the results are generalizable across at least three different universities, and strengthens the argument for the external validity of the results.

Discussion

The results presented support all three research hypotheses. As demonstrated in Table 2, the attitudes of college students toward personal selling have improved over time, up to and including the present study. Yet when asked whether they would prefer a career in sales, or were asked to indicate their preference for specific marketing careers, they consistently shied away from sales-related careers (see Tables 1 and 3). Finally, the results were consistent across the three universities included in this study.

Thus we are faced with something of a paradox. Although the attribute by attribute perception of personal selling has improved, the desire to enter the field as a career choice for college graduates remains low. Two possible avenues for further research are suggested.

First, it is possible either that the attributes which remain negative are those which are most important in the career selection process, or that there are additional salient attributes which are not presently being investigated. In either case, the salience of the attributes and the possible inclusion of additional ones needs to be investigated. As an illustration, it is possible that students would be interested in a career if they have confidence that they will perform well in it, or that their performance could not be measured with a great deal of accuracy. To the extent that they have performance doubts, or to the degree that performance can be accurately measured, they would tend to avoid the career. It can be further speculated that students have doubts about their ability to sell, and they perceive a sales person's performance to be quickly and accurately measured. The doubts about sales ability comes from the nature of selling (it is to a large extent an art) and the failure of many universities to include personal selling in their curriculum (thus providing neither instruction nor the opportunity to practice). Even where personal selling is included in the curriculum, insufficient time exists to hone selling skills or even to gain much confidence in one's selling ability.

Second, it may be that other career choices rate more highly across these attributes than

does a sales career. That is, although the rating of the attributes with respect to sales has improved over time, sales may still rate lower than other career options available to college graduates. Thus the perspective becomes one suggesting that although sales is not bad, other careers are better. Sales just suffers by comparison. To the extent that this is true, it is necessary to find out why other careers are more highly rated. If the higher rankings are a true reflection of the attributes of competing careers, then it becomes incumbent upon business to change the nature of personal selling to make it more attractive to college graduates. This may include such things as providing more authority, responsibility, and the concomitant instruction necessary to handle the position. On the other side of the coin, if the nature of the position cannot be changed to satisfy the needs of college graduates, then sales recruiters should reevaluate their need for college graduates to fill sales positions. If the higher rankings are a result of misperception of a sales career on the part of college students, then the task becomes one of education. The education can come from both academics and practitioners. There is some evidence that this misperception may indeed be the case.

Dubinsky (1981) found that sales personnel perceive the sales job differently than students. Assuming that sales personnel do perceive their jobs accurately, then the students are misinformed. To the extent that this misinformation inhibits entry to the selling career, it must be corrected for the good of both students and business. The results of an attempt to improve student attitudes toward sales was published by Stevenson and Paksoy (1983). They exposed students to literature on the nature of selling, and found an improvement in student attitudes. This might be interpreted as a result of rectifying student misperceptions (at least to the extent that the literature to which they were exposed accurately reflects personal selling). These positive results illustrate one avenue for correcting the misperceptions found by Dubinsky.

In conclusion, college students are continuing the trend toward a more positive attitude toward sales, but this trend has not overcome the reluctance of these students to enter the selling profession. Until the problem is understood more fully, companies will continue to have trouble recruiting the best candidates to fill sales positions. This is detrimental to business, and precludes an otherwise productive career choice for many of our business school graduates. The subject warrants further research to increase our and understanding of the problem.

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ORGANIZATIONAL BUYING BEHAVIOR IN VENDOR SELECTIONS: A MODEL OF THE USES OF DECISION STRATEGIES IN EVOKED SET SELECTION

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Abstract

A model of organizational buyers' use of decision strategies is presented and tested. The model depicts the interaction of risk to the buyer in making a selection, the familiarity of the task, and information load on the use of decision strategies. The model deals with only the selection of suppliers to which bids will be sent. The findings provide support for the model and suggest that it is the buyers' subjective evaluation of the environment that determines the use of compensatory and non-compensatory decision strategies.

To date, little is known about the decision strategies that organizational buyers use in making initial supplier selections or how the decision strategies are used in making the final purchase decision. Crow, Olshausky and Summers (1980) provide some insight into the decision-making process. However, they fall short of presenting a framework for understanding why or when organizational buyers might use alternative decision strategies.

Hanson (1979) did present a conceptual framework of the use of decision strategies by organizational buyers. His framework directly transferred the logic of Park and Lessig (1977) who suggested the buying tasks (Robinson, Faris and Wind, 1967) contained elements that influenced the use of decision strategies. Their logic was based on the findings of Park (1976) and Wright (1974, 1975).

A factor that was not considered by Hanson is the role of the purchasing agent in the buying group. The purchasing agent has the recognized social power in the buying group for selecting potential suppliers. This selection process is separate and distinct from the final purchase decision (Cooley, Jackson, and Ostrom, 1979). Hanson's logic does not consider the protection of this social power and the effect this has on the choice of a decision strategy.

The purpose of this research is to present and test a model of the use of decision strategies that incorporates risk into the mainstream of the decision-making process. The following section of this paper presents a model and the rationale used to develop it.

A Model of The Use of Decision Strategies

This model, presented at the end of the paper, illustrates the evaluation of potential suppliers by purchasing agents as a multi-factor, interactive process. It shows the evaluation routine that leads to an evoked set of qualified suppliers developed from a search activity that identified a set of potential suppliers. As Luffman (1974) has reported, not all suppliers in the awareness set are considered in the purchase decision-making process. Only those suppliers who are favorably perceived by the purchasing agent will make it through the qualifying process and be actively considered in the evaluation routine that leads to the final purchase decision.

The integration of risk into the model was done because of the role this factor has in a decision making situation. In the case of the organizational buyer, prudent supplier choice is seen as a means of protecting the buyer's role in the buying group.

The first node in the model depicts the first major choice of the purchasing agent in the selection of an evoked set of qualified suppliers - the choice of using either the compensatory or noncompensatory decision strategies. This choice is seen as being dependent upon the level of perceived risk (Cox, 1967) faced by the purchasing agent in the selection process. When the risk to the purchasing agent's position in the buying group is perceived to be high, use of a compensatory evaluation function can minimize the risk. When the risk of supplier selection is low, the purchasing agent may feel comfortable in the use of a noncompensatory strategy. The decision to initially dichotomize the use of decision strategies on the risk-related variables is based on the findings of Wright (1975). He reported that compensatory strategies are viewed as leading to an ideal choice.

When the perceived risk is high and the purchasing agent is using one of the compensatory strategies, Node 2, the level of familiarity with the task is seen as the mediating influence in the choice of using the weighted or unweighted evaluation functions. Under conditions of high familiarity, the weighted compensatory strategy should be employed with the unweighted strategy being used in conditions of low familiarity.

When the level of risk is low and the purchasing agent is using one of the noncompensatory evaluation functions, Node 3, familiarity and information load are expected to interact. This results in the use of either the disjunctive and lexicographic evaluation functions when the level of familiarity is high or the conjunctive and lexicographic strategies when familiarity is low.

Under conditions of high familiarity with the buying task, the purchasing agent may use either the disjunctive or the lexicographic strategies, Node 4. Information load aspects of the purchasing situation are seen as the factors interacting with the level of familiarity in the choice between the two alternative strategies. The disjunctive strategy is seen as the logical use of an evaluation function under the condition of high familiarity and high information load because the disjunctive strategy requires selection

based on one outstanding characteristic; for example, a history of low prices. The lexicographic strategy on the other hand requires a rank ordering of salient supplier attributes deemed important. The additional information processing requirements of the lexicographic strategy are seen as adding to the cognitive strain of the purchasing agent. This suggests that the lexicographic strategy should be used under conditions of high familiarity and low information load in this section of the model.

When the level of familiarity with the task is low, Node 5, the model depicts the purchasing agent applying either the conjunctive or the lexicographic strategies. In this situation, the lexicographic strategy is seen as the evaluation function that is used under conditions of high information load. This is seen as being consistent with the logic used in the previous section of the model because the conjunctive strategy requires more cognitive effort than the lexicographic strategy. When using the conjunctive strategy, the purchasing agent would evaluate alternatives based on a minimum performance standard on all relevant supplier characteristics. This requires a higher level of cognitive activity than is required by the lexicographic strategy. The lexicographic strategy does not require information processing on all relevant attributes; choice is a function of the most important attribute.

The hypotheses that are associated with each nodal section of the model, assume that there is a higher level of risk, familiarity, or information load associated with the strategies suggested at each node. The variables measured are presented in the following section.

Data Collection

The Sample

One hundred and thirty-five organizational buyers were personally interviewed. Because a random sampling method was not feasible, a convenience sample was used. In order to minimize the systematic bias that might occur in a convenience sample, the sample was drawn from seventy-eight organizations representing a cross section of high technology national and international firms, local firms, as well as city, county and state agencies.

Data Collection Device

The data collection device was a five-page questionnaire developed after a series of preliminary interactions used to pretest the ability of the subjects to respond to the questions.

As a result of the pretest, a five-point Likert scale was used. The Likert-scaled questions provided subjective measures of risk, familiarity and information load. Objective measures of these variables were also taken.

Five dimensions of risk were measured: Financial risk, measured by ascertaining the total cost of the purchase and the item cost; Product risk, measured by asking about the complexity of the product and the monogeneity of the product offerings; and the risk of making selections, measured by asking about the homogeneity of the supplier offerings.

Six variables measured familiarity. Product experience and frequency of purchasing the product were used to measure product-related familiarity. Supplier familiarity and consideration of new suppliers were used to measure supplier-related familiarity. Routineness of the purchase and having a well-defined set of product attributes to consider were used to measure the familiarity of the task.

Information load was measured by ten variables. Six objective measures of the purchasing agent's task were included: the number of buys being worked on, the number of array-and-review buys of the total number of buys, the size of the evoked set, the size of the awareness set, the number of attributes used to select the evoked set, and the number of days the purchasing agent had to make the final purchase decision. Also included were four subjective measures of the task: the amount of information needed to make the choice of the evoked set, the number of suppliers who could supply the product, and the workload faced by the purchasing agent when the evoked set was selected.

Structured protocols (Park and Schaniger, 1976) were used to identify the decision strategies.

Data Analysis

Analysis of the model is complicated by two conditions. The first is the interaction of the variables in the model. This precludes a simultaneous testing of the model in its entirety. The second condition is the number of risk, familiarity and information load variables included in the data collection device. Analysis of the model required identification of which of the aspects of risk, familiarity and information load could differentiate between the evaluation functions at each node of the model.

In combination, these data analysis problems were dealt with by testing each nodal section of the model independently. The first step was the use of multiple discriminant analysis to identify which of the measured aspects of risk, familiarity and information load were able to discriminate between the evaluation functions at each nodal section. Multiple discriminant analysis was used as a screening device as well as an internal validity check. Those variables included in the discriminant function were subsequently used in the one-tailed t-test starting with the variable with the highest beta weight. The findings of this study follow.

Findings

The findings of this study are presented in **Table 1**. The table displays the decision strategies that were compared, the variable(s) that were tested, the mean of each group, and the calculated t-value. The variables displayed in the table

were identified in the multiple discriminant analysis as being the variables with the highest beta weights. At Node 4, a subjunctive measure of the workload was the variable in the discriminant function with the highest beta weight, but it did provide a statistically significant result. All of the other variables in the table were the variables with the highest beta weights in the discriminant functions. T-tests were terminated when non-significant results were obtained.

These results support four of the five nodal sections of the model:

- Node 1: There is a higher level of risk associated with the use of compensatory strategies.
- Node 2: There is a higher level of familiarity when the weighted compensatory versus the unweighted compensatory strategies are used.
- Node 3: There is a higher level of familiarity when the lexicographic versus conjunctive strategies are used.
- Node 5: There is a higher level of information load when lexicographic versus conjunctive strategies are used.

TABLE 1
FINDINGS

Node	Measured Construct	Group	Mean	T-Value
		SUPPLIER HOMOGENEITY		
1	Risk	Compensatory	.49	-1.82(1)*
		Non-Compensatory	.81	
		PRODUCT HOMOGENEITY		
1	Risk	Compensatory	.59	-1.71(1)*
		Non-Compensatory	.90	
		SUPPLIER FAMILIARITY		
2	Familiarity	Compensatory	.32	1.78(1)*
		Non-Compensatory	.84	
		FREQUENCY OF PURCHASE		
3	Familiarity	Conjunctive	.38	2.16(1)*
		Disjunctive	-.73	
		NUMBER OF MULTIPLE SUPPLIER PURCHASES		
4	Information Load	Lexicographic	18.33	-.61(2)NS
		Disjunctive	24.22	
		NUMBER OF SUPPLIERS CONSIDERED		
5	Information Load	Lexicographic	.78	2.45(1)*
		Disjunctive	-.31	

(1) Pooled Variance Estimate
(2) Separate Variance Estimate
* Significant at .05 Level

Discussion

All of the variables identified as significant in the t-tests are subjective measures. The fact that none of the objective measures of these variables contributed to the significant results suggests that it is the buyer's perception of the buying task that influences the use of an evaluation function.

Statistical support of four of the five nodal sections of the model is encouraging when one considers the possible sources of error inherent in the methodology used. First, the structured protocols used to identify the evaluation functions are a relatively crude technique to ascertain the internal mental processes of buyers. Our inability to uniquely identify the internal workings of the mind is a methodological problem that must be contended with at present.

Measurement of the independent variables provide another source of potential error. The set of variables used to measure various aspects of risk familiarity and information load may not be accurate surrogates for these concepts.

The lack of control over individual cognitive styles of the buyers and the conditions under which decisions were made also contributed to the variability of the responses and may have biased the results toward insignificance. Support for the model is thus very encouraging.

Implications

The findings of this study suggest that the use of evaluation functions in evoked set selection is not restricted to the use of the conjunctive and disjunctive strategies. All of the evaluation functions were used by organizational buyers in selecting an evoked set of suppliers. The use of the compensatory and noncompensatory decision strategies was influenced by the subjectively determined levels of risk, familiarity and information load.

If this is, in fact, the nature of evoked-set selection in organizational buying, then an analysis of the decision process of organizational buying that does not consider this selection process may not accurately measure the final purchase choice. Evoked-set selection is a separate and distinct stage of the decision process - a necessary but not sufficient condition for being selected as the best supplier in the final purchase decision. The decision to include or exclude a supplier from the evoked set is made by using a set of decision criteria and a decision rule. If a researcher fails to recognize this decision stage and only studies the final choice process, accurate predictions will only result if the two choice decisions are identical. If a different decision strategy or set of decision rules are being used at the final purchase phase of the decision process, then accurate forecasts of the decisions are not likely to occur.

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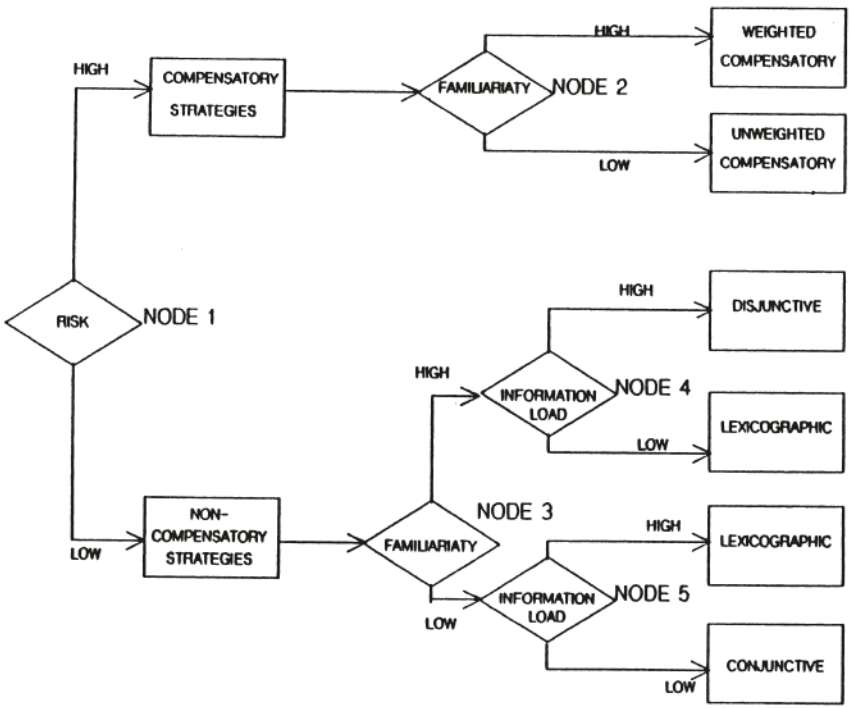
TABLE 1

A MODEL OF THE USE OF DECISION
STRATEGIES IN EVOKED SET SELECTION



ORGANIZATIONAL PROCUREMENT PAPER- AND WORK-FLOW BOTTLENECKS: SOME "REAL WORLD" CASES

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Abstract

The purpose of this paper is to present a methodology for identifying and eliminating organizational procurement paper- and work-flow bottlenecks. Several common organizational procurement paper and work-flow bottlenecks are highlighted along with suggested solutions.

Introduction

One of the continual challenges confronting organizational procurement executives is the effective elimination of paper- and work-flow bottlenecks. Even with detailed written company procedures and almost "paperless" procurement, thanks to the computer, such bottlenecks are apt to persist if not mushroom. This occurs because of the operation of the informal organization relative to its formal counterpart. That is, the procurement manager may possess a comprehensive understanding of his department's paper- and work-flows, which is not always the case. But he usually is not cognizant of the individual procedures employed by his procurement subordinates. Oftentimes, these unique procedures lead to suboptimization of the department and firm's goals. In further defense of the procurement manager, the very nature of his job insulates him from the hour-to-hour responsibilities associated with paper- and work-flows. He is usually embroiled in strategy and planning meetings with superiors; report writing; tactical sessions with his buyers relative to vendor selection and evaluation, value analysis, and price quotations; and departmental/firm emergencies.

What then is the answer to locating and eliminating organizational procurement paper- and work-flow bottlenecks? A partial solution involves flowcharting or diagramming these flows for the procurement department much as a computer programmer flowcharts a complex problem before programming it. The basic procedure is as follows: (1) pinpoint paperwork flows in and out of the procurement department; (2) keep track of where the paperwork comes from and to whom it goes within the department; (3) ascertain what this individual does to the paperwork; (4) determine to whom this paperwork then flows, and follow steps 3 and 4 until all paperwork is handled; (5) put all this information together by means of interconnecting dots and/or arrows; and (6) scrutinize the flow diagram for existing bottlenecks, which are normally self-evident if objectively viewed. The remaining part of the solution lies in observing the physical movement of procurement personnel--secretaries, buyers, and managers--during a "normal" workday. By maintaining records of each person's movement, one is operating like a time-and-motion engineer to discover and alleviate various work-flow bottlenecks.

Common Organization Procurement Paper- and Work-Flow Bottlenecks

In order to illustrate the application of the afore-mentioned method, some of the more common organizational procurement paper- and work-flow bottlenecks will be highlighted in case form.

Case 1: Over-Clericalizing the Procurement Executive

Here clerical tasks normally reserved for secretaries, e.g., filing, typing, and distributing various forms, are being undertaken by the procurement executive. In one specific example, the department secretary logged in and forwarded purchase requisitions received from various departments to the assistant procurement manager, who then segregated these by buyer and returned them to the secretary. She, in turn, logged out and distributed each stack of requisitions to the appropriate buyer (**Figure 1**). Given the routine nature of most purchase requisitions, experience of the secretary, and formal delineation of item procurement responsibilities by buyer, the secretary should have segregated requisitions by buyer. This would have freed the assistant manager from a clerical task. Of course, if most of the purchase requisitions were not routine and/or the departmental secretary was not "experienced," then the assistant procurement manager should probably still perform this task.

Case 2: Buyers Pushing Their Responsibilities Upward

In this situation, buyers unload some of their responsibilities on the procurement manager. In one experience, every purchase order was signed by the procurement manager or, in his absence, the assistant manager. For purchase orders less than $200, the company delegated the signing authority to the particular buyer. But, left to their own preferences, most of the buyers would not assume this responsibility. Without strict enforcement of this policy, the procurement manager soon discovered other responsibilities normally reserved for buyers coming his way. Furthermore, if the manager continues to accept this "buck passing," then a Case 1

FIGURE 1
EXAMPLE OF CASE 1

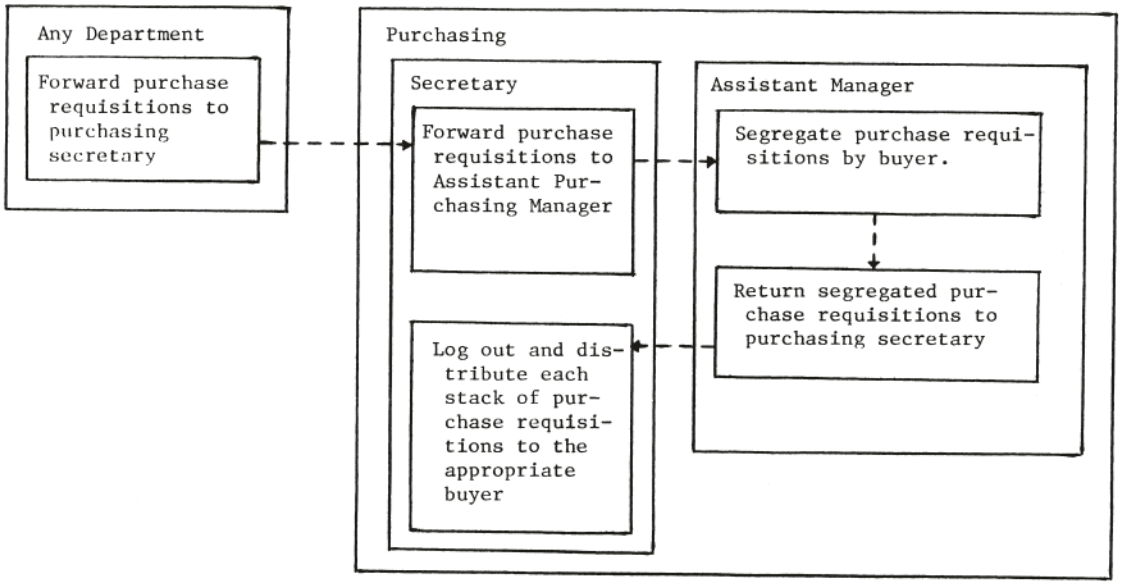


FIGURE 2
EXAMPLE OF CASE 3

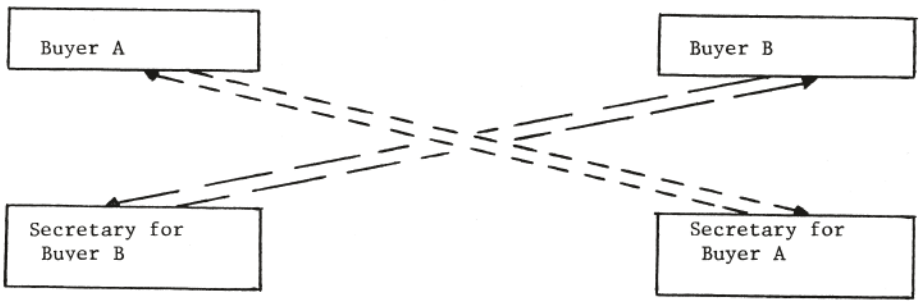
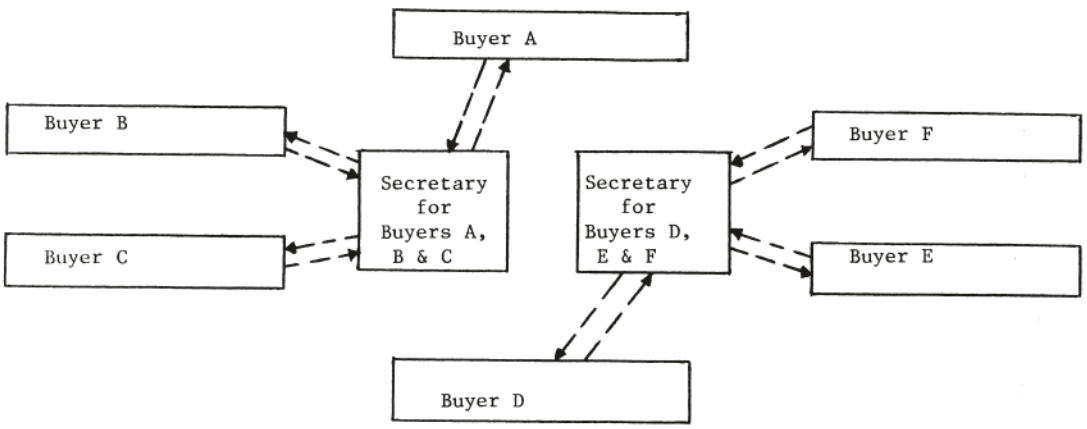


FIGURE 3
WHEEL ARRANGEMENT FOR SOLVING CASE 3 PROBLEM



problem will evolve. However, by enforcing this policy, time and cost savings will accrue to the procurement manager as well as the benefits associated with participatory management on the part of the buyers.

Case 3: Needless Steps Taken by Buyers

Here buyers' furniture, records, files, and books may be situated such that the number of needless steps taken in a day's time is maximized, which in turn usually minimizes their productive efficiency. In one company, the author observed two buyers whose desks were physically separated by 15-20 feet. However, each one's secretary was opposite the other buyer (**Figure 2**). All day long, these two buyers crossed paths--approximately 15-20 times--en route to their respective secretaries. The obvious solution, of course, was to either move one of the secretaries or one of the buyers. But this can be a problem for departments possessing more than say ten buyers. What then? Assuming the existence of adequate physical facilities, the number of steps taken by all persons can be minimized if some variation of a wheel arrangement is employed (**Figure 3**).

Case 4: Dog-Eared Purchase Orders

Whether the purchase order is open or closed, it is usually placed in some folder and filed away in a file cabinet. Depending upon the firm and industry, these purchase orders may be pulled and scrutinized for order information numerous times during the course of their existence. After only several pullings, these sheets usually become dog-eared, if not torn, which makes it difficult to subsequently locate and pull them. Also, there is the associated problem of refiling orders. As a result, valuable secretarial time is used locating, pulling, examining, and refiling purchase orders. Although a microfilm system could be substituted for this archaic procedure, a more advanced approach would be to use visual display equipment, such as a CRT, which is linked with the computer, or by a PC monitor. By typing in the requisite purchase order number on the keyboard, the procurement executive can get an almost instantaneous version of the original order on the visual display tube. He nor his secretary physically handle the purchase order as it is now stored in the central memory of the computer. While a large cash outlay accompanies the acquisition of such a system, the possible reduction in secretarial time and/or personnel usually outweighs this problem.

Case 5: Over-Zealous Use of Stamps and Approval Signatures

Office personnel, especially procurement individuals, can easily fall prey to the problem of over-stamping and over-signing departmental/office forms. This is an inherent hazard associated with paperwork. By developing a paper- and work-flow diagram, however, these "over-stamping" and "over-signing" points can be pinpointed, and eventually eliminated. If left unmonitored, such hoaxes can reach ridiculous proportions as in one example where a "rush" purchase order had five "rush's" stamped on it along with corresponding signatures from five different procurement individuals. By objectively examining each stamp and approval signature, the procurement manager can ascertain the benefit/cost behind it as well as the necessity for continuing it. If such approval steps cannot be totally eliminated, perhaps some can be integrated and performed by one person or a few people. Not only will this speed the flow of paperwork but it might also obsolete a job position since fewer "stampers" and/or "approvers" are needed.

Case 6: Too Many Copies of Forms Being Distributed

Another phenomenon associated with paperwork is the vast array of copies of each form that is sent to everyone everywhere in the firm. It has been the author's experience that many of these copies are either discarded or filed away and forgotten about so that when the department needs information, they ask the initiating department. Not only has the time necessary to develop the original form as well as cost of the paper been wasted, but additional time is required of the initiating department to locate and communicate the requested information. Before haphazardly reducing the number of copies of various procurement department forms forwarded to other departments, the procurement manager should ascertain the benefit each department derives from its particular copy. Armed with this information, he can objectively determine which distribution copies of each procurement form should be discarded. The prior development of a paper- and work-flow diagram for each department within the firm may facilitate this analysis. A problem related to "too many copies of forms" and perhaps more generic is the existence of too many forms. By overburdening procurement executives with forms, top management is encouraging productive inefficiency; fostering "paper pushing," thereby over-clericalizing its procurement executives (Case 1); and causing the procurement department to be overstaffed. While one answer is "paperless" procurement, a more appropriate and profitable solution involves a cost/benefit analysis of each form similar to that mentioned above under "too many copies of forms."

Case 7: Over-Logging of Forms In and Out

As in Cases 5 and 6, this situation is a natural result of paperwork as well as over-enthusiastic record-keeping and control maintenance. In an atmosphere of mutual trust and understanding, little if any

logging in and out of forms is required. But, in firms/departments where this atmosphere does not exist, everyone embraces some type of logging in and out process to protect himself. A paper- and work-flow diagram will unearth and highlight this time-consuming practice. While some logging in and out is necessary, much of it can probably be eliminated, as observed in one situation where intra-departmental movement of every single procurement form had to be logged in and out. Perhaps, as in Case 5, some of the logging can be integrated and performed by one person or a few individuals.

Conclusion

Additional uses of organizational procurement paper- and work-flow diagrams include: (1) training apparatus for new procurement personnel; (2) justifying either the number of individuals presently in the procurement department or need for additional persons to top-level executives; (3) affords management a panoramic and succinct perspective of the department; and (4) by putting time values on each block, one can determine where time delays occur in procurement paper- and work-flows as well as how long it takes to proceed through the system.

Any one of at least four problems can prevent the effective development and utilization of these flow diagrams. First, when developing paper- and work-flow diagrams, it is mandatory to discuss this with someone who possesses a detailed, comprehensive knowledge of paper- and work-flows within the procurement department. Sometimes this is the procurement manager; usually it is one of his subordinates who works with these flows on a daily basis. Regardless, if the individual contacted does not know the required information, then any attempt to develop a viable, useful diagram is fruitless. Second, the source person for the flow diagram may choose not to divulge all aspects of the procurement department's paper- and work-flows. This is different from the first problem where the person did not know the required information. Here, the individual knows, but for reasons of either company politics, playing psychological games, or whatever, he does not disclose either some or all of the requisite information. If this person represents the only potential contact within the procurement department, then development of a complete flow diagram is seriously jeopardized. Third, presupposing the evolution of a detailed organizational procurement paper- and work-flow diagram, another obstacle looms realistically in preventing the effective utilization of such data--a procurement department manager sufficiently biased so as not to recognize apparent procurement flow problems. If top management is ineffectual, the procurement department's paper- and work-flow bottlenecks will persist. Finally, inter- and intra-departmental problems will arise if the flow diagram developer is a person from either the corporate staff or the procurement department. For reasons of job security and politics, a procurement subordinate is likely to be ineffective in researching and developing an accurate, detailed flow diagram. Because of the "love-hate" relationship existing between most departments and corporate staff personnel, a corporate staff person will probably encounter the second type of problem, which will result in an incomplete diagram. The best solution is to bring in an outside consultant who is capable of developing such diagrams, unaware of company politics, and committed to doing a comprehensive job. Unfortunately, this will cost a relatively large sum of money. Discounting these difficulties, the development of complete and accurate organizational procurement paper- and work-flow diagrams can assist appreciably in the effective elimination of procurement flow bottlenecks. In most instances, unearthing and crystallizing a problem is half-way to solving it, and so it is with uncovering and detailing organizational procurement paper- and work-flow problems.

Informal Interpersonal Influence on Purchasing Agents' Perceived Risk

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Abstract

Informal, interpersonal influence was found to have a significant influence on purchasing agents' perceived risk. This impact was found to exist over the categories of perceived performance, social, and economic risk. "Influencers" were found to exist both within and without the purchasing agent's organization. The primary implication of the results is a broadened view of the scope of perceived risk influence as it affects the industrial buyer.

Introduction

The influential role of the purchasing agent in the organizational buying process is stressed in the structure of both macro models of industrial buyer behavior (e.g., Sheth 1973; Webster and Wind 1972) and micro models of industrial buyer behavior (Bellizzi and Walter 1980; Mogee and Bean 1972; Strauss 1962). Important to both macro and micro model development of industrial buyer behavior has been the impact of informal, interpersonal influences on the purchasing agent (Doyle, Woodside, and Mitchell 1979; Martilla 1971; Sheth 1973, 1977) and the impact of informal interpersonal influence on the level of the purchasing agent's perceived risk (Reingen 1973; Sheth 1977).

The macro models have provided the strategist with a general comprehensive view of organizational buying; however, the models have traditionally failed to provide adequate empirical evidence which may be applied to the aforementioned variable relationships (Robey and Johnston 1977). This study provides such an empirical test by examining the impact of informal, interpersonal influences on the purchasing agent's perceived risk level.

Informal Influence

It has been established that organizational buyers frequently solicit the input of personal, noncommercial sources of information in the search for information concerning potential new task purchases (Baker and Parkinson 1977; Kelly and Hensel 1973; Martilla 1971; Sheth 1977; Webster 1970; Zaltman and Bonoma 1977). This informal influence may have its source either within or without the buyer's organization (Hillier 1975; Johnston and Bonoma 1981; Kolchin 1986; Krapfel 1982; Martilla 1971; Mathews, Roberson, and Bambic 1977; Pettigrew 1972; Zaltman and Bonoma 1977). The degree of influence attributed to the source appears to vary along three dimensions:

1. the stage of the adoption decision process (Baker and Parkinson 1977; Ozanne and Churchill 1971; Webster 1970);

2. the degree of "expert power" attributed to the source (Burnkrant and Cousineau 1975; Cobb 1980; Thomas 1982);

3. the degree of uncertainty (or perceived risk) associated with the decision (Cardozo and Cagley 1986; Dempsey 1978; Wind 1978).

It is upon the latter this research most heavily focuses.

Perceived Risk and Its Modification

Arndt (1967) delineated perceived risk into two distinct subparts: (1) the importance of the purchase; and (2) the perceived uncertainty associated with the outcome of the purchase (p. 292). Perceived risk can further be classified as (1) performance risk, (2) social risk (e.g., Midgley 1983; Webster 1970; Woodside 1972), and (3) economic risk (Midgley 1983; Perry and Hamm 1969; Woodside 1972). Performance risk pertains to the likelihood of product breakdown, social risk to the danger of important others not approving, and economic risk to the potential dollar investment loss resulting from the purchase of the product.

Woodside (1972, 1974) confirmed the existence of both a risky shift phenomenon and a conservative shift phenomenon in consumer behavior. Risky shift is defined as willingness to choose risker alternatives (i.e., performance risk, social risk, economic risk) after informal, interpersonal interaction concerning low risk items; while conservative shift is viewed as the decision to choose less risky alternatives following informal, interpersonal interaction concerning perceived high risk decisions (Reingen 1973; Stoner 1968; Woodside 1972). Informal discussion group interaction has been shown to facilitate willingness to take risk. The fundamental finding associated with this research is a generalized risky shift following a low risk product scenario, a conservative shift following a high risk scenario, and negligable shift following a medium risk scenario (Reingen 1973; Wallach and Kogan 1965).

In summation, the literature tends to support the premise that perceived performance, social, and economic risk in both the consumer and industrial buying situations is subject to significant influence and change via informal, interpersonal influences. This relationship should be especially pertinant to the role of the industrial purchasing agent because of the relative importance of the purchasing agent to the industrial buying situation (Mogee and Bean 1976).

Hypothesis

Based on the previous discussion, it is hypothesized that:

> Significant changes in perceived performance, social, and economic risk, on the part of the industrial purchasing agent, may be caused by corresponding positive or negative informal interpersonal contact from within or without the organization.

Methodology

Research has indicated the necessity of considering a paradigm which delineates the organizational buying process into specific stages (e.g., Bellizzi and Walter 1980; Mogee and Bean 1976; Ozanne and Churchill 1971; Silk and Kalwani 1982). These studies indicate that the influence of the various information sources flucuates with the stage of the buying process (Martilla 1971; Ozanne and Churchill 1971; Webster 1970). Significant variations appear to exist with regard to the differing buying situations (i.e., straight rebuy, modified rebuy, new task) (Doyle, Woodside, and Mitchell 1979; Mogee and Bean 1976). It is the "new task" situation which is generally accepted as the most appropriate for examination of innovation adoption and the associated risk inherent with the level of newness and complexity involved in the situation (Mogee and Bean 1976).

Scenario Development

Focus group interviews of purchasing agents were conducted to determine the parameters associated with high perceived performance, social, and economic risk purchase situations. This exploratory research resulted in the following scenario developed to focus on a first time (i.e., new task) purchase of a new industrial pump.

> Your organization is considering the purchase of a large quantity of newly developed, high speed pumps manufactured and distributed by the XYZ Corporation. This will be a relatively expensive purchase. Neither you nor your organization has previously purchased this type of product or dealt with the XYZ Corporation.
>
> According to the advertisements you have read in the various trade journals, this product promises to provide greater application, flexibility, and easier maintenance than comparable models. These pumps will be used for several new processes that your company will be working with for the first time.
>
> Your involvement will center on: (1) the search for qualified alternative potential suppliers; (2) gathering of relevant purchase information and acquisition of proposals; (3) evaluation of information and proposals and selection of a supplier; and (4) selection of an order routine.

Subjects

Four hundred questionnaires were mailed to a convenience sample of purchasing agent association members in Louisiana, Mississippi, and Arkansas. Sixty-six usuable questionnaires were returned for analysis constituting a 16.5 percent usable return rate.

Operationalization of Variables

Following the scenario, each respondent was asked to respond to separate five-point bi-polar adjective scales representing (1) the likelihood of performance, social, and economic consequences of the purchase, and (2) the importance of those consequences. The products of the liklihood and importance scale scores, associated with each risk type, were used as the measures of those risk types.

The initial risk measurements were followed by one of four "scenario updates" which discussed either positive or negative opinions of various professional acquaintances from within or without the organization. The professional acquaintances, drawn from the focus group interviews, consisted of: technical representatives (marketing support); other purchasing agents; production engineers; safety engineers; and salesmen. The conversations with acquaintances were described as being "in addition" to the communications typically outlined by the policies and procedures associated with a "new buy" situation. This "scenario update" was then followed by identical scale risk measurements. This "before and after" measurement allows for the calculation of individual risk change scores.

Analysis

Multivariate analysis of variance (MANOVA) was used to examine the effects of type of influence (i.e., positive versus negative opinion), source of influence (i.e., within organization versus without the organization), and the interaction effects, on perceived performance, social, and economic risk. MANOVA was utilized as the preferred technique given the high levels of significant correlations between dependent variable measures of the three forms of risk (refer to Appendix). Analysis of Variance (ANOVA) was utilized in subsequent analysis to further define various effects on individual independent variables.

Results

The MANOVA results indicated valence of influence does have a significant overall impact at the $p < .0001$ level, as evidenced by Table 1.

TABLE 1
MANOVA RESULTS

	Valence of Influence Effect	Source of Influence	Inter-action Effect
Hotelling-Lawley Trace	F(3.60) = 14.57 PROB > F = 0.0001	F(3.60) = 0.72 PROB > F = 0.5468	F(3.60) = 0.84 PROB > F = 0.4778
Pillai's Trace	F(3.60) = 14.57 PROB > F = 0.0001	F(3.60) 0.72 PROB > F = 0.5468	F(3.60) = 0.84 PROB > F = 0.4778
Wilks' Criterion	F(3.60) = 14.57 PROB > F = 0.0001	F(3.60) 0.72 PROB > F = 0.5468	F(3.60) = 0.84 PROB > F = 0.4778

The source of influence and the interaction effect were nonsiginficant.

Separate ANOVAs indicated that the valence of influence had a significant effect on all three types of risk (Table 2).

TABLE 2
ANOVA RESULTS

Dependent Variable: Social Risk Change Score

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Model	4	955.14	238.78	4.54	0.0028
Error	61	3206.12	52.55		
Corrected Total	65	4161.27			

Source	DF	SS	F Value	PR > F
Valence of Influence	1	871.96	16.59	0.0001
Source of Influence	1	0.42	0.01	0.9286
Interaction	1	82.66	1.57	0.2146

Dependent Variable: Economic Risk Change Score

Source	DF	Sum of Squares	Mean Square	F Value	PR > F
Model	4	2076.65	519.16	9.54	.0001
Error	61	3319.10	54.41		
Corrected Total	65	5395.75			

Source	DF	SS	F Value	PR > F
Valence of Influence	1	1922.73	35.34	.0001
Source of Influence	1	74.80	1.37	.2456
Interaction	1	14.01	.26	.6136

Dependent Variable: Performance Risk Change Score

Source	DF	Sum of Squares	Mean Square	F Value	PR>F
Model	4	798.30	199.57	4.32	.0038
Error	61	3826.36	46.16		
Corrected Total	65	3614.66			

Source	DF	SS	F Value	PR > F
Valence of Influence	1	588.18	12.74	0.0007
Source of Influence	1	2.07	0.04	0.8328
Interaction	1	9.94	0.22	0.6442

Conclusions

The results of this study indicate that informal, interpersonal influence does have a significant impact on the level of perceived risk (refer to Table 2). This finding is in support of previous research which has found informal, interpersonal influence to significantly effect the perceived level of risk associated with the industrial purchase decision (Cardozo and Cagley 1971; Choffray and Johnston 1979; Krapfel 1982). This impact is regardless of whether the influence is within the organization or without the organization.

One implication for industrial marketing strategy may be a broadened view of the "buying center" (Wind 1967). Potential perceived risk influencers may be found outside of the set of individuals designated by the organization as part of the traditional buying center.

Future research may wish to incorporate additional analysis of specific outside roles (e.g., technical representatives, friendly, competing purchasing agents). By investigating the frequency of contact and the relative influence of each role, a better understanding of the effect of each on the organization's purchasing agent may be obtained.

Appendix

Economic Risk With Social Risk	r = .362	p < .0028
Performance Risk With Social Risk	r = .207	p < .094
Performance Risk With Economic Risk	r = .500	p < .0001

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SELECTING SUCCESSFUL PURCHASING AGENTS

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Abstract

This research investigates the overall and negotiation performance of 302 purchasing agents. The specific research questions addressed were: i) How important is the negotiation component of purchasing? ii) What buyers' demographic, personality, experience and task environment characterstics are most influencial on performance? iii) Is the Churchill, Ford and Walker model of sales performance useful in purchasing research?

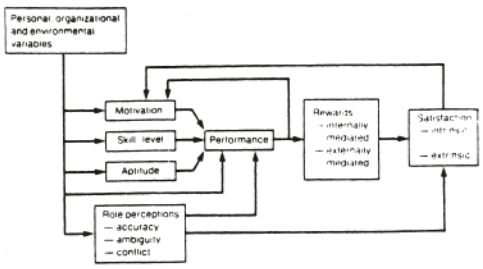
The findings were that: i) negotiation skills and performance are not an important performance factor. ii) Successful purchasing agents deal openly and honestly as opposed to opportunistically. iii) Buyer motivation and role clarity are important factors. iv) The Churchill et al. model is useful in purchasing research.

Introduction

According to Leenders, Fearon and England (1985) purchasing is the largest single dollar control area with which management must deal. Increasingly purchasing managers have sought to cut acquisition costs as one means of staying price competitive. This research is focused on the determinants of purchasing agent performance. The objective is to expand our understanding of purchasing to improve its effectiveness.

Churchill, Ford and Walker (1981) have adopted the performance model of Vroom to predict the performance behavior of sales personnel. Their model (See Figure 1) views performance as a an interaction among motivation, job aptitudes and skills, and task expectations. The skills and aptitudes required for effective purchasing and sales performance will differ. The salesperson will be skilled at sales presentations and the buyers at evaluating them. The rationale for the use of a sales performance model is that the maintainance of longterm trade relationships is bilaterally important and subject to similar influences. The primary focus of this research is on the role of two personality characteristics, dogmatism and Machiavellianism, and negotiation skill.

FIGURE 1
CHURCHILL, FORD AND WALKER
MODEL OF SALESPERSON PERFORMANCE



Personality as a Determinant of Purchasing Agent Performance

Chonko (1982) viewed negotiation as part of the purchasing function and assumed that highly Machiavellian people would be better negotiators. In terms of the Churchill, Ford and Walker (1981) model negotiation performance is an intermediate performance variable mediating overall performance. Chonko's (1982) link between negotiation behavior and Machiavellianism is well supported by Christie and Geis (1970). They describe highly Machiavellian people as manipulative, opportunistic and more resistant to persuasion than less Machiavellian people. Chonko (1982) found purchasing agents more Machiavellian than average but not more so than the average corporate employee. He found highly Machiavellian buyers were higher on self-reports of perceived overall performance. Druckman (1967) found that highly dogmatic people were more resistant to compromise and yielded fewer bargaining concessions and suggested that they might perform well in the bargaining aspect of purchasing. This would be true in those cases where the buyer-seller relationship was less important and would not be damaged by buyer intransigience.

Research Questions

The present study addresses the following questions: i) How important is the negotiation component of purchasing? Chonko (1982) assumes it is significant. This assumes the buyer-seller interaction is a competitive division of the profits of trade (See Dion and Mitchell 1986) not a cooperative venture. ii) Which aspects of a buyer's personality, work experience, and skills, educational background, personal demographics and task environment are

most influential on performance? Chonko (1982) and Christie and Geis (1970) suggest that more Machiavellian people will perform better. Their findings are only relevant if negotiation is a significant part of the purchasing task. Druckman (1967) suggests that dognatism will be influential. Churchill, Ford, Hartley,and Walker (1985) suggest that task skills, such as negotiation skills in the case of purchasing personnel, and role perceptions will most important. iii) How effective is the Churchill, Ford and Walker (1981) model in predicting purchasing performance both as a whole and on the basis of individual variables.

Research Method

Sample Respondents

This study obtained data from 302 (44.4% return rate) purchasing personnel drawn from the membership roster of the local National Association of Purchasing Management (N.A.P.M.) chapter of a large midwestern city. A statistical check revealed that there was no significant relationship between the date of return and any of the results. If the assumption is made that those returning their questionnaires later are more similar to those not responding than those responding early there is evidence that the sample was representative.

The average respondent worked in a firm with 1400 employees, with an annual growth rate of between seven and nine percent, was between 40 and 45 years of age, had three years of postsecondary education in a business discipline and had been in purchasing for 15 years with 11 of those years spent with his/her current firm.

Data Questionnaire

Pilot Study. The questionnaire was pilot tested on a sample of 40 N.A.P.M. members in a small midwest city prior to being sent to the main sample. This exercise revealed that the multi-item scales measuring Machiavellianism and dogmatism were of acceptable reliability. Five items were dropped from the twenty item negotiation skill scale to improve its internal consistency.

Reliability and Validity of Measures. The Machiavellianism, dogmatism, and measure of negotiation skills had alpha coefficients of 0.64, 0.78 and 0.87 respectively for the main sample of 302. The validity of the these scales is reported elsewhere, by Rokeach (1956), Christie and Geis (1970) and Raiffa (1982).

Questionnaire Administration. The questionnaire was mailed with a preaddressed, stamped envelop to the respondents and was self-administered. The use of a mailed questionnaire necessitated the use of self-report scales for respondent performance. Self-report scales have been used previously in the same application (see Chonko 1982). Churchill, Ford, Hartley and Walker (1985) argue that the size of correlations between predictors and performance data is not affected by the use of self-report measures of performance.

Research Variables. All research questions excepting those pertaining to the respondent's individual demographics and employment history, and company desciption and work environment, were answered on a seven-point scale which read: "strongly agree", "agree", "slightly agree", Neither agree nor disagree", "slightly disagree", "disagree", "strongly disagree".

Measures and Variable Definitions

Performance Measures. Three different measures were used to tap perceived performance on the spectrum of purchasing behavior. One read, "Overall my job performance makes a significant contribution to the company"; another, "I expect to be promoted within the next three years", and a third, "I usually get good product value for the company's money."

Two distinct, and possibly conflicting, negotiation performances were measured. The measure of short-term gains read, "I can usually get a sales representative to accept a lower price than he would like for his product". The measure of long-term performance read, "The trade relationships which I negotiate with the seller serve the company well for many years".

Motivation. A self-report measure of motivation read, "Please indicate on the scale below the amount of ambition you see yourself as having". The seven point response scale ran from "maximum amount" to "minimum amount". This measure was constructed to tap the three elements of motivation cited in the Churchill, Ford and Walker (1981) model: initiating action, expending effort, and persistence.

Satisfaction. The two summary measures of satisfaction read, "In general I like working here", and "All in all, I am satisfied with my job". These measures are components of motivation in the Churchill, Ford and Walker model.

Rewards. There were questions about the respondent's income and his discretionary authority. The latter question represented an effort to measure job autonomy which is linked to performance.

Personal Variables. These measures included: marital status, level and type of education, number of years in purchasing, years in the present firm, and sales experience.

Organizational Characteristics. Two organizational characteristics were measured. The number of employees, and the percentage growth in sales.

Working Environment. The dimensions measured were: decision autonomy, degree to which sales transactions are negotiated, rate of change of prices and products, industry competition, and the extent to which the purchaser dealt with familiar sellers.

Role Perceptions. The measure of role ambiguity read, "I am certain of the expectations of those for whom I buy." This measure captures the ambiguity dimension of the role perceptions variable in the research model. It was impossible to measure role accuracy and conflict in this research which questionned only purchasing personnel.

Aptitudes. The Churchill, Ford and Walker model defines age, sex, height, Machiavellianism and dogmatism as aptitudes. The Christie and Geis (1970) Mach IV scale measured Machiavellianism. The respondent read twenty statements and recorded his level of agreement or disagreement with each on a seven point scale. One-half of the 20 statements were scored positively. An example is, "The best way to handle people is to tell them what they want to hear." The other half were scored negatively. The maximum Machiavellianism score is 160 and the minimum 40 because a constant of 20 was added to each score to make them comparable to Chonko's (1982).

Rokeach (1960) defines highly dogmatic people as closed in their system of beliefs. The scale used was devised by Rokeach (1956). For all 20 items agreement with the statement indicates high dogmatism. An example is, "There is only one correct philosophy."

Measure of Negotiation Skill. If the negotiation component in purchasing is important negotiation skill should be linked to purchasing performance. A scale was formed by selecting 15 of the 34 characteristics thought by a sample of 32 bank lending officers to describe successful negotiators (see Raiffa 1982). These requiried an agree or disagree answer. An example is, "I am good at debate".

Other Variables Measured. These were: career mobility, attitude toward and perceived industry usage of buyer-seller reciprocity, number of courses completed towards the CPM professional designation, whether or not the respondent had a course in negotiation. They were included as the results were of empirical if not theoretical interest to the researcher.

Research Findings and Discussion

The correlation coefficients reported here range from 0.10 to 0.39. Although these correlations are not impressive in size they are for the most part similar to the results obtained by Churchill, Ford, Hartley and Walker (1985) in the most extensive study of the determinants of salesforce success to date. They found the correlations between performance and predictor variables of: aptitudes 0.17, skills 0.28, motivation 0.23, role 0.30, personal factors 0.17, and organizational and environmental variables 0.14.

Two dissimilarities with the Churchill, Hartley, Ford and Walker findings deserve comment. First, the relationship of role factors and motivation to performance reported here are slightly lower. One possible reason for this is that in the present study only the clarity of the job expectations dimension of role perceptions was measured whereas Churchill, Ford and Walker (1981) specify a complete model composed of role perceptions accuracy, ambiguity and conflict. The measurement of these latter factors would require a comparison of the respondent's and company's perceptions which was not attempted here. Thus it was not possible to utilize this more complex model in the present study because of the data requirements. Second, the model specifies an expectancy valence model of motivation whereas the the sole measure utilized in the present study was ambition.

The Role and Importance of Negotiation in Purchasing Agent Performance

Chonko (1982) has argued that highly Machiavellian people should be good purchasing personnel. He based his reasonning on the work of Christie and Geis (1970) which suggested that the more manipulative and opportunistic highly Machiavellian people were better negotiators than less Machiavellian people. Indeed, Chonko (1982) did find that highly Machiavellian people reported higher levels of purchasing performance. The present research found that: i) Less Machiavellian people were better purchasing performers on two measures of overall performance; job contribution ($r=0.16^*$) and product value ($r=0.14^*$). (Note: Hereafter * means significant at the 0.001 level, and ** means significant between the 0.001 and 0.01 levels.) ii) The sample of 302 purchasing personnel reported a high level of performance despite the fact that they were significantly less Machiavellian than Chonko's respondents. The respective means were 80.9 and 99.6. iii) Contrary to Chonko's assumption, negotiation performance was not a large influence on overall success. Skill at winning price concessions, one measure of negotiation performance, was not related to any measure of overall performance. The measures of negotiation performance accounted for only 5% of overall performance variation as measured by the job contribution measure, 1% as measured by promotion expectation and 17% as measured by product value. The price concessions measure of negotiation performance accounted for only 1% of the 17% variation in product value performance. iv) Highly dogmatic and mobile buyers proved to be superior at securing price concessions but were not better overall performers. v) The strongest link between negotiation and overall performance was that between the product value and trade

relationship measures (r=0.39*). However, the trade relationship measure does not tap the exploitive or manipulative aspects of negotiation but the cooperative ones. Buyers obtain product value by building up vendor trade relationships with trust and effort. vi) The highest performance was reported by buyers who favored a policy of honesty (r=0.21*) and openess (r=0.16) with vendors. Purchasers were rewarded (with income) for job contribution to the firm and securing good long term trade relationships as opposed to securing price concessions. vii) The measure of negotiation skill employed in this research predicted both overall and negotiation performance well. Negotiation skill was correlated with the job contribution (r=0.30*), promotion expectation (r=0.27*) and product value (r=0.15**) measures of overall performance and with the price concessions (r=0.34*) and trade relations (r=0.16*) measures of negotiation performance. However, the nature of this predictive power is revealed by the fact that the most powerful item (r=0.39*) tapped the purchaser's awareness of not only his own but the seller organization's needs; the cooperative aspect of negotiation. If the negotiation skill measure had tapped only negotiation skills its linkage to the overall performance variables should have been improved by controlling for the amount of negotiation content in the buyers' transactions. This was not found to be true. It can be concluded that this scale measured non negotiation factors which influenced performance because it was found to be linked to performance.

The picture of buyer-seller interaction obtained from the results does not resemble the conventional meaning of the term "negotiation." The important processes appear to be cooperative rather than the combative adversarial aspect of negotiation. Successful buyers manage vendor relationships as a means of achieving purchasing objectives. (See Hakanson 1982 for further discussion.)

Describing Successful Buyers

Those buyers reporting successful purchasing performance had a number of characteristics in common.

First, successful buyers were highly motivated. Ambitious buyers scored high on all three measures of overall performance; contirbution (r=0.15**), promotion expectation (r=0.16**) and product value (r=0.28**) in addition to the trade relationship (r=0.17**) measure of negotiation performance. These findings are consistent with the motivation literature (see Vroom 1967). An explanation of this finding would be that motivation is essential to the performance of the many tasks, some tedious no doubt, necessary in maintaining a productive trade relationship and securing product value. Price concession performance was not linked to motivation.

Second: The "satisfied" measure of satisfaction was correlated to the job contribution and promotion expectation measures of overall performance r=0.38* and r=0.22* respectively. The values for the "like" measure were 0.21* and 0.15**. This finding is consistent with the satisfaction literature (see Porter and Lawler 1968 and Vroom 1967). If the conventional interpretation is adopted, that performance leads to rewards which in turn lead to satisfaction, the implication is that managers should direct their efforts towards facilitating performance rather than satisfaction.

The performance-reward-satisfaction sequence also explains the lack of relationship found between negotiation performance and satisfaction. If, as has been found in the present study, negotiation performance is not linked to overall performance then it would not be rewarded and would not result in satisfaction. The Churchill, Ford and Walker model (1981) shows satisfaction as an important determinant of motivation. This argument also explains why no relationship was found between motivation and the price concessions measure of negotiation performance.

Third, buyers who were more certain of the expectations of their organizations reported higher overall and negotiation performance. Expectations correlated 0.27* with contribution, 0.15** with product value, 0.21* with accepting lower offers and 0.19* with trade relationships. An explanation is that clarity of expectations is particularly important in the purchasing function because purchasing has an inherent multiplicity of goals. Should the buyer stress low acquisition costs or the development of long term vendor relationships? Should he/she single source to achieve cost efficiencies or insure product supplies by developing multiple sources? The message for managers is that buyers need unambiguous standards for performance which are clearly communicated. An implication of the lack of a relationship with the concessions measure is that concessions are not a prominent expectation of buyers.

There were also a number of interesting contrasts among successful buyers.

First, there was no significant difference between males and females on any of the performance measures excepting the promotion (sign=0.01) expectations measure. Females were significantly more confident of promotion (sign=0.01). However, females had significantly lower incomes. The mean income for males was at the top of the $30-35,000 range while females were in bottom of the $25-30,000 range (significant at the 0.01 level). Sex accounted for 8.4% of the variation in income when the respondents' age, firm size, education and purchasing experience were held constant (8.22, sign=0.004).

The income bias against female purchasing

personnel should be cause for alarm for several reasons. The difference was substantial, statistically significant and applied to a large proportion of the respondents (18.7%). In addition to the business ethics of pay inequity the bias may have negative motivational effects. This is of practical managerial concern given the link between motivation and performance. However, by way of comparison, women have fared well in purchasing. Sawhill (1973) reported unexplained disrepancies of from 12 to 31% in her review of studies conducted in many industries. Also, a factor which might correct the discrepancy is that women were more confident of promotion than men.

Second, there was no consistent age difference in performance. Older buyers tended to be less confident of promotion (r=0.30) but did better on the trade relationship measure of negotiation performance (r=0.29). Older buyers are perhaps less confident of promotion because they are closer to retirement age given a mean age in the 40-45 year range and may by then have plateaued in their careers. On the other hand their more extensive experience and vendor contacts could explain their superiority in securing long term trade relationships. One might have expected their superior experience to result in higher overall performance. There was however, no link found between experience and performance. This might be due to the tendency of people to compare themselves to their experience or age peers in the self-report measures used here.

Third, career mobility was not a factor affecting performance except for the promotion (r=0.18*) and concessions (r=0.31*) performance measures where more mobile buyers were superior. Career mobile buyers can be thought of as having a short term time horizon. Their awareness of alternative positions suggests a brief tenure with their present firm. Their success at securing seller concessions may represent efforts to attain rapid job performance results which they hope will result in promotion. Most of the present research suggests that their efforts are misplaced because the development of long term trade relationships is more important than short term concessions.

Finally, CPM certification was not linked to any measure of performance. If this finding is supported by further research an investigation of the CPM course instructional content would be warranted. There was a link (r=0.15*) between certification and approval of buyer-seller reciprocity. Certification may be successful in instilling business ethics in purchasing practitioners.

Modelling Purchasing Performance

The factors in the Churchill, Ford and Walker (1981) model of sales success accounted for 32% of the variance in overall purchasing performance as measured by the job contribution variable, 25% as measured by product value, and 23% as measured by promotion expectations. The model also accounted for 28% of the variation in negotiation performance as measured by the trade relationship criteria, and 16% as measured by the price concessions measure. By way of comparison the model variables accounted for 29.3% of sales performance variation in the Churchill, Ford, Hartley and Walker (1985) analysis of 116 studies. (Note: This figure was approximated using the simple correlations reported in the study.)

The application of this sales performance model to purchasing performance was justified by the results because the percentage of accounted for variance was significant and similar to the sales performance application. This suggests, but does not prove, that the influences on sales and purchasing performance are similar. One implication is that the sales performance model has utility as a conceptual tool for the study of purchasing. Another is that the findings reported here should be of interest to those managing sales personnel dealing directly with purchasers.

If the job contribution measure of overall performance is used as a criterion, the five best predictors of performance are, in order of the percentage of variance accounted for: i) buyer job satisfaction ii) an item on the negotiation skill scale which read, "I am aware of the needs and reactions of both my own organization and my opponent's organization in negotiation sessions." iii) an item on the Machiavellianism scale which read, "Never tell anyone the real reason for doing something unless it is useful to do so." High performers disagreed with this statement. iv) another item on the Machiavellianism scale which read, "Honesty is the best policy in all cases." High performers agreed with this statement. v) buyer certainty of their company's expectations.

In other words, the manager who is selecting purchasing agents should look for individuals who like their jobs, are knowledgeable of and sensitive to the vendor and his business, are open and honest with vendors and are well informed about their firm's goals and policies.

The results presented here are useful to both buyer and seller management. Because they reveal the nature of the buyer-seller interaction process and the factors affecting it they facilitate employee selection, training and supervision. Specifically, these findings should aid in the design of sales and purchasing employee screening tests and personal interviews. Although the performance factors investigated here do not account for a majority of the variation in purchasing performance they do offer specific guidelines which can be used to reduce expensive hiring mistakes. An example would be the finding that less Machiavellian, not more Machiavellian, people make better purchasing personnel.

Summary and Conclusions

The major findings in this study were the following: i) Negotiation skill, in the sense of obtaining price concessions, is not a significant influence on overall purchasing performance. ii) Successful purchasing personnel are those who favor open, honest and cooperative vendor relationships and avoid opportunistic and short term gains, such as vendor price concessions. iii) Managers are advised to pay careful attention to the motivational levels and internalization of firm expectations in purchasing employees. Satisfaction and performance should result. iv) The Churchill, Ford and Walker (1981) model of sales performance is equally applicable to purchasing performance.

The results presented here clearly contradict Chonko's (1982) finding that highly Machiavellian people make superior purchasers. The discrepancy may be the result of Chonko's small sample (125) and use of a single performance measure. Chonko's assumption that negotiation is a significant factor in purchasing was not supported. The implication is that buyer-seller relationships are better conceived of as co-operative versus competitive. Hakanson (1982) describes this cooperative relationship well.

These findings hold several implications for industrial sales force managers. First, salespersons will encounter aggressive, manipulative purchasing agents only as exceptions. The usual experience will be a buyer whose goal is a mutually beneficial and harmonious trade relationship with the seller. Second, sales training stressing the defense of sales propositions against hostile and unconstructive counterattacks is contraindicated by the results. Third, sales training should stress salesperson listening skills and the knowledge which enables the salesperson to find win-win sales offers which enhance the longterm trade relationship. Fourth, sales renumeration should reflect a stress on the development of these long term relationships rather than the immediate transaction.

Much work needs to be done to construct a valid and comprehensive model of purchasing behavior. It is hoped that a useful first step has been taken here.

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THE RELATIONSHIP BETWEEN GROWTH STRATEGY AND MARKET PERFORMANCE IN TECHNOLOGY-BASED MANUFACTURING COMPANIES

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Abstract

This paper examines the relationships between product-market policy options, market performances and the growth strategies adopted by forty-two technology-based manufacturing firms. The results show that product-market policy options are significantly different for diversified firms compared to firms which pursue product or market-based strategies. Additional analysis indicates that the market performances of diversified firms are weaker than that of other firms. Few differences in performance were noted among firms pursuing product development, market development, or market penetration strategies, i.e. the marketing managers' perceptions and objective evaluations of market performances are similar for firms pursuing these strategies.

Introduction

Growth is often a good indication of a firm's current and long term health since it can be difficult to survive without it. For instance, without a compensating growth objective, a mature firm will be unable to offset losses brought about by competitive attacks on its more vulnerable business. Alternatively, more youthful firms may require growth to reach "critical mass" (see Child and Kieser, 1981 for a review of growth motives). Thus, growth objectives are not only healthy, they may be essential to the firm's survival.

Managing growth in technology based firms is an especially difficult task, particularly in the early-growth stage when the initial product-market strategy is being tested (Robinson et al 1984). In part, this is so because the external environment is characterized by technological and market uncertainties, customer demands for high levels of product performance, and the threat of potential competition. It follows then that a measurable improvement in market performance may be achieved by understanding the implications for performance of alternative growth strategies. Unfortunately, little is known about the growth strategies followed by technology-based manufacturing firms.

Purpose

Accordingly, the purpose of this exploratory research is to examine the growth strategies of a sample of technology-based manufacturers. The following questions will guide the investigation.

1) What product-market policy options are consistent with different growth strategies, and to what extent are they followed by technology-based manufacturing firms?

2) What is the relationship between growth strategy and market performance?

3) What implications can be drawn regarding the growth strategies pursued by technology-based manufacturing firms?

Concepts and Components of Growth Strategies

As a general definition, a firm's strategy is a statement of the fundamental means it will use to try to achieve its growth objectives. Further, there is consensus that there are at least three core components to any firm's strategy (see Aaker, Chapter 1, 1984, for a typical presentation). These components are:

1) Scope, e.g., the number of unique product-markets targeted by a firm;

2) Resource deployment, i.e., the pattern of resource deployments that will help the firm achieve its objectives; and,

3) Synergy, i.e., the joint effects that are sought from the firm's resource deployment and/or scope decisions.

In addition, product standardization and product innovativeness are included because of their potential relevance to technology-based manufacturing firms.

These components can be used to operationalize the concept of strategy at all levels within the hierarchy (e.g., corporate, business, or product-market level), although the relative importance of these components may differ (see Hofer and Schendel, Chapter 2, 1978 for a discussion of this point). It follows then, that the hierarchical level at which strategies are considered has important implications for research design. Accordingly, since this research focuses at the business level and is concerned with product-market segmentation choices, Ansoff's (1965) product-market growth matrix is used to describe the market strategies of the firms in the sample (Figure 1).

FIGURE 1
GROWTH MATRIX

mission \ product	present	new
present	market penetration	product development
new	market development	diversifi-cation

Source: H.I. Ansoff, 1965. Corporate Strategy, (New York: McGraw -Hill), p. 109.

Market penetration (MP), indicates a growth direction through the increase of the firm's existing product-market shares. In market development (MD), new customer groups are sought for the firm's existing products. Product development (PD) creates new products for existing markets, while a diversification growth strategy (DIV) leads the firm into creating new products for new customer groups.

Reference to the marketing literature led to our development of selected product-market policy options, hypothesized to be consistent with each growth strategy (Table 1). (See Hambrick et al. 1983 for a typical discussion of R & D decision-making and Aaker 1984 for a discussion of relevant marketing issues).

TABLE 1
SELECTED PRODUCT-MARKET POLICY OPTIONS BY GROWTH STRATEGY

	DIV	PD	MD	MP
Resource Deployment				
marketing budget	low	low	high	high
R & D Budget	low	high	low	low
Scope				
markets	broad	narrow	broad	narrow
product line				
width	wide	?	narrow	narrow
depth	shallow	deep	shallow	deep
Synergy				
technology	?	great	some	some
production	?	great	some	some
markets	?	some	some	great
channels	?	some	some	great
Product Standardization	some	great	some	some
Product Innovativeness	low	high	medium	medium

For both market oriented strategies (MP and MD) support for the presence of relatively high levels of market expenditure are hypothesized; R & D expenditures are expected to be low relative to other strategies since product development is not the primary focus of these strategies. In contrast, relatively high levels of R & D expenditure should be incurred by those firms which pursue product development. Further, since the aim of diversification is typically efficiency, it is expected that relative market and product expenditures will be low for diversified firms.

For firms pursuing market penetration strategies, scope is hypothesized to be narrow, with numerous product extensions designed to achieve depth of penetration within the firms' served markets. In contrast, market development is hypothesized to be associated with broad market scope, but little product width or depth in order to achieve production efficiencies. Product development will likely emphasize the development of product extensions and new lines within a relatively narrowly defined market. Diversified firms will attempt to seek efficiences (i.e., will offer few product extensions) across a number of markets and, therefore, will be characterized by broad market scope with minimal product depth.

Product-market synergies are hypothesized to be few for diversified firms since synergy, to the degree that it exists at all, will be associated with the potential to share financial and management resources. Synergies are likely to be more clearly indicated in the latter three strategies and are associated with either marketing skills, product technologies, or both. However, to the extent that a particular strategy focuses primarily on a particular functional area (i.e., products or markets) synergies are expected to relate more strongly to that area and less to the secondary area.

Since the primary focus of the market oriented strategies (MP and MD) is likely to be on effectiveness, and on efficiency for diversified and product oriented firms, the extent of product standardization achieved will likely reflect these objectives. Product innovativeness is hypothesized to be high for product oriented firms; less for others.

Design

Sample and Method

The data reported were collected from a convenience sample of forty-two technology based manufacturing companies in Canada during 1985. To minimize intergroup variations, the target popultion was restricted to the manufacturers of micro-electronic components or applications (e.g. data transmission, telecommunications, and sensing equipment). To overcome the problem of comparing responses from very large with very small companies, an arbitrary size limit was selected as a cut-off rule for company inclusion. Although different indicators of size can be used, number of employees is a common measure in the literature. On this basis and because most Canadian technology-based companies are relatively small (de Bretani and Droge 1985), companies employing between 15 and 500 persons were selected.

Various manufacturing and technology directories were used to identify firms that fit the size and activity conditions imposed on the sample. Qualifying firms were initially contacted by telephone to verify directory information and to obtain the name of the head of marketing or his equivalent. Personal letters identifying the project's objective were then sent to these individuals. This was followed by a telephone call to gain support for the research and a request for an on-site interview.

Size of the sample firms ranged from 15 employees to 500 employees. (mean=165; s.d.=150). The firms had been in existence between 2 and 34 years (mean=14; s.d.=10). The firms' sales ranged from $600K to $40,000K (mean=$12,000K; s.d.=$9,000K). 68% of firms were partially or wholly family owned.

Measures

The interviews obtained data on the priority accorded each of the previously identified growth strategies by marketing managers. Further, the marketing managers were asked to indicate resource deployments as a percent of sales for both marketing and research and development expenditures. Data in regard to functional policies were collected using a number of ratio and five-point scales. Performance data obtained in the research included three measures of sales performance, domestic and international market shares, and four qualitative assessments of marketing performance measured on a five-point scale ranging from Above Industry Norm (1) to Far Below Industry Norm (5).

Results

The firms evidenced considerable variability in their choice of growth strategy. The greatest number of firms (45%) reported product development as their first priority. Market development was reported by 24% of firms, followed by market penetration (17%), and diversification (14%).

Comparative product-market functional policies pursued by the sample firms (arranged by principal growth strategy) are shown in Table 2. Comparative market performances are shown in Table 3. In order to determine if specific product-market functional policies and market performances differed across principal growth strategies pursued, a student's t or chi square was computed for each factor (Tables 4 and 5).

TABLE 2
COMPARATIVE PRODUCT-MARKET POLICY OPTIONS BY GROWTH STRATEGY

Characteristics	Sample (n=42)	Diversification (n=6)	Product Dev. (n=19)	Market Dev. (n=10)	Market Penetration (n=7)
Marketing/Sales Budget (% of sales)	8.8(6.8)[1]	11.3(9.2)	5.6(3.8)	11.7(8.4)	11.2(7.4)
R & D Budget (% of sales)	10.5(7.4)	8.4(6.1)	18.1(12.6)	15.4(13.5)	13.0(11.1)
Number Product Lines	3.9(3.2)	4.1(2.2)	3.2(1.3)	3.8(1.7)	3.0(2.1)
Number Items in Major Line	32(48)	7(9)	34(42)	22(47)	24(37)
Product Line Relatedness[2]					
technology	24,17,59	50,50,0	22,17,61	12,22,66	16,34,50
production	20,24,56	33,17,50	17,33,50	11,11,78	17,17,64
markets	26,24,50	33,33,34	28,17,55	33,44,23	17,0,83
channels	12,34,54	0,50,50	18,28,54	22,33,45	0,50,50
Standardization[3]	21,29,40,10	0,16,84,0	33,28,28,11	13,13,52,22	14,43,43,0
Number Accounts	100(108)	58(36)	112(50)	85(60)	136(63)
Innovativeness of Technology[3]	27,33,20,20	33,50,17,0	57,14,14,14	11,44,33,12	22,28,17,13

[1] mean shown first; standard deviation in parentheses.
[2] read: % unrelated, % slightly related, % closely related
[3] read: % high above industry norm, % above, % at norm, % below.

TABLE 3
COMPARATIVE MARKETING PERFORMANCES BY GROWTH STRATEGY

Performance	Sample (n=42)	Diversification (n=6)	Product Dev. (n=19)	Market Dev. (n=10)	Market Penetration (n=7)
Sales Revenue ($millions)	22.9(43.7)[1]	9.21(4.1)	13.01(23.2)	11.6(14.0)	15.8(15.3)
Average Annual Sales Growth ($millions)	1.2(.8)	.8(.2)	1.1(.5)	1(.2)	1.3(.9)
Average Sales/ Account ($000's)	61(58)	50(10)	70(80)	50(42)	54(48)
Distribution Effectiveness[2]	5,28,46,21	0,0,50,50	6,30,53,11	0,44,33,23	14,29,43,14
Ability to Spot Market Trends[2]	20,47,20,13	17,67,16,0	61,22,11,6	33,33,11,23	57,14,29,0
Ability to Respond to Market Trends[2]	27,42,17,14	17,50,33,0	39,39,6,16	0,45,44,11	43,43,14,0
Customer Loyalty[2]	31,35,23,11	33,17,17,33	28,39,22,11	22,44,34,0	57,29,14,0

[1] mean shown first; standard deviation in parentheses.
[2] read: % high above industry norm, % above, % at norm, % below.

TABLE 4
PRODUCT-MARKET POLICY OPTIONS BY GROWTH STRATEGY

	Diversification (n=6)	Product Dev. (n=19)	Market Dev. (n=10)	Market Penetration (n=7)
Market Budget (% of Sales)	11.3 ^{a*}	5.6 ^{a*,d*,e*}	11.7 ^{d*}	11.2 ^{e*}
R & D Budget (% of sales)	8.4^{a*}	18.1^{a*}	15.4	13.90
Number of Product Lines	4	3	4	3
Items in Major Product Line	7^{a*,b*,c*}	34^{a*}	32^{b*}	24^{c*}
Product Line Relatedness[1]				
technology	unrelated^{a*,b*,c*}	closely^{a*}	closely^{b*}	closely^{c*}
production	closely	closely	closely	closely
markets	closely^{c}	closely	slightly	closely^{c}
channels	slightly	closely	closely	closely
Standardization of Product Lines[1]	std.^{a*,b*}	cust. ^{a*} group	cust. ^{b*,f*} group	cust. ^{f*} group
Innovativeness of Technology[1]	above^{a}	high above^{a,d}	above^{d}	above

* t<.05, otherwise t<.10

Columns sharing the same letters are statistically significant at the above probabilities.

For example, "a" indicates a statistically significant difference, at P:<.05, in marketing budgets between firms pursuing a diversification marketing strategy and those firms whose priority is product development.

1 modal response shown

TABLE 5
MARKETING PERFORMANCE BY GROWTH STRATEGY

	Diversification (n=6)	Product Dev. (n=19)	Market Dev. (n=10)	Market Penetration (n=7)
Sales Revenue ($ millions)	9.2^{c*}	13.0	11.6	15.8^{c*}
Average Sales Revenue/ Marketing Employee ($ millions)	0.90^{a*,b*,c*}	1.24^{a*}	1.37^{b*}	1.11^{c*}
Average Annual Sales Growth ($ millions)	0.83^{c*}	1.15	0.97	1.30^{c*}
Domestic Market Share (%)	5^{a*,b*,c*}	23^{a*,d}	32^{b*,d}	24^{c*}
International Market Share (%)	10	5^{d}	14^{d}	9
Distribution Effectiveness Compared to Industry Norm[1]	below^{a*,b*,c*}	norm^{a*}	above^{b*}	norm^{c*}
Ability to Spot Market Trends Compared to Industry Norm[1]	above^{a*,c*}	high above^{a*,e*}	high above	high above^{c*,e*}
Ability to Respond to Market Trends Compared to Industry[1] Norm	above^{a}	high^{a} above	above^{d}	high above
Customer Loyalty Compared to Industry Norm[1]	high above^{c}	high above	above	high above^{c}

* t<.05, otherwise t<.10

Columns sharing the same letters are statistically significant at the above probabilities.

For example, "a" indicates a statistically significant difference, at P:<.05, in distribution effectiveness compared to the industry norm between firms pursuing a diversification marketing strategy and those firms whose priority is product development.

1 modal response shown.

Apparently, firms pursuing product development spend significantly less on marketing activities (5.6% of sales as compared to approximately 11% of sales for other firms), but relatively more on research and development (approximately 18% of sales as compared to expenditures ranging between 8% and 15% for others). Surprisingly, the firms did not differ with respect to number of product lines sold, although diversified firms provided fewer product extensions than did other firms. Diversified firms achieved fewer product-market synergies than did other firms and tended to produce more standardized products than did firms pursuing product or market-based strategies. Firms pursuing product-based strategies reported achieving technological leadership relative to other firms.

Diversified firms achieved significantly poorer market performances than did other firms. Specifically, sales revenues, growth in sales, and sales efficiency (i.e., average sales revenue/marketing employee) were less for these firms than for all other firms. Statistically significant differences were noted most often on comparisons of diversified firms with those reporting market penetration as the principal growth strategy. Also, domestic market shares were less for diversified firms than for all other firms, although no differences were noted in degree of internationalization of these firms relative to others. Further, marketing efforts were less effective for these firms relative to firms pursuing product or market based strategies. Few performance differences were observed across firms which pursued product development, market development, or market penetration strategies. Market development strategies achieved significantly greater domestic and international market shares than product-based strategies.

Discussion

The research shows that different firms take significantly different positions in regard to choice of a principal growth strategy. Three of these strategies - product development, market development, and market penetration - retain contact with the firm's former business along one dimension. The fourth - diversification - takes it into a completely new area. Not unexpectedly, therefore, the contrast in overall product-market policies is greatest for diversified firms relative to all other firms. These differences are reduced choice within product lines, a high degree of product standardization, and technological followership.

The real issue, however, is not whether different growth strategies are associated with different product-market functional policies. One would expect to find such differences and, in fact, their presence is essentially a test of the internal consistency of a stated growth strategy. Rather, the issue is whether a particular strategy out-performs another or whether all strategies lead to similar performances.

Of course, selection of a given strategy will depend upon a firm's perception of its own strengths and weaknesses vis-a-vis those of its competitors and upon its relative standing in the market place. Then too, stage of market evolution (Kotler, 1976) will also influence strategic choices. None the less, this research supports the belief that diversified strategies for these firms are less effective and efficient than other strategies. Further, descriptive evidence obtained during the interviews indicates that top management within these firms has been unable to adequately specify the nature of the firm's business, to articulate objectives to be achieved, or to identify policies appropriate to achieving stated objectives. Taken together, the evidence suggests the absence of an appreciation of the benefits of a "common thread" and indicates an impaired competitive ability.

The evidence is less clear regarding the relative effectiveness and/or efficiency of product and market-based growth strategies. However, to the degree that relative market position is indicative of a firm's long term competitiveness, market-based growth strategies may be preferred over the former. Indeed, recent research suggests that many technology-based companies do not have the necessary capability to sustain product-based strategies (see Boag 1986 for a review). Alternatively, a market-based operational focus may be more suited to achieving a sustainable differential andvantage.

Finally, this research is limited by its exploratory nature and small sample size. More extensive future research should focus on extending our understanding of "high-tech" growth strategies and providing more in-depth insights into some of the key issues identified in this research. Specifically, future research should be directed at identifying the specific nature of resource deployments that are used to establish advantages over competitors within each of the growth strategies. Further, subsequent research needs to examine the relationship between growth strategies and market evolution. The importance of technology- based industries to the overall economies of many countries deem this research as being warranted.

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THE DISTINCTIVE NEEDS AND PROBLEMS IN INDUSTRIAL GOODS CLASSIFICATION

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Abstract

Product classification holds great potential for the industrial marketing manager. Considerable confusion exists, however, regarding the manner in which products can most effectively be classified. To address this problem, a classification of classification schemes is presented in this paper. It is argued that many available schemes do not actually classify products, but instead focus on buyer behavior and market segmentation. Efforts to produce universal schemes which ignore the consumer/industrial marketing dichotomy are presented as shortsighted. Instead, a variety of schemes are needed which reflect the diverse strategic requirements of the marketer.

Introduction

Hunt (1976, p.13) explains, "every science seeks to describe and classify the structure and properties of its basic subject matter." As the simplest form of measurement, classification is the primary means for organizing phenomena (Reynolds, 1977). Within the discipline of marketing, classification schemata are important both in theory development and in helping marketers address real-world problems (Bell, 1986; Murphy and Enis, 1986). Once a workable classification scheme has been uncovered, it may become the basis for the development of a theory which accounts for any regularities we have observed. Further, the ultimate criterion for evaluating a given approach to classification is its usefulness: How useful is the schema in solving the problems faced by marketing managers? (Hunt, 1983). Krigman (1983), for example, argues that a firm must have a realistic classification of its products before establishing a marketing posture.

The science of marketing has, over the years, developed numerous schemes for classifying such phenomena as goods, customers, costs, innovation adoption, organizations, information, risk, product/market strategies, as well as the subject areas which constitute the nature and scope of the discipline itself. The greatest interest by marketers in classification has centered around consumer behavior phenomena and, historically, consumer goods (e.g., Copeland, 1923; Holton, 1958; Bucklin, 1963). Engel, et al. (1978) note a very large number of available typologies, and raise concerns about the considerable heterogeneity in the categories used. Similarly, Enis and Roering (1981) characterize extant product classification schemes as ambiguous and imprecise, but maintain that such schemes "continue to provide a logic which is readily understood, used and appreciated in marketing."

The present study seeks to critically assess product classification as it applies to industrial goods, which have traditionally been classified separately, but more recently have been integrated into proposed universal schemes. Major conceptual issues surrounding the practice of classification are discussed, and a classification of available classification schemes is proposed. The distinct problems posed by industrial goods will be highlighted. It is argued both that industrial products benefit from separate classification, and that multiple schemes are needed. Guidelines are provided to the marketing manager for designing classification schemes tailored to his/her own needs.

The Nature of Industrial Products

In its simplest form, a product is a bundle of properties or attributes. The extensive focus placed in the marketing literature on consumer products may be due in part to the fact that the properties of these products are more easily internalized. All of us have extensive experience on a daily basis with consumer goods. Industrial products tend to be more complex, and the relevant properties are typically more technical in nature. The industrial product is one which represents a multiplicity of physical and performance specifications (Corey, 1983). Webster (1979, p.16) explains, "The same man who, as a consumer, settles for plain shaving cream if he can't find lemon lime, will be unwilling, as an industrial buyer, to accept a bolt with threading 30 to the inch when his specifications call for 28."

Industrial goods carry a larger unit dollar value, and are frequently sold in larger quantities. Often they are custom-made or tailored to the specific application needs of the customer firm. Further, these products are marketed at different stages of completion, with much of what is sold taking the form of raw and semifinished goods. The buying firm purchases for inventory as well as immediate usage. It may purchase a given product for a number of differing uses. In some instances, the buyer has the option of making or leasing the product rather than purchasing it.

The industrial product attribute bundle may also include technical assistance for installation and equipment operation, service before and after the sale, and an emphasis on prompt, reliable delivery. Packaging requirements have more to do with protection than with product information. Finally, industrial products are distinguished by the fact that their satisfactory performance is critical for the daily operation and longer term economic viability of the customer firm.

Why Industrial Product Classification Is Important

Given these general characteristics of industrial products, it is important to note the extensive diversity which exists among such goods. Within the category labeled "industrial" one could conceivably include anything sold to

commercial, governmental, or institutional organizations (Haas, 1982). This would encompass everything from nuclear generators to telephones, from customer-made machinery to standard wrenches. It would also contain office supplies, spare parts, aftermarket goods, and industrial services.

With such a wide range of product types, and the fact that each has multiple dimensions, it is important that we develop approaches for reducing products to managerially useful sets of variables. Virtually every analytical problem requires that objects be classified in terms of some set of measurable characteristics (Frank and Green, 1968). Product classification serves this purpose. A product classification scheme represents an attempt to partition the universe of products into homogeneous groups (Hunt, 1983). In practice, these groups can be homogeneous with respect to just one or a set of characteristics, although classification becomes difficult beyond two or three characteristics (Frank and Green, 1968). This limitation undermines the practicality of many schemes, given real world complexities.

Product classification schemes also serve as a basis from which propositions and hypotheses can be developed (e.g., Blalock, 1969). Thus, Aspinwall's (1961) color scheme generated propositions concerning the nature of product distribution, while the buyclasses of Robinson, Faris and Wind (1967) have produced hypotheses concerning influence in the industrial buying process.

Management may also find industrial product classification schemes of use in planning and day-to-day decision making. An appropriately designed scheme can be used to identify gaps in product line depth and breath, or conversely, may suggest areas in which there is overlap or too much concentration. In addition, schemes can be helpful in the allocation of marketing resources across products. Based on how products are classified, the marketing manager can also develop strategies concerning ways in which certain products in a line can be used to support others. Further, product schemes are often designed to assist in segmentation. In fact, it would seem that classification is a fairly underutilized tool in marketing decision making, given its potential. The extensive emphasis among strategists on product portfolio analysis would appear to be a tacit recognition of this potential.

Classifying the Classification Schemes

The sizeable number of approaches available for classifying both consumer and industrial products suggests a) this is an area of some consequence, b) a substantial amount of disagreement regarding how products should be classified, and c) the potential for much confusion on the part of the marketing manager as to how to utilize classification in the product planning process. As a result, some clarification is called for.

In attempting to cast the many available schemes into a more manageable form, a taxonomy for product classification schemes is proposed in Exhibit I. It appears that classification has been approached from one of four possible bases: product characteristics, buyer behavior, product use or application, and product performance.

Product characteristics refer to descriptive, and typically both measurable and observable, aspects of an item, including its unit value, replacement rate, distributive velocity, customization, and stage of completion. Buyer behavior schemes rely upon customer perception of risk and product quality, their willingness to engage in search or shopping behavior, and their past experience with the product, among others. Product use schemes focus on how the buyer applies the industrial product to his company's operations. Thus, the manner in which buying firms treat the purchase from an accounting standpoint, how they have organized their purchasing operation, and how the item enters or affects their production process become the relevant bases for classification. Finally, product performance schemes provide post hoc categorization based on marketplace results. The emphasis is placed on the rate of sales growth, relative market share, and profitability.

These four categories are not mutually exclusive. For example, Miracle's (1965) product characteristics may, in effect, define the category into which an item will fall in Webster's (1979) product usage scheme. They are helpful, though, both in distinguishing among schemes, and in suggesting when any one scheme might be more appropriate. For example, the marketing manager may want to utilize schemes based on product characteristics when attempting to develop the link between the nature of the product itself and marketing strategy. Buyer behavior schemes become more appropriate when one wishes to identify specific products with types or classes of buyer behaviors (i.e., market segments) for the purpose of targeting his/her marketing efforts. The product use/application schemes should be relied upon when one is interested in developing the relationship between how the product is used and how it is sold. The fourth type of scheme, those based upon product performance, are valuable when one is involved with resource allocation across products, or with product abandonment decisions.

The relevance of a given scheme depends, then, on the task and objectives of the marketer. Moreover, as Exhibit I demonstrates, many of the schemes presented are actually classifying buyers and product uses, not products per se. This seemingly subtle distinction has important implications for the marketer.

Predicates of Classification: The Need for a Seller's View

Product classification schemes are generated either through the logical partitioning of products (deductive) or the empirically generated grouping of products (inductive). Underlying either method is what we term the predicate form of one's approach. As marketers, our basic

concern is with exchange transactions between buyers and sellers. The products we are attempting to classify exist within the context of such transactions. The resultant classification schemes are predicated, then, on either the buyer's perspective or the seller's perspective within the exchange process.

From a buying point of view, classification is based on various aspects of buyer behavior. The convenience/shopping/specialty schema provides an example. Classification is based on shopping behavior and/or the nature of a customer's preference map. Such an orientation would seem consistent with the marketing concept. The danger is that our focus is diverted away from the product and its manufacture. This leads to strategies which emphasize transitory market wants, a preoccupation with advertising, selling and promotion, and a decline in product value.

If a selling point of view is adopted, the product itself becomes the objective focus of one's efforts at classification. Thus, one is more concerned about the nature of the product and how it leads to certain buyer behavior. It is this field of product-related variables that lend themselves to marketing action. Bellizi and McVey (1983) found, for example, that industrial buyer behavior was significantly related to product type, but not significantly related to the buyclass variable. Similarly, Lilien and Wong (1984) indicate that industrial products can be grouped based on the decision-making process of buyers, but that the groupings are actually explained by two product dimensions: product complexity and commercial uncertainty.

The missing link between marketing strategy and buying behavior is the product itself. Ramond and Assael (1974, p.349) explain that "a product may be thought of as a vehicle or mediator of a bundle of physical attributes that produce a bundle of psychological or behavioral responses." Seller-based classification requires that customer and market characteristics be redefined in terms of product characteristics in developing a managerially useful scheme (cf., Miracle, 1965). We want to classify the product, not the behavioral process or response.

As has been suggested, buying process classifications are frequently mis-interpreted as product classification schema. They actually result in market segmentation schema. That is, schemes that are predicated on buying behavior divide the market according to descriptors of buying processes (e.g., search effort, perceived risk). Where the partitions are based on the field of buyers, the cells of the resultant scheme represent market segments, not products. By definition, however, product classification schemes should focus on product and seller-related characteristics. Specifically, they should focus on those characteristics which lend themselves to buyer-based marketing action.

The need to assume a seller's point of view and focus on the nature of products themselves would seem especially applicable to industrial marketing. The consumer goods company can significantly alter its marketing strategy by changing advertising messages, promotional emphasis, or package design. These changes can be largely effected within the marketing department (Ames and Hlavacek, 1984). With the industrial firm, "...changes in marketing strategy are more likely to involve commitments for new equipment, shifts in product development activities, or departures from traditional engineering and manufacturing approaches, any one of which would have company wide implications (Ames and Hlavacek, 1984, p.5). Thus, industrial marketing strategy is very much a function of product characteristics, and classification should reflect this fact.

Is Industrial Product Classification Different?

Fern and Brown (1984) propose that available classification schemes apply equally well to organizations and households, and that there are greater differences within the consumer goods category or industrial goods category than between these categories. More recently, Bell (1986) and Murphy and Enis (1986) have made similar arguments, and propose the existence of universal schemes which are applicable to all products and marketing decision contexts. However, these analyses do not sufficiently address the implications of the variables or characteristics underlying the various classification schemes for marketing decision making, and the practical meaningfulness of such variables for industrial versus consumer goods. None of these efforts provide empirical support for their conclusions, nor do they provide guidelines for implementation of their perspectives or evidence of the benefits to the industrial marketer. While most consumer product schemes can be force-fit to classify industrial goods, the more basic issue concerns whether such classification is relevant to the needs of the industrial marketer.

For example, the Copeland-Holton goods classification scheme is based in part on a consumer's willingness to shop around. But Hutt and Speh (1981) indicate that industrial buyers do not "shop" for products, and that an industrial classification scheme should reflect those factors which affect strategy formulation, such as how the product is used or how it is treated from an accounting standpoint. Similarly, it has been suggested that, with industrial products, the seller frequently goes to the buyer, and not vice versa (McCarthy, 1964).

Moreover, to the extent that product classification begins with characteristics of the products themselves, are industrial and consumer products congruent in terms of such characteristics? The efforts of Aspinwall (1961) and Miracle (1965) represent attempts at identifying a universal set of product-related variables. The issue becomes what is lost in the process of generating such a universal set.

An examination of the Aspinwall-Miracle schemes might lead one to the conclusion that their categories effectively distinguish between industrial and consumer goods. For example,

industrial goods would seem to fall more towards the "yellow" end of Aspinwall's continuum, and into Miracle's Group IV and V (i.e., high unit value, low turnover, technically complex, high adjustment). Neither scheme sufficiently discriminates within the industrial category. That is, neither is all that satisfactory for meeting the widely divergent strategy requirements of various industrial products. Those who would discard the consumer/industrial dichotomy and focus on commonalities have failed to produce a scheme that has strategic value to the industrial marketing manager.

Not only do industrial products differ from consumer products, the classification needs of these two markets are not the same. In both instances, the manager is concerned with formulating effective marketing strategies. Kotler (1984) argues, however, that consumer marketing strategy follows from consumer buying habits, while industrial strategy is more a function of how goods enter the production process, and their relative cost. Industrial classification should correspondingly reflect such production/product-related factors as those listed below:

Tangibility	Divisibility
Expected Life	Newness (stage in life cycle)
Technical Complexity	Positive/Negative Cross Elasticities
Unit Cost	Required adjunct services
Gross Margin	Type of application
Type of technology	Significance of purchase to buying organization
Type of production process	Product contribution
	Accounting treatment

Suggestions for Further Development

Product schemes which can be universally applied are appealing, especially from a theoretical standpoint. Unfortunately, they provide little assistance to the industrial marketing manager attempting to solve day to day problems involving his/her specific product mix. The large number of situational factors affecting product management decisions suggest the marketer develop schemes tailored to the demands of his/her own organizational, product, and market constraints. For example, financial resources, the rate of technological change, the nature of product cost structures, the depth and breadth of one's product line, and an array of other factors say much about the link between product groupings and marketing planning. Given these constraints, let us provide suggestions for classification design.

The starting point must be to define the purpose of product classification, and to ensure the subsequent scheme addresses this purpose. Is the scheme to be used to allocate resources, evaluate product performance, identify market opportunities, delete products, develop specific marketing strategies, or some other purpose? Clearly, one might employ more than one scheme, with each based on different characteristics, depending on the task at hand.

A classification scheme is, in a sense, a snapshot at a point in time. The categories are pigeon-holes in which the objects being classified can be placed. Underlying the chosen scheme, is a set of variables or characteristics. Effective product classification requires that we delineate specific criteria for identifying and evaluating these characteristics. Further, the most productive approach to design is one which explicitly considers the basic underlying attributes of the product itself. This does not mean that we ignore the buyer, for both seller and buyer points of view should be integrated (Enis and Roering, 1981). Syntactically, however, we want to classify products using enduring and strategic attributes, such as those listed earlier.

There is ample evidence that a myopic attachment to buyer behavior and customer perceptions, as a basis for product classification, may even play havoc with product schemes. This evidence is both strategic (e.g., Bennett and Cooper, 1981) and circumstantial; namely, virtually every benefit segmentation study contains a "null" group of buyers who show no measurable desire for any particular set of benefits at that particular measurement occasion (Calantone and Sawyer, 1978).

Once the underlying characteristic(s) are determined, it is important that the resultant product categories represent a continuum along each characteristic, and that each category utilizes the same underlying characteristic(s). The categories themselves must have clearly defined boundaries, ideally in quantifiable terms. For this reason, the scheme should adopt an absolute (rather than a relative) view of products. That is, products should not be categorized relative to one another, but rather, in terms of their actual measured performance on the underlying characteristic(s). In this manner, the criterion of mutual exclusivity is also dealt with.

A related issue involves the ability of the scheme to deal collectively with both new and existing products. In a validation sense, a good schema should provide unequivocal information (hopefully strategic) on products not used in the original classification. The schema should add real net knowledge to what we know by just looking at the products themselves. The ability to handle products other than those for which a schema is developed is directly related to the extent to which a) an absolute product view is adopted, b) boundaries are clearly specified, and c) categories are mutually exclusive.

Finally, classification should accommodate the strategic spectrum within the seller's firm. Industrial product strategy is typically the result of contributions from engineering, manufacturing, research and development, finance, and marketing. As a result, the design of product schemes should reflect aspects of product policy affected by these functional areas.

Exhibit I: A Classification of Product Classification Schemes

I. SCHEMES BASED ON PRODUCT CHARACTERISTICS

Source	Categories	Underlying Variables
-A.M.A. (1960)	-durable, non-durable, service	-# of times product can be used, tangibility
-Aspinwall (1961)	-red, yellow, orange	-replacement rate, gross margin, adjustment, time of consumption, search time
-McCarthy (1964)	-homogeneous, heterogeneous	-perceptions of product similarity and standardization
-Miracle (1965)	-group I, II, III, IV, V	-unit value, significance, time and effort spent purchasing, tech. complexity, need for service
-OMB's Standard Industrial Classification (1972)	-ten major economic activity classes	-frequency of purchase, rapidity of purchase, extent and variety of usage
-Ramond and Assael (1974)	-high, medium, low distributive velocity	-time lag between factory's shipment and retail sale
-Shapiro (1977)	-proprietary, custom-built, custom-designed, services	-standardization, customization
-Schmalensee (1982)	-differentiated, undifferentiated	-perceptions of quality
-Corey (1983)	-new materials, semi-processed materials, finished materials, components, sub-assemblies, end products	-stage of product completion
-Lovelock (1983)	-Cells 1-9 in matrix	-tangibility, continuous/discrete delivery customization, demand fluctuations, service delivery method
-Bell (1986)	-Cells 1-9 in matrix	-tangibility, customization

II. SCHEMES BASED ON BUYERS/BUYER BEHAVIOR

Source	Categories	Underlying Variables
-Copeland (1924)	-convenience, shopping, specialty	-search and shopping effort
-Industrial Marketing Committee Review Board (1954)	-industrial, consumer	-intended customers
-Holton (1958)	-convenience, shopping, specialty	-perceptions of likely gain from comparison shopping
-Bucklin (1963)	-convenience, shopping, specialty	-nature of and completeness of preference map
-Robinson, Faris, Wind (1967)	-straight rebuy, modified rebuy, new task	-newness of problem, information requirements consideration of new alternatives
-Howard and Sheth (1969)	-routine, limited problem solving, extensive problem solving	-past experience, learning, information sought
-Lehman and O'Shaughnessy (1974)	-routine, procedural, political, performance	-type of problem purchase poses to buying organization.
-Krigman (1983)	-commodity, package, system	-attributes emphasized by buyer
-Murphy and Enis (1986)	-convenience, preference, shopping, specialty	-effort and risk dimensions of price

III. SCHEMES BASED ON PRODUCT USE/APPLICATION

Source	Categories	Underlying variables
-Standard Product Use Scheme (e.g. McCarthy, 1964)	-installation, accessory equipment, raw materials, processed materials, component parts, MRO, services	-product uses
-Hillier (1975)	-production services, facilities product constituents product transformers	-how buyer uses item
-Corey (1978)	-standard parts, custom parts, major equipment, raw materials, MRO, internally-sourced	-buying assignments
-Webster (1979)	-construction, heavy equipment, light equipment, components sub-assemblies, raw materials, processed materials, MRO, services	-product uses
-Kotler (1980)	-completely entering, partly entering, not entering	-degree to which purchased item becomes part of buyer's product

IV. SCHEMES BASED ON PRODUCT PERFORMANCE

-Boston Consulting Group (1970)	-dogs, problem children, stars, cash cows	-relative market share, industry growth
-Product Life Cycle (e.g. Wasson, 1978)	-intro, growth, turbulence maturity, decline	-sales and profit growth
-Brand Life Cycle (e.g. Wind, 1982)	-intro, growth, maturity, decline	-sales and profit growth

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WHAT A DIFFERENCE DENSITY MAKES IN DEFINING THE BOUNDARIES OF INDUSTRIAL MARKETS

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Abstract

It is common in ranking various types of economic activity by state to find certain physically large states at or near the top of the list when, in actuality some contiguous groups of small states are much more important. The purpose in writing this paper is to show the differences. This is important because marketing effort is frequently allocated on the basis of these absolute figures when, in reality, density measures are more useful.

Introduction

There is a tendency when ranking markets to use absolutes (population, retail sales, shipments and so on). As noted in previous papers (Cooke, 1983 and 1984) this is misleading. For example, Sales and Marketing Management in their 1984 Survey of U.S. Industrial and Commerical Buying Power imply (Stryker, 1987, p.7) that California, Texas, Michigan, Illinois, Ohio, Pennsylvania and New York are in a special class (1983 manufacturing shipments of 100+ billion dollars) by themselves and other states represent smaller markets.

If shipment density (manufacturing shipments divided by land area) is considered a totally different and more useful picture is developed. In Table 1 information is presented on shipments and shipment density to illustrate this point.

Regional Patterns

The argument could be made here that Rhode Island, even though a high density state, is an insignificant market because the state is so small, but this misses a key point concerning regional patterns.

The first twelve states in shipments (50+ billion dollars) include three states that are widely separated (California, Texas, and North Carolina) and nine states which are contiguous and spread out from Wisconsin to Massachusetts. On the other hand, the first twelve states in shipment density are not only contiguous, but their configuration is more complete and compact. Geographically, these twelve states are north and east. These twelve states represent a compact region which covers 10.6% of the land area of the continental U.S. but accounts for 45.0% of the continental U.S. manufacturing shipments. Shipment density for this region is $3,071,000 per square mile compared to a density of $656,000 per square mile for the entire continental United States.

Another comparison is to look at the two top states in shipments, California and Texas. These two states cover 14.1% of the land area of the continental U.S. but account for only 15.1% of manufacturing shipments. The shipment density of $703,000 per square mile is barely above the density of $656,000 per square mile for the continental United States. The reason that these two states have the highest manufacturing shipments is their physical size. When size is taken into consideration, the level of manufacturing activity in these two states is relatively low.

What happens when absolutes (in this case manufacturing shipments) are considered is that regional patterns are lost. For example, the three west coast states have total manufacturing shipments of $154.7 billion (California) $30.5 billion (Washington) and $18.8 billion (Oregon); a range of just over eight to one. If density is considered, the figures are $990 thousand per square mile (California), $458 thousand per square mile (Washington), and $196 thousand per square mile (Oregon), a range of barely over five to one. This indicates that these three states are closer together in manufacturing actively than indicated by total shipments.

This is even more significant when it is observed that the range for the entire U.S. for shipments is 258:1 ($154.7 billion to .6 billion) while the range for density is 10,810:1. If last place Alaska is excluded, the shipment range is 110:1 and the density range is 832:1. Thus using density increases the diversity by a factor of almost eight, yet on a regional basis less diversity can be seen by using density as illustrated by the west coast example and more important the example of the first twelve states.

Two Regions

One problem that probably defies a final solution concerns how to divide the country into regions. The most widely used system has been developed by the Census Bureau and has nine regions. Others have used other methods of dividing the country with mixed results. For the purposes of identifying the location of manufacturing activities the densities shown in Table 1 automatically identify two major, significant regions.

The first is the twelve states in the north and east quadrant of the country which have 44.9% of all continental U.S. manufacturing shipments in 10.6% of the land area. The second is the thirty-eighth to the forty-ninth states (the last twelve except for Alaska). These twelve states are also contiguous and compact. This last area covers 39.6% of the land area in the continental U.S. and they account for 5.0% of manufacturing shipments. Shipment density is $83,000 per square mile compared to $656,000 for the entire continental U.S. and $3,071,000 thousand for the twelve states in the northeast

TABLE 1

1983 MANUFACTURING SHIPMENTS BY STATE RANKED BY DENSITY

Regional	Manufacturing Shipment Density (Thousand dollars per square mile)	Manufacturing Shipments in billions of dollars
New Jersey	10,810 (1)	81.3 (8)
Rhode Island	10,056 (2)	10.5 (37)
Connecticut	7,370 (3)	35.8 (19)
Massachusetts	6,552 (4)	51.3 (12)
Delaware	3,342 (5)	6.6 (40)
Ohio	2,921 (6)	119.7 (5)
Maryland and DC	2,651 (7)	26.4 (26)
Pennsylvania	2,561 (8)	115.1 (6)
New York	2,401 (9)	114.8 (7)
Michigan	2,257 (10)	128.3 (3)
Illinois	2,163 (11)	120.1 (4)
Indiana	1,801 (12)	65.0 (10)
Total First Twelve	3,071	874.9 (44.9%)
North Carolina	1,338 (13)	65.3 (9)
Tennessee	1,034 (14)	42.7 (16)
Louisiana	1,031 (15)	46.3 (13)
South Carolina	999 (16)	30.2 (23)
California	990 (17)	154.7 (1)
Wisconsin	948 (18)	51.6 (11)
Virginia	934 (19)	37.2 (17)
New Hampshire	878 (20)	7.9 (39)
Kentucky	760 (21)	30.1 (24)
Georgia	737 (22)	42.8 (15)
Florida	666 (23)	36.0 (18)
Continental United States	656	1942.9
Missouri	630 (24)	43.4 (14)
Alabama	612 (25)	31.0 (21)
United States	550	1946.9
Texas	533 (26)	139.6 (2)
West Virginia	522 (27)	12.6 (34)
Hawaii	514 (28)	3.3 (46)
Iowa	460 929)	25.7 (28)
Washington	458 (30)	30.5 (22)
Minnesota	440 (31)	34.9 (20)
Mississippi	422 (32)	20.0 (30)
Oklahoma	414 (33)	28.5 (25)
Vermont	384 (35)	3.6 (44)
Kansas	317 (36)	25.9 (27)
Maine	285 (37)	8.8 (38)
Oregon	196 (38)	18.8 (31)
Colorado	164 (39)	17.0 (32)
Nebraska	156 (40)	12.0 (35)
Arizona	131 (41)	14.9 (33)
Utah	129 (42)	10.6 (36)
Idaho	62 (43)	5.1 (42)
New Mexico	45 (44)	5.4 (41)
Wyoming	44 (45)	4.2 (43)
South Dakota	37 (46)	2.8 (47)
North Dakota	28 (47)	1.9 (48)
Montana	23 (48)	3.4 (45)
Nevada	13 (49)	1.4 (49)
Total Last Twelve States	83	97.5
Alaska	1 (50)	.6 (50)

Number in parentheses is the rank

quadrant of the U.S. Again, if only shipments (not density) had been used the picture would not be as clear, because the thirty-eighth to forty-ninth states in shipments include New Hampshire, Delaware, Vermont, Maine and Hawaii and do not include Utah, Nebraska, Arizona, Oregon, and Colorado.

Summary

Although this analysis was done at the state level the same type of error is found in using absolutes at the county or metropolitan level. This had lead in recent years to the mistaken notion that the west and south have become larger markets than the northeast. The south and west have certainly increased in importance but as can be seen from this limited analysis of industrial markets most of the action is still in the northeast. The top twelve states are in the northeast and they account for 874.9 billion dollars of manufacturing shipments out of a total for the entire United States of 1,946.9 billion or 44.9%. Using the procedure outlined in this paper at the county level by relevant SIC number should result in improved allocations of marketing effort. The only reason for using states here was to simplify the presentation of this material. Obviously using counties will identify significant concentrated markets. Using shipments or employment by SIC number will of course identify the markets for individual business.

This has important managerial implications. In setting up sales territories and market areas, density measures provide much more useful information than absolute measures. These differences are so significant that the result of using density measures should be a much more efficient allocation of scarce resources.

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PENETRATING THE INDUSTRIAL MARKET: A CASE STUDY

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Adoption of the marketing concept has not come easily in industrial markets. Sales efforts and product orientation appears to receive an inordinate amount of attention even in highly mature, saturated markets. Resistance to marketing can encourage new competitors possessing technology and marketing skills to invade these once stagnant market segments. This paper identifies one firm's attempt to thwart such invasion by developing and implementing sound marketing strategy.

Introduction

Nearly all markets eventually experience change in character, composition, etc. As forces within and outside a market challenge the nature and scope of competition, evolution results. Today's market leaders may become tomorrow's followers. Market share may become a tug-of-war between competitors. Vendors who once practiced a customer-passive management philosophy are forced to become more active in their attempt to better comprehend and satisfy demand. Vendors jockey for market position and make an attempt to practice marketing instead of sales management.

The forces that impact a market and cause the sales-to-marketing transition are often external participants (competitors) possessing new technology. The struggle to gain relative advantage is focused upon a variety of strategies. For example, some firms depend on their marketing expertise for success. These firms understand the benefits associated with proven marketing techniques and use a customer-active orientation in order to extract market share away from traditional market participants. Alternatively, some firms depend upon technological superiority or expertise to penetrate a mature market. Relative advantage can be realized through market-wide affirmation to new technology. A once stagnant market can suddenly become quite active in relationship with the infusion and subsequent adoption of "new" technology. Finally, the most successful firm understands that the greatest relative advantage can be realized by balancing both marketing and technology. Such firms blend their product and customer capability in order to advance their position in the market.

The purpose of this paper is to describe the efforts of one firm that has attempted to assess market potential and consumer perception of a new technological development. This firm is striving to gain a fundamental understanding of the demand for a new product concept--the "multiple operation concept." This proposed product concept is essentially a small, lathe-type numerical-control machine tool whose primary objective is to minimize the cost of converting raw stock into finished product while maintaining or improving accuracy (precision). This product concept can be easily compared with the latest state-of-the-art technology--the "cell" concept of lathe-robot-mill. The lathe-robot-mill machining cell product requires a design of various machines. Alternatively, the multiple operation concept (MOC) is a single machine concept (see **Figure A** and **B**).

Scope of the Research

To understand the potential demand and market characteristics of the MOC market, a two-phased study was conducted. Phase I was an exploratory effort to establish general parameters or conditions for subsequent, more structured investigation. Emphasis was placed upon general market exploration since it was assumed that no particular market segment could be labeled adoption-certain candidates. Furthermore, the basic objective of Phase I was to provide market-related parameters thereby allowing the researchers to probe select market niches without preconceived notion of market adoption rate.

The insight generated by this phase provided support for a more detailed, comprehensive investigation of select target market segments. As a result, Phase II required a refinement of the original product concept. Product and market refinement/enhancement is essential because successful diffusion of any technology demands a precise market entry strategy and product to ensure comprehensive, systematic adoption. In fact, the rate of adoption is directly related to early entry strategy. By comparison, a "pull" strategy is superior to a "push" strategy. This implies that more successful market penetration will result when selective marketing is utilized thereby linking users (innovators/early adopters) with producers. It is very important to have early users "pull" the product into the marketplace and then thereby serve as propagators or role models in continued penetration of larger, more technology-resistant segments (e.g. late majority, laggards).

The diffusion scenario for machine tools is similar to that for any other technology/product/service. As depicted in **Figure C**, this comprehensive process is actually a planned process of steps or stages. The process is directly impacted by market facilitators and their endorsement/rejection of the technology.

Inasmuch, Phase II therefore focused upon market facilitators or risk takers who serve as early adopters. The result of Phase I identified these facilitators as large job contract shops and large manufacturers (>50 employees). The data generated by Phase II will support the development of purposeful "pull" strategy for market introduction of the MOC.

Methodology

The methodology chosen for Phase I centered around 20 in-depth interviews with potential customers of the MOC concept. While it was unknown whether these participants characterized the entire machine-tool market, it was hoped the information/insights generated by these intensive interviews would offer response similarity and provide for a general "picture" of interest and demand for the MOC within the entire machine-tool market.

Participant firms were selected according to the following criteria: size of firm, firm status (customer vs. non-customer), and type of firm (job shop or manufacturer). It was assumed these criteria would greatly influence the adoption/rejection probability of the product concept. Present customers of the sponsoring firm (MOC developer) were substantially relied upon because of their product knowledge, geographic location, and willingness to participate. At no time were the participants aware of the sponsor. Anonymity ensured objectivity in response. And, because of the properietary nature of the MOC, the name of the concept developer and sponsoring firms will remain anonymous throughout this report.

In order to increase participation in Phase II research, respondents were contacted prior to receiving a copy of the research questionnaire. This procedure was implemented in order to increase the traditionally low response rate associated with mail questionnaires. Normally, the response rate for self-administered mail questionnaires is no greater than 18-20%. The pre-mailing phone contact increased the actual response rate to a respectable 34% (104 total respondents. 37 job contract shops with average size of 90 employees: 67 manufacturers with average size of 785 employees).

A self-administered questionnaire serves as the primary information-gathering technique. The self-administering format increases response objectivity and offers greater savings and reliability than alternate forms of data collection. Each respondent received a detailed description/explanation of the MOC (see Appendix A) along with a letter outlining the research objective(s) associated with Phase II.

A semantic differential scaling technique was utilized for many of the questions. These scaled responses formed the basis for the respondent's perception regarding product- and market-related questions. To analyze the data, the BMDP statistical software package was used. Basic routines were employed to compute the frequency, percentage, and cumulative percentage, etc. for each distinct question or variable.

Before discussing the information generated in Phase II, a general overview of the various segments composing the user-market of the machine-tool products is helpful.

Job Contract Shops

Traditionally, job contract shops can be defined as "passive" market participants. They are often only order-taking establishments which prosper by offering a specialized, high-quality product at a relatively low price. Simply, job shops do an adequate job at a lower cost than if manufactured in-house. Normally, job-contract shops have lower overhead rates. In the highly competitive machine market the job shop is perpetually coerced to maintain low overhead and high quality. Job shops are often seeking new ways to more efficiently and effectively machine a part and turn a profit. This often requires the assessment and adoption of a new technology. Unfortunately, job-contract shops may feel threatened by the extreme costs and sophistication often associated with advanced technology.

Smaller job shops (<50 employees) are large in number and might be considered as primary candidates to adopt new technology. However, while these candidates are large in number they usually possess a unique character which precludes them as market adopters or primary market candidates. Specifically, smaller job-contract shops are technology laggards and are highly conservative, change resistant, and extremely sensitive to cash-flow and capital funding.

Alternatively, larger job shops appear to be much more reasonable in philosophy regarding the management of technological change. Specifically, they are often more educated regarding product application, benefits, etc. Probably more than any market segment, they live by a rather simple "bottom line" philosophy -- lower overhead leads to increased ROI which ultimately leads to continued competition. This philosophy makes this particular segment a primary candidate for the successful marketing and adoption of the multiple operation concept.

Manufacturers

Another important segment consists of manufacturing firms. This market segment performs a wide range of machine-tool activities ranging from specialized engineering (low volume customization) to mass production of standard parts/equipment. This segment is often in the mainstream of technology and is more responsive to technological change.

During Phase I, a very interesting perception surfaced during conversions with large manufacturers. It appears that many manufacturers sense their in-house capability may be greatly enhanced with advanced technology.

The units of analysis in Phase II consisted of medium and large job contract shops and large manufacturers (>50 employees). The insights generated in Phase I suggested that these segments formed the primary market for the adoption of the multiple operation concept.

Discussion of the Research Findings
Phase I: An Exploratory Investigation

In order to foster a general discussion with participants selected for Phase I, each was given an opportunity to read a detailed explanation of the MOC. In addition, a series of product application and adoption questions along with general market-related questions provided the discussion parameters for exploratory interviews. The interviews normally lasted up to three hours and included intense product and market-related questioning.

After reviewing responses provided in Phase I, the researchers became aware of several prevalent concerns addressed by nearly all respondents. It was apparent that certain possible market segments do not consider the MOC to possess any value. Coincidently, there appears to be much general confusion and skepticism regarding the reliability and availability of the MOC technology. Certain market segments (smaller establishments) expressed concern with the utility of the MOC. Type of establishment is a definite segmenting variable for the MOC.

Also in Phase I, a very interesting perception surfaced during conversations with large manufacturers. It appears that a growing number of manufacturers sense their own in-house capability can be greatly enhanced through the adoption of new technology. Many respondents stated that the new machine tool technology can increase in-house production capability and overall machining expertise/control and thereby reduce dependency on job-contract shops. New technology can often reduce the manufacturer's overhead rate and thereby make him more competitive with the job shop counterpart. This is viewed as a tremendous benefit by the manufacturer.

The information provided by Phase I interviews aided in the research focus for Phase II. Phase I findings suggested that the optimal target market for introducing the MOC was larger job-contract shops and manufacturers (>50 employees). Because these organizations possess greater resources as well as a keener ability to assess the utility of new technology, they were singled out as high probability candidates for the MOC adoption.

To promote the adoption of the MOC product concept, it was important to identify innovators/early adopters. Phase I results established that the large job shops and manufacturers represented the innovator/early adopter category while smaller job shops and manufacturers comprise the late majority and laggards of the market (See **Figure C**). More importantly, Phase I helped determine product/technology characteristics/features that are in high demand. This preliminary information helped design Phase II of this comprehensive research effort.

Prior to designing/implementing costly market-related introductory strategy, the proposed market segements needed to be explored further. The proposed adoption market needed to be statistically sampled in order to ensure reliability/validity of the preliminary findings of Phase I. It would have been dangerous to overgeneralize Phase I information. Therefore, Phase II--a more systematic and detailed sample of these two target segments of larger establishments--served a critical role.

Phase II: A Random Sample of the Target Market

As already stated, Phase II is an intensive, systematic assessment of the primary target market-large job shops and manufacturers. The information from the 104 respondents provided several interesting insights which can greatly assist in the development of a market introductory strategy. The following is a general discussion of key findings generated from Phase II.

First, it is interesting to note that there was clear support for the MOC by the large manufacturers versus the large job contract shops. Manufacturers' strong endorsement stems from their growing interest in technology in general and their desire to control any and all manufacturing functions whenever possible. These are definitely the "trend setters" for technology.

Comparatively, while both groups of respondents expressed interest in increased accuracy and understood the sometimes necessary tradeoff of higher initial purchase price vs. increased machine accuracy, the job contract shops did not completely believe the implied capability of the MOC. The job contract shop generally portrayed skepticism in the MOC's configuration--a complex, one-machine system. They wanted more detailed performance information as well as vendor assurances to support the standards proposed by the MOC. It came down to a simple belief in the reputation of the vendor. This is essentially a marketing-related problem and not necessarily a technology-related problem. Product performance perception and adoption can be changed through sound marketing strategy. All parties are concerned with machine accuracy. Everyone is interested in not only increasing production capacity but also technical capacity. Increased technical capacity allows the machine user to do more difficult work. However, the job-shop segment will require a special marketing effort in order to reduce and eliminate the mild adoption resistance expressed in Phase II.

Another important question in Phase II required the respondents to assess his ability to predict machine tool needs--to forecast his own machine-tool purchases in the next 3-5 years. The responses indicated that both segments are cautiously optimistic regarding their ability to successfully forecast demand. Such caution can be attributed to the perceived volatility within the machine-tool industry during the past few years. All respondents explained how the machine-tool market has undergone much turbulence during the last five years. Much foreign competition has

flooded the once technology-stale market with low priced, highly sophisticated hardware. Japanese and European machine-tool companies have turned the market upside down with the constant stream of new technology. Most respondents expect this trend to continue. While large manufacturers view this positively, large job shops express concern with too much "progress."

A follow-up question asked the respondents to predict the rate of technological change relative to machine tools for the next 3 to 5 years (a normal planning period). While both segments perceived a continued pattern of technology infusion, job shops perceived a slightly greater infusion rate than manufacturers. This may be a direct reflection of the job shop environment. That is, job shops not only have to compete among themselves, they must also maintain a rellative advantage over manufacturers that may attempt to do more machine work in-house. Job shop respondents sense the potential threat and view it with increasing alarm.

The final question in Phase II requested the respondent to carefully consider his own adoption decision regarding the MOC. A specific timetable for planned adoption was provided and ranged from "adoption within the next year" to "never consider for adoption." Based on prior adoption research, many respondents will avoid the extreme response and select a conservatively safe period (i.e. 5 years). The responses, as indicated below, portray a highly favorable perceptual adoption rate for the MOC.

-would adopt within the next year....
  22% Man. 21% Job Shop
-would adopt within the next 3 years.
  32% Man. 37% Job Shop
-would adopt within the next 5 years.
  40% Man. 38% Job Shop
-would never consider for adoption...
  6% Man. 4% Job Shop

These favorable results seem to paint a rather bright picture for the MOC. The two market niches represented by large manufacturers and job contract shops form the basis for early adoption of the MOC. This is a relatively substantial group (54% of large manufacturers, 58% of large job contract shops) and is not similar to the normal 12-15% represented in most diffusion models/scenarios. Such a substantial portion of technology adopters can greatly moderate the overall diffusion process or rate. At best, it represents a substantial clientele--ready, willing, and able to adopt. At worst, it reflects a substanatial % of highprobability purchasers in a market that is "technology active" and possibly pro-adoption. In any case, this situation presents a challenge not only to technology advocates but also marketing experts.

Summary of Major Findings

-Substantial ready-made market segments that are technology-friendly yet somewhat skeptical of any new technology.
-Restructuring of machine-tool market due to invasion by foreign competitors.
-Change in machine-tool producer management philosophy from product orientation. Implementation of traditional marketing techniques.
-Increasing market volatility due to recent intense competition of machine-tool manufacturers as well as changing needs of users of machine-tool products.
-Sponsoring agency frequently cited as a highly reliable, reputable organization--overall favorable competitive image.

Proposed Marketing Strategy

All new technology is subjected to the diffusion process. Due to the important role market facilitators play in the diffusion of any technology, it is important to consider the nature and scope of their role. For instance, the timing associated with technology development and introduction is critical to the long-term success for the product. Delaying the introduction of a technology such as the multiple operation concept may be tantamount to diffusion suicide. A substantial percentage of both segments is calling for the MOC within a relatively short period of time. Any delay by the sponsoring agency and technology developer might invite competition to enter the market with their own version. A delay in product of more than 3 years may significantly distort the diffusion of the MOC for the developing agency and thereby dilute potential ROI.

If introduction of the MOC can be accomplished within a period of 2 or fewer years, a "bond" might be formed between the firm and many early adopters/advocates and thereby enhance subsequent adoption throughout the entire market. For instance, the firm may select a group of product development and refinement (e.g. prototyping, test-marketing). This practice is becoming common throughout industrial markets. Such cooperation can help "pull" the product through introduction and growth into large, more profitable market segments (e.g. late adopters, early majority).

Finally a major information effort must accompany the marketing of the MOC. As evidenced in this project, confusion and skepticism are closely associated with MOC. Marketing must be able to resolve this concern by concentrating on the reliability and vendor. If the firm already has a strong reputation regarding quality, service, and value, diffusion can be enhanced through marketing effort. The general image of the vendor plays a significant role in the adoption process. Firm reputation can serve as a primary stepping stone for successful marketing. The keys to market penetration and successful diffusion rest with perceived reliability (reputation), promotion, and customer cooperation. The active marketer must be "pro" customer and realize the benefits associated with this new, more demanding role.

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Product Concept Description

"Multiple Operation Concept"

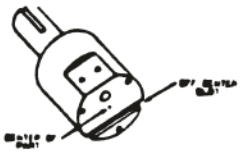
This proposed product will be a small lathe-type numerical control machine for parts 6 inches in diameter by 6 inches long or smaller. It will be able to more completely machine parts that require turning and milling. What distinguishes this product from present lathes with mill/drill attachments is the ability to move an additional axis in order to do off-axis work (see **Figure A**). Specifically, this product would be a "family" of machines starting with a simple 2-axis lathe as the low-end entry. By adding attachments, this machine could readily be enhanced (expanded) on the shop floor. For example, the simple 2-axis lathe could be expanded by adding mill and drill capability. Furthermore, this machine can also be expanded to include off-axis milling capability, part handling and/or unattended operation capability.

Another proposed feature of this machine concept is its ability to automatically set up. This feature would allow automated trial cuts to be performed on the first part without an operator being present. Subsequent machining of parts can be automatically monitored and adjusted. This "automatic set-up" feature may also reduce the need for a part programmer.

The primary objective of this multiple operation concept is to minimize the cost of converting raw stock into finished product while retaining or improving accuracy.

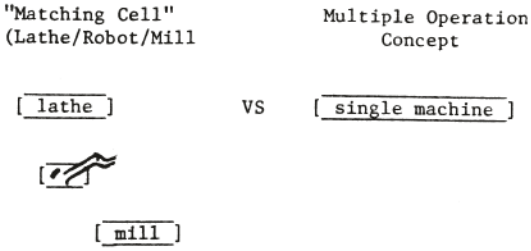
(Figure A)

Typical Part Machined by Multiple Operation Concept

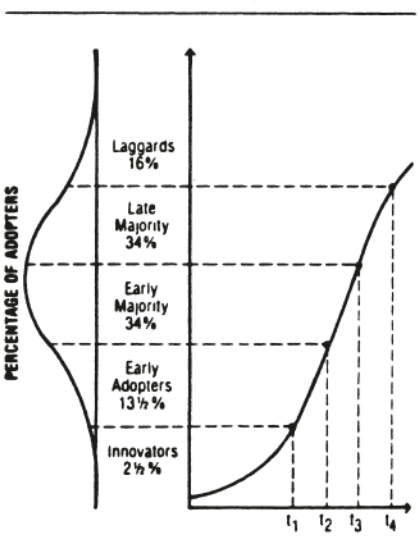


(Figure B)

Comparison - Cell Concept vs. Single Machine (Multiple Operation Concept)



(Figure C)



MARKETING OF SERVICES

AN ENROLLMENT MARKETING PLAN FOR INSTITUTIONS OF HIGHER LEARNING

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Abstract

The purpose of this paper is to present an enrollment marketing plan (or model) with alternative strategies and contingency plans so that institutional leadership may be in a position to act decisively and successfully during the difficult enrollment years ahead. This enrollment marketing plan exposes the user to an orderly transfer from one enrollment marketing stage to the next logical stage. It permits the user the ability to exert some control over both the internal and external environment, and should help the user to better understand the delicate interaction that exists between activities and components critical to the enrollment process.

It has been estimated that by the year 2000, 25% of the currently existing residential liberal arts colleges will be gone (Dunn 1979). Many other colleges will find themselves in dire straits and will be searching hard for ways to survive. In fact, declining enrollments and increased competition for funding have thrown many institutions of higher learning that are unschooled in strategic planning and high-level resource management into a financial tailspin (Anderson 1983). Total college costs will rise 6 percent in 1986-87 -- the sixth consecutive year in which they have outpaced inflation (Evangelauf 1986).

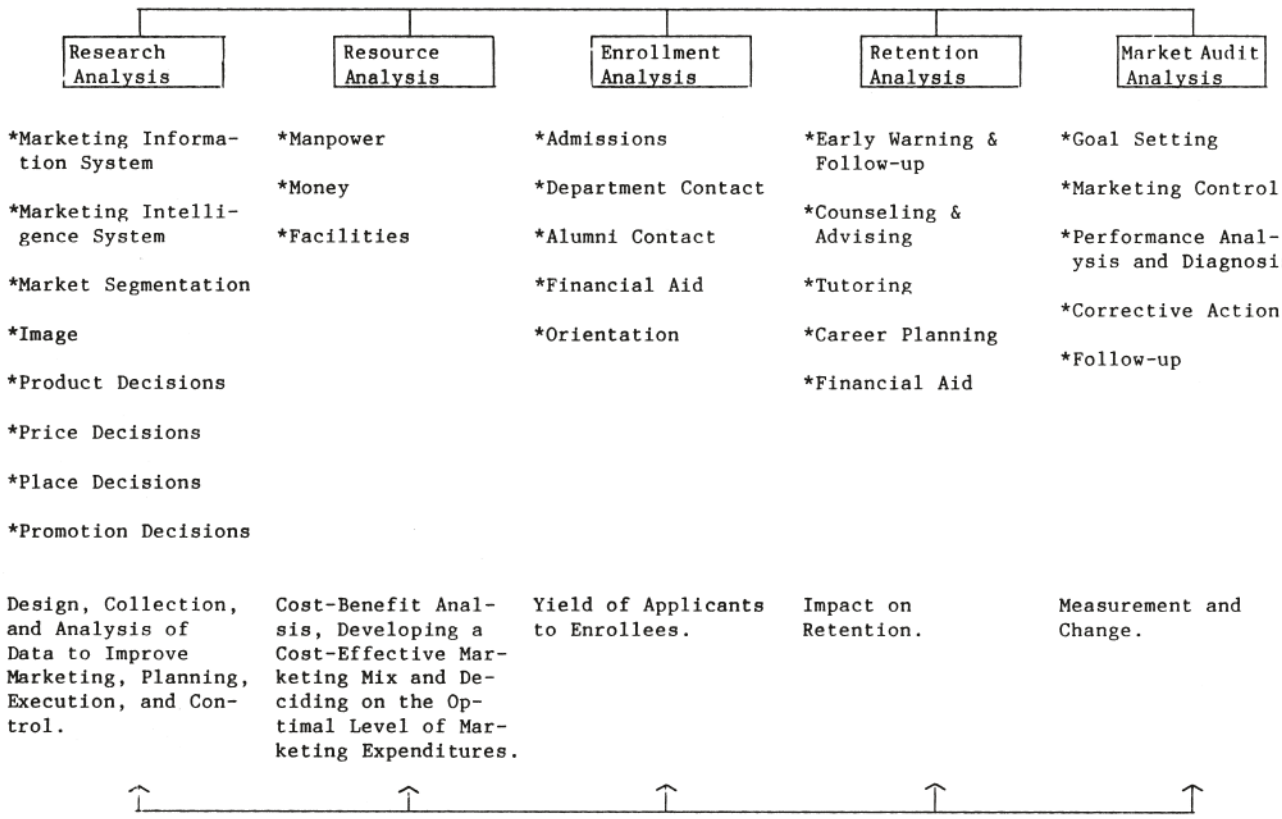
That's the bad news. The good news is that, like other nonprofit organizations caught in a tight financial vise, educational institutions still have time to:

- Analyze the external and internal environmental factors that could affect the institution.
- Formulate step-by-step immediate and long-range goals and plans.
- Motivate professional and support staff members to work productively toward these goals.

The purpose of this paper is to present a general enrollment marketing plan (or model) with alternative strategies and contingency plans so that institutional leadership may be in a position to act decisively and successfully during the difficult enrollment years ahead. This marketing plan should be of use to institutional leadership with no prior training in the marketing discipline and also those that lead the recruitment effort of all institutions of higher learning regardless of where their institution may fit within the Classification of Institutions of Higher Learning as published by the Carnegie Foundation for the Advancement of Teaching (1973). The enrollment marketing plan exposes the user to an orderly transfer from one enrollment marketing stage to the next logical stage. It further permits the user the ability to exert some control over not only the internal environment, but also the external macro and micro environment, and finally it will help the user to better understand the delicate interaction that exists between activities and components critical to the overall enrollment process.

From the standpoint of the institutional administrator, the immediate prospects are not encouraging. However, certain steps can be taken to help maintain stable enrollment, steps that may allow the institution to control its destiny through systematic planning. The process is presented in a logical linear system that integrates the traditional independent functions associated with marketing, recruitment, admissions, enrollment, funding and retention. It suggests various ways in which officials can respond so that the potentially unfavorable impact of enrollment counts can be averted, or at least cushioned. The plan (process or model) further suggests that resources (money, manpower, and facilities) can be allocated when and where needed. Its purpose is to allow the institution to both market and manage its enrollment (growth, maintenance, or even planned decline). All major functions concerned with enrollment are identified and placed into one of five groupings.

ENROLLMENT MARKETING PLAN



Research Analysis

As the plan indicates, the enrollment cycle should begin with research analysis. Most organizations in our society have learned that they cannot keep up with markets and changing societal conditions without some organized research effort. At the minimum, this effort should involve a continuing collection and analysis of published secondary data. On a more sophisticated basis, it may require the generation and analysis of primary or original data. Research should help combine marketing efforts and serve as a basis for a resource program formulated from ideas supported by research and experience. Marketing must begin with research and then continue with a plan that results in something that will address people's needs. It should be a process which involves the total institution, and which will allow the institution to analyze curricula and programs and ensure that programs offered meet student needs. Marketing research should help institutions to understand their strengths and weaknesses, and to build on strengths which meet expressed student needs.

Marketing Information System

Along with a research orientation goes an ability to manage information well. Although information may be available from a variety of sources, it may not be exactly what is needed. Administrators may complain of a lack of the right kind of information for making specific decisions. Paradoxically, administrators may also be overburdened with too much irrelevant information. Resolution of this apparent contradiction of generating too much or too little information has led to the realization that information should be managed systematically. A marketing information system is a formal network of information flow to an institution's administration.

The amount of information available about students' academic qualities, demographic characteristics, socio-economic circumstances, and college plans is almost limitless. To gather this information is one thing; to make it available is another. The admissions officer must display it, interpret it well, share it with the appropriate people on campus, and use it to help answer important questions. In short, the marketing information system (MIS) should be an organizer of information and a means to allow decision makers the chance to quickly find and use the pertinent facts and data in the decision making process.

Marketing Intelligence System

A marketing intelligence system would encompass sources and procedures by which administrators would obtain their everyday information about developments in the external marketing environment. This could be in the form of marketing intelligence gleaned through newspaper articles, trade publications, and other information sources. The institution should also encourage outside parties with whom they deal -- consultants, advertising agencies, lawyers, and others -- to pass on any useful bits of information.

Market Segmentation

The basis for segmentation would usually include demographic variables such as age, sex, occupation, income and geographic factors. These kinds of variables are useful because they are easy to measure and are often related to consumer needs and purchasing behavior.

Age. Consumer wants and needs change with age. There will be fewer college-age students over the next several years, so most institutions of higher learning should try and attract one of the newest markets in education -- the nontraditional student. Because of technological advances, education will become a part of all of life, with learning becoming a year-round, life-long continuous process. A strong program to find, identify, and recruit the nontraditional student (while at the same time continuing to recruit the traditional 18-22 year old) should benefit the institution by raising the number of full-time equivalent (FTE) students and thereby produce more tuition income.

Sex. Segmentation by sex is not uncommon as it can be seen in several areas (male and female institutions of higher learning, social clubs, prisons, and others). Administrators involved in continuing education could segment the potential female adult learner into housewife, full- or part-time employed, or a combination of the two. A housewife may be attracted to a course for self-enrichment or improved homemaking skills. The employed female may be interested in clerical, technical, or management courses. Each segment may have different motivations for taking course work and different educational programs may be appropriate for each.

Occupation. Job dissatisfaction should foster some return to higher education. It would seem that an adult learner would not necessarily have to go back and totally retread if they decided to switch careers in mid-life. If price, place, promotion, and product strategies can be devised to accommodate these people, it would seem that a real market void will have been filled.

Income. Market research should identify potential candidates who can afford to attend a particular institution. To not do this might result in wasted resource allocation with absolutely no return on the investment. A family's economic situation would seem to strongly influence a student's choice of institutions looked at.

Geographic. Consumer needs vary geographically, and all too often, little is done to study students presently enrolled in the institution. (These students embody most of the characteristics of prospective students in the market place at large.) The analysis and examination of the students already served by the institution could be a first step to be taken before an informed decision can be made about where to turn for new students. The geographic location of the institution and its present students is a basic non-academic factor to analyze as an administration goes about the task of establishing an enrollment marketing plan. Community characteristics such as being urban, suburban, or of a rural nature can provide insight not only about those students who have been attracted to the institution in the past but also about where one might have reasonable success in attracting additional students in the future.

Image

Image is a problem with many of our institutions of higher learning. Attracting the attention of the public in a positive way is a difficult task so it might be a good time for higher education to adopt more of the communications methods used by the business sector to improve image. (This will be examined in more detail later in this paper.)

Image impressions are highly colored by the influence of the prospective student's reference groups, and reference groups may cover a broad spectrum of the institution's publics. Marketing research not only could pinpoint the publics, but could also determine the image of the institution enjoyed by that public (through questionnaire administration and other means). Institutions of higher learning must recognize what corporations have known for decades: That institutions are perceived according to their differences, not their similarities. Educational institutions must place more and more emphasis on creating images that improve their marketing position: The way they are perceived in relation to competing institutions (Topor 1983).

Product Decisions

The drawing power of an institution of higher learning, to a certain extent, depends on the number and kinds of programs offered by that institution, just as the business drawing power of a corporation depends on the number of its product lines. The richer the product portfolio, the greater the drawing power of that institution. However, most institutions just cannot offer (or afford) a program for every pocket, purse, and personality. The research effort should go about the task of deciding which markets an institution can most effectively serve and with what programs and services. The key is to determine just what product-program elements the target market is demanding.

Price Decisions

Typically, institutions of higher learning follow

a one- or two-price policy (graduate and undergraduate), with most public institutions also recognizing in-state and out-of-state segments. Realistically, however, different programs, often at different locations, have different costs and they also have different levels of demand and appeal to very different market groups. All of these factors should be more fully recognized and considered in price determination. An institution should know what will happen in terms of demand, as price moves either up or down. It is incumbent on market research personnel to evaluate the student market of the institution and student perceptions of the institution's value in comparison with competing institutions for pricing decisions to achieve enrollment and institutional objectives.

Place Decisions

The problem of distribution is one of how to meet more effectively the educational needs of all the students within a target market. In more generalized terms, the distribution concept is one of when, where, and how to get the product to the market in an acceptable and efficient manner. The question of whether the institution has the market come to it or whether it should go to the market must be addressed. Market research can help to answer these important questions.

Promotion Decisions

The marketing research process should facilitate decisions which determine where best to invest promotional resources. Common and appropriate investments of institutional resources are direct mail, news releases, personal contact, advertisements in newspapers and periodicals, advertisements in specialty journals, public relations and information bureaus, and news releases to specialty journals and newsletters. Though each of these examples can, alone, become quite successful, the most effective promotion may be a partial or full mix of several alternatives. Market research should help institutional administrators make that decision.

Resource Analysis

Once research has served as a basis in determining what must be done to improve marketing planning, execution, and control, attention should focus toward a realistic resource analysis. It is now assumed that an administrator knows what must be done, so the question now centers on resource allocation analysis to accomplish the tasks as determined by research analysis.

Manpower

Here we must be concerned with the allocation of resources for administration and faculty. It is important to stress that the need for administrative staff and faculty grow from the new set of programs and purposes as recognized by research analysis. The research analysis identified specific projects or actions for accomplishing an objective, and a human resource plan should identify the numbers and types of people needed and the timing in order to accomplish the plan.

Money

Budget constraints may dictate that certain plans and programs, developed in the research analysis, be abandoned or at least postponed for a certain period of time. Further, the administrator will probably want to determine which programs should be pursued and how much should be spent on each program adopted, again keeping budget constraints in mind. Finally, of the programs remaining, the administrator should determine just exactly what the optimal marketing mix will be so as to comply with and enforce the organization's mission statement, while at the same time satisfying marketing objectives as determined by market research. Often, a decision will have to be made on how much to spend on several needed programs. In this situation a detailed cost-benefit analysis on each program is strongly suggested.

Facilities

During the next several years institutional planning officials will probably have to weigh available options carefully as they try to minimize physical plant overhead, bearing in mind that the numbers of total college-age youth will begin to rise again by the mid-1990's. Short-term responses to demographic trends may be more suitable than long-term policy changes that drastically alter the nature of the institution. Some institutions that overbuilt in the 1960's may have to dispose of a few of their facilities. Others, unable to withstand financial pressures exacerbated by population declines, may have to close entirely. Still others (those that planned carefully) may have to build or renovate facilities to carry the burden of an increasing target market seeking out what the institution has to offer.

Enrollment Analysis

The third step in the enrollment marketing plan is a thorough enrollment analysis. Every institution needs to attract people, so the first task is to convert nonattenders to attenders.

Admissions

Admissions officers may be more successful if they tailor their approach to the various stages of a prospect's interest, from first inquiry to the day when the prospect enrolls at the institution. The recruitment-admissions effort can be improved if an institution's needs can be determined first so that the admissions officer knows how much emphasis to place on each step in the admissions process. As an example, if an institution wishes to increase its enrollment it will probably want to replace and upgrade its first contact piece. This should generate more prospects. Another institution may have sufficient prospects but may wish to upgrade the quality of matriculating students, so that institution might want to emphasize some steps closer

to the actual admission stage. And still another institution may wish to increase its yield, so that once the prospect has applied and been accepted the institution would strive to make sure that the prospect matriculates. Once the institution has determined where to place its emphasis, it must determine what is needed at each stage in the way of literature, phone calls, campus visits, and so forth.

Department Contact

Faculty should understand that they are critical to any successful marketing program. The faculty is the "sales force" of the institution in the sense that it is the consumer-user contact group determining, in large part, image and reputation. If a faculty member is at a conference, involved in research that requires occasional travel, or is presenting a paper, it may be possible for that faculty member to speak with prospects either in a group or individually.

Alumni Contact

An important component of the institution's marketing plan should be alumni loyalty development. Institutions that achieve strong alumni support are fortunate indeed; they raise some money, recruit better students, and enjoy many other benefits.

Alumni can be trained and organized as alumni admissions advisors, as admissions officers realize that it is important to utilize all available resources to support the marketing effort in as complete a manner as possible. The overall effect may be that an additional strong marketing force can be developed.

Financial Aid

Officials of American colleges and universities rank the availability of financial aid to students second, after increased student recruiting activity, as the most frequent cause of enrollment increases in institutions of higher education (Stadman 1980). Financial aid should play a major part in the institutional marketing effort. It would include the granting of scholarships, grants, loans, assistantships, and fellowships, among others. Financial aid can be advertised and marketed.

Orientation

Orientation is an ideal time to eliminate, or at least reduce any feelings of cognitive dissonance that the students or parents may harbor. The orientation committee should be working toward integrating orientation programs with academic advising and departmental visits. The old premise that orientation is just a day on campus should be discarded. In its place is the much broader view of orientation as being an ongoing service of events involving academic, student, and administrative affairs.

Retention Analysis

Student retention is an issue of great concern to institutions of higher learning. A satisfied customer who returns is an important component of most marketing plans. Returning students comprise most of the enrollment for most institutions of higher learning, so student return rates measure an important aspect of student retention.

Early Warning and Follow-Up

The dropout decision is usually not impulsive; generally, it is the product of much thought over an extended period of time. The idea is simple enough: If institutions can return more students once they are admitted, their enrollment will hold steady or decrease at a slower pace. It is recommended that administrators start with an early alert system that would involve faculty, peers, and administrators. Students showing low performance at mid-term, those placed on probation, and those who take excessive absences might be interviewed with the hope that a problem or potential problem can be identified and solved so that the student does not become a dropout.

Counseling and Advising

Most of the new undergraduates are away from home for the first time, and there is a need to be accepted. At this time of conflicting forces and maximum energy, most institutions put students into large classrooms and ask them to sit still in order to acquire skills that will be useful later in life. When there is a strong conflict between the student and the environment, some may drop out. A strong counseling and advising program might identify and solve some of these problems.

Tutoring

Initially, it is suggested that tutor workshops be held to cover questions most commonly asked by tutors and to sensitize tutors to some of the problems faced by the student in need of tutorial sessions. Workshops might be held covering areas such as: The responsibility of tutors; learning to help students develop or improve study skills; teaching the tutor the ability to communicate; diagnosing student problems; methods of tutoring; recognizing anxiety and stress; and working with faculty.

Career Planning

In order to be able to promise full value to a prospect, it is suggested that all institutions institute a career planning program. This program could guide the undecided student through a career exploration process with exposure to several career choices open to the student through course offerings, internships, workshops, speakers, and so forth, to finally placing the student in a challenging career position.

Financial Aid

This was covered earlier in this paper and is included in this section only as a reminder that financial aid can be used not only in attracting students to the institution, but also in keeping them in the institution.

Market Audit Analysis

Plans are only useful if they are going to be implemented and monitored. The purpose of a market audit analysis is to measure the ongoing results of a plan against the plan's goals and to take corrective action when and where needed.

Goal Setting

Realistic goals should be set for each area within the plan, with changes readily made when it becomes obvious that the goals previously set are unreasonable (expectations that are either too high or too low). Before administrators can plan programs and determine what action is to take place in each section of the marketing plan, they should know just what it is that they wish to accomplish. Goals control the size, shape, and design of an institution and help to motivate and direct its personnel. When general goals are subdivided into subsystem goals, deadlines, targets, and quotas, the administrator should have a practical, tangible, and operating basis for control. Without goals, anything the institution does or achieves may be considered acceptable; there is no standard for planning or control.

Marketing Control

Control is simply the regulating of activities in accordance with the requirements of the marketing plan. The fundamental goal is to assure satisfactory accomplishment of the basic objectives of the institution. It therefore requires an awareness of actions that take place, the correlation of these actions with respect to each other and in relation to the objectives, and the removal of any obstacle to the attainment of goals.

Performance Analysis and Diagnosis

Once goals are set and control mechanisms are in place, the next step is the evaluation of performance. This step involves measuring the work that has been done in terms of the control standards, and communicating the appraisal to people who can take corrective action.

Corrective Action

The function of corrective action is concerned with either correcting deviation from planned performance or altering the plan to allow for obstacles that cannot be removed. Control should lead to investigating difficulties, promptly deciding how to overcome the difficulties, and then making adjustments when and where necessary.

Follow-Up

A valuable check on how both the various parts of the plan are working, and the appropriateness and adequacy of instructions given is consistent follow-up. This simple practice has a salutary effect, not only on the administrator who is in charge of the institutional marketing effort, but also on the people who are charged with the day-to-day implementation of the plan.

Conclusion

The objective of this paper is to present a marketing plan that, with minor modifications, can be easily understood and used by most institutions of higher learning. The plan as presented should also convince administrators that the implementation of a structured marketing plan will be helpful to both those institutions that have experienced declining enrollments and those that wish to exert some control over their own destiny in the potentially difficult years ahead.

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HUMAN RESOURCE DEVELOPMENT - THE KEY INVESTMENT FOR A FIRM MARKETING SERVICES

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Abstract

An important element in marketing services is the human factor. Quality of services is subject to wide fluctuations depending on the ability, dedication and motivation of the employee providing these services. Human resources development as part of the investment in a business is discussed in this paper, including relevant calculations concerning the investment.

Introduction

Kotler (1984, p. 498) makes the point that services are highly variable. Service quality will depend on who provides the service and how that person feels mentally and physically while providing the service. Buyers of services are aware of this variability and are frequently apprehensive about buying services, particularly health, beauty and repair services.

Although particularly acute for providers of the services mentioned above, this problem exists with all services: lodging, transportation, entertainment, education, retailing, and so on.

A key element in services quality control is the employee providing the service. In manufacturing there is the possibility of correcting quality problems before the product reaches the customer. With services, the quality problem usually occurs at the point of contact with the customer and management may not even be aware of its existence.

This put a great deal of emphasis on the proper selection and training of employees. The purpose in presenting this paper is to discuss Human Resource Development (training and development) as an investment the service firm must make in the business. This type of analysis may be foreign to most marketing managers in the services industries.

Human Resource Development

American business and industry have long recognized the importance of training and development as a valuable employment activity. Billions of dollars are spent annually on programs to train people at all levels of the organization--from basic skills for entry-level employees to sophisticated management development for senior executives.

In light of this substantial investment in human resources development (HRD), a paradox exists in the manner in which HRD programs are viewed by management. In many organizations, training and development is viewed as a "stepchild" with little or no support from top management. This ludicrous view has a devastating effect on the well-being of the total organization. The socialization process is greatly hampered, career development programs are superficial, and premature employee turnover is accelerated.

The purpose in writing this paper is to show that it is in management's best interest if HRD be viewed as an investment. Human resources are the most important assets of any organization which contributes to long-run profits. Therefore, management should consider the future cash flows attributable to human resources as it does with other capital expenditures.

Human Resources Development and the Socialization Process

Just as a supervisor can make or break a newcomer's job experiences, a trainer can make or break a new trainee's learning experience. Part of the success of training depends on the trainer's ability to orient or "socialize" trainees to the learning environment (Sanders and Yanouzas, 1983, p. 14). Schein (1968, p 48) defines the socialization process as "the process by which new members learn the value system, the norms, and the required behavior patterns of the society, organization, or group which he is entering." Socialization encompasses the process or method the trainer adopts to inform trainees of expectations. Trainees must be made aware of what is expected of them, of the role of the trainer, and of the desired outcomes. A model HRD program is presented in Exhibit 1, which incorporates the socialization process.

Schein (1968, p. 51) suggests that one of the important functions of organizational socialization is to build commitment and loyalty to the organization. One way in which this is accomplished is to invest much time and effort in the new members and thereby build up expectations of being repaid by loyalty, hard work, and rapid learning. Another method is to get the new employee to make a series of small behavioral commitments which can only be justified by him through the acceptance and incorporation of company values.

Employee socialization is crucial to the well-being of any organization. Schein (1968, p. 52) points out three responses to socialization--(1) rebellion, which is rejection of all pivotal values and norms; (2) conformity, which is

acceptance of all values and norms; and (3) creative individualism, where the employee accepts only pivotal values and norms, and rejects all others. The most desirable reaction is creative individualism, which contributes to innovation and creative thinking within the organization. If rebellion occurs, socialization has been ineffective, causing premature employee turnover, increased HRD costs, and turmoil within the organization.

Dealing With Premature Employee Turnover

Premature turnover of employee is costly. Minimal replacement costs exceed $3,000 for the lowest level employee (Seybolt, 1983, p. 107). For more valued employees, this cost can be much greater. Although most organizations are not concerned with turnover of all of their employees, they should be concerned when their valued employees leave prematurely.

EXHIBIT 1. MODEL HRD PROGRAM

Define and Specify
Job and Training Requirements

Develop Training Objectives

Develop and Test
Training Program

Select Trainees

Assess Socialization to Learning Needs:
A. Determine Pivotal and Peripheral Learning Values
B. Develop Socialization to Learning Strategy
C. Determine Learning Goals
D. Assess Extent to Which Prior Learning Must be Unfrozen
E. Initiate Learner to Learning Climate

Conduct Training

Evaluate Training

Modify Training

Re-Train if Necessary

Accountability of Trainee

Seybolt (1983, p. 108) presents a model for dealing with premature employee turnover which includes the following steps:
1. Categorize the organization's employees according to their organizational career stage or length of tenure and examine work-related attitudes of these different groups. Example:
Entry level: Less than six months
Early career: Six months - one year
Mid career: One - three years
Advanced career: Three - six years
Later career: Over six years
2. Focus on the turnover intentions of these groups, both in terms of absolute level of these intentions and the relative levels of the intentions.
3. Dealing first with those groups with the highest levels of turnover intentions, examine the various dissatisfactions which are predictors of these levels of turnover.
4. Having signaled out the facets of dissatisfaction which best predict intentions, examine the factors in the work-role design which best predict those most important facets of work dissatisfaction.
5. Having identified those work-role-design factors which end to best predict the important dissatisfactions, try to design specific programs to deal with those factors which are most crucial.
For a firm marketing services, an additional step would be to identify those employees whose performance most directly affects the quality of employee-customer interaction.
Using this approach may help avoid a shotgun approach to employee turnover, trying to deal with all employees as one large mass. It focuses on specific factors in the work role design which are critical to employee turnover, factors which can be isolated and dealt with separately.

HRD - An Investment

Most organizations are sticklers for insisting on a fair return on investment. With billions of dollars being spent annually for human resource development, it is imperative that management adopt a system for measuring this investment. Following is a list of reasons for capitalizing HRD (Caplan and Landekich, 1974, p. 2):

1. Human resources provide benefits to an organization in a fashion similar to the manner in which financial and physical resources provide benefits.
2. The benefits associated with both conventional assets and human resources have value to the organization because these benefits contribute in some way to the accomplishment of the organization's goals.
3. The acquisition of human resources typically involves an economic cost, and the benefits associated with such resources can reasonably be expected to contribute to economic effectiveness. It follows, therefore, that

these benefits are essentially economic in nature and are subject to measurement in financial terms.
4. Since the usual accounting definition of an asset involves the right to receive economic benefits in the future, human resources can be classified as capital assets.
5. It is possible to identify and measure human resources costs and benefits within an organization.
6. Information with respect to human resource costs and benefits can be useful in the process of planning, controlling, evaluating, and predicting organizational performance.

Methods for Measuring HRD Investments

Measurement of an investment in HRD is somewhat elusive. Consequently, many organizations fail to measure the effectiveness of HRD. This problem further perpetuates itself in the organization's philosophy toward HRD, where this function is relegated to that of a "stepchild" within the organization.

However, there are methods available for quantifying the HRD investment. These include:

1. Earnings orientation (ROI) - A basic formula for rate of return is:

$$ROI = \frac{\text{dollar value of results}}{\text{program costs}}$$

When ROI's are calculated, they should be compared with a target ROI for such programs. Sometimes these targets are determined on the basis of company standards for capital expenditures. Others are based on what top management expects from an HRD program, or what level it would require to approve the implementation (Phillips, 1983, p. 17).
2. Human changes orientation - Monitor the change in turnover (reduced), improved performance and reduced grievances (Kaye, 1983, p. 137).
3. Time orientation - Time spent or wasted. Time spent in training new employees versus moving existing employees to new jobs, and time wasted due to turnover (Kaye, 1983, p. 137).

A somewhat more quantitative technique for measuring investments in human resources involves the use of human resource accounting. Human resource accounting (HRA) is the process of identifying, measuring, and communicating information about human resources to facilitate effective management within an organization (Brummet, Flamholtz and Pyle, 1969, p. 12). Two types of HRA models will be discussed: historical cost methods and adjusted present value methods.

Historical Cost Model

Historical cost models are structured to collect and record expenditures made on acquiring, allocating and developing people for the performance of tasks within the organization. The cost outlays are then amortized over appropriate periods. The most notable historical cost model is that of Brummet, Flamholtz, and Pyle (Stephenson and Franklin, 1981-82, p. 46). Another version of the historical cost model is the replacement value model which updates the historical model to reflect current value. The Whatchamacallit Corporation provides an example. Seven functional accounts are presently in use for accumulation of the costs that quality as investments, i.e., whose worth to the company exceeds the accounting period in which the costs are incurred. Both direct and indirect costs are included. The seven cost categories are as follows: (1) recruiting, (2) acquisition, (3) orientation, (4) training, (5) familiarization, (6) informal development, and (7) formal development (Caplan and Landekich, 1974, p. 91). (See Exhibit 2.)

Each operating manager receives quarterly reports on investments in each of the seven categories for employees in his area. Upon review of the report, the operating manager indicates any required write-offs due to expiration of the particular investments. Amortization of the costs recorded as investments in human resources is calculated in principle to reflect expirations as the expected benefits are realized over time. This means that the amortization schedule is determined in accordance with the expected useful life of the investment. If an employee leaves the firm, the balance in his account is written-off as a loss. Thus, at any given time, the sum of unamortized balances represents Whatchamacallit's "net investment in human resources"--that is, that portion of the total costs of hiring and training employees which have not yet been amortized as an expense or written-off as a loss.

The model attempts to answer the question posed by Rensis Likert and other researchers--How much would it cost to start from scratch and replace the human part of an organization? Likert and his associates estimate that it requires two to ten times the annual payroll of an organization to effect such a replacement (Likert, 1973, p. 10).

Adjusted Present Value Method

This method requires four steps in order to arrive at the value of the human assets (Caplan and Landekich, 1974, p. 80):
1. Estimate annual wages and salary payments for five years into the future.
2. Calculate the present value of the estimated wage and salary payments by applying a discount factor equal to the normal rate of return in the economy.
3. Calculate an "average efficiency ratio" based on the previous five year's performance. This ratio is found by dividing the actual

EXHIBIT 2

RESOURCE ACQUISITION AND DEVELOPMENTAL INFORMATION
Replacement Investment of Managerial Personnel at the Whatchamacallit Corporation
(January 1, 1984)

	A First-Line Supervisor	A Middle Manager	High-Level Manager	95 Manager	% of Total
Recruiting costs	$ 600	$ 2,000	$ 6,700	$154,100	(16%)
Acquisition costs	200	1,700	3,500	103,500	(10%)
Formal training and orientation	100	500	1,000	22,300	(2%)
On-the-job training	1,000	3,000	5,100	204,100	(21%)
Familiarization	1,900	6,800	10,200	399,000	(40%)
Development	200	1,400	2,000	103,600	(11%)
TOTAL	$4,000	$15,400	$28,500	$986,600	(100%)
Initial amoritization adjustment				458,300(-)	
"Book value" - January 1, 1968				$528,300	

Source: Edwin H. Caplan and Stephen Landekich, Human Resource Accounting: Past, Present, and Future (New York: National Association of Accountants, July 1974), p. 92.

earnings of the firm by normal earnings for each year and averaging the results.
4. Multiply the present value of the future wage and salary payments by the average efficiency ratio. The resulting figure represents the estimated value of the human resources.

Exhibit 3 illustrates this method. An efficiency ratio of 1 indicated that the firm's average rate of return over the five years is equal to the average normal rate of return for the economy. For purposes of this example, an efficiency ratio equal to 1.4 is assumed. The calculation of human asset value is as follows:

> Multiply the present value of the figure wage (salary) payments by the efficiency ratio - $537,400 x 1.4 = $752,402. Thus, the computed value of the firm's human assets of $752,402.

Lev and Schwartz (1971, p. 103) presented the "classic" present value model. Using salaries as a surrogate for contribution, they calculated the value of the sum of the individual's projected future earnings. The future earnings were estimated by using census data for wage levels for specific skills in different age groups, races, locations, sex, etc. The summation was adjusted for the possibility of death before retirement by using a probability factor from insurance mortality tables.

EXHIBIT 3

COMPUTATION OF HUMAN RESOURCE VALUE USING THE ADJUSTED PRESENT VALUE PERIOD

Calculation of the Present Value of Future Wage and Salary Payments

Year	Estimated Wage and Salary Payments	Discount Factor at 6%	Present Value of Future Payments Discounted at 6%
1	$100,000	.943	$ 94,300
2	120,000	.890	106,800
3	135,000	.840	113,400
4	140,000	.792	110,880
5	150,000	.747	112,050
Total	$645,000		$537,430

Calculation of the "Average Efficiency Ratio" Based on Previous 5 Years' Performance

$$\text{Efficiency Ratio} = \frac{5\frac{R_{F_0}}{R_{E_0}} + 4\frac{R_{F_1}}{R_{E_1}} + 3\frac{R_{F_2}}{R_{E_2}} + 2\frac{R_{F_3}}{R_{E_3}} + \frac{R_{F_4}}{R_{E_4}}}{15}$$

R_{F_0} = The rate of accounting income on owned assets for the firm for the current year.
R_{E_0} = The average rate of accounting income on owned assets for all firms in the economy for the current year.
R_{F_4} = The rate of accounting income on owned assets for the firm for the fourth year previous.
R_{E_4} = The average rate of accounting income on owned assets for all firms in the economy for the fourth year previous.

Source: Edwin H. Caplan and Stephen Landekich, Human Resource Accounting: Past, Present, and Future (New York: National Association of Accountants, July 1974), p. 82.

BENEFITS OF HRD INVESTMENT

When HRD is viewed as an investment, the following benefits can be realized:

1. Socialization Process Improved - Management's concern for its investment in human resources assures that greater attention will be given to socializing the new employee, thereby making this process more effective.
2. Reduced Turnover of Recently Hired Employees as well as Established Employees - As the employee is socialized into the organization, frustrations frequently encountered by new employees are greatly reduced, improving the likelihood that the newly hired employee will remain in this new job for a longer period of time. Additionally, as management promotes

qualified employees from within, tenured employees will remain with the company for a greater time period.

3. Develop High Potential Employees More Quickly - With management's quest to reap maximum benefits from its investment in HRD, a concerted effort will be made to develop high-potential employees more quickly.

4. Increase the Overall Effectiveness of the Organization Through Greater Productivity - With a well-trained employee, mistakes are reduced, retraining is minimized, and the effectiveness of the organization is improved, which is particularly important in a firm marketing services.

5. Alter the Behavior and Attitudes of Top Management Toward HRD - Management places more importance on HRD, and views it as it does other investments.

6. Quality of Worklife Improved - When viewed as an investment, employees feel cared for. Relationships within the organization are built on confidence and trust, and company objectives are met through mutuality of purpose.

7. Reduced Recruitment and Placement Costs - Through reduced employee turnover, the need to recruit new employees is reduced, thereby reducing expenses associated with recruiting.

8. Maximize Use of Human Resources - When an employee is trained properly, fewer mistakes are made; and productivity is maximized. Additionally, a well-trained employee requires less direct supervision from superiors, which permits the superior to devote more attention to critical areas of concern within the organization.

Summary and Conclusions

The American Society for Training and Development supports viewing HRD as an investment. The study proves that human resources are the dominant factor accounting for growth in the national income; that since 1929, American workers have been learning to work smarter while increasing leisure time, wages and productivity; that with added training and job experience, young and female workers will have a positive impact on national income growth from the 1980's through the end of this century; that the human factor is the decisive component of productivity growth; and that because human resources are almost inexhaustible, there are no permanent limits to economic growth (Harris and Harris, 1983, p. 66).

When viewing HRD as an investment, the benefits provided to the organization far out-weigh any disadvantages. Techniques are available for quantifying the HRD investment. Therefore, management should adopt the attitude that HRD is indeed an investment. This is particularly true of management in the services industries where the employee personally provides the service and the quality of that service is determined at that specific point in time by the ability, dedication and motivation of the employee then and there.

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CONSUMER UTILITIES FOR A LEGAL SERVICE QUALITY SUPPORT SYSTEM

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Abstract

This empirical study examines consumer utilities for selected components of legal service support system alternatives. Conjoint measurement technique was utilized to ascertain consumer utilities for a set of multiattribute alternatives. The results of conjoint analysis, using OLS regression with effects coding, are presented and discussed.

Introduction

Recent interest in the marketing of services among both academics and practitioners can be attributed to not only the continued growth in the service sector of the U.S. economy (Berry, Shostack and Upah 1982), but also to developments such as deregulation of several major service industries, the removal of professional association restrictions on using marketing techniques (particularly advertising), among others (Lovelock 1983). As competition has intensified within the service sector, service marketing managers have become cognizant of the need to develop greater sophistication in their service marketing strategies for survival.

Traditionally, professional service providers have focused on the quality of their service(s) as a means to differentiate their offerings and compete favorably in the market place. But quality is an elusive construct difficult to define, delimit, and measure (Crosby 1979). Research attempts in identifying, operationalizing, and measuring determinants of quality in the services context have also been constrained. However, progress has been reported in this direction. For instance, based on exploratory investigations of four service businesses, Parasuraman, Zeithaml and Berry (1985) identify ten dimensions (i.e., reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding the customer, and tangibles) that consumers use in forming expectations about and perceptions of services.

Along with renewed emphasis on service quality, prudent service providers have recognized the importance of service support activities, in today's competitive service marketing environment. The concept of service support system is analagous to the established product support system concept. The professional service providers have a whole host of activities at their disposal to develop service support systems. For example, to facilitate ease of access, a lawyer might keep evening hours, relocate, add more phone lines, etc. However, given limited resources and time availability, the rational lawyer would probably like to select the most productive alternative.

Current research literature provides little evidence about consumer preferences or utilities for programs and strategies thought to enhance overall service quality satisfaction.

Therefore, the present study attempts to examine consumer preferences and utilities for components of service support system alternatives that are associated with perceived service quality. Specifically, the study investigates consumer preference and consumer utilities for a set of alternative legal service support system features which professional service providers, namely lawyers, can incorporate in developing competitive legal service marketing strategies.

Components of Legal Service Support System

Efforts to evaluate consumer preferences for potential service support system alternatives required that the components of the service system first be identified. Therefore, the existing knowledge about professional service features was reviewed. This was followed by interviewing a sample of consumers and legal experts to identify features of legal services that influenced consumer perceptions of service quality.

The literature reviewed indicated that only a handful of studies have focused on servicce quality. In general, consumer perceptions of professional service quality have been linked to features such as service price (Hite, and Kiser 1985; Darden Darden, and Kiser 1981; Garcia 1980); promptness of delivery (Parasuraman, Zeithaml, and Berry 1985; Levitt 1972); degree of customization in the offering (Lovelock 1983; Levitt 1976), among others. However, none of these studies focused on identifying specific components of professional service quality.

Because literature on professional service quality, particularly, legal services, is not rich enough to identify specific components, an exploratory qualitative investigation was undertaken. One hundred and twenty-five in-depth telephone interviews with consumers were conducted in a tri-county area in a suburban area surrounding a mid-sized southern city during the fall of 1984.

In addition, twenty personal interviews were conducted with senior lawyers during that time and in that area.

In both sets of interviews, participants were questioned on their perceptions, expectations, and experiences concerning legal services. The participants´answers were subjectively classified into appropriate categories. A list of key attributes of legal service support system capable of enhancing consumers´ quality experiences was thus developed.

Methodology

The objective of this study was to determine consumer preferences and utilities for slected legal service attributes which professional lawyers could utilize as components for legal service support systems. From the broad list of attributes identified in the literature review and the exploratory investigation, a subset of attributes and their levels was chosen for further evaluation. These attributes and their levels are summarized in **Table 1**. Professional legal service providers can incorporate these quality attributes in their service support systems to enhance customer satisfaction. However, not all quality attributes can be incorporated in their service offerings. Therefore, to develop a feasible and practical support system, professional service providers will need to know the degree to which consumers consider the quality features as important and desirable, and the degree to which consumers will make tradeoffs among attributes and attribute levels. A useful procedure to ascertain consumers´ utilities modeling multiattribute alternatives is conjoint measurement (Green and Srinivasan 1978).

In the study the chosen attributes and their levels (**Table 1**) provide a total of 27 three-factor stimulus profiles requiring respondents´ preference orderings. However, to reduce respondents´ evaluative task to realistic complexity, fractional factorial designs have been utilized (Green 1974). In the present case, the 27 three-factor stimulus profiles present a 3x3x3 Latin square design. Assuming absence of interaction effects among attribute-levels, a one-third fractional factorial design reduces the number of stimulus profiles to nine, without loss of estimatability of all main effects. The nine stimulus profiles of a single Latin square utilized in the study are presented in **Table 2**.

The Data: The data for conjoint analysis required individuals´ rank order preferences for the set of nine stimulus profiles of a legal service quality support system. The data were obtained by administering a mail survey rather than the traditional classroom or central location administration of stimulus profile description cards/booklets. Subjects in the study mail survey were drawn from a population of households in South Florida. The sampling frame was a current telephone directory containing the listing of several South Florida suburban cities. A systematic random sample of 500 households was compiled. Each potential survey respondent was sent a four-page questionnaire, a cover letter on university stationary, and a postage-paid business reply envelope. The structured questionnaire included items designed to measure respondents´ demographic characteristics and choice preferences for the nine stimulus profiles (Table 2). The conjoint measurement of respondents´ data was as follows. A brief introductory statement asked respondents to assume that a law firm was conducting a survey to determine their preferences for various programs concerning quality, speed of delivery, and pricing of a lawyer´s services. Following a hypothetical example illustration of rank ordering, each respondent´s preference was measured by ranking the nine stimulus profiles from most preferred (assigned 9 points) to least preferred (assigned 1 point).

Analysis: The evaluative judgements in this study consisted of rank order preference judgements. The dependent variable, therefore, was measured on an ordinal scale. Although several nonmetric conjoint algorithms have been developed such as MONANOVA (Kruskal 1965) and LINMAP (Srinivasan and Shocker 1973), recent research evidence suggests metric analysis of variance or OLS regression procedures are very robust (Carmone, Green, and Jain 1979; Wittink and Cattin 1981). Consequently, OLS regression analysis using inter ranks as dependent variable and effects coding for the attribute-levels was used to estimate respondents´ partworth utilities for the service quality support system.

Findings

Of the 500 questionnaires mailed, 165 were returned for an overall response rate of 33 percent. However, only 156 respondents who fully completed the conjoint measurement task were utilized in the analysis.

Using individual respondents´ rank preferences for the service quality stimuli set as dependent variable and effect coded attribute level dummy variables as explanatory variables, the pooled OLS regression produced partial regression coefficients that reflect the effects of the attribute-levels in the analysis. The effects coding enabled the calculation of the partial regression coeffi-

TABLE 1

A SUBSET OF LEGAL SERVICE QUALITY SUPPORT SYSTEM ATTRIBUTES IDENTIFIED BY PARTICIPANTS IN THE EXPLORATORY INVESTIGATION

ATTRIBUTES AND LEVELS

I. QUALITY IMPROVEMENT PLAN (Q)
   1. Staff members meet basic professional requirements.
   2. In addition to basic requirements, staff members encouraged to seek advice from top lawyers.
   3. In addition to basic requirements, staff members are closely supervised by top lawyers.

II. SCHEDULING/RESERVATION APPOINTMENTS (S)
   1. First come, first served; no appointment.
   2. Guaranteed reservation system; no delay.
   3. Wait for service until the lawyer is not busy.

III. PRICING PROGRAMS (P)
   1. Price discounts to regular, preferred customers.
   2. Free initial consultation.
   3. Credit payment plan available.

TABLE 2

DESCRIPTION OF THE STIMULUS PROFILES SET

Factor-Level Combination	Description of Stimulus Profiles
Q1 S1 P1	Staff members meet basic professional requirements - First come, first served; no appointments - Price discounts to regular, preffered customers.
Q1 S2 P2	Staff members meet basic professional requirements - Guaranteed reservation system; no delay - Free initial consultation
Q1 S3 P3	Staff members meet basic professional requirements - Wait for service until the lawyer is not busy - Credit payment plan available.
Q2 S2 P1	In addition to basic requirements, staff members encouraged to seek advice from top lawyers - Guaranteed reservation system; no delay - Price discounts to regular, preferred customers.
Q2 S3 P2	In addition to basic requirements, staff members encouraged to seek advice from top lawyers - Wait for service until lawyer is not busy - Free initial consultation.
Q2 S1 P3	In addition to basic requirements, staff members encouraged to seek advice from top lawyers - First come, first served, no appointment - Credit plan available.
Q3 S3 P1	In addition to basic requirements, staff members are closely supervised by top lawyers - Wait for service until the laywer is not busy - Price discounts to regular, preferred customers.
Q3 S1 P2	In addition to basic requirements, staff members are closely supervised by top lawyers - First come, first served; no appointment - Free initial consultation.
Q3 S2 P3	In addition to basic requirements, staff members are closely supervised by top lawyers - Guaranteed reservation system; no delay - Credit payment plan available.

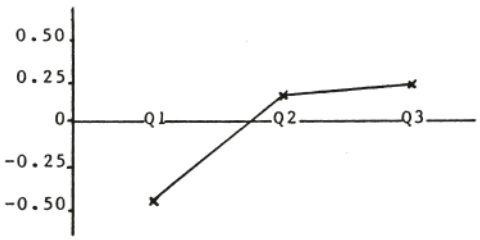
cient for the third level in each attribute as the negative sum of the first two levels coefficients in each attribute (Pedhazur 1982).

The OLS results based on pooled data of nine observations for each of the 156 respondents are presented in **Table 3**. The estimated partworth utilities for each level of the three features of the service quality support system are illustrated in **Figure 1**.

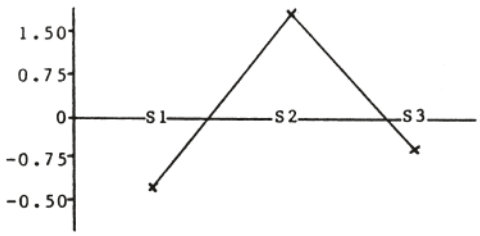
FIGURE 1

ESTIMATED PARTWORTH UTILITIES FOR THE LEGAL SERVICE QUALITY SUPPORT SYSTEM

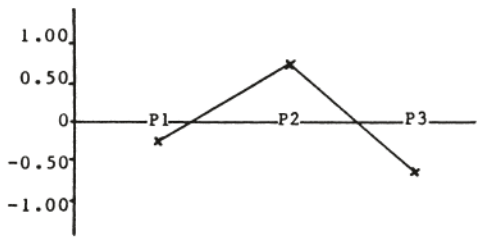
(a) Quality Improvement Plan (Q)



(b) Scheduling/reservation Appointments (S)



(c) Pricing Programs (P)



Since the utility scales for each attribute are expressed in common unit, the within-attribute partworth can be used as an index of a relative importance of the attributes (Green and Srinivasan 1978). The partworth ranges for the service quality support system features are presented in **Table 3**. As indicated by the partworth ranges, the scheduling/-reservation appointment feature shows the most variation, and therefore, ranked the most important determinant of the average respondent's legal service quality support system preference ratings. The pricing programs feature was rated the

TABLE 3

SUMMARY OF CONJOINT MEASUREMENT RESULTS FOR LEGAL SERVICE SUPPORT SYSTEM: POOLED OLS RESULTS

Attribute-Levels	Regression Explanatory Variable	Partial Regression Coefficient	Partworth Estimates	Partworth Range	Importance Rank
QUALITY IMPROVEMENT PLAN					
Q1	X1	-0.4660	-0.4660		
Q2	X2	0.2306	0.2306		
Q3			0.2354	0.7014	3
SCHEDULING/ RESERVATION APPOINTMENTS					
S1	X3	-1.1540	-1.1540		
S2	X4	1.5345	1.5345		
S3			-0.3805	2.6885	1
PRICING PROGRAMS					
P1	X5	-0.1070	-0.1070		
P2	X6	0.6601	0.6601		
P3			-0.5531	1.2132	2

$\bar{X}$ = 5.0066

N = (9 x 156) = 1404

next most important feature for the legal service quality support system. The quality improvement plan feature showed the least variation, and therefore, was a relatively unimportant determinant of the respondents' preference ratings for the alternative legal service quality support systems.

Conclusions

The purpose of this study was to determine consumers' preferences and the importance of features of legal service quality support system alternatives. The conjoint measurement technique was utilized to estimate consumers' partworth utilities for the different feature-level combinations. The empirical findings of the study provide interesting results which suggest managerial implications for service providers.

Of the three service support systems features investigated in the study, consumers perceived scheduling/reservation feature the most important. Customers had the highest utility for guaranteed appointment with no waiting-time delays. They disliked the first-come, first-serve routine, but were less intolerant to waiting until the service provider was not busy. These conclusions, while supporting past literature, clearly indicate that customers value their time highly and have low tolerance to delays in service delivery. Thus, strategically, attorneys planning for a legal service support system should include and place a high priority on scheduling appointments involving little or no client-waiting periods.

Consumers rated the pricing program feature as next in importance to scheduling. Among pricing program options, free initial consultation commanded the highest consumer utility. Price discounts for preferred customers and the option of credit payment plan both generated negative customer utilty. Thus, a service support system that provides a potential client an opportunity to get acquainted with the attorney's services without having to pay a fee, could greatly enhance customer confidence in the provider's services. In addition, the negative customer utilities for price discounts offers a cautionary note to attorneys not to discount their services prices to attract more business. Perhaps, a stronger than anticipated association exists between price and quality. A similar reasoning may apply to customer negative utilities for the credit payment plan option.

The quality improvement feature concerning staff members providing legal services was found to be the least important feature of the service support system. While the overall contribution of this feature in strengthening the service support system was low, positive consumer utilities were associated with levels requiring supervision of staff members providing the legal services. However, as the trend toward delegating routine legal matters to paralegals increases, attorneys will have to place increased emphasis on supervision to maintain service quality expectations.

In summary, based on conjoint analysis estimated partworth utilities, professional legal service providers may be advised that a legal service quality support system with features of guaranteed appointments, free initial consultations, and closely supervised legal staff will elicit the maximum customer utility. However, a service support system may ininclude many more feature not investigated in this study. The service marketing environment is typified by an abundance of multi-attribute choice alternatives which require consumer input. The present study documents a known research methodology which professional service providers can effectively utilize in developing competitive marketing strategies.

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DIRECT MARKETING VIA HIGH-TECHNOLOGY: IS THERE A MARKET?

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Abstract

This paper presents the findings of an empirically based national survey research study designed to clarify the controversy that exists today regarding the likely "revolution" vs. "evolution" of high-tech direct marketing. The study specifically investigates the viability of direct "in-home" TV shopping. The findings suggest that retailing strategists start developing long-term marketing scenarios that will permit them to take advantage of an "evolution" likely to turn "revolution" by the year 2000.

Introduction

The success story of direct marketing efforts over the past decade is well documented (Business Week 1979; Davidson and Rogers 1979; Kobs 1979; McQuade 1980). Analyzing this trend, it is evident that direct marketers have been successful for several reasons. First, they have clearly recognized the changing needs and desires of the marketplace regarding value, time pressure, reliability, satisfaction and convenience. Second, they have expanded the breadth and depth of merchandise lines offered; e.g., furniture, clothing, home computers, software, etc. Last, they have been innovative in the creation of new and varied direct marketing systems; e.g., direct dial toll-free 800 number ordering, direct purchase via in-store computers and teleshopping ... direct interactive cable TV shopping; e.g., QUBE and Channel 2000 (Urbany and Talarzyk 1979, p. 82).

There is no doubt that technology has been a major contributing factor in the past growth of direct marketing sales. However, a controversy still exists regarding the future value of high-technology as it relates to direct marketing sales. For example, one highly quoted research team has drawn the following conclusions: (Rosenberg and Hirshman 1980, p. 112)

> We see as a virtual certainty that the era of widespread telecommunication shopping is approaching. We predict that this era will witness significant alterations in the concept of retailing and the nature of retail competition.

Clearly, the above view is not shared by all marketers, as evidenced by the closing comments in a recent study published by the Harvard Business School. The researchers note: (Salmon 1985, p. 86)

> ... the inescapable conclusion is that electronic in-home shopping will not, in the foreseeable future, revolutionize consumer shopping. Instead it is likely to encroach slowly on existing nonstore retailing, and its ultimate significance remains uncertain.

With the above statements in mind, the primary purpose of this paper is to present the findings of an empirically based research effort designed to clarify this issue; i.e., to investigate the viability of high-tech direct marketing efforts. Specifically, the project was designed to address, on a national basis, the following questions:

- What is the probable usage of the direct (interactive) television purchase form of "in-home" shopping?
- To what degree is the direct (interactive) television purchase form of "in-home" shopping perceived as providing additional benefits to the user?
- What is the willingness of those likely to use the direct (interactive) television purchase form of "in-home" shopping to pay a reasonable monthly fee to access such capabilities?
- For those willing to pay an access fee for such capabilities, what do they consider to be a reasonable monthly fee?
- What is the demographic profile of those most likely to use the direct (interactive) television purchase form of "in-home" shopping?

Before presenting the findings relative to the above questions, it will be useful to review briefly the research design associated with this project.

Given the length of the survey questionnaire, budget and time constraints of the project, it was determined by the authors that a mail-panel format would be the most effective means of collecting the required data. A national mail-panel research group was hired to collect the data. In order to provide a data base that was statistically projectable at the national level, 750 questionnaires were sent to selected panel members on October 9, 1985. The sample was selected to conform to the latest available U.S. Census data for the nine geographic divisions and within each division the sample was balanced to conform to the area by market size, age, annual household income and household size. A total of 490 questionnaires were completed and returned by the November 30, 1985 cutoff date. This represents a sixty-five percent completion rate.

Given the exploritory and descriptive nature of this research effort, formal research hypotheses were not generated. Rather, a series of questions were formulated to explore the viability of a particular form of high-tech direct marketing, namely direct interactive "in-home" TV shopping (see the Introduction Section for the specific questions addressed). It is the authors' belief that this research effort does provide new information that will assist researchers in formulating relevant formal research hypotheses in this area of study.

Findings and Implications

In interpreting the findings to specific questions asked of the respondents regarding direct "in-home" TV shopping, it is important to note these questions were prefaced by a brief description of the concept in question. It read as follows:

> Now I would like you to consider the future of "in-home" shopping. Experiments are currently being conducted in the U.S. which permit families to view merchandise on television. By pressing a series of buttons on their TV, merchandise can be ordered for direct shipment to their home. Eventually, we are likely to see several TV shopping channels present in every market.

TABLE 1 reports the findings relative to the question: Would you consider using the direct TV purchase form of "in-home" shopping? As can be seen from this table, only 6.5 percent of the respondents indicated they definitely would consider using this direct marketing approach. However, 31.2 percent stated they probably would consider this approach. Important also is the large number of respondents who were undecided about its use....28 percent. While these figures represent significant interest at the national level, they hardly constitute the basis for a near-term revolution in retailing.

TABLE 1
PROBABLE USE OF DIRECT "IN-HOME" TV SHOPPING

Question: Would you consider using the direct form of "in-home" shopping?

Response	N	Percent
Definitely would not	52	10.6%
Probably would not	116	23.7%
Undecided	137	28.0%
Probably would	153	31.2%
Definitely would	32	6.5%
	490	100.0%

The findings shown in **TABLE 2** provide support for the figures exhibited in **TABLE 1**. For example, **TABLE 2** shows 36 percent of those responding to the questions as either strongly agreeing or agreeing that TV shopping appears to have many additional benefits to them as a means of shopping from home. This corresponds, and logically supports, the willingness of 37.7 percent of the survey respondents to definitely or probably consider the use of this direct marketing approach .... It should also be pointed out in **TABLE 2** that the highest response percentage was in the undecided category. This implies the need for a strong communications program which can inform the potential users of the many benefits to be derived from this approach to shopping. This too suggests that until the communications task is complete a high-tech direct marketing revolution is not likely to occur.

TABLE 2
AGREEMENT REGARDING ADDITIONAL BENEFITS PROVIDED BY DIRECT "IN-HOME" TV SHOPPING

Question: Do you agree or disagree that TV shopping appears to have many additional benefits to you, yourself, as a means of shopping from the home?

Response	N	Percent
Strongly Agree	33	6.8%
Agree	142	29.2%
Undecided	190	39.0%
Disagree	87	17.8%
Strongly Disagree	35	7.2%
	487	100.0%

The less than overwhelming acceptance of the high-tech direct marketing approach by the sample group is further compounded by the fact that few of those who would consider the use of direct "in-home" television shopping (37.7 percent, N=185, **TABLE 1**) are willing to pay for the service. For example, **TABLE 3** indicates that of the 185 respondents who would consider the use of this approach, only 36 would be willing to pay a reasonable monthly fee for the service....this represents only 19 percent of the relevant base.

TABLE 3
WILLINGNESS OF "HIGH PROBABILITY" MARKET POTENTIAL TO PAY FOR DIRECT TV PURCHASE SERVICE

Note: The following information relates to those respondents who indicated they (1) definitely would; (2) probably would; and (3) were undecided regarding the consideration to use the direct TV purchase form of "in-home" shopping. They were asked the following question:

Would you be willing to pay a reasonable monthly fee to access direct TV shopping capabilities?

Willingness To Pay	Willingness To Consider Use of Direct Purchase TV Shopping					
	Definitely Would		Probably Would		Undecided	
	N	Percent	N	Percent	N	Percent
Definitely	6	19.4%	-	-	-	-
Probably	9	29.0%	21	13.8%	1	0.7%
Undecided	6	19.4%	58	37.9%	24	17.5%
Probably Not	5	16.1%	49	32.0%	83	60.6%
Definitely Not	5	16.1%	25	16.3%	29	21.2%
	31	100.0%	153	100.0%	137	100.0%

Current technology and its attendent costs suggest that a monthly users fee of approximately $11 will be required to support a "most likely case" marketing scenario for a concept similar to that described to the respondents in this study (Salmon 1985, p. 82). To further compound this issue of fees, TABLE 4 looks at what those respondents, who would be willing to pay, believe represents a "reasonable" monthly fee. Over 40 percent thought $5 was a reasonable monthly fee for such a service while the mean value for the group was somewhat higher....$6.40. Thus, reflecting on TABLES 3 and 4, it becomes increasingly evident that the direct marketing approach under consideration is not likely to explode overnight into a prominent form of retailing.

TABLE 4
PERCEIVED REASONABLE FEE FOR DIRECT TV PURCHASE CAPABILITIES BY THOSE RESPONDENTS WILLING TO PAY

Note: The following information pertains to those thirty-six (36) respondents from TABLE 3 who would definitely/probably consider using direct "in-home" TV shopping and would definitely/probably be willing to pay a reasonable access fee.

The following question was asked of this group:

What do you think would be a reasonable monthly fee for providing your household with direct TV shopping capabilities?

Suggested Monthly Fee	N	Percent
$ 2	3	8.0%
$ 3	2	6.0%
$ 5	15	41.8%
$ 7	1	2.8%
$ 10	9	25.0%
$ 12	1	2.8%
$ 15	1	2.8%
$ 20	1	2.8%
Don't Know	3	8.0%
	36	100.0%

Mean=$6.40

Up to this point all the findings of this study support the more conservative position regarding the growth of direct "in-home" TV shopping; i.e., it is more likely to take the form of a slow evolution rather than a dynamic revolution in retailing. However, TABLE 5.1 shows the willingness to consider the use of this new approach in direct marketing is strongly related to age. For example, 68 percent of the under age 31 sample said they definitely or probably would consider the use of direct "in-home" TV shopping; whereas only 24 percent of the age 60 and over sample said they would definitely or probably consider such an approach. As our population ages, what is now the potential for a modest evolution in retailing may indeed form the basis for a retailing revolution. TABLES 5.1-5.6 look at selected demographics of those who said they definitely or probably would consider the use of this approach (high potential users). A comparison was made, for selected demographics, to determine if the subsample's distribution was similar to the distribution of the general sample. Thus, a "goodness of fit" test was performed based on a calculation of the Chi-square statistic. Based on this analysis, only age demonstrated a significant difference in the distributions at the .05 level or greater. (See TABLES 5.1-5.6 for the specific Chi-square values.) Further, with the exception of age, the demographics of this sample group appears similar to recent profiles of other "in-home" shoppers (Gillett 1979); i.e., higher than average income and education

levels.

TABLE 5
SELECTED DEMOGRAPHIC PROFILE OF
HIGH PROBABILITY USERS OF
DIRECT "IN-HOME" TV SHOPPING

Note: The following is a selected demographic profile of those 185 respondents in **TABLE 1** who indicated they definitely/probably would consider using the direct TV purchase form of "in-home" shopping.

(5.1) AGE

	N	%	N Total Sample	%	Percent of Total Sample
Under	45	24%	66	14%	68%
31 - 39	39	21%	79	16%	49%
40 - 49	31	17%	72	15%	43%
50 - 56	23	13%	91	18%	25%
60 and Over	41	22%	170	35%	24%
Refused	6	3%	12	2%	50%
	185	100%	490	100%	38%

X^2=30.5 Significant at the .001 level.

TABLE 5 (continued)
SELECTED DEMOGRAPHIC PROFILE OF
HIGH PROBABILITY USERS OF
DIRECT "IN-HOME" TV SHOPPING

(5.2) ANNUAL HOUSEHOLD INCOME

	N	%	N Total Sample	%	Percent of Total Sample
Under $15,000	43	23%	135	28%	32%
$15,000 - $19,999	18	10%	62	13%	29%
$20,000 - $29,999	36	19%	81	16%	44%
$30,000 - $39,999	35	19%	81	16%	43%
$50,000 - $49,999	27	15%	53	11%	51%
$50,000 and Over	23	13%	60	12%	38%
Refused	3	1%	18	4%	17%
	185	100%	490	100%	38%

X^2=12.1

TABLE 5 (continued)
SELECTED DEMOGRAPHIC PROFILE OF
HIGH PROBABILITY USERS OF
DIRECT "IN-HOME" TV SHOPPING

(5.3) SEX

	N	%	N Total Sample	%	Percent of Total Sample
Male	77	42%	198	40%	39%
Female	101	54%	282	58%	36%
Refused	7	4%	10	2%	70%
	185	100%	490	100%	38%

X^2=2.54

TABLE 5 (continued)
SELECTED DEMOGRAPHIC PROFILE OF
HIGH PROBABILITY USERS OF
DIRECT "IN-HOME" TV SHOPPING

(5.4) GEOGRAPHIC LOCATION

	N	%	N Total Sample	%	Percent of Total Sample
New England	15	8%	30	6%	50%
Middle Atlantic	27	15%	74	15%	36%
East North Central	33	18%	90	19%	37%
West North Central	15	8%	36	7%	2%
South Atlantic	25	14%	78	16%	32%
East South Central	12	6%	26	5%	46%
West South Central	21	11%	56	12%	38%
Mountain	6	3%	26	5%	23%
Pacific	8	15%	70	14%	40%
Refused	3	2%	4	1%	75%
	185	100%	490	100%	38%

X^2=4.83

TABLE 5 (continued)
SELECTED DEMOGRAPHIC PROFILE OF
HIGH PROBABILITY USERS OF
DIRECT "IN-HOME" TV SHOPPING

(5.5) EDUCATION - FEMALE RESPONDENTS

	N	%	Sample	%	Percent of Total Sample
Grade School	4	4%	7	2%	57%
Attended H.S.	9	9%	32	11%	28%
Graduated H.S.	38	37%	114	40%	33%
Attended College	28	28%	75	27%	37%
Graduated College	11	11%	25	9%	44%
College Post Grad	10	10%	26	9%	38%
Refused	1	1%	7	2%	50%
	101	100%	286	100%	36%

X^2=3.47

TABLE 5 (continued)
SELECTED DEMOGRAPHIC PROFILE OF
HIGH PROBABILITY USERS OF
DIRECT "IN-HOME" TV SHOPPING

(5.6) EDUCATION - MALE RESPONDENTS

	N	%	Sample	%	Percent of Total Sample
Grade School	-	-	12	6%	-
Attended H.S.	3	4%	18	9%	17%
Graduated H.S.	27	35%	62	31%	43%
Attended College	21	28%	42	21%	50%
Graduated College	11	14%	25	13%	44%
College Post Grad	10	13%	33	17%	30%
Refused	5	6%	6	3%	83%
	77	100%	198	100%	39%

$X^2 = 10.4$

In summarizing, can the clarity issue posed at the beginning of this paper be resolved; i.e., revolution vs. slow evolution as it relates high-tech direct marketing? The findings of this research effort strongly support the more conservative slow evolutionary position.... certainly through the year 2000. However, a potential revolution in retailing exists at that point because those with positive attitudes toward the concept in question today (age 31 and under group) will replace those in the market who are currently skeptical of the approach. Further, since the acceptance of the approach appears to be related to age, a high probability exists that in the year 2000 the age 31 and under group will show an even higher acceptance rate of high-tech direct marketing than is present today.

Given the above considerations, it is recommended that long-range retailing strategists not ignore the potential of high-tech direct marketing in reaching the consumer marketplace. However, if this approach is to become viable, they must be sure that appropriate plans are in place for effectively communicating the benefits of such an approach. Thus, it is advised that retail strategists start developing long-term scenarios that will permit them to take advantage of an "evolution" likely to turn "revolution."

Future Research Considerations

The findings of this study suggest the need for further research and strategy consideration in the following areas:

- While age and income offered a partial explanation for the willingness to use direct TV shopping, it is suggested that psychographic variables be investigated with the hope of enhancing the prediction and understanding of the high-potential user audience(s) e.g., desire of potential users to be the first to try new products/services; willingness to take risk in a shopping situation; desire for convenient shopping, etc.

- Further, a measure of past satisfaction when using various non-retail store alternatives may also improve the predictability regarding the willingness to utilize this new form of direct marketing and, as such, warrants investigation.

- Research related to trade-off analysis may also offer the retail/direct marketing service distributor additional insight into the market e.g., determining what impact the offering of specified discount levels on various merchandise, purchased via direct TV shopping, should have in terms of its likely adoption rate.

- Research is also needed to isolate high-potential user segment(s) and determine the most appropriate way(s) to communicate the "high-tech" message to this audience(s).

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THE AUTOMATIC BANK MACHINE USER: DEMOGRAPHICS, IN-BANK VISITATION AND INHERENT PROMOTIONAL CONSIDERATIONS

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Abstract

Automatic Banking Machines, capable of handling a wide variety of bank transactions are now widely available. This paper examines the demographics of consumers who use ABM's together with the inherent promotional problems they bring to the bank with the decreasing use of bank premises.

Introduction

It was in the 1950s that the marketing concept was first introduced into the banking system. "Helpful Friendliness" (Ingram, 1981) was recognized as a key to retail banking marketing in this period, and in the years that followed other media such as T.V. advertising evolved (Sullivan, 1981). However, banks still seemed more comfortable with public relations than advertising.

In the 1960s product advertising, as opposed to institutional advertising was stressed. Banks started to issue credit cards, opened drive-up windows and viewed the customers more as individual market segments than as a mass market. We are looking back on a time when two-thirds of the wage earners did not use any bank services. We are presently in a time when over ninety percent of households have at least one chequing account. However, current literature reveals that banks are not successfully marketing their services to the consumer. Given increasing competition and a dynamic marketplace, something must be done for the banks to be successful.

Review of Previous Literature

Roll (1984) maintains that the future of consomer banks will require increasing sales volume to offset lower margins. Product line expansion will be important through "cross selling", which involves selling more products to each customer. It is less costly to sell an additional service to an existing customer than a new prospect. The fact ABM use is limiting the opportunity for the bank to see customers face to face means that such cross selling may have to be done through direct mail or telemarketing. Varble (1986) states marketing strategies must be implemented for this "self-service transaction form."

Studies on the ABM user have varied. Hood (1979) found the typical user was male, young with middle to high income. Ingram and Pugh (1981) found only 29% used this form of banking and were upwards of 29 years old. Stanley and Mochis (1983) explored the reasons customers were predisposed to use the automatic teller. Characteristics examined included whether the machine was near home or place of work and the convenience of banking hours. Users were found to be younger and more educated than non-users. Income did not seem to be related to bank machine usage.

Tyrus Reiman (1986) feels ABM's can enable banks to penetrate markets they were never able to reach in the past. However, they must be able to reach these consumers to inform them of their services. Before direct mail or other promotional campaigns can be directed to these consumers, precise information on the target audience is required. Murray Roman (1984) prefers a combination of phone and direct mail to bring in a positive response (2½ to 10 times greater) than a direct mail campaign alone.

Methodology

Statement of Hypothesis

Based on the previous literature review three general research hypothesis have been developed. These are:

I. Bank machine users are younger and better educated, with higher incomes than non-users.

II. Users of automatic teller machines use in-bank services significantly less often than they did previous to usage of bank machines.

III. Bank machine users and non-users obtain their information about banking services from different sources.

Data Collection and Analysis

To obtain market information, 540 telephone interviews were conducted during March 1986, using randomly chosen numbers from the Halifax/Dartmouth, Nova Scotia, Canada telephone directory. The questionnaire was designed to examine demographic profiles of ABM users, frequency of in-bank visits before and after becoming ABM users, and the various sources of information used to obtain knowledge of banking services. There were only six refusals to answer. These numbers were replaced by other randomly chosen numbers from the directory.

Given the strictly nominal nature of the data, cross tabulations were used along with chi-square tests for association between variables. Symmetric lamba was also employed to indicate the direction of the relationship between the variables. Cramer's V statistics were calculated to examine the absolute strength of the relationship between cross tabulated variables. Differences in percentages were examined for media usage and frequency of entry to bank premises, using sampling statistics based on the normal frequency distribution.

Results and Discussion

Use of Automatic Banking Machines

Results of the research showed that 61.7% of those sampled used automatic banking machines. Both age and education were strongly related to ABM usage with Chi-square significance levels of .0000 and .0005 respectively. (See Table 1.)

TABLE 1
CHI-SQUARE SIGNIFICANCE TESTS
SYMMETRIC LAMBDA AND CRAMER'S V STATISTICS

Variables Cross Tabulated with ABM Usage	X^2	df	Sig*	Lambda Coefficient with ABM Usage Dependent	Cramer's V
Age	70.821	5	.0000	.227	.370
Educa-tion	22.167	5	.0005	.056	.207
Income	1.895	4	N.S.	.000	.063

*Acceptable levels of significance used were .10 or better. The "conventional" levels of statistical significance were used, as lower levels would have provided a greater chance of rejecting a true hypothesis

The age variable showed a unique usage pattern. Those under the age of 45 tended to use ABM's, accounting for 86.6% of all ABM users. Those aged 45 and over tended to use ABM's less than their younger counterparts (see Table 2).

TABLE 2
CROSS TABULATION OF AGE BY ABM USAGE

		Uses Automatic Banking Machines		
Age		Yes	No	TOTAL
18-24	(Actual)	102	39	141
	(Row %)	72.3	27.7	
	(Column %)	32.0	19.7	28.3%
25-34	(Actual)	109	43	152
	(Row %)	71.7	28.3	
	(Column %)	34.2	21.7	29.4%
35-44	(Actual)	65	28	93
	(Row %)	69.9	30.1	
	(Column %)	20.4	14.1	18.0%
45-54	(Actual)	31	43	74
	(Row %)	41.9	58.1	
	(Column %)	9.7	21.7	14.3%
55-64	(Actual)	10	23	33
	(Row %)	30.3	69.7	
	(Column %)	3.1	11.6	6.4%
65 and over	(Actual)	2	22	24
	(Row %)	8.3	91.7	
	(Column)	.6	11.1	4.6%
TOTAL		319	198	517*
*23 non respondents		61.7%	38.3%	100.0%

Educational background also provided an interesting pattern of bank machine usage. Respondents with a grade school education tended not to use ABM's (66.7%). Those with some high school indicated a "turning point" in ABM usage. With almost a 50/50 split in usage habits. Of this group, 48.4% used the machines, and 51.6% did not. Those respondents with high school education and higher tended to use ABM's accounting for 65% of the ABM users (see Table 3).

TABLE 3
CROSS TABULATION OF EDUCATION BY ABM USAGE

	Uses Automatic Banking Machines		
Education	Yes	No	TOTAL
Grade School	9	18	27
	33.3	66.7	
	2.8	9.2	5.3%
Some High School	30	32	62
	48.4	51.6	
	9.5	16.3	21.1%
High School Grad.	72	45	117
	61.5	38.5	
	22.7	23.0	22.8%
Some College	104	59	163
	63.8	36.2	
	32.8	30.1	31.8%
College Grad.	90	32	122
	73.8	26.2	
	28.4	16.3	23.8%
Post Grad.	12	10	22
	54.5	45.5	
	3.8	5.1	4.3%
	317	196	513*
TOTAL	61.8%	38.2%	100.0%

*27 non respondents

A cross tabulation of income by ABM usage confirmed the results of Stanley and Machis (1983), that income is not a significant factor in ABM usage (see Table 4).

TABLE 4
CROSS TABULATION OF INCOME BY ABM USAGE

	Uses Automatic Banking Machines		
Income	Yes	No	TOTAL
Under 20,000	87	60	147
	59.2	40.8	
	29.2	34.9	31.3%
20,000 - 30,000	72	41	113
	63.7	36.3	
	24.2	23.8	24.0%
30,000+ - 40,000	71	35	106
	67.0	33.0	
	23.8	20.3	22.6%
40,000+ - 50,000	21	11	32
	65.6	34.4	
	7.0	6.4	6.8%
Over 50,000	47	25	72
	65.3	34.7	
	15.8	14.5	15.3%
TOTAL	298	172	470*
	63.4%	36.6%	100.0%

* 70 non respondents

An examination of the Lambda coefficients indicated that error in predicting ABM usage given knowledge of a respondent's age was reduced by 22.7%. This indicates that ABM usage was dependent on age. The Lambda coefficient for education showed a 5.6% reduction of error in predicting ABM usage given knowledge of a respondent's education. Thus, it appears that there is a stronger relationship between ABM usage and age than ABM usage and education. This assumption is sustained when Cramer's V statistics are examined to measure the absolute strength of the relationship. Interpreted similar to a correlation coefficient, the Cramer's V statistics for age and education were .370 and .208 respectively. These are reasonably strong for this type of test. However, it is clear that age is more strongly related to ABM usage than is education.

Frequency of In-Bank Services of ABM Users

Previous literature has raised concerns about the frequency of in-bank service usage following the broad use of automatic teller machines. The primary problems arising from frequent ABM use is the lack of face to face contact between customers and bank staff. This reduced personal contact creates difficulties in cross-selling of bank products and reduces the efficiency of other forms of in-bank promotion.

Survey results indicated that 65% of ABM users visit the machine at least once weekly. Only about 35% visit twice monthly or less frequently (see Table 5). Consequently, one would expect their in-bank visits to be greatly reduced given the frequent usage of the bank machines. Respondents have demonstrated this to be true when asked the frequency of their in-bank visits before and after their acquaintance with ABM's.

TABLE 5
FREQUENCY OF USAGE OF AUTOMATIC TELLER MACHINES

Frequency of Visits	Actual	Percent
Daily	51	9.9%
Weekly	159	30.8
Biweekly	70	13.5
Monthly	30	5.8
Longer	12	2.3
Never	195	37.7
	517*	100.0%

*23 non respondents

Prior to their use of ABM's, respondents indicated they seldom visited the bank on a daily basis. Only 2.3% did so. Following ABM usership, only .4% visit the bank daily. This shows a significant decrease in daily visits at the .01 level (see Table 6). Prior to ABM usage, the majority of respondents visited the bank once weekly (32.7%). This figure has dropped to 6% since the widespread of ABM's. This decrease is significant at the .01 level. Before ABM usage, 20.1% of respondents visited the bank once every two weeks. This figure has decreased to 11.9%, a difference significant at the .01 level as would be anticipated, since frequent in-bank visits have dropped off with the widespread use of ABM's, infrequent visits may have increased. This assumption was confirmed by the results of the survey. The largest percentage of customers (22.6%) now visit the branches once monthly. This is only one-quarter of the number of visits of the pre-ABM majority (32.7%) which visited the banks once weekly. It shows a significant increase (.01 level) of monthly bank visits from 5.4% previously, to a current rate of 22.6%. A similar trend is evident in even less frequent visits to the branches. Previously, only 1.5% visited the bank less than once per month. This figure has now increased to 15.2%. Again, the difference is significant at the .01 level. The survey also showed that a small group of respondents do all of their banking through the machine and never enter the branch at all. This group accounts for 5.7% of the customers surveyed. Given that this group did not exist before the use of ABM's, this growth is significant at the .01 level (see Table 6). Hence it appears that there is legitimate cause for concern that most customers use less in-bank services since the adoption of ABM's.

TABLE 6
SIGNIFICANT TRENDS OF IN-BANK VISITATION AMONG ABM USERS SINCE THE INTRODUCTION OF AUTOMATIC BANKING MACHINES

Frequency of Visits	In-Branch Business Before Use of ABM's	In-Branch Business After Use of ABM's	Z-Values*	Significance of One-Tailed Test**
Daily	2.3%	.4%	2.92	.01
Weekly	32.7	6.0	13.22	.01
Biweekly	20.1	11.9	4.77	.01
Monthly	5.4	22.6	-17.73***	.01
Longer	1.5	15.2	-26.35	.01
Not at all	0	5.7	-12.95	

*Z-value = $\frac{\text{Previous \% - After \%}}{Sp_{previous}}$

$Sp_{previous} = \frac{\text{Previous \% (1 - Previous \%)}}{n}$

** Z-Value = 2.33 (.01-One tail)

*** Negative Z-Value indicates increase in After %

NOTE: 38.2% did not use ABM's and did not respond to this question.

Sources of Banking Information of Users and Nonusers of ABM's

The results revealed that while there are differences among information sources of users and nonusers of ABM's, these differences are not very pronounced. Neither group makes extensive use of radio, television or professional consulting. However, ABM users do obtain information from radio more than nonusers (significant difference at .10). There are no significant differences in the use of professional consulting or television consumption between the two groups (see Table 7). Newspaper is used significantly more by nonusers than users of ABM's (.01 level). Also, word of mouth is more often cited as a source of banking information by nonusers (.05 level). Both groups listed other information sources frequently. However they were more prevalent among ABM-users than nonusers (.01 level). Of special interest was that the "other" source listed most predominantly was in-bank promotion, or promotional information in bank statements. This is important because this form of bank promotion is the most frequent form cited by both users and nonusers of automatic banking machines. If this is the main source of information used to obtain knowedge of bank services, this may indicate a problem in promoting to ABM users who do not visit the branch.

This problem would be compounded for ABM users who do not receive bank statements. The only reasonable alternatives for bankers to reach this group would be direct mail, or telemarketing, for they make little use of other popular media sources.

TABLE 7
SIGNIFICANT TRENDS IN SOURCES OF BANKING INFORMATION AMONG USERS AND NONUSERS OF ABM'S

Information Source	ABM Users	ABM Nonusers	Z-Value*	Significance of One-Tailed Test
Newspapers	6.7	16.5	-9.26***	.01
Radio	4.1	2.1	2.35	.10
TV	9.2	7.7	1.21	N.S.
Word of Mouth	24.4	28.4	-2.16	.05
Professional Consulting	8.9	9.8	-.73	N.S.
Other	46.7	35.6	5.16	.01

*Z-Value = $\frac{\text{\% ABM Users - \% Nonusers}}{S_{p\ users}}$

$S_{p\ users} = \frac{\text{\% Users (1 - \% Users)}}{n}$

**Z-Value = 2.33 (.01 One Tail) Z-Value = 1.64 (.05 One Tail) Z-Value = 1.28 (.10 One Tail)

***Negative Z-Value indicates a higher percentage among nonusers of ABM's.

CONCLUSIONS AND RECOMMENDATIONS

The research conducted has confirmed two of the three research hypotheses presented earlier. As postulated, bank machine users are younger (under 45) and better educated (high school or better) than nonusers. However, income is not significantly different between these two groups. This indicates that ABM's as a product offering will appeal more to younger, educated customers than other market segments. In-bank services should be maintained and improved to service these other markets. Also, it is possible to "target" automated services to the younger, better educated market segments. Segmenting the market based on income may work for some products, but not for automatic banking machines. However, it is reassuring to know

that ABM users can be segmented on the basis of age and education. It appears that there is a big untapped market for use of ABM's among older bank customers (45 years and over). It would be less expensive for banks if these customers would utilize the machines for routine transactions (Roll, 1984). Hence, bankers should be exploring ways of reaching this segment of the marketplace.

The second research hypotheses was also confirmed. Users of automatic banking machines do use in-bank services significantly less often than they did previous to adopting ABM's. As Lindgren (1985) points out a passive marketing strategy was successful only so long as the factors which affected the banking industry did not require active selling. The competitive environment has changed to the point where aggressive marketing techniques, such as cross-selling, requiring face-to-face contact between bank and customer, are necessary. The banks cannot rely on the personal selling process as the ABM's limit opportunities to see customers face-to-face. The implications of this study confirm the seriousness of the problem, and demonstrate that banks may have to seek other methods of promoting their services.

Our third hypothesis, that ABM users and non-users obtain their banking information from different sources, can only be partly rejected. While it appears that both groups obtain their banking knowledge from similar sources, there are significant differences in frequency between the two groups. Nonusers rely significantly more on newspapers than users of ABM's, and neither groups use radio, television or professional consulting extensively. However, both use word of mouth, and list in-bank/bank statement promotion as a primary "other" source of information. While differences between these two groups exist, they are not striking, but do demonstrate that in-branch banking is an important promotional tool.

Obviously more aggressive promotion must be used to reach ABM-users, particularly if they don't receive bank statements regularly. Future profitability requires cross-selling among ABM users so it is important that other selling approaches are used to reach this market segment. Previous research advocates the use of direct mail and telemarketing to counter less in-bank visitation among ABM-users, and fierce competition in the financial services industry. As Roman (1984) states a successful marketing strategy will require carefully developed production forms, tight controls and continuous supervision and training of telephone marketers. Bankers have complete customer mailing lists. They must use these lists to develop new marketing strategies for clientele who have developed different bank visitation patterns.

LIMITATION AND SUGGESTIONS FOR FUTURE STUDIES

While this study is enlightening, the data base is characteristic of Maritime Canada where unlike the United States, ABM's have only been in operation for approximately three years and may not be generalizable to other regions. This study is valid for exploratory purposes. Conclusive research should be conducted prior to making changes in promotional strategy. Given possible regional differences bankers should familiarize themselves with the unique characteristic of their own client bases and marketplaces. Research should address several key areas evident in this study. What promotional methods are suitable which do not require in-bank visitation? What can be done to create ABM users out of nonusers? Banks should explore reasons why customers prefer not to use ABM's. Do they distrust wholly automated systems? Do they fear a loss of privacy or friendly service? Perhaps they do not feel their funds are safe, readily accessible, or easily transferable. Reluctance to use ABM's could be due to a general discomfort in using computerized machines. Psychographic research may yield even more striking differences between users and nonusers of ABM's. More research is needed to gain a fuller understanding of the usage of automated teller machines.

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CONSUMER ATTITUDES TOWARD ALTERNATIVE HEALTH CARE SERVICES

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Abstract

Results of an empirical study of consumer attitudes toward alternative health care services (hospitals, home health care, nursing homes, and outpatient clinics) are reported. Attitudes toward the services are examined along ten attributes such as quality of medical service, convenience, and cost. Respondents' attitudes of the services along the ten dimensions are presented, along with results of tests for statistical significance. Attitudes of two groups--the elderly and non-elderly--are compared. Implications for the formulation of marketing strategies for health care services are discussed.

Introduction

The rapidly changing, volatile nature of the health care industry within the U. S. is a well documented phenomenon. Organizations offering alternatives to traditional health care institutions have increased in number and in competitiveness. These new competitors are continuing to introduce new forms of health care delivery such as outpatient surgery centers, executive wellness programs, independent nursing group practices, hospices, PPO's, nursing home and intermediate care facilities, and home health care programs (Joseph 1986).

The increasing intra-service (hospital vs. hospital) and inter-service (hospital vs. outpatient clinic) competition necessitates more comprehensive integration of competitive analysis into the formulation of health care service plans and marketing strategies (Milch 1980; Variu 1985). The importance of marketing and market planning to success in providing health care has long been recognized (Whittington and Dillon 1979; Joseph, Zallocco and Markovic 1985; Coddington, Palmquist and Trollinger 1985). Sophisticated competitive analysis has, generally, not been emphasized as much.

In addition to a greater number of alternative services and increasing competition, the consumers' health care decision selection process has also changed. In general, the consumer behavior model of the physician as the decider is obsolete, and has been replaced by a model that suggests the consumer has an increasing role at both the influence and selection stages of the decision process (Berkowitz and Hillestad 1982; Wright and Parsons 1982). A number of authors have attempted to model this newer consumer-oriented decision process (Berger and Guiltinan 1981; Boscarino and Steiber 1982; Miller and Zikmund,1984).

The body of research concerning the consumer behavior process relative to health care is increasing. Boscarino and Steiber (1982) have explored hospital choice. The importance of specific attributes in the consumers' preference for or selection of a health care provider has been identified (Berger and Guiltinan 1981). In various studies, significant attributes have been linked to the choice of a hospital (Wright and Parsons 1982), preference for an HMO (Klegan 1981), selection of a nursing home (Froebe 1982), and level of satisfaction with the nursing home selection decision (Smith and Gray 1982).

A final trend of importance is the increasing significance of the elderly as a market segment in the health care industry. The U. S. Bureau of Census estimates that the population as a whole will grow by 16 percent by the year 2000, but the elderly age group will grow by about 50 percent. The elderly also account for about 25 percent of the total spent for health care in this country. The increasing affluence of the elderly also increases the size of the market that can afford assisted living facilities such as nursing homes. Studies of the elderly have been, to date, limited to the issue of nursing home selection (Clabaugh and Wallace 1982; Froebe 1982; Smith and Gray 1982).

All of the studies cited above are intra-system (i.e.--they explore the consumer decision process relative to providers within a specific competitive group such as nursing homes). This study is designed to expand the research by investigating consumer attitudes toward alternative systems (i.e.--hospitals vs. nursing homes). Such comparisons should improve the understanding of the competitive nature of the health care industry and be of assistance in formulative competitive strategies.

Objectives

Specifically, the objectives of the research were:

1. To determine consumer attitudes toward four alternative health care services (hospitals, home health care, nursing homes and outpatient clinics).
2. To determine how consumers perceive each of the four health care services along specific attributes or dimensions.
3. To determine whether attitudes toward the four services along the attributes differ when paired comparisons are made.
4. To determine whether responses vary between elderly and non-elderly respondents.

Methodology

Each respondent was questioned regarding their attitudes toward the four health care services--hospitals, nursing homes, outpatient clinics, and home health care--along ten attributes. The attributes were: Quality of medical care, safety, speed of recovery, quality of medical personnel,

risk of complications, cleanliness, convenience, comfort, privacy provided, and cost. The attributes were generated from a review of the literature and discussions with medical administrators. In addition, demographic information and data on current usage of health care services were obtained from respondents.

A self-administered structured questionnaire was used for data gathering. Respondents were presented statements for each service on each attribute. Examples of specific statements are: "Outpatient clinics provide adequate privacy," "Nursing homes are sanitary," and "Home health care is convenient." Both positive and negative statements were used. A six-point Likert Scale ranging from strongly agree to strongly disagree was used for responses. A total of 62 respondents were interviewed, 32 elderly (over 55) and 30 non-elderly (between 21 and 54).

Results

Attitudes Toward Health Care Services

Graphic profiles of attitudes toward the alternative services along the attributes are provided in Figure 1 (elderly respondents only) and in Figure 2 (non-elderly respondents only). The mean values are summarized in Table 1.

FIGURE 1
ATTITUDES TOWARD HEALTH SERVICES
(ELDERLY; MEAN VALUES)

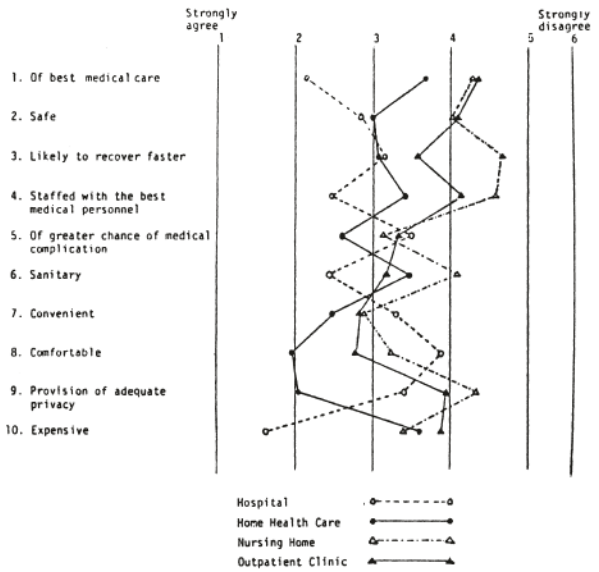
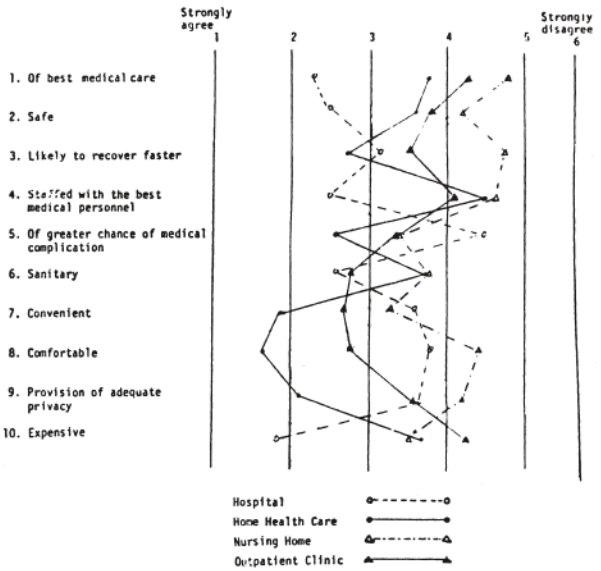


FIGURE 2
ATTITUDES TOWARD HEALTH SERVICES
(NON-ELDERLY; MEAN VALUES)



Some of the more interesting findings from this analysis are:

- Hospitals have a more positive overall image along the dimensions of quality, safety and sanitation. This is true for both the elderly and non-elderly groups. On the other hand, hospitals are perceived by both groups as significantly more expensive than any of the other three services.
- Overall, nursing homes have the most negative image with both groups of respondents. The non-elderly in particular hold a very negative image of nursing homes. Within this group, nursing homes are perceived to be the weakest of any of the services along seven of the ten attributes. Among the negative perceptions of nursing homes are quality of medical care, quality of medical personnel, comfort, sanitation, privacy, safety and, as would be expected, likelihood of a speedy recovery.
- In general, attitudes toward home health care are positive. Respondents perceive them to be the most positive service on the dimensions of convenience, comfort and privacy. Just as significantly, home health care did not generate many negative attitudes. The only exception was the perception by the non-elderly of relatively poor medical personnel (e.g.--visiting nurses).
- Outpatient clinics are perceived to be lower cost operations. They have a negative image along the attributes of quality of medical care and quality of personnel.

TABLE 1
ATTITUDES TOWARD ALTERNATIVE HEALTH CARE
SERVICES ON TEN ATTRIBUTES (MEANS)

ATTRIBUTE	SERVICE							
	Hospital		Home Health Care		Nursing Home		Outpatient Clinic	
	Elderly	Non-Elderly	Elderly	Non-Elderly	Elderly	Non-Elderly	Elderly	Non-Elderly
Best Medical Care	2.13	2.28	3.73	3.93	4.27**	4.89**	4.33	4.18
Safety	2.86*	2.36*	2.97**	3.71**	4.03	4.07	4.06	3.86
Fast Recovery	3.13	3.11	3.07	2.79	4.67	4.82	3.56	3.50
Best Medical Personnel	2.47	2.50	3.43***	4.46***	4.57	4.68	4.13	4.03
Higher Chance of Complications	3.50***	4.43***	2.60	2.61	3.13	3.36	3.33	3.36
Sanitary	2.43	2.61	3.47	3.75	4.07	3.79	3.17	2.82
Convenient	3.30	3.71	2.47**	1.93**	2.86	3.25	2.80	2.71
Comfortable	3.87	3.82	1.96	1.71	3.23***	4.43***	2.77	2.82
Provides Adequate Privacy	3.40	3.68	2.03	2.07	4.33	4.11	3.93*	3.57*
Expensive	1.60	1.89	3.60	3.75	2.90**	3.50**	3.87	4.22

n = Elderly, 32; Non-Elderly, 30.

Numbers are means on a six-point scale where 1 = Strongly Agree; 6 = Strongly Disagree.

*** $P < .01$; ** $P < .05$; * $P < .10$

- Attitudes of the elderly and non-elderly groups are similar. A statistical comparison (t-test) of the means of the two groups shows relatively few statistically significant differences in attitudes toward each health care service along the ten attributes (see Table 1).
- Among the elderly, the least variance in attitudes toward the four services is found along the attributes of chance of medical complications and convenience; the most variance in attitudes is along the attributes quality of medical care, quality of medical personnel, adequate privacy and cost. The non-elderly responses show a pattern of greater variance in attitudes towards the services, particularly on the attributes of quality of medical care, likelihood of a speedy recovery, quality of medical personnel, comfort, adequate privacy and cost.

Paired Comparisons of Health Care Services

Attitudes toward health care services were examined by looking at pairs of services. Each group--the elderly and the non-elderly--was examined along the ten attributes to determine whether the groups' attitudes toward paired health care services were similar. The results, presented in Table 2, show, for example, the elderly had significantly different attitudes toward hospitals and home health care on the attribute of 'best medical care'. As another example, the elderly did not perceive any significant difference between the safety of hospitals and home health care, while the differences in attitudes of the non-elderly toward the safety of the two services were statistically significant at the .01 level.

Table 2 indicates that, in general, both groups perceive hospitals and home health care to be the

TABLE 2
A COMPARISON OF THE ATTITUDES OF ELDERLY
AND NON-ELDERLY TOWARD PAIRED HEALTH CARE SERVICES
(MEAN DIFFERENCE TESTS FOR SIGNIFICANCE)

ATTRIBUTE	SERVICE											
	HO vs. HHC		HO vs. NH		HO vs. OC		HHC vs. NH		HHC vs. OC		NH vs. OC	
	GR1	GR2	GR1	GR2	GR1	GR2	GR1	GR2	GR1	GR2	GR1	GR2
Best Medical Care	**	**	**	**	**	**	NS	**	NS	NS	NS	**
Safety	NS	**	**	**	**	**	**	NS	**	NS	NS	NS
Fast Recovery	NS	NS	**	**	NS	NS	**	**	NS	**	**	**
Best Medical Personnel	**	**	**	**	**	**	**	NS	*	NS	NS	*
Higher Chance of Complications	*	**	NS	**	NS	**	NS	*	*	*	NS	NS
Sanitary	**	**	**	**	*	NS	NS	NS	NS	**	*	**
Convenient	*	**	NS	NS	NS	**	NS	**	NS	**	NS	NS
Comfortable	**	**	NS	*	**	**	**	**	*	**	NS	**
Provides Adequate Privacy	**	**	**	NS	NS	NS	**	**	**	**	NS	NS
Expensive	**	**	**	**	**	**	*	NS	NS	NS	**	*

Notes: 1. HO = Hospital; HHC = Home Health Care; NH = Nursing Home; OC = Outpatient Clinic

2. GR1 = Elderly Respondent Group; GR2 = Non-elderly Respondent Group

3. ** $P < .01$; * $P < .05$; NS=Not Significant at the .05 level

most dissimilar across the greatest number of attributes. Hospitals and nursing homes are also perceived to be dissimilar by both groups. On the other hand, a comparison of nursing homes vs. outpatient clinics indicates that both groups, and in particular the elderly, perceive them to be similar along a substantial number of attributes.

In examining specific attributes, the analysis indicates that significantly different attitudes occur most frequently for comfort, expense and quality of medical personnel. Both groups perceive differences in the services in these areas. At the other extreme, the fewest significantly different attitudes were on the dimension of convenience. The elderly in particular saw little difference in service convenience; only the hospital vs. home health care comparison was statistically significant along this dimension.

Discussion

This paper has reported the results of a survey of consumers' attitudes toward alternative health care services. A fundamental question posed is, "Do consumers attitudes toward health care vary by type of service?" The answer is yes. The second question posed is, "Do attitudes toward the services vary depending on the attribute being discussed?" Here again, the answer is yes. The next logical issue--how these attitudinal patterns relate to the consumer behavior process--is an area that needs exploration in future research.

The study has implications both methodologically and in the results. The methodology is recommended to any health care provider. It is relatively easy to operationalize. Also, it is suitable for identifying comparative attitudes for both inter-service (outpatient clinic vs. hospital, for example) and intra-service (one outpatient clinic vs. another, for example) situations.

In terms of results, the issue is the relative value of the data presented here and in similar data that might be generated from studies conducted by health care providers. The information is important in a number of ways critical to the formulation of marketing strategies. Specifically, it is useful:

- As an instrument for competitive analysis. The data provides valuable information to determine the relative attitudes of consumers toward alternative health care providers. In addition, specific information is provided on the strengths/weaknesses relevant to specific attributes. Such information is important to formulating competitive strategies in areas such as service characteristics and positioning.
- As baseline data against which to compare future attitudinal surveys.
- In formulating targeting strategies. Similarities/dissimilarities in attitudes among segments helps as input toward formulating strategies regarding the number and depth of segment coverage.
- In formulating overall promotional strategies and specific elements of the

promotional campaign such as advertising theme and media to employ.

- In setting objectives. Most organizations have, or should have, image-related objectives. The results here present specific information against which objectives can be formulated and an evaluation of performance conducted.

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THE EFFECT OF DEMOGRAPHICS AND OLD AGE ADJUSTMENT ON ATTITUDES TOWARD RETIREMENT COMMUNITIES: AN EMPIRICAL EXAMINATION

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Rustan Kosenko, Ohio University

Abstract

As the size of the mature market continues to increase, more services will be required to satisfy the needs of this segment. This paper empirically explores a service area which is facing rapid expansion: retirement community housing. Results from the data analysis suggest that in addition to standard demographic factors, adjustment to growing old affects general attitudes toward retirement community living.

INTRODUCTION

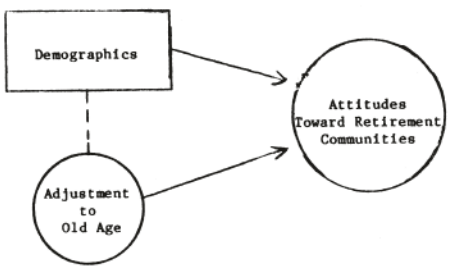
There is a new generation of mature Americans who are living longer, spending more money, and enjoying life more. People over fifty currently account for 35.6 percent of the U.S. population and this figure is growing. For example, the expected growth rate through 1989 for citizens over sixty-five is 2.52 percent while the expected growth rate for all citizens is only 1.16 percent (Linden, 1986). Although past stereotypes have portrayed the elderly as poor, recent data suggests the opposite may be true for many of these mature consumers (Lazer, 1985; Stern, 1986). Though average household income of the elderly often declines, so does average household size. As a consequence discretionary income increases. This decrease in household size, increase in discretionary income, plus an involvement in more activities and interests than previous generations, makes them a promising market for the services of the retirement community industry.

If those in the retirement community industry are to be successful in servicing this growing market, it is important that they develop an understanding about that market's characteristics and how those characteristics may influence perspectives on retirement community living. The work that has addressed itself to this issue is very limited in scope. Most retirement community planners rely strictly on age and income for an estimation of market potential.

Once basic demographic market potential is determined, the providers often return to a strict product orientation. The primary concern becomes making that service "the best" available. The problem is, however, that having the "best" product does not always mean success. Negative attitudes or just "bad feelings" about any product or service can signal a quick demise.

The purpose of this study is to provide a general assessment of two possible influences on attitudes toward retirement communities. As shown in **Figure 1**, these two influences are: 1) basic demographic characteristics; and 2) adjustment to old age. Six demographic characteristics were measured. There were: 1) age; 2) sex; 3) marital status; 4) employment status; 5) gross income; and 6) education. Adjustment to old age was operationalized by twelve Likert scaled items modified from a survey of gerontologists concerning the senior citizen segment conducted by French and Fox (1985). The dependent variable, attitudes toward retirement communities, was operationalized through eight six-point forced choice Likert scaled items concerning general feelings about retirement communities (see **Table 2** and **3** for the items). The relationship between these variables was then compared through a two stage procedure of factor analysis and correlation analysis. Through such a comparison, it was possible to explore which dimensions of the mature market may underlie attitudinal development concerning retirement communities.

FIGURE 1
FACTORS AFFECTING ATTITUDES TOWARD RETIREMENT COMMUNITIES



THE STUDY

Data for this study were collected via a mail survey questionnaire sent to senior citizens in the mid-Atlantic region of the United States. The instrument used to collect the data included demographic and psychographic inventory questions. For this study, six standard demographic variables and twenty psychographic items were used. As noted, the psychographic inventory included modified items from a survey of gerontologists concerning the senior citizen segment conducted by French and Fox (1985).

The instrument was pre-tested on 22 senior citizens. Based on written and verbal comments, minor adjustments were made to wording on some questions and some questions were deleted. The revised instrument was then qualitatively rechecked on a small group of elderly (n = 6) and used for the main data collection.

A sample of 3,700 was drawn through systematic random sampling of a mailing list. The mailing list of approximately 20,000 contained the names of households in the region with a member sixty years of age or older. Eight hundred and five of the questionnaires were returned for a response rate of 22 percent. Seventeen of the

questionnaires were unusable leaving 788 for data analysis, a 21 percent usable response rate. While the response rate is not extremely high, it is within the expected levels of single mailing consumer surveys (Kanuk and Berenson, 1975). In addition, as Ferber (1981) has suggested, steps were taken to assess the impact of that bias. Comparisons were made between the true population demographic distribution and the returned sample's demographics (i.e., sex and age). No significant differences were found.

ANALYSIS AND RESULTS

Data analysis was carried out on both the demographic and psychographic/ attitudinal items from the survey instrument. To assess the relationships between these demographics, adjustment to old age, and attitudes toward retirement communities, a two step data analysis procedure was undertaken.

The first step in this procedure was separate R factor analyses of the items concerning "old age adjustment" and "attitudes toward retirement communities." This was done to aid in interpretation of the data by creating summary dimensions for each of the two constructs. Once these factor analyses were completed the strength of the relationships between these constructs and the demographic factors were assessed through a Spearman correlational analysis. The following sections present summaries of these analyses.

Demographic Dimensions

Summaries of the data on the six demographic items are presented in **Table 1**. The male/female ratio is about 60% to 40%. A slight majority of the sample is currently married with the next largest percentage being widowed. Cross tabulation of the data also revealed that the majority of those widowed were female.

TABLE 1
DEMOGRAPHIC CHARACTERISTICS

Variable	% in Category		% in Category
AGE*		MARITAL STATUS	
55-60	5.2	Married	54.7
61-64	21.4	Widowed	35.2
65-68	26.9	Divorced	6.2
69-72	17.1	Single	3.8
73-76	13.4		
77-80	7.2		
81-85	5.0	EMPLOYMENT STATUS	
over 85	1.8		
		Fulltime	9.8
		Part-time	8.4
SEX		Not employed	1.8
Male	40.2	EDUCATION	
Female	59.8		
		Grammar School	23.7
GROSS YEARLY INCOME		High School	25.8
		College (at least some)	35.5
0 - $ 999	2	Grad (at least some)	2.0
1,000 - 4,999	5	Trade+	2.9
5,000 - 9,999	16		
10,000 - 14,999	18		
15,000 - 19,999	14		
20,000 - 24,999	12		
25,000 - 29,999	7		
30,000 - 34,999	7		
35,000 - 39,999	6		
40,000 - 44,999	6		
50,000 - or more	8		

* Shown as ordinal. Used in analysis as continuous.
\+ Not used in analysis.

The median gross yearly income was fifteen to twenty thousand dollars. Most of the sample (81.8%) were not currently employed. The educational level of the sample indicated that almost half (47.5%) had at least attended college in some manner. This education percentage is somewhat high for the mature market and recognized as a potential bias. However, the matching to other demographic population characteristics is felt to outweigh any potential major bias.

Adjustment to Old Age

The "adjustment to old age" factor was comprised of the twelve modified items from the French and Fox (1985) study. An R factor analysis with a Varimax rotation on the twelve items yielded a three factor solution which accounted for 43.6% of the variance. The three factors were labeled as: 1) Independent; 2) Social; and 3) Withdrawn/Concerned. The composition of each factor is shown in **Table 2**.

Independent: The independent dimension is made up of questions which seem to tap a feeling for enjoying life on a physical level. Overall the sample seems to agree with the statements of "trying new and different things," and "doing things for themselves". A high rating on this dimension would indicate an active and positive outlook on life. French and Fox would appear to liken this to being well adjusted to growing old.

Social: Questions which group together on the social dimension are concerned with interacting with those around the mature individual. Strong agreement with statements such as "Maintaining my appearance is important to me" and "My

TABLE 2
OLD AGE ADJUSTMENT DIMENSIONS

	Mean*	Factor Loadings	Eigenvalue
Factor 1 Independent			2.35
I like to try new and different things	4.706	.51180	
I prefer to do things myself rather than have somebody do it for me	5.195	.41335	
I enjoy the physical pleasures of life	4.968	.48306	
Factor 2 Social			1.69
Maintaining my appearance is important to me	5.390	.37387	
Our family is a close knit group	5.085	.46486	
My friends are a big part of my life	4.999	.45894	
I often seek out advice of friends and/or family about decisions	4.280	.43396	
I am cautious about spending money	5.013	.35557	
Factor 3 Withdrawn/concerned			1.19
My opinions don't count very much	3.088	.44521	
Not many people respect senior citizens	3.330	.50315	
I would rather spend a quiet evening at home than go out	4.501	.38929	
I frequently think about my health	4.480	.26389	
			43.6% Variance Accounted For

*Computed on a six-point scale (1) strongly disagree to (6) strongly agree

friends are a big part of my life" would again be indicative of a fairly well adjusted individual. As the mean scores in **Table 2** indicate, the overall response from the sample was fairly positive on this dimension.

The "cautious about spending money" item loads highest on this factor, but also loaded fairly high on factor 3. Its appearance in this dimension, however, could possibly be explained through an interpretation of shopping (i.e., spending money) as a social event. Such behavior has been suggested as being common among the elderly market.

Withdrawn/Concerned: This dimension centers on the perceived worth of the mature individual. Questions of whether or not "opinions don't count very much" and "people's respect for senior citizens" address the alienation element of adjusting to older age. Overall, the sample seems somewhat neutral on the respect and opinion questions. They seem to lean more toward agreement with statements concerning "staying at home" and "thinking about their health". It is natural that a heightened concern about health would be evident in the mature population. Marketers have been aware of this sensitivity for years.

The health awareness question, while loading low (.26389) into this dimension, is left in for the extended analysis due to its inclusion in the French and Fox study. An individual who rated highly on this dimension would probably be considered less well adjusted to growing old and concerned about getting old.

Attitudes Toward Retirement Communities

Attitudes toward retirement communities, as noted previously, were measured using eight six-point Likert scaled items. These eight items were then entered into the second R factor analysis which included Variamax rotation of the factor solution. The procedure yielded a two factor solution which accounted for 53.2% of the variance. These factors were labeled: 1) Abstract Dimensions; and 2) Concrete Dimensions. **Table 3** presents the composition of these two factors.

Abstract Dimension: The abstract dimension accounts for 38.9% of the variance in the "attitudes toward retirement communities" factor. The mature market views the retirement community issue on an abstract level as well as in strict dollars and cents. This dimension contains items such as "Retirement Communities are places for old thinking people" and "Retirement communities are not very 'homey' places to live". As the mean scores on the items indicate there appear to be neutral feelings concerning retirement communities on the abstract "feeling" variables (see **Table 3**).

Concrete Dimension: The concrete dimension accounts for 14.2% of the variance in the overall attitude dimension. Where in the abstract "feeling" type of dimension, the aggregate mature market sample was neutral, on the concrete dimension there seems to be apprehension about the retirement community environment. Of dominant concern here is the financial arrangement of the retirement community. The overall feeling seems to be that, retirement communities have placed confusing and excessive financial demands on the mature market.

TABLE 3
ATTITUDES TOWARD RETIREMENT COMMUNITIES
DIMENSIONS

	Mean *	Factor Loadings	Eigenvalue
Factor 1 Abstract			3.11
Retirement Communities are places for "old thinking people"	3.182	.44702	
Retirement community owners don't really care about the retirees	3.696	.56051	
Retirement communities are not very "homey" places to live	3.636	.78569	
Retirement communities are not very attractive looking	3.183	.56736	
Factor 2 Concrete			1.15
The problem with most retirement communities is that you have to move far away from your neighborhood	4.272	.33359	
The money demands of joining a retirement community are too high for most seniors	5.117	.65845	
Joining a retirement community is financially very confusing	4.540	.69142	
I could not afford to join a retirement community.	4.031	.48602	
			53.2% Variance Accounted For

*computed on a six-point scale (1) strongly disagree to (6) strongly agree

Relationship Between Demographics, Adjustment To Old Age, and Attitudes Toward Retirement Communities

In order to assess the general relationships between the three overall variables of interest, analysis was performed using Spearman's Correlation. It was assumed that the demographic characteristics could be arrayed in such a manner as to create a dimensionality to the items. For example, "single to married", with divorced and widowed as the intervening levels. Sex, obviously, is nominal data, but for this exploratory study, this violation is not seen as crucial. Income, age, employment status, education, and marital status meet (as arrayed) the requirements of the correlational procedure (Liebetrau, 1983).

For "Adjustment to Old Age", and "Attitudes Toward Retirement Communities" regression-generated factor scores for each individual were used as the data input for the subsequent analysis. Use of factor scores as input for subsequent analysis is an acceptable practice in the discipline (Harman, 1976; Nunnally, 1978; Hair, Anderson, Tatham, and Grablowsky, 1979). While the regression generated factor scores can be considered interval in nature, the inclusion of the demographics made the Spearman correlation procedure the preferred comparison method.

As can be seen from **Table 4** there were some significant correlations between the demographics,

"Adjustment to Old Age," and "Attitudes Toward Retirement Communities". While some thirty-six of the correlations were significant ($p < .05$), the large sample size influence is noted. As such, the discussion here will concern itself only with those significant correlations which had a sufficient "level of magnitude" to warrant consideration. For this exploratory study that level is set at .15 or above. Huck, Cormier, and Bounds (1974) suggest this level is a good "rule of thumb" to show a relationship is present. Significance level of all the discussed correlations was p=.000.

Adjustment to Old Age Relationship to Attitudes Toward Retirement Communities: Three of the six correlations showed a significant relationship. As can be seen from Table 4, the "Withdrawn" dimension seems to exhibit the strongest relationship overall with the "Abstract" and "Concrete" dimensions of the dependent variable. Correlations of .2761 and .2911 respectively suggest that individuals who may not be adapting well to growing old have more negative attitudes toward retirement communities. This type of individual seems to be feeling "no respect", is "concerned about health" and "doesn't think their opinions count very much". There apparently is a reluctance toward living life to the fullest. A possible fear of being "put away". This feeling may transfer into a distrust and confusion on both the abstract and concrete dimensions of retirement community feelings. The other significant correlation is between the "Social" dimension of adjustment and the "Concrete" dimensions of the retirement communities. The .1798 level suggests that those who exhibit the more active social life by being "close with their family" and "having friends as a big part of their life" may be more likely to have more negative "concrete concerns." It is suspected that the "moving far away" variable could have contributed greatly to this. Moving to a retirement community for many seniors could have been seen as having to give up living close to family and friends.

Demographic Relationship to Attitudes Toward Retirement Communities: Only two of the twelve correlations meet the .15 criterion for sufficient level of magnitude. These are the education and gross income variables. As education and/or income increased so does the positive attitude toward retirement communities on the "Concrete" dimension. This would be expected since income increases should lower concern for financial demands on the seniors. As Table 4 also shows there is a substantial positive correlation (.5322) between the two demographic variables as well. Therefore, if one increases it would be expected for the other to do so as well.

Demographic/Adjustment Interaction

As Table 4 shows, there is a substantial correlation between the income and education demographics and the "Social" and "Withdrawn" dimensions of "Adjustment to Old Age". The interesting correlations here are between the two demographics and the "Social" dimension. One might expect a positive correlation, yet the correlation is negative.

An explanation could be that as income and education increase, the mobility of the mature individual increases as well. As such, "family closeness", and "friends" may become less salient as an adjustment dimension. Individuals may be more concerned with self-actualization, travel, exploration, and the like.

TABLE 4
SPEARMAN CORRELATION COEFFICIENTS

Variable	Age	Sex	Marital Status	Employment Status	Gross Income	Education	Age		Retire	
							Independent	Social withdrawn	Abstract	Concrete
Age										
Sex	.0378									
Marital Status	.2038*	-.5274*								
Employment Status	-.3510*	.0148	.0059							
Gross Income	-.1493*	-.4233*	.4102*	-.1047*						
Education	.0078	-.1948*	.1746*	-.0763*	.5322*					
Age/Independence	-.0642	.1576*	-.0702	-.0554	-.0370	.0481				
Age/Social	.1136*	.1381*	-.0865*	.1218*	-.2297*	.1918*	.2998*			
Age/Withdrawn	.0870*	.0118	-.0563	.0749*	-.2575*	-.2282*	-.0201	.1192*		
Retire/Abstract	.0891*	-.1194*	.0227	.0136	-.0032	.0617	-.0479	-.0625	.2761*	
Retire/Concrete	.0818*	.0773*	-.1354*	.0398	-.3668*	-.1891*	-.0850*	.1798*	.2911*	.2126*

* significant at p< .05

SUMMARY AND CONCLUSIONS

The purpose of this study was to explore the relationships between senior citizens adjustment to old age, demographics and attitudes toward retirement communities. It was hypothesized that some relationship would exist and an understanding of that relationship would help marketers in this growing service market better serve that market. The results suggest that there are dimensions in both demographics and age adjustment factors which do influence attitudes toward these service facilities. Demographically, as income and education go up so do

positive attitudes toward the retirement communities on the "concrete" dimension. Overall, the "Adjustment to Old Age" dimensions seem to be more broadly related to attitudes toward retirement communities than the entire breadth of the demographics considered. The "Social" and "Withdrawn" dimensions both correlate with the "Concrete" dimensions. The "Withdrawn" dimensions exhibits a relationship to the "Abstract" dimension, as well.

While the results here suggest that there are relationships present, there is a need for more research in this growing service area. It is recognized that this exploratory research does not control for all of the possible interactions and measurement problems that are often inherent in survey research. The concern here was to explore the general relationships between the variables of interest. Future research should now seek to establish the true magnitude of these relationship through more tightly controlled experimental designs and methodologies where control of interactions and intervening variables may be more readily achievable. Construct validation and causal modeling are two types of studies which should aid in explaining these relationships.

This study contributes to this end by providing empirical evidence that certain relationships between demographics, adjustment to old age, and attitudes toward retirement communities do appear to exist. There are two conclusions which the results suggest. They are: 1) seniors who appear to have difficulty adjusting to old age are more likely to have negative attitudes toward retirement communities; and 2) the higher educated, well off individuals are not as concerned with social and/or family intimacy. If these conclusions are true, then marketers in this service area need to recognize the influence of the underlying dimensions on attitudes toward their services and adjust their marketing programs accordingly. For the "Withdrawn" segment an initial campaign may be necessary to clarify the positive nature of retirement communities on both the "Abstract" and "Concrete" dimensions. An emphasis should be placed on the "Concrete" financial dimension, explaining the financial demands and affordability of the service. For the better educated, higher income group a marketing program which emphasizes independence and mobility may be appropriate. The results suggest there is less concern with family and friend proximity.

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POSITIONING IN THE FINANCIAL SERVICES INDUSTRY: A LOOK AT THE DECOMPOSITION OF IMAGE

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Abstract

Deregulation in the financial service industry has led to increasing awareness that consumer perceptions play a key role in the selection of banking services. Financial institutions no longer rely on promoting only the traditional services. They must now market their non-banking services. Banks must, in addition, determine the image they wish to project and the type of consumer which is attracted by that image. The purpose of this research is to augment current theory on how consumers develop images of banks. Of particular importance is to explore the number and composition of attributes which are salient in the image development of specific banks. Results show that image is bank specific: varied numbers and types of attributes contribute to the images of four different banks.

Introduction

Commercial banking institutions have become increasingly aware of the relationship between image and long-term growth. Due to deregulation in the financial services industry, banks have chosen to compete on bases other than traditional. Many markets are oligopolistic. Thus, a small number of large banks offering similar services must compete for customers (Laurent 1979). In order to differentiate themselves, banking institutions must promote their qualitative (as opposed to quantitative) attributes. Friendly service, community involvement, and "caring" are familiar themes in advertising. Laurent (1979) demonstrated that consumers do qualify banks according to such attributes. In doing so, they allow banks to individualize their images. We are concerned with the issue of whether these images are generalizable or whether they are organization specific. Relevance of the issue derives from a proposition that "it is critical that a bank engage in research into the private depositor market's perception of it and its competitors' images before it designs or implements any form of market strategy" (Laurent 1979, p.32).

As the shift in emphasis from price to non-price attributes has occurred, many studies have been conducted on the importance of bank attributes. Riggall (1979) used attributes of bank image in order to create a ranking on relative importance to customers. These are the attributes upon which we build. They are itemized in **Figure One** below.

The most salient attributes of the set illustrated in **Figure One** were 1) Convenience of Location, 2) Employee Competence, and 3) Financial Soundness. Others have included different attributes. Durand, Eckrich, and Sprecher (1978) included bank hours, auxiliary bank services, reputation in the community, cost of checking account, interest rates on loans, and speed of service, in addition to others, in their examination of bank images. Thus, there is variance in the nature and number of attributes examined across studies. The attributes we have chosen for purposes of this research are illustrated in **Table One**.

FIGURE ONE
BANK ATTRIBUTES PER RIGGALL (1979)

1) Convenience of Location
2) Employee Competence
3) Financial Soundness
4) Bank Management
5) Obtainability of Loan Funds
6) Friendly Service
7) Attractiveness of Physical Structure
8) Availability of 24-Hour ATM
9) Recommendations from Friends and Relatives
10) Innovativeness
11) Civic Involvement

In order to identify a bank's personality, Durand, Eckrich, and Sprecher (1978) used a multiattribute attitude model to construct image. Although many models exist which estimate behavioral intentions and attitudes, a common structural component is that they include an evaluative element as well as a reinforcement measure which acts as a weight (Ryan and Bonfield 1975; Wilson, Mathews, and Harvey 1975). A commonly used attitude model (Wilkie and Pessemier 1973; Durand, Eckrich, and Sprecher 1978) in consumer behavior is shown below.

$$A_{jk} = \sum B_{ijk} * I_{ik} \qquad (1)$$

where: i = the attribute or object characteristic.
j = the object.
k = the respondent.

thus: B_{ijk} = consumer k's belief as to extent to which attribute i is offered by object j.

I_{ik} = the importance weight given object attribute i by consumer k.

and: A_{jk} = consumer k's attitude score for object j.

By operationalizing such a model via regression techniques Durand, Eckrich, and Sprecher (1978) examine the role which particular attributes play in forming the image of different banks. The technique could be likened to the

examination of a factor loading matrix in order to identify convergent and discriminant structures. The work of Durand, Eckrich, and Sprecher (1978) shows that multiattribute attitude models are a viable approach to the construction and examination of bank images.

The Study

The purpose of this study is two-fold. First, we wish to develop an updated construct configuration by which consumers evaluate banks. This, in and of itself, will provide banks with information regarding the convergent and discriminant validity of the most cited attributes used in the choice process. We will develop this construct configuration across all banks in the study area.

Second, we wish to develop bank specific image models for four banks. With fresh data and in a different geography, we hope to augment the work of Riggall (1979) regarding the salient attributes of image using methods similar to Durand, Eckrich, and Sprecher (1978). This is done in order to examine whether or not one may generalize about the number and composition of attributes which go into the development of a specific bank's image.

Methodology and Results

Subjects were obtained by the mall intercept technique. In a recent study Bush and Hair (1985) have shown this method to be as effective as telephone interviews. In the present study, one hundred and seven responses were used for analysis. Collection was conducted at two sites in a New England community of approximately 100,000 people.

Most respondents (44.4 percent) were 25 to 35 years of age. Sixty-two percent of the subjects were female and 38 percent were male. Of the respondents, 42 percent had lived in the state for more than 19 years. With regard to education, 98 percent graduated from high school and 59 percent graduated from college. The median annual income interval was $15,000 to $24,999.

Measures

Respondents were surveyed using a fully structured, self-report instrument. The questionnaire was designed to obtain three types of measurements. First, subjects were asked to rate fifteen bank attributes (shown in Table One) on importance. A five point scale ranging from not important to very important was employed. The attributes measured were derived from the work of Riggall (1979) and Durand, Eckrich, and Sprecher (1978). It was our a priori contention that the underlying dimensions of the fifteen attributes would be related to 1) traditional services, 2) convenience, 3) reputation, and 4) personnel.

The next set of measures asked respondents to evaluate the performance of a known specific bank. Thus, the "belief" component of the multiattribute model was measured on the same set of fifteen attributes. It should be noted here that respondents did not necessarily have to be users of the chosen bank. All that was required was knowledge of the bank. The fact that 42 percent of subjects had lived in the state for more than 19 years is, thus, important. However, because knowledge levels often run low with such attributes by specific banks, respondents were given a "don't know" option. The product of these belief measures and the above measures on importance were used in the multiple regression models (see Table Two) which profiled the images of the four banks.

Evaluative Constructs

It was hypothesized that a distinct set of evaluative constructs could be configured using an updated set of bank attributes. These are shown in Table One below. The four constructs were configured via principle components factor analysis. An orthogonal varimax rotation was utilized to increase interpretability. The minimum eigen value was set at unity.

TABLE ONE
BANK EVALUATIVE CONSTRUCTS

Construct and Indicants	Factor Loading	% Explained Variance
1. Traditional Services		26.9
Interest Rates on Loans	.80	
Reputation in the Community	.72	
Low Rates for Checking	.71	
Friendly/Personalized Service	.53	
Monthly Statements are Easy to Read and Understand	.49	
Obtainability of Loans	.42*	
2. Convenience		10.5
Convenient Branch Location	.69	
Convenient ATM Location	.66	
Speed of Service	.62	
Convenient Banking Hours	.59*	
3. Visibility		9.6
Recommendations from Friends and Relatives	.68	
Attractiveness of the Physical Structure	.62	
Community Involvement	.62	
Obtainability of Loans	-.54*	
4. Competence		7.8
Employee Competence	.72	
Availability of Auxiliary Banking Services	.54	
Convenient Banking Hours	.44*	

*Attributes which split loaded are included in order to add to the interpretation of each construct as well as to illustrate those indicants which exhibit poor discriminant validity.

Attributes which loaded less than .40 were not included in a given factor's interpretation.

As illustrated in Table One, a four factor solution was extracted. Clearly the issues of Traditional Services, Convenience, Visibility, and Competence are reflected in this factor solution. Given that these four underlying dimensions are based on measures of importance, it is of value for any banker to note the areas upon which they are being evaluated. Especially interesting is that there is this area of "Visibility" which is a part of our subjects' evaluation process. We note again that these dimensions are generalized across all banks by the subjects of this research. Bank specific image is explored in the subsequent sections.

Bank Specific Image Definition

The methodology employed in this analysis is similar to that used by Durand, Eckrich, and Sprecher (1978). A multiattribute model was utilized to evaluate banks images. Rather than taking a factor analytic approach, a multiple linear regression was performed to determine which weighted attributes were significant in predicting the summate of the same weighted attributes. Thus, an attitude score was calculated for each bank using the multi-attribute model. This score was used as the dependent variable with the fifteen weighted attributes serving as the predictive set. This approach was taken to add clarity to interpretations of explained variance for the reduced as well as full models. Even in the reduced models, presented in Table Two, the R^2s are all quite high. This was expected given that we are regressing the components of a summate on itself. The R^2p criterion was used to select the best set of independent variables (Neter and Wasserman 1974). The purpose for using this method was to eliminate those attributes from the model which explained only a small portion of the variance. As this model does not take the number of parameters into account, the $MSEp$ criterion was used simultaneously with the R^2p criterion. A stepwise regression was performed initially. To further reduce the number of parameters, the R^2p was employed. The change in R^2 was plotted against the step or number of parameters in the model.

Table Two shows those attributes which contributed significantly to each model. The regression coefficients are reported as well as a 95 percent confidence interval for each. Probably of most importance is that the number and nature of the significant predictors of image for each bank is different. No two banks have the same attributes in their image model. When reduced models were run with only the first variable entered, the adjusted R^2s were all greater than .65. This suggests that it is primarily a single attribute which defines image. Each attribute does not weigh equally in forming a bank's image. Instead, a single attribute is the primary perceptual identification. Additional attributes contribute to the individualization of that image.

TABLE TWO
IMAGE REGRESSION MODELS FOR FOUR BANKS

Variable	Bank A	Bank B	Bank C	Bank D
Reputation in the Community		0.110* (±.060)	0.117 (±.060)	0.333* (±.127)
Community Involvement	0.210 (±.077)	0.128 (±.050)		0.228 (±.153)
Recommendations from Friends and Relatives			0.134 (±.053)	0.139 (±.120)
Speed of Service			0.212 (±.064)	0.229 (±.075)
Interest Rates Charged for Loans	0.363* (±.073)		0.191 (±.052)	
Convenient Location of Branches			0.152* (±.059)	0.131 (±.061)
Convenient Banking Hours	0.106 (±.077)	0.120 (±.068)		
Convenient ATM Location	0.113 (±.061)			
Adjusted R^2	.906	.879	.959	.862

*First variable entering

Also of importance is that Reputation in the Community, Community Involvement, and measures involving convenience are so important in determining image that traditional banking services such as cost of checking seem to take a back seat.

Discussion

We wish to make one major point as the result of this research: different financial institutions derive their images via a different number of different attributes. For example, while speed of service was important in defining the image of two of the banks in this study, it was not an important contributor to the image of two other banks. While reputation in the community was a significant contributor to the image of three of the four banks in the study, it was not evident in the last. Image development for banks seems to be more then monomorphic; it appears to be brand specific!

The Evaluative constructs developed in this research are more generalizable. Four evaluative constructs are evident from our analysis. They are 1) Traditional Service, 2) Convenience, 3) Visibility, and 4) Competence. A consumer evaluates a bank on the Traditional Service dimension when he or she evaluates fees, availability of loans, checking, monthly statements, reputation, and friendliness. In contrast, the Convenience dimension is reflective of a society with little patience for waiting. Thus, location, ATM, speed, and hours are the important indicants of this construct. Visibility is grounded more in word of mouth and

appearance of the physical structure of a bank. Lastly, competence occurs as the result of auxiliary services and knowledgeable employees.

Thus, while it would appear that the development of constructs important in evaluating a financial institution is easily accomplished, generalizing about a specific bank's image is not. Consumers appear to have fairly well grounded beliefs about what a bank "should be". They don't seem to agree, however, about the things which have caused a given bank to be "what it is".

Like Riggall (1979), this research supports the notion that convenience is important in defining image (some component of it is included in three of the four models). Unlike Rigall (1979), we find that word of mouth is an important factor. In addition, reputation and community involvement of a bank are shown to be highly important in the definition of image.

Banks remain in service by attracting new customers and retaining present customers. Image is critical to these ends. Any given bank should realize that its image is probably defined by a different set and number of criteria than its competitors.

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THE SERVICES CHALLENGE: MEETING THE SERVICE NEEDS OF THE SINGLES MARKET

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Abstract

Single persons represent the fastest growing market segment in an American economy that is increasingly dominated by the service sector. This study examines the consumption behavior of 25 to 34 year old (married and single) consumers with regard to 5 innovative services. Single persons are found to be the heaviest consumers of these services and methods of targeting services to this segment are discussed.

Introduction

By its nature, the marketing discipline is continually involved in the search for new, previously untapped, market segments large enough in size and affluent enough in resources to provide excellent opportunities for the astute marketer. There is one significantly large, but not very well organized, minority group in the United States that has yet to receive such attention from marketers. This is in spite of the fact that the 1980 Census found that this group had grown from under three million in 1970 to over seven million in 1980, a growth rate of over 150% (U.S. Department of Commerce 1980 (A) and (B)). This group is comprised of the adult, never married single person in American society.

While the singles market has started to attract the attention of popular publications (Abbey 1982, Cargan 1982, Kronholz 1977, Lindan 1979, Lublin 1986, Michman 1983, Peterson 1980, Stevens 1981) little attention has been given to singles in the marketing literature. It appears that many academic marketers do not recognize that adult single persons might actually represent a distinct market. Single persons of all ages most often are grouped into the bachelor stage of the family life cycle or are implicitly assumed to behave like married couples.

Such treatment may not adequately represent the behavior of the burgeoning singles market of the mid 80's, especially in the area of consumption of services. Since the growth in the service sector of the economy has paralleled the growth in the singles market, what is needed is a determination of whether singles are actually different from married people of the same age in the area of consumption behavior of services.

The Changing Marital Profile of America

The United States is witnessing significant changes in the marital status of its population. Both the aggregate number of persons who are unmarried and the percentage of all adults who are unmarried have risen substantially over the last ten years (see **Table 1**). Although different computation techniques (see note explaining **Table 1**) make comparisons of pre-1960 and post-1960 data difficult, it is clear that the major growth in the number of unmarried persons has come recently.

TABLE 1
MARRIED AND UNMARRIED PERSONS IN THE U.S.: 1950 TO 1980

	Married Persons		Unmarried Persons	
Year	number (in ,000)	% of all persons	number (in ,000)	% of all persons
1950	74,900	67.0	36,900	33.0
1960	84,400	67.3	41,200	32.7
1970	95,000	71.7	37,500	28.3
1980	102,600	65.7	53.600	34.3

Note: 1950-1960, persons 14 years old and over; thereafter, 18 and over. Married persons are individuals currently married in March of the year indicated. Unmarried persons are individuals who were either never married or are widowed, separated, or divorced in March of the year indicated.

Source: U.S. Department Commerce, Bureau of the Census, Current Population Reports-Marital Status of the Population, by Age and Sex (Washington, D.C.: Government Printing Office, 1980), Series p-20, No. 372, pp. 35-44.

In 1970, just over 37 million persons, or 28.3 percent of all adults 18 years old and over, were unmarried. By 1980, the number of unmarried persons had risen by over 16 million to total 53 million. This represented over 34 percent of all adults 18 years old and over. Two recent studies indicate that the percentage of persons remaining single in the mid 1980s may even be accelerating (Francese 1986, Lublin 1983).

Marital Trends By Age Group

An examination of **Table 2** reveals that the 70's witnessed a large increase in the percentage of single, never married persons in some age categories, but not all. In fact, some age brackets actually declined in the percentage of the group which is in this marital status.

An examination of the ratio of 1980 to 1970 percentages uncovers an interesting observation. In 1970, 14.7 percent of all persons between the ages of 25 and 29 were single, never married. By 1980, this percentage had increased to 26.5 percent, a ratio to the previous percentage of 1.80 and a percentage increase of over 80 percent. The 30 to 34 segment grew from 7.7 percent single, never married in 1970 to 12.5 percent in 1980, a ratio of 1.63 and a

TABLE 2
PERCENTAGE OF POPULATION SINGLE, NEVER MARRIED BY AGE GROUP AND SEX

age group	women (% single) 1980	1970	ratio 1980/1970	men (% single) 1980	1970	ratio 1980/1970	men and women (% single) 1980	1970	ratio 1980/1970
15 to 19	88.0	82.0	1.07	97.4	95.1	1.02	92.6	88.5	1.05
20 to 24	50.2	35.8	1.40	68.6	54.7	1.25	59.5	45.2	1.32
25 to 29	20.8	10.5	1.98	32.4	19.1	1.70	26.5	14.7	1.80
30 to 34	9.5	6.2	1.53	15.7	9.4	1.67	12.5	7.7	1.63
35 to 39	6.2	5.4	1.15	8.0	7.2	1.11	7.1	6.3	1.13
40 to 44	4.8	4.9	.98	6.6	6.3	1.05	5.7	5.6	1.01
45 to 54	4.7	4.9	.96	6.4	7.5	.85	5.5	6.2	.90
55 to 64	4.6	6.8	.77	5.1	7.5	.68	4.8	7.1	.68
55 and over	5.9	7.7	.77	5.1	7.5	.68	5.6	7.6	.74

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Reports-Marital Status and Living Arrangements: March 1980 (Washington, D.C.: Government Printing Office), Series P-20, No. 363, pp. 2-4.

percentage increase of over 62 percent. By far the greatest growth in the percentage single, never married has occurred in the 25 to 34 age segment.

Research Hypothesis

The following hypothesis was tested in this study:

H1: Single persons will be more likely than their married counterparts to be the consumers of innovative services.

The United States has been described as the leading service economy in the world (Kotler 1986). Since much of the growth in the service industry has come at the same time that the number of singles in society was increasing, it was expected that singles would be greater consumers of services than their married counterparts. This was expected, in part, because singles must use their own time and expertise to get things done. With limited amounts of both time and expertise, services are very beneficial. Meanwhile, married persons may often depend upon each other to perform tasks that one family member is unable to do.

Data Collection Procedure

A representative sample of 1000 names was randomly selected from a mailing list obtained from R. L. Polk and Company, a well known firm specializing in lists of this kind. The sample included 500 singles and 500 married persons, with each group divided into halves by sex. Each person selected received a questionnaire (containing dichotomous consumption questions on 5 innovative services), a stamped return envelope, and a separate personalized note requesting his or her cooperation. Whether of not a given service is actually an innovative service was felt to be determined by the perception of newness by the potential customer, not by the perception of newness by the researcher. For this reason, an initial survey was conducted to identify the five services (out of a possible twenty five services) that were perceived by the potential consumer to the "newest" service. These five services were used in this study. The questionnaires were mailed during fall 1984 and all responses used were returned by spring 1985. The response rate was 41 percent.

Results

The objective of this study involved determining whether there is a relationship between marital status and consumption of a group of innovative services. To examine this possible relationship, the number of innovative services (maximum of all 5) used in the last six months was totaled for each individual. Respondents were then grouped by marital status and a chi square test was conducted.

The results of this test clearly indicated that single persons are, in fact, more likely than their married counterparts to be the consumers of innovative services (see Table 3). In particular, singles are more likely than married persons to consume a larger number of these services (therefore, H1 is accepted). While 63.1 percent of singles consumed 3 or more of these services, only 35.8 percent of their married counterparts did so. This same relationship is found when examining either males (where 66.0 percent of singles consume 3 or more services versus 40.9 percent of married males) or females (where 60.8 percent of single females consume 3 or more services versus only 30.3 percent of married females). The chi square value of 33.31 (for all married persons versus singles) indicates that this relationship is statistically significant at the .05 test level.

A further examination of Table 3 reveals that there are not statistically significant differences between the sexes in terms of the number of innovative services used. The chi square value (8.27) indicates that the difference between sexes is not significant at the .05 test level.

TABLE 3
CONSUMPTION OF INNOVATIVE SERVICES

		all respondents by marital status		all respondents by sex	
		married (n=179)	single (n=206)	all males (n=181)	all females (n=204)
Total Number of Innovative Services Used (maximum of 5)	0	5.0%	2.9%	4.2%	4.1%
	1	27.4%	11.7%	14.7%	23.4%
	2	31.8%	22.3%	28.3%	26.6%
	3	23.5%	35.4%	28.8%	30.2%
	4	11.7%	24.3%	20.9%	14.4%
	5	0.6%	3.4%	3.1%	1.4%
Chi Square		33.31		8.27	
Signaficance		.0000		.1420	

		males only		females only	
		married (n=91)	single (n=90)	married (n=.89)	single (n=115)
Total Number of Innovative Services Used (maximum of 5)	0	4.3%	3.3%	5.8%	2.6%
	1	19.4%	8.8%	36.0%	13.9%
	2	35.5%	22.0%	27.9%	22.6%
	3	26.9%	29.7%	19.8%	40.0%
	4	12.9%	30.8%	10.5%	19.1%
	5	1.1%	5.5%	0.0%	1.7%
Chi Square		16.36		22.42	
Significance		.0060		.0004	

An examination of consumption for each service indicates that a higher percentage of singles than married persons consume every one of the 5 services tested (see Table 4). The difference between the marital groups' consumption for three of the services, answering machines, automated bank machines, and new specialty restaurants, is statistically significant at the .05 level.

Implications and Conclusion

Before discussing the implications of this study, one important limitation should be noted. Since the sample used for this study was not necessarily representative of the entire U.S. single's market, one should not generalize the findings to singles in general. Even so, this study points to various strategies that may be appropriate in marketing to the singles market. Further research will be necessary to develop more detailed generalizations about this growing segment.

There are several marketing implications concerning innovative services. First, marketers should recognize that single persons will be well represented among first groups to adopt a new service. For example, 75.7 percent of the singles group said that they ate at new specialty restaurants, but only 50.8 percent of the married group fell into this category. This same relationship was found in each of the other four innovative services evaluated. This means that single persons will comprise a larger percentage of the early users of an innovative service than their proportion of the population might suggest.

If one hopes for the most successful introduction of a new service, then single persons should be shown in the early promotion. Some astute marketers are already aiming their

TABLE 4
CONSUMPTION OF INNOVATIVE SERVICES

Which of the following services have you used in the last six months?		all respondents by marital status	
		married	single
1. cable TV	yes	41.9%	49.5%
	no	58.1%	50.5%
chi square		1.94	
significance		.1348	
		married	single
2. answer machine	yes	9.5%	18.0%
	no	90.5%	82.0%
chi square		5.01	
significance		.0252	
		married	single
3. 2+ credit cards	yes	67.6%	73.3%
	no	32.4%	26.7%
chi square		1.24	
significance		.2655	
		married	single
4. auto. bank machine	yes	41.3%	60.7%
	no	58.7%	39.3%
chi square		13.58	
significance		.0002	
		married	single
5. new restaurant	yes	50.8%	75.7%
	no	49.2%	24.3%
chi square		24.73	
significance		.0000	

promotional messages toward single persons. In the current advertising campaign for Steak and Ale, two (obviously single) individuals are shown on an outdoor (horseback riding) social event. At the end of the ride, one of the individuals suggests that they have dinner at "his place." The woman then states that she did not know that her date could cook. "His place" turns out to be Steak and Ale, a location that the woman concludes that she likes. Another example of an advertisement (for an innovative service) aimed at single persons can be found in the present campaign for Visa credit cards. A male and female are shown getting their mail from their mailboxes. Each has received their new Visa, although the female has obtained the more prestigious "gold" card. The man then comments that he has not seen the woman around for awhile. After she replies that this is because she travels a lot on business, she invites him to help her break in her new card.

Another marketing implication evolves from the fact that single persons appear to be receptive to services which can save them time and perform the activities that a second household member might perform in a married household. For example, single persons were almost twice as likely as married persons to own a home answering machine. Marketers who provide these kinds of services are likely to be successful selling to singles.

Marketers of services should also be aware that the demand by single persons for innovative services is likely to be relatively price inelastic. This can be demonstrated by the fact that, unlike married persons, single persons were not deterred from adopting the five innovative services tested by the relatively high price of these items. While more research is needed to test the possible relationship between marital status and price sensitivity, it is quite possible that astute marketers may be able to price innovative services heavily consumed by single persons at a relatively high level without losing much of the quantity demanded.

While there seems to be very little difference between single males and single females in terms of eating at new specialty restaurants and using credit cards, single males seem to be somewhat more likely than single females to subscribe to cable television, own a home answering machine, and use automated banking facilities. Some firms may wish to aim their promotion at the sex which is most likely to be the consumer of their service. This can be done by placing advertising for these services in media vehicles which target singles of each sex (such as Cosmopolitan for females and Playboy for males). However, more research is needed to determine whether there are general categories of innovative services heavily consumed by singles that exhibit a difference in consumption based on sex.

In summary, it is clear that single persons may represent an important market to marketers of services. In order to be successful with this segment, marketers of services must learn to identify the unique needs of single persons and target promotion in the media which reach this segment.

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SEGMENTING THE MARKET FOR LEISURE TIME SERVICES

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Abstract

This study investigates joint use of the satisfactions derived from leisure activities and from demographics to segment the market for leisure time services. These satisfactions, when experienced, represent affective benefits received by participants. To the extent these two types of variables can be found related to one another, public officials (and others) can develop programs to provide leisure services to serve these segments as jointly defined. In fact, the empirical results show that viable segments can be jointly characterized on the basis of demographics and these elements of the satisfactions experienced by consumers: Psychological, Educational, Relaxation, Physiological, and Aesthetic dimensions of satisfaction with leisure activities.

Recent years have seen a widespread increase in the application of segmentation techniques to the markets for services (Sawyer and Arbeit 1974; Anderson, Cox and Fulcher 1976; Darden, Darden and Kiser 1981; Griffith and Wells 1984). Predictably, these studies have involved a wide variety of different services. One of the areas studied has been the demand for market offerings that help consumers spend their scarce resource of time. In particular, marketing researchers have recently become interested in that aspect of human behavior that relates to the way consumers spend their leisure time (Anderson and Golden 1984; Bloch and Bruce 1984). These studies have investigated how individuals allocate their time to various leisure pursuits. Some have provided information concerning the characteristics of those segments of consumers involved in the more popular patterns of leisure activity (Hawes 1978).

Another stream of research has involved satisfaction as an output measure of the process of consumption (Oliver and Linda 1981; Swan and Trawick 1981). Here, researchers have sought to characterize satisfaction, find suitable measures for the construct, discover who finds satisfaction in consumption.

It is not surprising, then, that the conceptual confluence of these two streams of research should suggest an investigation into the satisfaction derived from leisure-time pursuits (Pierce 1980). This report deals with a study that provides an integration of these research topics. Its motivation was pragmatic; the study was commissioned by government officials charged with developing and managing programs designed to help citizens spend their leisure time in a satisfactory manner. In particular, this study sought to use a marketing perspective to explain who, in terms of the demographic characteristics of the participants, finds various elements of satisfaction in leisure pursuits. In essence, this was a market segmentation study where the segmentation variables, satisfaction and demographics, were considered jointly.

On this basis, the purpose of this research was work within the context of leisure services to: (1) investigate the existence of and provide empirical support for the relationship between elements of satisfaction and demographics; (2) discover the nature of the different segments of consumers delineated by this relationship; and (3) interpret these findings with respect to segmentation to provide marketing information useful to government officials responsible for developing programs to provide leisure time services.

Conceptual Background

Marketers can support consumption of leisure time in two ways: (1) by facilitating participation itself; and (2) by providing services (and products) used by consumers to support this participation. Examples of services of the first type are motion pictures, bowling alleys, and commercial swimming pools. Without the service in question, the consumer would be unable to participate in the leisure activity. Examples of the second type are movie reviews, bowling ball cleaners, and swimming lessons. Here, the service is an adjunct that presumably adds to the enjoyment of the activity, but is not necessary. Consumers could participate without them, by asking friends' opinions about current movies, washing their balls with available tools, and learning to swim by trial and error.

Thus, participation is often intimately connected to consumption of services (and products). Marketers, commercially-sponsored or otherwise, provide the services that are part of the total experience of consuming leisure time, a total experience that has a wholistic nature. As a result, the consumer (or anyone else) would find it difficult to distinguish that component of satisfaction which is intrinsic from that which is due to consumption of the products/services that underlie or support participation (Bloch and Bruce 1984).

Another aspect of this consumption process that makes leisure satisfaction difficult to conceptualize is the effect on overall satisfaction from the interaction between the various pursuits that constitute a person's regimen (Buchanan 1983). Some participants may concentrate their participation on one or a few activities. Others may spread their efforts over a larger number of different pursuits. As a result, the only measurement of satisfaction that may be possible for some consumers is their total satisfaction with their complete program of activities.

In this vein, Beard and Ragheb (1980) empirically derived a set of dimensions claimed to underlie

a person's satisfaction with leisure activities, either taken singly or as a complete program of participation. In a two-stage process, these researchers used principal components analysis to examine the structure of responses to a large set of satisfaction items obtained from groups of 603 and 347 participants. The respondents reported the extent to which each satisfaction item was true of them, responding to a battery that consisted of 51 items in its final form. The resulting leisure satisfaction scale (LSS) attained an alpha coefficient of reliability for the total set of items of .96, with alphas for the six dimensions ranging from .85 to .92. The six dimensions are:

1. Psychological. Psychological benefits such as: a sense of freedom, enjoyment, involvement, and intellectual challenge.

2. Educational. Intellectual stimulation and helps them to learn about themselves and their surroundings.

3. Social. Rewarding relationships with other people.

4. Relaxation. Relief from the stress and strain of life.

5. Physiological. A means to develop physical fitness, stay healthy, control weight, and otherwise promote well being.

6. Aesthetic. Aesthetic rewards. Individuals scoring high on this part view the areas in which they engage in their leisure activities as being pleasing, interesting, beautiful, and generally well designed. (Beard and Ragheb 1980, p. 26).

The concept of market segmentation suggests the market for consumption of leisure time can be formed into meaningful groupings of consumers on the basis of variables that are useful for planning marketing strategy. In the present study, the context is one of developing community programs of leisure activities for the market segments that can be delineated. By effecting segmentation, management can gain an advantage through targeting groupings of persons who are similar in terms of: (1) their responses to offerings in the marketplace and/or (2) other measurable characteristics of consumers; e.g., demographics. Thus, if patterns of individual satisfactions can be linked to patterns of demographics (Pierce 1980), a market segment can be jointly characterized in terms of satisfaction and demographics.

To allow marketers to use the resulting characterizations of market segments, these segments must be defined narrowly enough that their members have recognizable similarities; i.e., so they form a relatively homogenous segment. Using 51 different variables would likely prevent the resulting characterization of any given segment from being narrowly enough defined to provide a suitable target. On this basis it seems worthwhile to conceptually group the variables into the sets defined by the six dimensions of Beard and Ragheb.

One further point should be made regarding the use of satisfaction measures in this marketing study. From a conceptual standpoint, satisfaction can be viewed as a benefit received from a service (or product). In essence, finding satisfaction through participation in leisure activities is an affective benefit for participants. The concept of segmenting markets on the basis of benefits was introduced by Haley (1968) and subsequently applied to the marketing of services by other researchers (Sawyer and Arbeit 1974; Bahn and Granzin 1985). The implication of benefit segmentation for this study is that marketers of services can profitably view their task to comprise two stages. They should first determine the benefits required by their target segment(s), and then plan their programs to provide these benefits.

To consider the other set of segmentation variables, demographics have provided a time-proven measure of market segments. The applied marketing study on which this report is based used demographics to help governmental policy makers: (1) assess the nature of their constituent market for public recreational facilities and services; and (2) judge the acceptance of those facilities and services currently provided. Thus, the demographic variables included in this study reflect the real decision needs of government officials, and the set featured here was chosen on the basis of its usefulness to these policy makers.

Method

Data Collection

Data came from in-person interviews with adults aged 18 and over. The sampling frame comprised households from fifteen population areas located in five different voting districts of a single county in an eastern state. Households were selected to give a representative sample in terms of the socioeconomic characteristics of both urban and non-urban areas of the county. Dwellings were selected by stopping at the every fourth house on each street in the residential areas selected, and each house in the more sparsely populated areas selected.

Trained interviewers presented the self-completion questionnaire and remained with respondents to answer questions, motivate participation, and monitor compliance with the instructions. A total of 435 interviews were completed, which produced 420 usable questionnaires. The official governmental sponsorship of the survey resulted in a relatively high proportion of successfully completed interviews, 84 per cent.

Measurement

The 51 satisfaction items were presented in a format calling for respondents to report their degree of agreement that a particular item was descriptive of them personally. The response

choices were: (1) Never true; (2) Seldom true; (3) Sometimes true; (4) Often true; and (5) Always true. To illustrate, the individual items followed the form of this item taken from those used to represent the educational dimension: "I learn things in my leisure activities simply because I like learning them." Tables 1 through 5 present the items used to measure leisure satisfaction, with wording of some of the items condensed for brevity. On the questionnaire, these 51 items followed a list of 57 leisure pursuits available in the county where they survey took place. This list served to remind respondents of the locally available means to leisure satisfaction.

The 12 demographics were measured by means of open-ended and forced-choice scales of conventional format. Table 1 indicates the nature of the categories and scales used to measure demographics.

Analysis

It would have been unwieldy at best to attempt to statistically relate the entire set of 51 satisfaction variables to the set of demographics. Therefore, for purposes of analysis, the satisfaction variables were grouped according to the basic dimensions of Beard and Ragheb, with the number of variables for each shown in parenthesis: Psychological (13), Educational (12), Social (11), Relaxation (4), Physiological (6), and Aesthetic (5).

Given a continuous set of satisfaction measures and a continuous set of demographics for each of six analyses, canonical correlation was selected as the appropriate statistical technique. Canonical correlation forms a linear compound (canonical variate) of the variables in one set that is maximally correlated with the linear compound formed using the variables in the other set. These pairs (roots) of correlated canonical variates are extracted sequentially until the number of such roots equals the number of variables in the smaller of the two sets. Successive pairs of variates are uncorrelated with the variates extracted by previous roots. Tests of significance for each root indicate its contribution to the analysis. To interpret the contribution of individual variables to the formation of a variate, one can examine the magnitude and sign of the correlation (loading) between each individual variable and the variate. Here, those loadings having an absolute value of .30 and above are considered to indicate variables important to the relationship, and these variables are used in the interpretation of the results.

Results

Table 1 presents the results of the analysis of the hypothesized relationship between the Psychological satisfaction variables and demographics, as computed using the SPSS-X package for statistical analysis. Two roots emerged as significant at the .05 level. To simplify the presentation of results, the signs have been stated so that the highest loading for a satisfaction variable is positive.

TABLE 1
CANONICAL ANALYSIS OF PSYCHOLOGICAL SATISFACTIONS AND DEMOGRAPHICS

Variables	Loadings Root A	Root B
Elements of Satisfaction		
I freely choose activities to do in spare time	-.07	.73
My leisure activities are interesting to me	.38	.57
I enjoy doing my leisure activities	.54	.32
I am frustrated in my free time	-.17	-.02
My leisure activities give me self-confidence	.11	.31
My activities give me a sense of accomplishment	.43	.33
I use many different skills and abilities	.54	.08
I consider leisure activities a waste of time	-.21	.07
When doing them I become fully involved	.08	.22
My choices are limited by my lack of skills	-.41	.13
I feel lonely in my free time	-.25	-.31
My activities are intellectually challenging	.49	.22
They have a positive effect on my life	.53	.35
Demographics		
Gender (0=Male; 1=Female)	-.46	-.20
Age (years)	.11	-.23
Time at current residence (years)	.21	-.30
Occupational prestige (U. of Ill. scale)	.68	-.08
Marital status (0=single; 1=married)	.36	.36
Education (years of schooling)	.07	-.27
Household income (8-point scale)	.47	.61
Number of persons supported by this income	.00	-.30
Ownership of dwelling (0=rents; 1=owns)	.54	-.22
Occupies single-family dwelling (0=no; 1=yes)	.36	.07
Occupies mobile home (0=no; 1=yes)	-.21	-.19
Occupies apartment or duplex (0=no; 1-yes)	-.25	.10
Canonical Correlation	.53	.43
Multivariate F-Ratio	1.69	1.38
Probability of a Type I Error	.001	.005

The first root relates the dimension of psychological satisfaction to demographics by means of the seven satisfaction variables and five demographics whose loadings reached an absolute value of .30. The first canonical variate for psychological satisfaction is defined by using skills and abilities, enjoying leisure activities, finding these activities have a positive effect on one's life, finding the activities

intellectually challenging, experiencing a sense of accomplishment in the activities, not having one's lack of skill limit the choice of activities, and finding the activities interesting. Briefly stated, this variate represents the ability to use one's skills to obtain both pleasurable involvement and a feeling of success.

The related variate for the demographics set includes important loadings for higher occupational prestige, owning one's dwelling, having higher income, being both male and married, and living in a single-family dwelling. This variate predominantly reflects married men who have found a more successful, stable existence.

The second root based on Psychological satisfactions reflects the feeling that participants can freely choose their leisure activities, find them interesting, feel they have a positive effect on their life, gain a sense of accomplishment from them, enjoy them, gain self-confidence from them, and not feel lonely in their free time. This root suggests participants gain a positive, enjoyable sense of independence from their leisure pursuits, and meet with a feeling of having succeeded.

The corresponding demographic variate reflects higher income for the most part. Secondary contributions come from being married, a lower number of persons supported within the household, and a lesser time of residence in the county. This variate indicates more mobile, smaller, but wealthier families.

Table 2 presents the results of the analysis of the hypothesized relationship between Educational aspects of satisfaction and demographics. One root emerged as significant. This root is defined by satisfaction in learning new things, finding broader experiences, being encouraged to learn new things, being restored spiritually, and increasing one's knowledge about the environment. This root seems to reflect the finding that leisure pursuits allow one to reach out beyond an otherwise more limited existence.

The related demographic variate is defined by higher income, owning one's home, living in a single-family dwelling, not living in a mobile home, being married, and having lower formal educational attainment. This variate reflects a more settled homelife, and greater financial success despite a lower level of education.

The analysis involving the Social aspects of satisfaction did not show a significant relationship with demographics, producing a canonical correlation of .42, with a corresponding probability of Type-I error of .11. These non-significant results are not presented in a table.

Table 3 gives the results for Relaxation, where one root emerged as significant. The two variables that define the satisfaction variate are a contribution to one's emotional well-being, and respondents' participating because they like doing them. This variate suggests pleasurable participation to gain a psychic benefit.

TABLE 2
CANONICAL ANALYSIS OF EDUCATIONAL SATISFACTIONS AND DEMOGRAPHICS

Variables	Loadings Root C
Elements of Satisfaction	
Some of my leisure activities give me broader experiences	.56
I do leisure activities which restore me spiritually	.43
I learn things in my activities simply to learn them	.62
My leisure activities encourage me to learn new skills	.52
My activities increase my knowledge of things around me	.37
My leisure activities help to satisfy my curiosity	.07
My activities provide opportunities to try new things	.07
My leisure activities help me to learn about myself	.20
My leisure activities help me to learn about other people	.27
My activities help me to learn about society in general	.21
My leisure activities help me to learn about nature	-.13
They help me accept differences among individuals	-.02
Demographics	
Gender (0=Male; 1=Female)	-.29
Age (years)	.26
Time at current residence (years)	.16
Occupational prestige (U. of Ill. scale)	.15
Marital status (0=single; 1=married)	.38
Education (years of schooling)	-.31
Household income (8-point scale)	.79
Number of persons supported by this income	-.14
Ownership of dwelling (0=rents; 1=owns)	.45
Occupies single-family dwelling (0=no; 1=yes)	.44
Occupies mobile home (0=no; 1=yes)	-.40
Occupies apartment or duplex (0=no; 1-yes)	-.17
Canonical Correlation	.43
Multivariate F-Ratio	1.34
Probability of a Type-I Error	.008

The demographic variate represents a higher income, one that supports a larger household, not living in an apartment or duplex, and greater occupational prestige. This variate indicates greater social and economic success in one's work, and a larger family living in more permanent quarters.

Table 4 presents the results for Physiological aspects of satisfaction. Here, all six of the variables contribute to the formation of the canonical variate. Leisure activities are seen as helping the participants to develop their physical fitness, control their weight, maintain their energy level, stay healthy, be restored physically, and find a physical challenge. In

TABLE 3
CANONICAL ANALYSIS OF RELAXATION SATISFACTIONS AND DEMOGRAPHICS

Variables	Loadings Root D
Elements of Satisfaction	
My leisure activities help me to relax	-.05
My leisure activities help relieve stress	.19
My activities contribute to my emotional well being	.65
I engage in activities simply because I like doing them	.57
Demographics	
Gender (0=Male; 1=Female)	-.25
Age (years)	.08
Time at current residence (years)	.22
Occupational prestige (U. of Ill. scale)	.37
Marital status (0=single; 1=married)	.20
Education (years of schooling)	.13
Household income (8-point scale)	.47
Number of persons supported by this income	.65
Ownership of dwelling (0=rents; 1=owns)	.40
Occupies single-family dwelling (0=no; 1=yes)	.25
Occupies mobile home (0=no; 1=yes)	.12
Occupies apartment or duplex (0=no; 1-yes)	-.44
Canonical Correlation	.39
Multivariate F-Ratio	1.66
Probability of a Type-I Error	.005

TABLE 4
CANONICAL ANALYSIS OF PHYSIOLOGICAL SATISFACTIONS AND DEMOGRAPHICS

Variables	Loadings Root E
Elements of Satisfaction	
My leisure activities are physically challenging	.33
I do leisure activities which develop my physical fitness	.82
I do leisure activities which restore me physically	.38
My leisure activities help me to stay healthy	.36
My leisure activities help control my weight	.54
My leisure activities help me maintain my energy level	.47
Demographics	
Gender (0=Male; 1=Female)	-.44
Age (years)	-.42
Time at current residence (years)	.02
Occupational prestige (U. of Ill. scale)	.01
Marital status (0=single; 1=married)	-.01
Education (years of schooling)	.11
Household income (8-point scale)	.15
Number of persons supported by this income	-.09
Ownership of dwelling (0=rents; 1=owns)	.48
Occupies single-family dwelling (0=no; 1=yes)	-.01
Occupies mobile home (0=no; 1=yes)	.03
Occupies apartment or duplex (0=no; 1-yes)	-.02
Canonical Correlation	.44
Multivariate F-Ratio	1.70
Probability of a Type-I Error	.001

short, these activities provide all the benefits associated with physical fitness workouts.

The demographics variate characterizes members of this segment as owning their home, being male, and being younger. Thus, younger men in established homes contribute to the formation of these two related variates.

Table 5 gives the results for Aesthetic aspects of satisfaction with leisure activities. Again, all five of the satisfaction variables contribute to the formation of the canonical variate. Respondents reported the areas or places where they engage in their leisure activities are: beautiful, well designed, interesting, pleasing to them, and fresh and clean. Restated, they find the benefits of a leisure environment that to provides a variety of aesthetically supportive attributes.

The demographic variate represents a greater likelihood of being male, younger age, higher income, and greater likelihood of living in a mobile home. Thus, in the aggregate, these predominantly younger men are better off financially, although some of them inhabit mobile homes.

Discussion

The results from the statistical analysis give clear support for the hypothesis that elements of satisfaction with one's leisure activities can be empirically associated with one's demographic characteristics. Because it is not logical to suppose satisfaction caused most of the demographics used in this study, a general causal influence from demographic characteristics to satisfaction seems reasonable.

Considered at the level of the basic dimensions of satisfaction, again the analysis supports the hypotheses used to guide this research. Five of the six dimensions of satisfaction were found related to demographics. Thus, demographics help us to understand the Psychological, Educational, Relaxation, Physiological, and Aesthetic benefits found gained through participation in leisure pursuits.

For the latter two sets of individual satisfaction variables, the satisfaction dimension that was derived appeared to be monolithic in that all the individual variables loaded positively beyond the

TABLE 5
CANONICAL ANALYSIS OF AESTHETIC SATISFACTIONS AND DEMOGRAPHICS

Variables	Loadings Root F
Elements of Satisfaction	
The places where I engage in them are fresh and clean	.55
The places where I engage in my activities are interesting	.77
The places where I engage in my activities are beautiful	.98
The places where I engage in them are well designed	.82
The places where I engage in them are pleasing to me	.61
Demographics	
Gender (0=Male; 1=Female)	-.51
Age (years)	-.42
Time at current residence (years)	-.14
Occupational prestige (U. of Ill. scale)	-.07
Marital status (0=single; 1=married)	.17
Education (years of schooling)	-.23
Household income (8-point scale)	.41
Number of persons supported by this income	.20
Ownership of dwelling (0=rents; 1=owns)	.01
Occupies single-family dwelling (0=no; 1=yes)	-.27
Occupies mobile home (0=no; 1=yes)	.37
Occupies apartment or duplex (0=no; 1-yes)	-.02
Canonical Correlation	.40
Multivariate F-Ratio	1.58
Probability of a Type-I Error	.005

prescribed level of importance. The analyses for the Educational and Relaxation dimensions also produced a unidimensional variate, but one that was not defined by all the measures used empirically to represent that construct. Finally, the Psychological dimension of Beard and Ragheb was split into two components by the analysis. However, both components reflected a feeling of success, and were distinguished from one another largely by participants' either finding pleasure or gaining independence from leisure activities.

Only the Social benefits could not be empirically linked to demographics. This finding is somewhat surprising in light of the apparent social benefits available from many of the leisure activities that respondents were required to consider before responding to the satisfaction items. Perhaps Social benefits are experienced from leisure pursuits, but these experiences do not vary across the demographic segments of participants in the area surveyed.

Considering those demographic measures that contributed most to the results, four such variables loaded importantly on at least three of the six significant variates that were formed, with numbers of important loadings in parenthesis: income (5), rents or owns dwelling (4), gender (3), and marital status (3). To generalize in terms of these demographics, those reporting the greatest benefit from their leisure pursuits were higher-income, married, male homeowners.

The implications of these findings for the marketing of leisure services to the public are several. First, the satisfactions are entirely positive in valence. None of those satisfaction items that loaded importantly had a negative substantive meaning (the negative loading for "being limited by a lack of skill" of course translates to a positive substantive meaning). The means for the 51 items ranged from (a substantively interpreted value of) over 3.0 to slightly over 4.0. Thus, it appears that the converse interpretations of the canonical roots (i.e., an orientation toward dissatisfactions) have little validity in an area where people are generally satisfied with their leisure opportunities.

Second, market segments can be jointly delineated in terms of demographics and the benefits from leisure activities. The four most influential demographic variables listed above dominate the demographic side of the characterizations of the market segments in this study. But each of the twelve demographics contributed importantly to the description of at least one of these segments. Thus, persons of differing characteristics are finding different benefits from their leisure pursuits, when considered in terms of five of the six dimensions of satisfaction proposed by Beard and Ragheb.

Third, each of the seven major elements of satisfaction (benefits) listed above may be used as the focal point for designing a program of leisure activities that appeals to persons with recognized demographic characteristics. Possibly two or more of these benefit segments may be combined to define an aggregated benefit segment, given that the aggregated demographics of the segment are consistent with a wholistic marketing strategy designed to provide the benefits in question.

Summary and Conclusions

This study investigated the efficacy of using aspects of participants' satisfaction with their leisure activities to characterize them through a description of joint benefit-demographic market segments. The orientation of this study reflected the pragmatic need of county government to delineate market segments useful for the development and management of programs providing services and facilities for residents. The results showed that dimensions of satisfactions that were conceptualized on the basis of previous research were generally empirically upheld as basic to these market segments. That is, these basic satisfactions/benefits were empirically coupled with demographics to delineate a set of segments for services that can provide target groupings of participants to whom government officials (and others) can direct their marketing efforts.

(References will be furnished upon request.

THE SERVICE ENCOUNTER AND CUSTOMER SATISFACTION

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Abstract

The service encounter in the cable television industry is examined as a contributor to consumer satisfaction. Cable television is a low-involvement, low-contact, continuously-produced service that requires few encounters with customers. When a service encounter does occur, it is likely to take place by telephone. A mail survey of cable subscribers indicates that satisfaction with phone contact as well as recency and frequency of contact are related to consumer satisfaction with the company's service offering. Encounters are also directly related to perception of cable programming. Results suggest that even for impersonal services such as cable television, some regular personal contact with customers may be necessary for maintenance of a high level of customer satisfaction.

Introduction

Customer service encounters are an important component of any marketing program. Such encounters take on special significance in service marketing. Unlike products, services are intangible and can vary considerably depending on the provider. Highly personalized services such as medicine are the most dependent on appropriate direct communication. However, even services that are more "mechanized" or even those that are fully "industrialized" (Levitt 1976) may benefit from effective use of a direct channel to the consumer.

According to Shostack (1985) "a service encounter is a period of time during which a consumer directly interacts with a service." These encounters are the consumer's main source of information about quality and service differentiation. A service encounter may or may not involve the total service offering and may or may not occur at the time of purchase. Encounters may be: (1) direct and face-to-face; (2) indirect via telephone; and (3) remote through written contact (Shostack, 1985).

This paper examines the importance of indirect service encounters, contact by telephone, in the cable television industry. Specifically, this is an exploratory study of the telephone-based customer service encounter in a low-involvement service. There are three main objectives. The first is to determine the impact of the most recent indirect contact by telephone on satisfaction with customer services. Second, the paper attempts to assess the persistence of the outcome of a service encounter over time. This is evaluated by relating recency and frequency of contact with overall satisfaction and satisfaction with selected aspects of customer service.

Third, the study examines the impact of customer service encounters on evaluation of the primary service of the cable operator--television programming. That is, an attempt is made to identify a "halo effect" such that consumer satisfaction or dissatisfaction extends from the phone contact to perception of the cable channel programming.

Background: Cable Television

Cable Television Industry

During the past decade, the major emphasis in the cable television industry has been on construction and wiring of markets. In each community, the local cable operating system has held a monopoly and little attention has been paid to strategic marketing and the role of customer services ("Cable TV" 1985). The cable operator's phone encounters with consumers usually involve responding to customer complaints and taking orders rather than promoting a long-term relationship. One consequence of this is that the national hook-up rate for homes "passed" by cable stands at only 50% (Landro 1985). In addition, the disconnect rate ("churn") can run as high as 25% a year for basic cable and up to 100% annually for certain pay channels (Metzger 1983).

The regulatory environment has also contributed somewhat to a lack of interest in marketing. The cable operator is often constrained to follow a myriad of costly obligations put in place by the local community as franchise conditions. All this is changing and, under deregulation, the operator will have to make decisions about "must carry" channels and will have greater flexibility in developing consumer-oriented service packages. Local marketing efforts are also important for suppliers of "premium" or pay-services such as Home Box Office (Blank 1985). These must be sold through the local cable operating company and gaining household penetration will require that "philosophies of cable operating companies evolve from their original 'utility perspective' into that of the integrated marketing service....(Rothe et al 1983, p. 20)."

Cable as a Service

Using Lovelock's (1983) classification scheme, cable can be described as a service that delivers an intangible on a continuous basis to

individuals who stand in a membership relationship to the supplier. There is only a small amount of customization in terms of selection of pay channels and certain accessories such as remote control. Decisions about customer needs are mostly made by the buyer not the seller, there is no physical contact between buyer and seller and services are delivered from a distance to a single site. The exception is the door-to-door selling of cable services used infrequently by some operators.

Cable can also be described as a low-involvement service that has a low level of personal significance for the subscriber. It is likely that the decision process for the selection of cable services is one of limited rather than extensive problem solving. Similar low-involvement, continuously-delivered services would include utilities, telephone service, and broadcast media. In contrast, medical care, psychotherapy, legal counsel and interior decorating are customized, high-involvement services that entail significant personal interest and concern.

Customer Service

Cable is a relatively impersonal service that relies mostly on remote encounters. When phone contact occurs, it has considerable potential for influencing customer perception and satisfaction. The major customer service tasks conducted over the phone usually include: providing information, complaint handling, dealing with billing issues, handling repair related problems and processing orders (Coppett and Voorhees 1985; p. 215). The telephone can be a valuable and cost-effective medium that offers a substantial opportunity for engaging in a personalized dialogue with customers (Roman 1976); Shapiro and Wyman 1985).

Cable is a "low contact" service in which the actual communication time between consumer and operator is a small percentage of the total service time (Chase 1984). However, even in a low-involvement, production-based service like cable television consumer service encounters may be a significant element in a marketing program. An indirect service encounter such as a telephone contact, with its potential for personalization, may have considerable impact on consumer attitudes. Further, the style and effectiveness of the phone service representative can be an important variable in customer satisfaction and continuity of patronage (George and Kelly 1983; McCallum and Harrison 1985).

According to Bell (1982, p. 165), organizational representatives engaged in communication with the customer may have to function as "service tacticians" who must become involved in "remixing" the service package and its meaning. Specifically, their functions are to react to customer feedback and modify the services provided or re-evaluate the consumers' needs and find ways to increase satisfaction. That is, employees and consumers work together interdependently in creating a satisfactory service encounter (Berry 1980; Bowen and Schneider 1985).

From the consumers' point of view, this personal interaction may result in a trade-off. On the one hand, they are treated less impersonally; on the other hand, the level of involvement with the mechanized service supplier increases. Consumers may prefer to simply receive the service and maintain impersonal contact. If this is the case, increased contact may be seen as an intrusion and lead to dissatisfaction. In any case, presentation of the service package by a representative is critical to customer satisfaction.

Methodology

During the spring of 1985, a brief questionnaire was mailed to the subscriber base of an urban cable television operation. Nearly 50,000 questionnaires were sent to subscribers with a routine mailing from the company.

The usable response rate was about 11% for a total sample of just over 5600. The characteristics of the sample were compared with those of the total subscriber base. There was a close match between towns of residence and type of cable services used by respondents and those of the subscriber population. In terms of demographics, the sample showed a modest "upscale" bias with greater representation among those with higher levels of income and education.

Findings and Discussion

Overall Satisfaction

Level of satisfaction with the most recent customer-initiated service encounter has a direct and dramatic relationship with overall satisfaction with customer service. Two-thirds of those who are extremely or very satisfied with the most recent indirect service encounter are satisfied with overall customer service. In contrast, only 7% of the respondents who feel dissatisfied indicate overall satisfaction with customer service.

Recency and Frequency

The recency and frequency of calling can have an important association with perception of customer service. The pattern in **Table 1** indicates that frequency can be more important than recency. Levels of satisfaction for the most recent contact and for overall customer service are lowest among those who called three or more times whether during the past month or past two to six months.

Respondents who engage in less frequent calling are more favorable in the assessment of their most recent contact. There is little difference in satisfaction with the most recent phone encounter between those who called one or two

Table 1

RECENCY AND FREQUENCY OF CONTACT
AND CUSTOMER SATISFACTION

Recency and frequency of calling	Satisfaction with most recent contact*			Overall satisfaction with customer service*		
	Extremely and very satisfied	Somewhat satisfied	Not very and not at all satisfied	Extremely and very satisfied	Somewhat satisfied	Not very and not at all satisfied
3 or more times in past month	28%	29%	43%	21%	37%	42%
3 or more times in past two to six months	34%	35%	31%	25%	39%	36%
1 or 2 times in past month	59%	23%	18%	51%	34%	15%
1 or 2 times in past two to six months	57%	29%	14%	47%	36%	17%
No call in the past six months	53%	24%	23%	51%	34%	15%

*X^2 significant at the .01 level.

times during the past month (59%) or past two to six months (57%). There is a slight tendency for level of satisfaction with the recent contact to erode among those who did not call within the past six months (53%) compared to those who did call (57%).

Overall satisfaction with customer service shows a similar relationship to recency and frequency. The more frequent callers are the least satisfied and the less frequent callers are most satisfied regardless of when the calls were made.

Customer Service Attributes

Frequency of calling is related to perception of company representatives and aspects of service (Table 2). As expected, frequent callers are less likely than others to agree that representatives are easy to reach, concerned, understand problems, and are able to solve problems during one call. Also, frequent calling is linked with a low level of agreement with the idea that the company is concerned about the customer. This perception of a lack of commitment on the part of the organization to meeting needs may weaken ties with customers and foster high turnover.

Finally, among those who made no calls within the past six months there is a decline in the evaluation of services provided by phone representatives. This decline in evaluation may indicate that some contact is needed to maintain positive evaluation at a high level.

Satisfaction With Service and Programming

Customer service is closely related to consumer satisfaction with cable programming (Table 3). This relation is consistently in evidence for basic cable and for two premium or "pay" channels, one offering a variety of programs and the other showing mostly movies.

This finding implies the existence of a "halo effect" for the service encounter. Thus, failure to meet consumer expectations for customer services may lead to dissatisfaction with other elements of the entire service offering.

Conclusions

Even low-involvement services offered on a continuous basis at a distance do not remain entirely impersonal. Once the consumer engages in a service encounter with the organization, the nature of the relationship alters and the satisfaction level becomes linked to service delivery and to the proficiency of the service representative in problem solving.

Table 2

RECENCY AND FREQUENCY OF CONTACT AND EVALUTION OF ASPECTS OF CUSTOMER SERVICE

	Percent strongly agree and agree			
Recency and frequency of calling	Easy to reach company by phone	Company is concerned about the customer	Phone reps understand my service problems*	One call re-solves
3 or more times in past month	40%	33%	42%	36%
3 or more times in past two to six months	39%	30%	40%	26%
1 or 2 times in past month	58%	54%	60%	57%
1 or 2 times in past two to six months	49%	42%	55%	47%
No call in past six months	35%	38%	50%	40%

*X^2 significant at the .01 level.

In the case of cable television, the customer is essentially captive as the cable franchise has a monopoly in the community. There are competitors for entertainment services such as broadcast TV and videotapes but thesse do not offer the programming variety of cable. While poor customer service in cable may not result in an immediate disconnect it leaves a residue of dissatisfaction that ultimately makes the marketing task far more costly and difficult. As the recency and frequency of contact increases there may be an overall steady decline in the level of consumer satisfaction. In addition, repeated calling could force the consumer to become more involved with problem solving than may be desired for a service that is routinely provided without any contact at all. The implications of this study are useful for industries such as telecommunications, utilities, charge card suppliers and others involved with automated continuously-delivered, low-contact services.

Table 3

CUSTOMER SERVICE AND SATISFACTION WITH CABLE SERVICE

	Percent satisfied with cable services		
	Basic cable*	Variety premium channel*	Movie premium channel*
Satisfaction with most recent contact			
Extremely and very satisfied	74%	49%	54%
Somewhat satisfied	51%	37%	37%
Not very and not at all satisfied	39%	31%	34%
Overall satisfaction with customer service			
Extremely and very satisfied	81%	53%	53%
Somewhat satisfied	53%	39%	43%
Not very and not at all satisfied	38%	29%	33%

*X^2 significant at .01 level.

The basic guideline is that there should always be a serious effort to solve problems with one or two phone contacts and to avoid frequent phone contact with consumers.

Secondly, there is also modest support for the thesis that consumers prefer some limited contact with providers of low-involvement services. Favorable attitudes appear to erode over time and if there is no contact at all, consumer satisfaction levels decrease. This may result from the fact that consumer tastes and interests change over time and some minimal contact allows the organization to assist in redefining needs and repackaging services. Additional research is needed to determine the reasons for this phenomenon and to assess the appropriate level of contact.

The results of this study underscore the importance of providing a high quality telephone contact with customers in low-involvement services. Service companies may benefit from making periodic direct or indirect contact with their customers to revive positive feeling. These contacts could also include efforts to redesign the service package and to convey a sense of concern for the customer and an understanding of problems. The long-term outcome may be heightened satisfaction and higher customer retention levels.

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RESEARCH METHODOLOGY

A COST-BENEFIT ANALYSIS OF A MAIL SURVEY OF RETAILERS IN KUWAIT

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Abstract

This experimental research investigates the effect of two kinds of incentive (monetary and nonmonetary) and three kinds of follow-up techniques on the rate, quality and cost of response of a mail survey to retailers in Kuwait. A cost-benefit analysis approach was used to evaluate 12 experimental groups.

The results indicated that incentives could increase the cost without producing significant increase on the rate and quality of response. While follow up by telephone was found to be very effective in maximizing the benefit of the mail survey to retailers, prenotification without any incentive was found to be the most productive alternative produced the maximum benefit (rate and quality of response) at lowest cost.

Introduction

Mail survey is an important tool for data collection in marketing research. Researchers have been trying to identify various ways to increase the efficiency of mail surveys.

Our review of previous studies indicated that researchers have dedicated much energy toward designing techniques to improve responses to mail surveys of general publics. Response to mail surveys of industrial populations has received much less attention (Skinner et al 1983).

Jobber and Sanderson (1985) indicated that the problem of identifying methods of increasing response rate of mail surveys to industrial populations is particularly important since response is, in general, lower for those populations than for household populations. As industrial populations are different from general publics in many aspects, e.g., motives, therefore this sector might need different tactics when approached by mail surveys. Pressley (1980) pointed out that techniques which are used to increase response to mail surveys of the general public are not always successful when applied to industrial populations.

Researchers of mail surveys to industrial populations have concentrated their efforts on investigating the effects of various incentive and follow up methods on the outcome of mail surveys, mainly responses rate.

Concerning incentives, experimental studies have shown that both monetary and nonmonetary inducements have stimulated increased returns from industrial populations in some studies. Examples for these studies are: Pressley and Tullar (1977) and Hansen (1980). On the contrary, different findings were achieved in the Middle East. For example, Al-Azhary (1983) has found the monetary and nonmonetary (a free copy of results upon response) incentive did not increase the rate of response of mail surveys to industrial population. Also, a promise of a list of business advice as nonmonetary incentive did not increase the rate of response of a mail survey to retailers in Kuwait (Nagy 1985).

The impact of follow-up techniques, particularly prenotification, on rate of response of industrial populations to mail surveys was also studied by a few researchers, for example, Hansen and Tinney (1983) and Hozier and Robles (1985). Prenotification was found very effective technique in increasing the rate of response. With respect to the quality or/and cost of responses of mail surveys of industrial populations, only a few researchers have investigated these dependent factors, e.g., Skinner (1983), Hansen and Tinney (1983), and Nagy (1985), who have paid attention to the quality of response.

The researcher believes that a tactic that might increase the rate of responses of mail surveys at the expense of quality and/or cost of these responses may not be acceptable. Therefore, a comprehensive approach to evaluate the outcome of various tactics of mail surveys of industrial populations is needed. The most appropriate approach is the cost-benefit analysis approach.

Objectives

The main objective of this study was to find out the best alternative that produces the highest rate and quality of responses at lowest cost. To achieve this objective, our study attempted to measure the effect of:

(1) incentive (monetary and nonmonetary) on the response rate,
(2) follow up method (prenotification by telephone, follow up by letter, and follow up by telephone) on the responses rate,
(3) incentive and follow up method on the quality of responses, and
(4) incentive and follow up method on the average cost per response.

Method

Two techniques (as independent factors) for inducing higher rate and quality of response at lower cost (as dependent factors) were tested:

Incentive (independent); two kinds of incentive were tested. The first was a promise of a free copy of the research report upon responding (nonmonetary). The second was a promise of a monetary reward for three respondents who will be selected randomly (30, 20, and 10 K.D. for the first, second, and third respondent, respectively).

Follow-up method (independent); three methods were tested. The first method was used before posting on the questionnaire (prenotification by telephone), while the

remaining two methods were used after posting the questionnaire (follow up by a telephone or by letter).

Rate of response (dependent); returned questionnaires as percent of the sample size.

Quality of response (dependent); quality was measured by: (1) number of completely answered questionnaires (completion was defined as a questionnaire that has all questions answered), and (2) the degree to which responses represent the sample at the .05 level of significant with respect to store kind of trade as criterion for measuring the sample bias. This criterion was chosen as no other alternative existed.

Average cost per response; total cost of each sample, including costs of inventive and follow-up method, was divided by the number of returned questionnaires of the sample.

A sample of 900 retailers were selected randomly from a total of 5,300 retailers in all kinds of trade in Kuwait. This sample was broken down into 12 subsamples (groups); each consists of 75 retailers in accordance with the experiment design (Table 1). Each subsample was similar to the other subsamples with respect to percentages of retailers from various trades according to x^2 test.

TABLE 1
EXPERIMENT DESIGN

Follow-up \ Incentive	No incentive	Nonmonetary	Monetary
No follow up	x_1	x_2	x_3
Follow up by letter	x_4	x_5	x_6
Follow up by telephone	x_7	x_8	x_9
Prenotification by telephone	x_{10}	x_{11}	x_{12}

A questionnaire consisting of three pages designed. The questionnaire included four multiple choice questions, 16 Likert attitude statements, and a question on nine personal and business characteristics. A cover letter accompanied the questionnaire indicating the research purpose: investigating some marketing activities of the retailers. The letter did not include any promise for groups x_1, x_4, x_7, and x_{10} (control group for incentive), while groups x_2, x_5, x_8, and x_{11} were promised to receive a copy of the research report upon receiving their replies. Each retailer in groups x_3, x_6, x_9, and x_{12} was informed that three replies will be chosen randomly for three rewards; the first 30 K.D., the second 20 K.D., and the third 10 K.D.

Concerning the follow up, two interviewers were trained and directed to make prenotification and follow up by telephone. Each interviewer was allocated to half of retailers in groups x_{10}, x_{11}, and x_{12} for prenotification, and to half of retailers in groups x_7, x_8, and x_9 for the follow up by telephone, after posting the questionnaires. Each retailer of groups x_4, x_5, and x_6 was to receive a letter three days after posting the questionnaire asking for his/her reply (no response was received during these three days). The researcher allowed 40 days as a deadline for response according to his experience and the condition of mail services in Kuwait.

All elements of costs of each subsample were recorded and documented.

Results

The response frequencies were summarized in Table 2. By the cutoff date, 39.2 percent of the total sample had responded. There was considerable variation in the proportion responding to the individual categories shown in Table 2 ranging from 15 to 72 percent.

TABLE 2
RETURNED QUESTIONNAIRES AND RESPONSE RATE

Follow-up \ Incentive	No incentive	Nonmonetary	Monetary	Total
No follow up	14 (19%)	14 (19%)	15 (20%)	43 (19%)
Follow up by letter	17 (23%)	11 (15%)	18 (24%)	46 (20%)
Follow up by telephone	35 (47%)	38 (51%)	37 (49%)	110 (49%)
Prenotification by telephone	51 (68%)	49 (65%)	54 (72%)	154 (68%)
Total	117 (39%)	112 (37%)	124 (41%)	353 (39.2%)

x^2 = 1.715, Degrees of freedom = 6 (not significant)
Kruskal-Wallis = .093 (not significant)

The interaction between incentive and follow-up factors was not found significant according to the result of the Multiple Comparisons test.

The effect of independent factors on the dependent ones were as follows:

(1) Incentive and rate of response: Comparisons were made using z test between the rates of response of all categories of incentives in each follow-up case. The control group (without incentive) was compared with each experimental groups (nonmonetary and monetary incentive), also the two experimental groups were compared. The results of z test did not show a significant difference in any case. This means that the kind of incentive did not affect the rate of response. In accordance, all vertical rows were amalgamated (pooling) to conduct comparisons between rates of response generated by methods of follow up.

(2) Follow up and rate of response: Table 3 illustrates the results of the comparisons between rates of response generated by different follow-up methods. It can be seen that follow-up by letter had no effect on the rate of response, while prenotification had increased the response rate dramatically in comparison with both the control group and the method of follow-up by letter. Follow-up by telephone was also found very effective but not as much as prenotification.

TABLE 3
THE EFFECT OF FOLLOW-UP METHOD
ON THE RATE OF RESPONSE

Comparisons (n=225 in each case)	Z	Test of Significance
1) No follow up (19%)vs. Follow up by letter (20%)	.268	NS
2) No follow up (19%)vs. Telephone after (49%)	3.375	S(.01)
3) No follow up (19%)vs. Prenotification (68%)	12.069	S(.01)
4) Letter (20%)vs. Telephone after (49%)	6.792	S(.01)
5) Letter (20%)vs. Prenotification (68%)	11.707	S(.01)
6) Telephone after (49%) vs. Prenotification (68%)	4.167	S(.01)

To confirm the above findings, Sheffe's test of multiple comparisons between rates of response was applied. Sheffe's value was accounted for at .128 at the .01 level of significance. Comparing this value with the differences between rates of response, significant differences were found between all cases but one as follows according to Dunkan technique (connected line presents the comparison which was not found significant).

	No follow-up	Letter	Telephone after	Prenotification
Rate of Response	19%	20%	49%	68%

(3) The effect of incentive and follow-up method on responses quality:

The results of applying the two measurements of responses quality were as follow:

a) Number of completed questionnaires; no significant differences existed between the 12 groups of the experiment. (x^2= 2.003, degrees of freedom = 6, completed questionnaires = Yes and incompleted = No). Only 19 questionnaires were excluded from all responses ranging from zero to 3 between categories. The results revealed that neither incentive nor follow-up method had any effect on the responses quality according to the completion of questionnaire criterion.

b) Sample bias: The comarisons between the collection questionnaires and the sample of each group with respect to the characteristic of store kind of trade indicated two significant differences (.05) out of nine comparisons (x^2 was not applied for three cases as zeroes were appeared in some cells). The two cases were: (1) monetary incentive without follow-up, and (2) follow-up by letter without incentive. Prenotification and follow-up by telephone had ensured high quality of responses as far as the above criterion was concerned.

(4) The effect of incentive and follow up method on cost:

Variation between categories concerning average cost per response ranging between .927 K.D. and 2.372 K.D. was occurred as shown in Table 4.

TABLE 4
AVERAGE COST OF RESPONSE IN EACH GROUP (K.D.)

Follow up \ Incentive	Control	Nonmonetary	Monetary	Total
- Control	1.233	1.358	1.635	1.414
- Letter	1.454	2.372	1.857	1.831
- Telephone after	1.350	1.368	1.761	1.494
- Prenotification	.927	1.089	1.359	1.130
Total	1.167	1.343	1.585	1.370

It can be seen that prenotification by telephone was the lowest cost technique. Of course, this was due to the high rate of response generated by this mehtod.

Also, follow-up by telephone was found very economic but it came second after prenotification. The increase on average cost per response of the follow-up by telephone case than that of the follow-up by letter was offset by the increase of responses rate generated by the former technique.

Follow-up by letter was found expensive as well as not productive. The average cost per response produced by this method with the nonmonetary incentive exceeded the cost of a personal interview (2.00 K.D.) in Kuwait for similar Or.

Conclusion

This study indicated that the incentive, whether monetary or nonmonetary, had no effect on the rate and quality of response of mail surveys of retailers in Kuwait. Our finding was consistent with those of Jobber and Sanderson (1985) in the U.S.A., Al-Azhary (1983) in Egypt, and Nagy (1985) in Kuwait.

Follow-up by telephone, particularly prenotification, was found the most effective technique producing the highest rate and quality of response at the lowest cost. This finding supported the findings of other researchers of mail surveys to consumers, e.g., Hornik (1982).

The results showed that the cost-benefit analysis could help researchers and decision-makers in marketing research in determining the extent to which an increase on cost could produce a better rate and quality of response.

Cost-benefit analysis should be applied by further studies to investigate the efficiency of various tactics of mail surveys. Also, additional research is required to test the effect of different techniques of follow-up by telephone on the productivity of mail surveys of industrial populations in order to improve this effective method. Perhaps the use of pre-call requests, together with follow-up by telephone, may produce better results. However, the average cost per response should be taken in consideration when using any technique to induce more rate of response at acceptable quality.

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THE DEMISE AND REVIVAL OF MOTIVATION RESEARCH: RECENT LESSONS FROM EUROPE

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Abstract

In this paper it is maintained, first, that motivation research is an essential component of consumer behavior research and that in order to understand and predict consumer behavior, we must explore the subconscious. Second, a general behavior model is presented in this paper which proposes that individual motives are related to the subconscious. Finally, eight relatively new and little known motivation research techniques are presented briefly. These techniques are widely used in Europe and need to be publicized more widely in the United States.

Introduction

In the 1940's and 1950's qualitative research, particularly in the form of motivation research, was widespread (Packard 1957) and was deemed to be quite effective. According to Sampson (1985, p. 69), "qualitative research grew out of the meeting, in the 1940's, of refugee Freudians and neo-Freudians seeking to apply some of the principles of psychoanalysis in a marketing context, and the pollsters, seeking to extend their measurement of behaviour and attitudes, on a large scale, to the same field." On the American scene, however, the latter group quickly took over, emphasized the attitude related aspects of behavior and quantified them spectacularly. During the past two decades in the United States, while attitudinal research made significant strides on both methodological and measurement fronts, motivation research appeared to be dormant at best. Only attention seekers, such as Key (1973), paid some attention to it at the fringe under the rubric of "subliminal seduction". Now, however, a new wave of motivation research appears to be going quite strongly on the European scene (Bigant and Rickebusch 1985; Schlackman 1984; Samuels 1984).

Both marketing researchers and consumer behaviorists would like to better predict the consumer's behavior so that marketing plans can be prepared to cope with the expected behavior properly. Furthermore, if the behavior patterns are understood, they may be intercepted and perhaps modified. Thus, the managerial marketing function can become more effective and profitable.

In attempting to predict consumer behavior, the forces behind the behavior patterns have been analyzed. On the American scene, because of quantitative expediency, attitudes have been singled out as the sole force of interest behind behavior. Many different scaling techniques have been developed since the mid-1960's, and with the advent of multivariate models (Kendall 1968, 1975; Cooley and Lohnes 1971), attitudinal research reached new highs in sophistication (Fishbein and Ajzen 1975; Ajzen and Fishbein 1980).

Perhaps the most important problem with attitudinal research is that the information obtained is at the conscious awareness level. It is quite questionable, however, whether consumers always behave consciously and are always aware of the forces causing their behavior. It may well be erroneous to attribute behavior entirely or even primarily to attitudes and to analyze the whole process at the conscious level alone. The subconscious or unconscious levels of human behavior that form and manipulate motives may not manifest themselves in the form of attitudes all at once. Furthermore, even if attitudes were to reflect all of the conscious residual of motives, they would still show only direction and would not explain origins. Thus, attitudes may not be solely usable, completely accurate, or fully explanatory as predictor variables of behavior.

It is posited here that the forces behind the behavior are organized in a hierarchy and that parts of this hierarchy are in the subconscious. It is also maintained here that without understanding the subconscious portion of the hierarchy of forces behind consumer behavior, effective prediction of that behavior is virtually impossible because the behavior will not be fully comprehended. Europeans have understood this and have been developing new and varied techniques of motivation research which they have termed "qualitative research" (Cooper and Branthwaite 1977; Wicken 1977; Fleury 1984).

Three key objectives are sought by this paper: (1) to present a brief review of motivation research and explain why it has become dormant in the United States; (2) to construct a consumer behavior model explaining why motivation research should be such a critical component of consumer research efforts; and (3) to critically analyze some of the key new research techniques widely used in Europe to deal with consumer behavior that enable the researcher to specify the significant motives behind behavior patterns.

Motivation Research: Then

As Green and Carmone (1970) maintained, when the reasons behind the purchases are known, future purchase projections are strengthened. Strong proponents of motivation research, who called it the "qualitative science" (Gottlieb 1958), maintained that the psychological reasons behind given behavior patterns can be determined only by using motivation research. There is a rich literature of this type that came about during the late 1950's, some examples of which include:

> A California prune growers' association wanted to know what caused people's negative attitudes towards prunes and how to make those attitudes more positive (Packard 1957).

The finding that baking a cake is a creative act for a woman, perhaps as a substitute for child bearing, helped to explain why cake mixes with the instructions "do not add milk, just water" were not very successful. General Mills' Bisquick therefore instructed consumers to add fresh eggs to return the creativity element to the housewife (Packard 1957).

Once motivation research found out that Rye-Crisp crackers were not perceived by stout people as a diet food, Rye-Crisp was repositioned as a cocktail snack (Gustafson 1958).

Motivation research indicated that cutting the price for cosmetics may have been an ineffective approach. Consumers of lipstick and shampoos stated that for them low price indicated a low quality product that might even be harmful to the user (Gustafson 1958).

The Japanese textile industry wanted to know accurately the views of the American public about the industry and its products (Gustafson 1958).

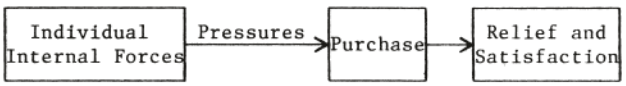
A manufacturer of laxatives wanted to know why his sales were weak in certain markets and what advertising appeals would be most effective (Gardner 1959).

By the mid-1960's, however, motivation research had come to a near halt. The cause can be traced to the emergence of what might be called the "School of Management by the Numbers". The advent of more empirical methodologies that accompanied the rapidly spreading use of computers created a management style that relied heavily, if not exclusively, on the quantitative manipulation of numerical inputs. This emphasis on numbers fostered the growth of attitudinal research, which is substantially more measurable and quantifiable than motivation research. The rise of attitudinal research closely paralleled the development of a very rich variety of multivariate techniques (Kendall 1968, 1975; Cooley and Lohnes 1971). As attitudinal research emphasized the analysis of scalar data through multivariate techniques, it paralyzed the growth of motivation research. Thus, a kind of "quantitative myopia" prevented marketing research from looking beyond conscious awareness into the subconscious as quantitative techniques for dealing with the conscious proliferated and became more and more esoteric. It then became difficult even to acknowledge the role of the subconscious in consumer behavior.

The Subconscious and Consumer Behavior

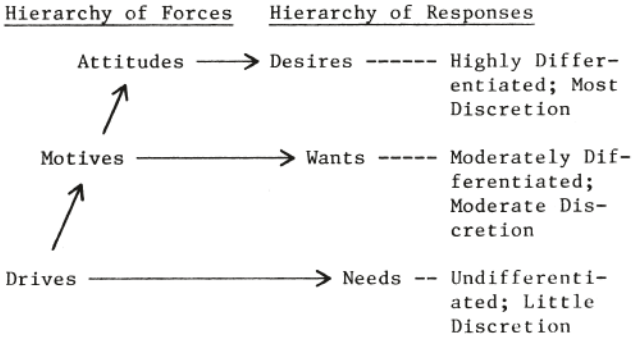
From one perspective, consumer purchase behavior is a series of responses to a series of pressures caused by a series of internal forces. **Figure 1** illustrates this concept. Individual internal forces are precipitated, molded, and reinforced by various environmental factors or cues. These forces lead to pressures and frustrations on the

FIGURE 1
PURCHASE AND ITS ANTECEDENTS



part of the consumer. These pressures and frustrations will not be relieved until a purchase takes place. This process is seen in greater detail as **Figure 2** is examined. Two separate hierarchies are presented in the figure: (1) a hierarchy of forces and (2) a hierarchy of responses. The hierarchies are conceived to be moving upward from the broadest, most fundamental and general to the narrowest, most derivative and specific. The forces hierarchy, depicting the triggering factors that cause a response, begins with basic drive forces that are completely undifferentiated, such as "hunger," the drive for food, which trigger a need response for an undifferentiated object: Any kind of food will do, whatever is most convenient and economical, a "food as fuel" response. At the motive level, the want responses are somewhat more differentiated and therefore discretionary, most often specifying a product class, such as candy bars: Any candy bar will do, but the motive has now channeled the hunger drive into wanting some kind of sweet confection. At the most specific and discretionary level, attitudes toward individual brands of candy bars have channeled the want for a candy bar into the highly specific desire for a Snickers. Neither wants nor desires are directly related to survival, although they may be the indirect consequences of primary drives. The individual, therefore, develops wants and desires that are more and more selective and that must be fulfilled more and more selectively. In a consumer behavior model all of the needs, wants, and desires are fulfilled directly or indirectly by purchases and their subsequent consumption or use.

FIGURE 2
HIERARCHIES OF FORCES AND RESPONSES



In order to understand consumer behavior well and be successful in predicting that behavior, the forces hierarchy must be understood well. As seen in **Figure 2**, the hierarchy moves from very general and basic to very idiosyncratic and specific. It is also apparent that it parallels Maslow's hierarchy. An individual cannot self-actualize by satisfying basic needs derived

directly from the drives. Satisfying basic needs by following drives would enable the individual to survive, but nothing more than that. Self-actualization takes place when the combined pressures of drives, motives, and attitudes lead to behavior that expresses itself in an idiosyncratic and discretionary purchase activity. Although there could be purchase activity related directly to drives and motives respectively, such purchases are not likely to bring the individual closer to self-actualization.

Regardless of how discretionary the purchases are, once the individual is beyond the basic need (or survival) level, the forces behind actions have both conscious and subconscious components (Sampson 1985). While structured interviews and attitudinal research reach the conscious level of consumer behavior, motivation research, or "qualitative research," as it is termed in Europe, deals with the subconscious. In describing the "new" qualitative research, Cooper and Branthwaite (1977) offer the following: "As we go further down (into the subconscious), obtaining responses by structured interviewing becomes progressively more difficult, and responses to qualitative interviewing more reliable because it is better able to cope with private feelings, irrationalities, 'illogical' behaviour or repressed attitudes". Thus, it is implied that the subconscious should be examined and understood separately because at this level there are the possibilities of having irrationality, illogical behavior, and/or repressed attitudes that are all covered up at the conscious level. It is quite likely that the transition from subconscious to conscious levels cannot be understood well by researching only the conscious. Early motivation research studies relating to instant coffee (Haire 1950), mouthwashes, air conditioners, and insurance (Packard 1957) are all indicative of such irrationalities or repressed attitudes. Certainly less than rational motives cannot possibly lead to the development of entirely rational attitudes. It is, therefore, extremely important to explore the subconscious in order to better understand motives. It has been asserted that there is a resurgence of qualitative research in Europe that deals primarily with motives (Fleury 1984, 1985). In pursuit of such research, a number of new techniques have been developed by Europeans.

New Techniques of Motivation Research

Cooper and Lannon (1983) present a comprehensive, though not exhaustive, list of techniques as vehicles for tapping intuition and the unconscious: (1) role-playing, (2) personal analogies, (3) direct analogies, (4) symbolic analogies, (5) fantasy solutions/future scenarios, (6) psycho-doodle /psycho-drawing/psycho-lumps, (7) adjectivization, (8) personification, (9) projective techniques, and (10) group conflict/competition. Seven more techniques added to this list by others are: (11) collage (de Souza 1984), (12) photo-sorting (Heylen 1984b), (13) play-oneiric tests (Frontori, Pogliana, and Spataro 1984), (14) the triangular interview (Fleury 1984), (15) transactional analysis (Blackstone and Holmes 1984), (16) libido theory (Heylen 1984a, 1984b), and (17) semiotics/semiology (Krief 1984).

Of these techniques, eight are considered to be lesser known ones that are receiving special attention currently in Europe (Sampson 1985). These following eight techniques will be briefly but critically discussed in the remainder of this paper: (1) psycho-drawing, (2) collage, (3) photo-sorting, (4) play-oneiric tests, (5) the triangular interview, (6) transactional analysis, (7) libido theory, and (8) semiotics/semiology.

Psycho-drawing

This technique revolves around "quick sketching" in small groups. Drawings are analyzed on the basis of material, shapes, colors, tone, etc. in order to assess perceptions, aspirations, values, etc. Typically respondents are asked to explain their drawings in considerable detail to the group. Although the technique is designed to overcome reluctance to draw, as indicated in Appendix 1, some remnants of this reluctance seem to remain (de Souza 1984).

Collage

The collage technique involves giving respondents a pile of magazines and asking them to cut out those pictures, drawings, and words that express their feelings about the product, brand, store, etc. It is a technique that does overcome drawing problems and taps into a vast range of symbols in order to determine how products and brands are perceived (de Souza 1984). Materials are still limited, however, and may restrict the ability of some respondents to express themselves.

Photo-sorting

Heylen's (1984a, 1984b) psychodynamic approach is the core of this technique. It requires a set of photographs that symbolize people (physiognomic analysis), homes, automobiles, etc. These pictures are standardized and sorted on the basis of certain dimensions that are determined in advance. Heylen (1984a) calls this procedure "implicit conative dynamics". The technique has the same problem as the collage technique, only more pronounced (See Appendix 1).

Play-oneiric Tests

Frontori, Pogliana, and Spataro (1984) described this technique by explaining how a psychoanalytic theory of language may be applied to basic motivation research and communication studies (Sampson 1985). It goes beneath the cognitive structure by helping to determine the affective-symbolic structures and the emotional substance of the images. The approach is particularly appropriate for products or services that are functionally similar and need to be differentiated and/or positioned in a distinctively competitive manner. The respondents are asked to describe the dream of an individual who comes in contact with the object in question. The interpretation is very complex and takes place in multiple levels.

The Triangular Interview

This technique is designed to avoid the demand and experimenter biases generated by the respondent seeking to give the "right" answer in the

context of the interviewer's presupposed knowledge of the subject matter (Sampson 1985). Fleury (1984) explains that by this method the desire to give the "right" answer is replaced by the desire to understand the problem. The technique is rather difficult to implement because of unexpected additional interactions among the interviewer, actor, and respondent.

Transactional Analysis

Developed by Berne (1973), this technique has been adapted to marketing research by Blackstone and Holmes (1984), combining psychoanalytic and behavioristic theories. The exchange between individuals or between consumer and brand or between consumer and advertising, according to this technique, is an act of recognition termed a "stroke". Strokes can be physical, psychological, or symbolic, and they can be positive or negative. The technique provides a deeper understanding of such aspects of marketing as brand choice, brand imagery, and brand communication. This technique is very new in marketing and is very complex. Its implementation is highly technical and requires well-trained personnel (Klein 1983).

Libido Theory

This extremely original approach has been developed by Heylen (1984a, 1984b), bringing together social biology and psychoanalysis. According to Heylen, the technique was meant to develop a theory and methodology to explain the deeper dimensions of consumer behavior (Heylen 1984a). The theory takes a strong anti-cognitivist stance and maintains that there is a conative dimension which deals with subconscious or unconscious values and aspirations. The technique revolves around extensive empirical testing based on a complex set of visually presented concrete symbols. This highly complex technique is difficult to use.

Semiotics/Semiology

This technique has been given particular attention in France (Krief 1984). Based on the linguistic theories of de Saussure (1974), semiotics studies the whole field of verbal and visual communications in a society. There are two levels of meaning for signs and symbols, denotative and connotative. Denotative stands for the explicit literal meaning of the sign, and connotative refers to the implicit underlying meaning (Barthes 1967; Sampson 1985). The technique dwells upon the concept of codes being central to the formation and understanding of messages. This concept is very culture-specific. Krief (1984) has used semiotics to develop a "communications audit" that evaluates supply (i.e., the product, promotional, and communications mixes) and demand (i.e., consumers' needs and expectations). Analyzing consumers' motivations and the semiotics of communication simultaneously provides a powerful orientation for researching the subconscious. This also is a very complex technique that requires a high level of expertise to implement.

Conclusions

As seen in this paper, motivation research is alive and thriving in Europe. Once North American marketing researchers break through the artificial barriers imposed by managing with numbers only and relieve their consequent "quantitative myopia," it will be possible to take up the legitimate study of the subconscious where it was left off. The authors do not mean to assert that qualitative and quantitative research activities are substitutes for one another so much as that they are complementary. It seems that there is much merit in delving into the subconscious for the better understanding of behavior and for predicting it more accurately.

In the past, the biggest problem with motivation research has been measurement. It has been claimed by more quantitatively oriented scientists that this type of research is extremely subjective and does not lend itself to scientific quantification (Rothwell 1955; Scriven 1958; Schiffman and Kanuk 1983). The authors maintain here, however, that under normal circumstances individuals who are of similar socio-economic and cultural backgrounds, and who have undergone the same types of experiences, will display similar motivational patterns. In other words, the motivational characteristics of ghetto youths will be similar to one another, yet significantly different from Amish farmers or Mormon women living in the suburbs of Salt Lake City. If this premise can be accepted, then using any and all of the techniques discussed in this paper becomes valid as long as the samples are tightly specified. Much needs to be done to test the applicability of this position. However, the question must be raised strongly: Are North American marketing researchers depriving themselves by ignoring a very important component of consumer behavior, the subconscious? The answer on the part of the authors is a very strong "yes". It is hoped that more attention will be paid to this very important and exciting area.

Appendix 1

A COMPARATIVE ANALYSIS OF EIGHT TECHNIQUES

Technique	Approach	Important Strength	Key Weakness
Psycho-drawing	Quick sketching that relates to perceptions, aspirations, etc.	Being able to illustrate concepts and meanings that people cannot articulate.	Reluctance on the part of those who don't draw well.

Technique	Approach	Important Strength	Key Weakness
Collage	Giving respondents a pile of magazines and asking them to cut out the pictures, drawings, and words that express their feelings.	Effective in describing brands, products, and symbols.	Expression of feelings and views is limited to the availability of materials.
Photo-sorting	Associating a series of pre-sorted, scaled, and standardized photographs to a series of products and brands.	Pre-standardized photos provide a good control for specific dimensions to be explored.	Same problem experienced in collage, only more serious.
Play-oneiric Tests	A play technique that is related to an imaginary dream associated with brand, product, store, etc.	In markets where products or brands are functionally similar, they are symbolically positioned and distinguished.	Extremely complex interpretation procedures.
Triangular Interview	An actor, a respondent, and an interviewer follow a scenario for a communication check.	Eliminates the desire to give the "right" answer and therefore built-in biases.	Difficult to implement.
Transactional Analysis	Analyzing the exchange between individuals or between consumer and brands on the basis of established "T.A." techniques.	Brings psychoanalytic and behavioristic theories together.	Needs highly skilled professional to implement.
Libido Theory	Combining psychoanalysis and social biology to explain the deeper dimensions of behavior.	Eliminates ill-conceived symbology.	Very complex technique is new and difficult to use.
Semiotics/ Semiology	The science of signs and symbols in society uses the whole field of verbal and visual communication.	Distinction between denotative and connotative meanings of each symbol provides a stronger brand analysis.	Too new and complex; technique needs special expertise.

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MEASUREMENT OF TRACES OF REGIONAL CULTURE: A CROSS-GENERATIONAL APPROACH

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Introduction

An area of increasing interest to marketers concerns how regional culture impacts consumer behavior (e.g. see Boote 1981; Clever 1982; Dardis, Derrick, Lehfeld, and Wolfe 1981; Hawkins, Roupe, and Coney 1980; Henry 1976; Schaninger, Bourgeios, and Buss 1985; Schiffman and Kenuk 1978; Vinson, Scott, and Lamont 1977; Wallendorf and Reilly 1983;). An ancilliary issue is how cultural assimilation impacts product and service preferences (Hawkins, Roupe, & Coney 1980; Wallendorf and Reilly 1983; and Kahle 1986). For example, Garreau (1981) suggests a "nine nations" view of regional culture and points out important ramifications for consumer behavior. However, significant research in this area is complicated by the complexity of regional culture. Measurement of this construct requires an understanding of its genesis. In the United States regional culture has its origins as described below:

1. Regional culture reflects the values (religious, economic, moral, consumption and shopping) learned from parents, teachers, and institutions. Differential acculturation among regions is hypothesized to be caused by differing rearing and educational approaches (Rokeach 1973).

2. These differing rearing and educational approaches are in turn learned by spouses, within a household, from the parents and teachers.

3. Finally, it follows that regional culture is the culmination of the differing cultures from the ancesters of each spouse.

Objectives of the Study

The prior discussion leads to the conclusion that measurement of a given regional culture requires the measurement of regional identification of preceding generations for the households being investigated. But measurement of regional culture is a difficult task, leading to an immense coding procedure. For example, information from a typical household might include the city and state of the household, the city and state where each spouse is reared and educated, and the city and state where each of the parents of each spouse were reared and educated. This kind of information may result in numerous combinations that would be difficult to analyze and to use to trace regional culture through time and space. Each household may have a diverse "regional background" that, when traced back through two generations, would lead to what we will call a "regional trace".

A simple and meaningful approach to measuring such a "regional trace" is needed if we are to examine its impact on value systems. We have coded location data (city and state for each spouse and their parents) over two generations.

An example of an intergenerational trace of one household is shown in **Figure 1**. In addition, we have gathered instrumental and terminal values (Rokeach 1973). Using the spatial trace approach--to be described later--we transform the transgenerational data to a form more applicable for identifying consumer clusters that have similar regional backgrounds. We then plan to analyze the regional traces for differences in values.

The New Measurement Approach

Figure 2 shows that the histories of both spouses should be used to trace regional culture. This diagram suggests that each spouse is influenced by the culture of the region in which they were reared and educated. In addition, each spouse is influenced by the regional culture where their parents, in turn, were reared and educated. As already indicated, the impact of regional culture across generations can be viewed as a "regional trace". Steps in finding unique regional traces are now presented.

First, the households to be analyzed should be chosen on some basis that requires the sample to be representative of the population of interest. In general, a randomized, proportionate, stratified sample may be used. For purposes of demonstration, we have chosen a sample that is representative of a regional area in the United States.

Second, an approach should be designed to gather the appropriate data, such as a self-administered questionnaire, personal interview, or other information gathering procedure. Regardless of the approach, three kinds of information should be gathered: (1) The state and city where each spouse, and their parents, were reared and educated should be collected (see **Figure 2**); (2) the appropriate values for each household (for example, Rokeach values, consumption values, or economic values) should be measured and examined for relationship to values; and (3) if, as Garreau suggests, regional culture is related to product preferences and behaviors, information to test these hypotheses should be collected.

Third, hierarchial cluster analysis can be used to search for regional traces. The centroids of the clusters from this analysis should reflect unique patterns of transgenerational locations (reflecting where each generation was reared and educated).

To facilitate the cluster analysis this proposal suggests the following data transformation: (1) convert each city and state location to its equivalent longitude and latitude (this is done by reference to a map); and (2) carry out the cluster analysis on the longitude and latitude data.

Questionnaire and Sample

Data were collected from two mail surveys from a panel of households in Arkansas. The first questionnaire requested information on the level of assimilation in the state subculture by asking respondents to record the city and state where they were reared and educated. This information was converted to longitude and latitude for purpose of analysis. This method of data collection was used because of the hypothesized correlation between length of residency in a given area and degree of subcultural assimilation.

The second questionnaire was used to obtain information concerning respondents' evaluations of personal values and how they view retail salespersons from six retail chains. Personal values were hypothesized to be different across subcultural regions. In order to obtain this information, respondents were provided a list of terminal values developed by Rokeach (1973) and asked to indicate the relative importance of each value on a 5-point scale ranging from not important (coded "1") to most imnportant (coded "5"). Rokeach's terminal values were selected because of the usability of the scale as shown in past studies (Hawkins and Coney 1980; Howell 1979; and Powell 1980).

Respondents' evaluations of retail salespersons were obtained using a 6-point scale. A rating of "1" was assigned to the retail store whose retail salespersons the consumer most preferred, while a rating of "6" was assigned to the retail store whose retail salespersons the consumer least preferred. Wal-Mart, Sears, K-Mart, Penneys, Dillards, and Kinneys Shoes were selected as retail chains in the study because of consumers familiarity with them in the South Central United States.

Analysis

Hierarchical Profile-Grouping Analysis (H-group) was used to combine the data into five clusters as shown in **Table 1**.

TABLE 1
RESULTS OF THE H-GROUP SOLUTION

Location[1] Variable	Total Grand Mean	Means for Group: 1	2	3	4	5	F-ratio[4]
I. Univariate Statistics[2] 1.Male Long.	91.9	90.7	119.5	94.8	91.8	80.8	59.1
2.Male Lat.	35.7	38.8	36.0	36.1	34.9	39.9	36.0
3.Fem. Long.	91.8	91.1	93.3	94.6	91.9	80.4	91.8
4.Fem. Lat.	35.5	38.9	37.9	36.2	34.7	37.4	37.4
Group size	195.0	23.0	2.0	23.0	141.0	6.0	
Percent of Total	100.0	11.8	1.2	11.8	72.3	3.1	
II. Multivariate Statistics							
1. F-ratio						43.9	0.00
2. Degrees of Freedom[3]						16(571)	
III. Cluster Significance							
1. Sample C Statistic = 2.451							
2. Critical C(unimodal) = 1.3564 Tested at the .05 level of significance							
3. Critical C (uniform) = 1.5798							

[1]Male and female longitude and latitude where reared and educated.
[2]Univariate degrees of freedom are 4 (model) and 190 (error).
[3]Model and (error) degrees of freedom, respectively.
[4]P < 0.00

Initially, the four, five, and six hierarchical group solutions were examined for use in this study. The five group solution was chosen because it displayed acceptable grouping characteristics. The location variables measure where each spouse was reared and educated. As shown in **Table 1**, Arnold's C-Statistic indicates a highly significant separation among the groups.

The mean longitude and latitude for each group is presented in **Figures 3** and **4**. The grand centroid for the sample is located in northeastern Arkanasas. The mean location for group 1 for both male and female spouse is near St. Louis, Missouri. The mean location for group 2 is different for male and female spouse. The grand mean for the male spouse is located slightly north of Los Angeles, California, while the female spouse was on average reared and educated near Kansas City, Missouri. For group 3, both spouses were reared and educated near each other along the Arkansas--Oklahoma border. In group 4, both spouses were reared and educated in Central Arkansas and in group 5, both spouses were reared and educated in West Virginia.

Although the results of the centroid analysis reveals five distinct groups, Group 3 has an Arkansan influence. For example, almost 73 percent of the respondents were reared and educated in Arkansas. In addition, another 12 percent of the sample (group 2) were reared and educated along the Arkansas--Oklahoma border. This may have an undue impact on shopping orientations.

Cultural Values

Rokeach's terminal values were tested for relationship with regional category using MANOVA. The MANOVA test was performed with an unbalanced design requiring the use of PROC SAS GLM with PDIFF and LSMEANS options. Wilk's criterion, Phillai's trace, Hotelling-Lawley trace, and Roy's maximum root were used as tests of significance. The tests statistics for overall significancee for the values among groups are shown in **Table 2**. The results indicate a significant difference in values among the groups.

TABLE 2
TEST STATISTICS FOR OVERALL SIGNIFICANCE FOR VALUES AMONG GROUPS

I.	Wilke's Criterion = 0.5845 W = 91.0309 U = 169.5000 Z = 3.9323 B = 17.5000 F = 1.28 Prob > F = 0.0653
II.	Pillai's Trace = 0.4841 F = 1.25 Prob > F = 0.0904
III.	Hotelling-Lawley Trace = 0.6004 F = 1.32 Prob > F = 0.0454
IV.	Roy's Maximum Root Criterion = 0.3567 F = 3.23 (Upper Bound)

The results for Rokeach's terminal values are shown in Table 1.

TABLE 3
MANOVA SOLUTION FOR ROKEACH TERMINAL VALUES

Variable	DF	F Value	PR>F	R-Square
1. Mature Love	4 (177)	3.60	0.0076	0.075159
2. Salvation	4 (177)	8.66	0.0001	0.163619
3. A Comfortable Life	4 (177)	1.12	0.3740	0.024747
4. A Sense of Accomplishment	4 (177)	0.36	0.8337	0.008170
5. A World at Peace	4 (177)	1.53	0.1959	0.033384
6. Equality	4 (177)	1.53	0.1948	0.033469
7. Happiness	4 (177)	0.90	0.4657	0.019917
8. National Security	4 (177)	1.04	0.3882	0.022958
9. Pleasure	4 (177)	1.08	0.3699	0.023739
10. Social Recognition	4 (177)	1.66	0.1611	0.036179
11. True Friendship	4 (177)	0.70	0.5906	0.015647
12. Wisdom	4 (177)	0.13	0.9703	0.002987
13. An Exciting Life	4 (177)	0.20	0.9401	0.004414
14. A World of Beauty	4 (177)	0.34	0.8503	0.007639
15. Family Security	4 (177)	1.62	0.1703	0.035391
16. Freedom	4 (177)	0.66	0.6235	0.014605
17. Inner Harmony	4 (177)	1.11	0.3553	0.024385
18. Self-respect	4 (177)	1.12	0.3509	0.024598

Two variables, mature love ($F(4,177) = 3.60$; $p > 0.0076$) and salvation ($F(4,177) = 8.66$; $p > 0.0001$) were highly significant.

Regional Factors

A factor analysis with VARIMAX rotation is shown in Table 4. It was used to determine if the location where the spouses were reared and educated loaded on two different factors. The results indicate that male longitude and latitude load on Factor 1 and female longitude and latitude load on Factor 2.

TABLE 4
FACTOR ANALYSIS SOLUTION WITH VARIMAX ROTATION

	Factor 1	Factor 2	h^2
I. Factor Loadings			
	0.88	-0.23	0.83
	0.52	-0.64	0.68
	0.87	0.35	0.88
	0.16	0.89	0.82
II. Factor Statistics			
Eigenvalue	1.83	1.38	3.21
Difference	0.48	0.79	
Proportion	0.46	0.34	
Cumulative	0.46	0.80	

Summary and Implications

This study demonstrates that one approach to capturing regional influence on consumer values is to convert the nominal location where a subject is reared and educated to a set or ratio numbers. Specifically, we recommend that the longitude and latitude of the location where a subject is reared and educated be substituted for names of towns. This procedure involves collecting city and state information on subjects, locating where they were reared and educated on a map, and substituting the longitude and latitude of this location for residential codes.

The results of this study show that these data can be analyzed with traditional multimeasurement techniques, assuming metric measurement qualities. The subjects in this study were classified using hierarchical cluster analysis. Five locational groups (where reared and educated) were found that were distinctly different among groups. Consumers values were examined with MANOVA to see if locational group membership related to Rokeachs' measures (1973). The group value centroids were significantly different among groups.

The major use of this research into regional influence and its measurement from a marketing perspective may be to investigate Garreau's (1981) nine nation thesis. If distinctly different marketing regional profiles assimilation is found--using this measure of regional assimilation--marketers can adapt their strategies to meet regional profiles within given market areas. For example, a book publisher may target its offering to one regional group within its market area. This research into methods to measure regional influence should find wide use in future marketing studies.

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FIGURE 1

THE CONCEPT OF INTERGENERATIONAL REGIONAL TRACES:
AN EXAMPLE OF ONE HOUSEHOLD

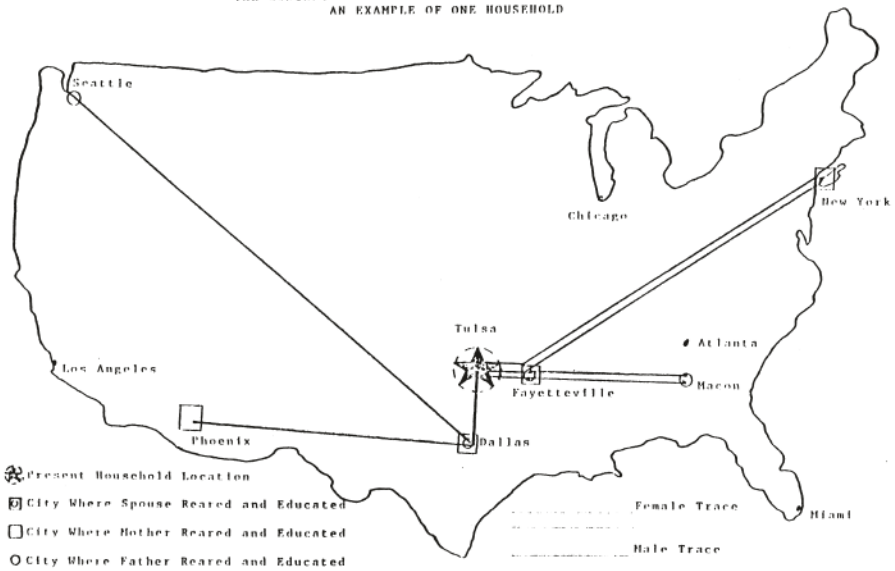


FIGURE 2

A TRACE OF ONE HOUSEHOLD BACK THROUGH TWO GENERATIONS:

(WHERE EACH WAS REARED AND EDUCATED)

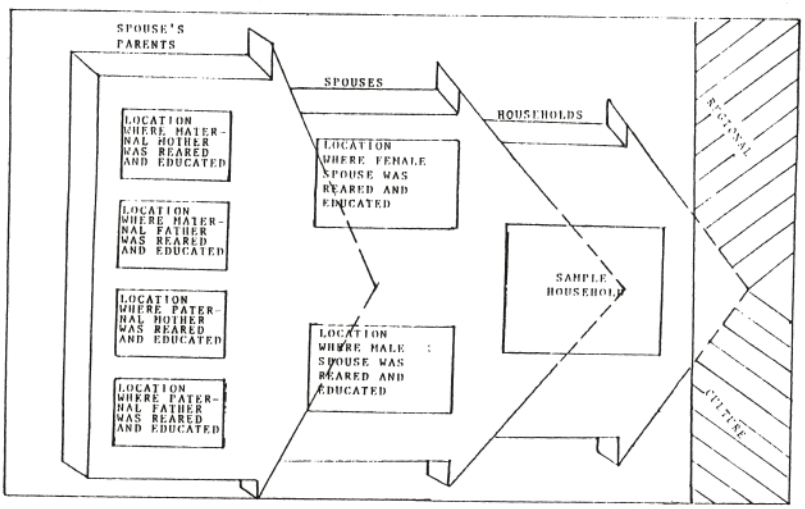


Figure 3
GROUP REGIONAL CENTROIDS: WHERE SPOUSES ARE REARED AND EDUCATED

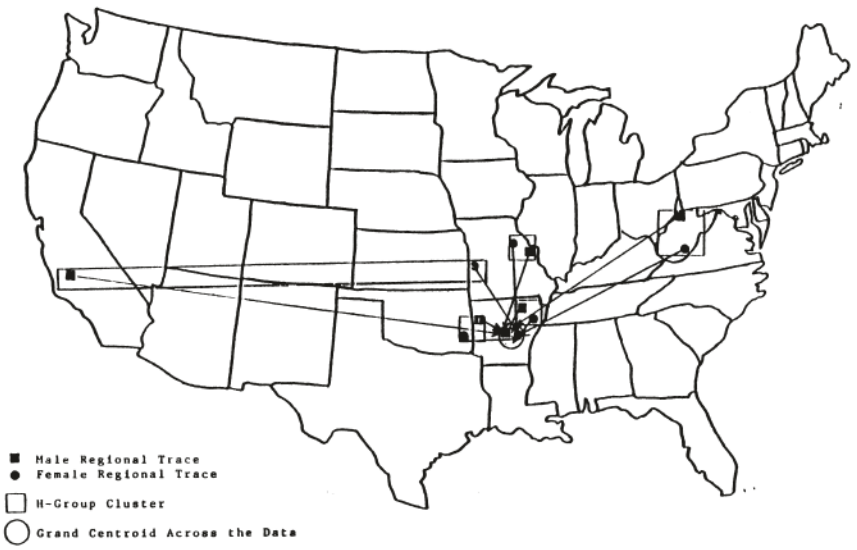
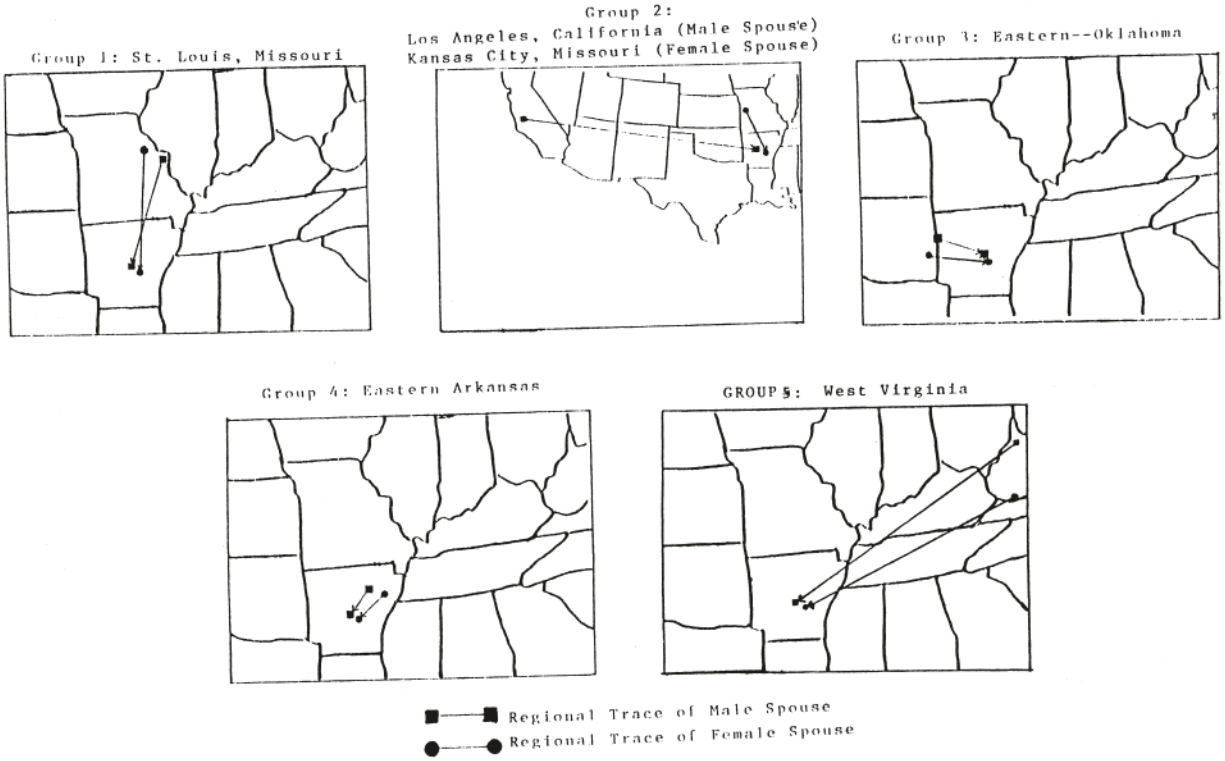


Figure 4
LOCATION OF GROUPS 1-5 REGIONAL CENTROID



QUESTIONNAIRE DEVELOPMENT FOR THE PERIODIC SURVEY OF A LOGISTICS INFRASTRUCTURE

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Abstract

This paper illustrates the development of a questionnaire to periodically survey a regional distribution infrastructure. The future respondents of the periodic survey were utilized to develop the survey instrument. While many questionnaires are pre-tested and then revised, in this case contact with the panel was initiated to assist with the writing of the questionnaire itself.

Introduction and Explanation of Terms

Until recently, according to Moskal (1983), "it was possible to lead a very useful life without knowing what the word 'infrastructure' meant." Abelson (1984), a featured column writer for Barron's, called infrastructure "one of those atrocities that have somehow insinuated themselves into the nation's vocabulary and now lumber off even the most sensitive tongue." But infrastructure had been in the logistics lexicon years before the popular press discovered it. In a 1969 speech, Plowman included infrastructure availability as one of three logistical planning areas. Throughout this paper, distribution infrastructure will be used to mean the existing support facilities--e.g., roads, rails, waterways, warehouses, terminals, and ports--which provide time and place utility to physical goods. Omitted from this usage are facilities for passenger travel (although there is much sharing by goods and passengers--roads, for example).

The Louisiana State University in Shreveport's Center for Business Research currently conducts periodical surveys of business activity in the manufacturing, retail, agricultural and construction sectors of the two parish regions which comprise the Shreveport standard metropolitan statistical area (McKee 1984). It was proposed that the Center initiate a quarterly study of the levels of activity in wholesale distribution and freight transportation. Firms in these broad categories are considered to constitute the distribution infrastructure of the region. The trends that such a periodic survey would produce may have policy implications in the region which has the expressed objective of attracting distribution industries. In addition, the Caddo-Bossier Port Commission is developing a public port and industrial park on the Red River Waterway; scheduled completion is "by the early 1990s" (Loftin 1984).

Previous data collection by the Center identified most of the potential participating firms. The sensitive question remains: what data would they be willing to furnish on a quarterly basis? Such data should indicate levels of physical volume of business, employment within the sector, capacity utilization, and expectations for the coming period.

A questionnaire was prepared for distribution by mail to these firms to ask questions pertaining to the following: 1. Would they participate? 2. Would they provide data about their operations? 3. Would they indicate their expectations about employment, business volume, and facilities?

With this information, the Center for Business Research could identify the members of the panel and could design a survey instrument with a greater expectation that responses would be forthcoming. To the extent that panel members would answer questions on their expectations, the results of the ensuing surveys could become leading indicators of economic activity in this sector. Conversely, without the information provided by the initial questionnaire, a periodic survey would tend to be overly long, containing questions that will generate little useful information. The long questionnaire would also tend to discourage replies.

Questionnaires on Community and Sensitive Issues

Miller (1977) counsels researchers to examine the existing inventory of scales and related work because: "simple indices are being constructed de novo for the problem, while scales with far more validity and stability languish unused." But this procedure did not prove fruitful, as might have been expected, given Miller's (1977) introduction to the topic of community research: "Measures of community variables are scarce." He cited several studies of a city's "goodness" and a "Scorecard for Community Services Activity," but these were for social measures rather than business indicators.

Business organizations are targets for much questionnaire-based research. In his position as assistant treasurer for a steel firm, Singhvi (1981) recorded the source of the more than 200 surveys his office received in a five-year period and placed them in five general categories: Faculty members, student, non-profit organizations (e.g., National Association of Accountants and The Conference Board), for-profit organizations (e.g., publishers), and government. Singhvi (1981) also reported his firm's policy of cooperating with researchers if the surveys were not overly time consuming and to the extent that "confidential information is not divulged." Asking business organizations to report their volume of business and their forecasts are generally considered to be treading on sensitive ground.

The issue of investigating sensitive attributes has received much attention in the data collection literature (Tamhane 1981) but the specific attributes have been largely personal. For example, Sheth, LeClaire, and Wachspress (1980) measured the effects of asking race in mail questionnaires; Duncan and Schuman (1980) researched the effects of asking religion. Asking sensitive business questions seems to have not been as well documented. Without these published guidelines, one of the objectives of the initial questionnaire became that of identifying potentially sensitive areas in order to avoid them in the subsequent quarterly questionnaires.

One example of business research that may provide applicable techniques is the "Business Survey" conducted by the National Association of Purchasing Management (NAPM). About 200 purchasing managers per month are surveyed about general business conditions with specific reference to production and new orders. The questions ask the manager to indicate if the conditions in their firm were "better than month ago," the "same as month ago," or "worse than month ago". This method provides ordinal data rather than interval, which would be more desirable for plotting trends. The NAPM published a "consensus" rating by subtracting the "worse than" percent of responses from the "better than" percentage. The consensus percentage is commonly graphed over time to obtain displayable trends (Ammer 1980).

Categories of Transportation and Distribution Data Currently Published

In a sector of the economy that furnishes over 21 percent of the Gross National Product (Wood and Johnson 1981), a large quantity of data is already generated and published. Examples, given in **Table 1**, are largely financial in form, and report revenues from freight and from selling transportation equipment, inventory levels, operating expenses, price and securities indices. Data not denominated in dollars include numbers of vehicles sold or loaded, and ton-miles or tonne-kilometres of freight. While much of the published data was national in scope, an example of regional transport data for European countries was furnished by the Economic Commission for Europe (1982). Data has also been collected for the specific area of the current study in the Census of Transportation (1981), Census of Wholesale Trade (1981), and Census of Retail Trade (1979), but on a schedule too infrequent to provide timely information. Examples of pertinent information for the Shreveport SMSA are shown in **Table 2**.

The types of information already tabulated suggest some specific categories that might be feasible, from the standpoints of collectability--i.e., firms are somewhat used to being asked for that information--and comparability with past published data. These categories are measures of volumes, capabilities, and expectations. Volume information was considered to include sales, car loads, truck loads, and tons shipped or received, and labor hours and

TABLE 1

TYPES OF "LOGISTICS INFRASTRUCTURE" DATA IN PUBLISHED SOURCES

CATEGORY	SOURCE
Transportation Equipment	
Sales (monthly), by:	Survey of Current Business, Vol. 63 (October 1983), p. S32.
Aerospace Vehicles	
Motor Vehicles	
Trucks and buses	
Truck trailers and chassis	
Trailer bodies	
Trailer chassis	
Freight cars	
Capacities (annual):	
Freight cars, Class I RR	Association of American Railroads
Railways, mobile equipment	
Lorries	Economic Commission for Europe, Geneva, Annual Bulletin: Transport Statistics for Europe, Vol. 33 (New York: United Nations, 1982), pp. 32, 78, 120, 152, 156, 158.
Tractors	
Trailers	
Total load capacity	
Barges	
Tankers	
Containers	
Oil pipelines	
Volumes of Freight Carried	
Monetary measures:	Survey of Current Business, p. S18.
Operating revenues (monthly)	
Class I Railroads	
Class I Motor Carriers	
Air Carriers	
Physical measures:	
Tonnage (quarterly), motor	Survey of Current Business, p. S18.
Ton-miles (qtr), air and rail	
Tonnes carried (road)	Annual Bulletin of Transport Statistics for Europe, pp. 17, 32, 144-145, 148.
Tonne-kilometres	
Ave. gross wt. of freight trains	
Wagons loaded	
Freight transport (by rivers)	
Goods handled at sea ports	
Networks	
Railroads	Annual Bulletin of Transport Statistics for Europe, pp. 32, 144, 158.
Inland waterways	
Oil pipelines	
Inventories (monthly)	
Monetary measures	Survey of Current Business, p. S3.
Physical measures	
Price Indices	
Transportation equipment	Survey of Current Business, pp. 5-6, S18.
Motor vehicles and equipment	
Railroad freight	American Trucking Association.
Motor carriers, Class I & II	
Financial	
Net incomes of transportation firms (air, motor, rail)	Survey of Current Business, pp. S15-16, S18.
Securities issued	
Bond yields	
Dow-Jones stocks	
Standard & Poors stocks	
NY Stock Exchange	

expenses. Cubic feet or gallons of storage (filled and unfilled; refrigerated and not) were possible measures of capacities.

Information about a firm's expectations would be based on both volume and capacity. A simple questionnaire was developed to ask which types of data the respondents would be willing to furnish on a quarterly basis. This questionnaire appears as Exhibit 1.

Results From Data Collection

To test the usefulness of the survey approach, the questionnaire was mailed to a panel of 64 firms known to be in the transportation and wholesale distribution trades in the Shreveport SMSA. Rankings from the 38 responses are displayed in **Table 3** and indicate which of the following were the most acceptable categories of questioning.

TABLE 2
EXISTING DATA DESCRIBING THE DISTRIBUTION INFRASTRUCTURE OF THE SHREVEPORT REGION

CATEGORY	SOURCE
Population	
Shreveport SMSA, by: 1960: 281,481 1970: 294,703 1980: 376,789	U.S., Bureau of the Census, 1970 Census of Population, Part A, Sec. 1, Table 13, pp. 20-25; 1980 Census of Population and Housing, Census Tracts, Shreveport, LA SMSA, June 1983, p. XII.
Wholesale Trade, 1977	
Durable goods Establishments: 472 Sales: $749,547,000	U.S., Bureau of the Census, 1977 Census of Wholesale Trade, Table 4, pp. 19-25.
Nondurable goods Establishments: 240 Sales: $1,154,625,000 (by SICs)	
Retail Trade, 1977	
Establishments: 2,957 Sales: $1,241,237,000 (by SICs)	U.S., Bureau of the Census, 1977 Census of Retail Trade, Table 5, pp. 52-103.
Shipments by Manufacturing Establishments, by Origin and Means of Transport by Destination (Value and Tons, by TCC code)	U.S., Bureau of the Census, 1977 Census of Transportation, Commodity Transportation Survey, Table 1, p. 1.
Freight Carried on Mississippi River System, 1980 Mil. sh. tons: 584 Bil. ton-miles: 228.9 (by Inland, Coastwise, Foreign: imports, exports, since 1950)	U.S., Bureau of the Census, Statistical Abstract of the United States: 1982-83 (103rd ed.), p. 640.

The data that would be reported most willingly is employment information. Three out of the top four most positive responses were employment-related; one of those three was the employment expectations question. Firms are accustomed to reporting numbers of employees; this is a common indicator of size among organizations.

Also ranking high on the list was the interest in the results of the quarterly survey on the distribution infrastructure. A high level of interest would tend to encourage response to the survey.

Items ranking fifth and sixth were the other expectations questions. These were general enough and would not violate confidential information restrictions so that most firms would not hesitate to respond.

The product type handled by a firm was ranked next and would be important as a categorizing variable.

The first variable to reflect the capacity of facilities was the total cubic feet of storage. The eighth-place ranking made it a clear choice ahead of refrigerated or liquid storage space; the latter were too specialized for a general use survey.

The volume measures that were ranked highest were numbers of truck loads received and shipped. In comments made by respondents, it was apparent that the term "truck load" was not clear in meaning, since there was much less-than-truckload activity. An alternative wording, which would bypass size considerations, would be the number of truck pickups and deliveries.

EXHIBIT 1
INITIAL SURVEY: SHREVEPORT/
BOSSIER CITY DISTRIBUTION REPORT

The Center for Business Research at LSU-Shreveport will be conducting a quarterly survey of regional activity in transportation and distribution at the wholesale level. To prepare for this project, we would like to ask for your cooperation in filling out this brief questionnaire.

YES	NO	
___	___	Would you be interested in the results of the quarterly survey?

Which of the following types of data would you provide in confidence about your operations in the Shreveport/Bossier City area? Please check YES or NO.

YES	NO	NOT APPLICABLE	
___	___	___	Quarterly sales
___	___	___	Total cubic feet of storage in your facility
___	___	___	Total cubic feet of refrigerated space in your facility
___	___	___	Total gallons of liquid storage in your facility
___	___	___	Percentage of each of the above unfilled at the end of the quarter
___	___	___	Cubic feet of storage space unfilled at the end of the quarter
___	___	___	Cubic feet of refrigerated space unfilled at the end of the quarter
___	___	___	Gallons of liquid storage space unfilled at the end of the quarter
___	___	___	Number of car loads shipped
___	___	___	Number of car loads received
___	___	___	Number of truck loads shipped
___	___	___	Number of truck loads received
___	___	___	Tons shipped
___	___	___	Type of products
___	___	___	Labor expenses for the quarter
___	___	___	Labor hours for the quarter

YES	NO	NOT APPLICABLE	
___	___	___	Number of employees (in Shreveport/Bossier City) at end of quarter
___	___	___	Maximum number of employees (in Shreveport/Bossier City) during the quarter
___	___	___	Gallons of diesel fuel purchased
___	___	___	Gallons of diesel fuel pumped

We also want to provide an indication of business expectations. Would you be willing to answer questions such as the following?

YES	NO	NOT APPLICABLE	
___	___	___	Number of employees you expect to employ by end of next three months

What do you expect your activities to be in the coming three months, compared with this quarter, in each of the following categories?

YES	NO	NOT APPLICABLE	
___	___	___	Volume of business (More, About the same, or Lower)
___	___	___	Your facilities (Expand, About the same, Reduced)

Thank you. If you wish to suggest any additional questions, a change in approach on any questions, or make any additional comments, please do so in the remaining space and/or the reverse side.

The remaining question items were given net ratings somewhat lower than the previous items. These questions were considered to be either getting into more sensitive areas of business information or the topic was not applicable to a large proportion of the respondents. For example, labor hours, quarterly sales, and labor expenses were applicable to most firms, but these questions generated the greatest number of negative answers of any questions on the survey. While data on expenses and sales might be desirable, asking these questions

TABLE 3
RANKING OF RESPONSES TO PILOT QUESTIONNAIRE

Rank	Questions
1	Number of employees (in Shreveport/Bossier City) at end of quarter
2	Number of employees (More, About the same, or Fewer)
3	Interested in the results of the quarterly survey?
4	Maximum number of employees (in Shreveport/Bossier City) during the quarter
5	Your facilities (Expand, About the same, Reduced)
6	Volume of business (More, About the same, or Lower)
7	Type of products
8	Total cubic feet of storage in your facility
9	Number of truck loads received
10	Number of truck loads shipped
11	Labor hours for the quarter
12	Gallons of diesel fuel purchased
13	Quarterly sales
14	Labor expenses for the quarter
15	Cubic feet of storage space unfilled
16	Tons shipped
17	Percentage of each of the above unfilled
18	Gallons of diesel fuel pumped
19	Number of car loads shipped
20	Number of car loads received
21	Total gallons of liquid storage in your facility
22	Total cubic feet of refrigerated space in your facility
23	Cubic feet of refrigerated space unfilled
24	Gallons of liquid storage space unfilled

might reduce the reception of the questionnaire among too many of the potential participants.

One pair of questions that ranked somewhat lower but which still may be asked is about the numbers of carloads shipped and received. For companies with rail sidings, this data could be an important indicator and did not generate many negative responses--more likely would be responses of "not applicable."

Another pair of questions were about gallons of diesel fuel purchased and pumped. These gallons would act as a proxy variable of trucking volume for those firms engaged in private carriage. They did not rank highly and, although they may have merit in some applications, will not be used in the quarterly survey.

Other questions related to amount of capacity unfilled at the end of the quarter did not elicit high enough responses to be encouraging for further use.

Conclusions

The obvious conclusions are that some business firms engaging in transportation and distribution in the Shreveport area indicated they were more open to providing possibly sensitive business information than others, and some specific types of information concerning operations and expectations would be furnished more readily than other specific types.

A definite conclusion drawn from the surveys is that the respondents were loath to supply dollar-denominated data. Thus, sales volume and labor expenses should not be asked directly. Other measures, such as numbers of car loads or tons shipped, and numbers of employees, were more amenable as volume and employment measures.

From the knowledge gained by the pilot study, a shorter questionnaire for the quarterly survey has been constructed (see Exhibit 2) and the periodic study has commenced. The process has followed two simple mechanical steps: first, the questions in the pilot survey were re-ordered by the net number of positive responses. Next, this list was reviewed to judge the relative coverage of volume, employment, and facilities measures. Redundant coverage was eliminated and the content for a revised questionnaire resulted.

A limitation of this procedure is that the pilot survey was used only to provide descriptive statistics. Analysis was only by frequency counts, hardly a statistically robust procedure. Yet the questions originally asked--what types of data would be provided, what types would be likely to be not provided--were answered in a simple, straightforward manner.

Another contribution of this initial step in the periodic survey is from the variation in the normal pre-test procedure. That is, while many questionnaires are pre-tested and then revised, in this case contact with the panel was initiated to assist with the writing of the questionnaire itself. Such a procedure may be useful in other situations in which the researchers could accept several from a variety of indicators. From a pragmatic approach, this logic is followed daily, as data for use happens to be those which are most available. Since little in the way of Shreveport distribution infrastructure data was available, it seemed expedient for the providers to assist in

EXHIBIT 2
WHOLESALE/DISTRIBUTION SURVEY

A. QUARTERLY RESULTS

We would like you to compare the quarter just ended with the previous quarter. Please check the appropriate line for each question.

1. Was the number of people you employed in Shreveport/Bossier City at the end of the last quarter:
   _____ More than in previous quarter
   _____ About the same as previous quarter
   _____ Fewer than previous quarter
   _____ Not applicable

2. Was the storage capacity of your facilities at the end of the last quarter:
   _____ Greater than in previous quarter
   _____ About the same as previous quarter
   _____ Less than previous quarter
   _____ Not applicable

3. Was the daily average number of trucks making pickups and deliveries (of any quantities) at your facilities during the last quarter:
   _____ Greater than in previous quarter
   _____ About the same as previous quarter
   _____ Less than previous quarter
   _____ Not applicable

4. Was the daily average number of rail cars being loaded or unloaded at your facilities during the last quarter:
   _____ Greater than in previous quarter
   _____ About the same as previous quarter
   _____ Less than previous quarter
   _____ Not applicable

5. Was the total volume of your business:
   _____ Greater than in previous quarter
   _____ About the same as previous quarter
   _____ Less than previous quarter
   _____ Not applicable

EXHIBIT 2 (Continued)

B. YOUR EXPECTATIONS

Compared with the quarter just ended, what do you expect for this quarter? Please check the responses which most closely match your opinion.

6. Number of employees at your Shreveport/Bossier City area facilities:

_____ More than previous quarter
_____ About the same as previous quarter
_____ Fewer than previous quarter
_____ Not applicable

7. Storage capacity:

_____ Greater than previous quarter
_____ About the same as previous quarter
_____ Less than previous quarter
_____ Not applicable

8. Daily average number of trucks handled (pickups and deliveries):

_____ Greater than previous quarter
_____ About the same as previous quarter
_____ Fewer than previous quarter
_____ Not applicable

9. Daily average number of rail cars loaded and unloaded:

_____ Greater than previous quarter
_____ About the same as previous quarter
_____ Fewer than previous quarter
_____ Not applicable

10. Total volume of your business for the next quarter should be:

_____ Greater than in previous quarter
_____ About the same as previous quarter
_____ Less than previous quarter
_____ Not applicable

11. Concerning plans for expansion of your facilities, do you anticipate starting on such a project during the next three months?

_____ Yes
_____ No
_____ Plans are in progress for later period

C. PRODUCT TYPES

We will accumulate responses for several product groups. Please list the two-digit Standard Industrial Classification code for most of the products handled in your Shreveport/Bossier City area facilities? (If the SIC's are not available, please write in the types of products and we will look them up.)

_____

_____

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determining the actual types of information to be provided right from the beginning of the project.

More interesting will be to ask why the firms responded as they did. Do the results vary by business activity (transportation vs. storage), by transport mode, by product group, or by business size? Further analysis of the collected data may provide some answers which could prove interesting to those who study the process of data collection.

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THE RELATIONSHIPS OF TIME SPENT AND RESPONDENT'S INTEREST LEVEL ON THE USEFULNESS OF CONJOINT MEASUREMENT

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Abstract

A study of the relationship among self-reported time spent, interest level and task performance level using conjoint measurement was carried out. Participants were professional purchasing executives within two midwestern states. A weak, but statistically significant, relationship was found between time spent and interest level. Performance on the theoretical modified rebuy and new task vendor selections, as measured using Kruskal's Stress, was not increased significantly with increasing self-reported time spent. The same lack of relationship was found between interest level and performance.

Introduction

Conjoint measurement continues to be a popular method in the study of consumers' judgments (e.g. Green and Wind 1975 and Desarbo and Green 1984) and organizational decision makers' judgments (Crow and Lindquist 1982 and Schnieder 1985). Those who use the technique have been concerned with a number of applications and reliability questions versus competing methods of analysis (e.g. Leigh, MacKay and Summers 1984.)

A question of interest is whether or not the respondent's level of commitment to the evaluation and rank order tasks, associated with the conjoint approach, will impact on the level of task performance. One would expect such a link to exist. This report deals with a preliminary investigation of this possible link. The setting was one where professional purchasing executives were asked to order and then choose suppliers for two separate theoretical situations.

The Hypotheses

There were three research hypotheses posed for this study. These hypotheses were based on theorized relationships among interest level, self-reported time spent on the execution of the questionnaire and a performance level measure, namely, Kruskal's Stress (1963).

The hypotheses tested were:

1) The greater the subject's interest in the two research tasks performed, the greater the amount of time that will be spent on doing the tasks.
2) The greater the subject's interest in the two research tasks performed, the better the subject will perform the tasks.
3) The greater the amount of time spent by the subject in doing the two research tasks, the better the subject will perform the tasks.

Methodology

The Task

Respondents were presented with two buying scenarios. The first was a modified rebuy where 100 fire alarm/smoke detectors had to be purchased to correct a problem found in a recent fire inspector's visit. The second situation could be classed as a new task decision and consisted of the purchase of a climate control system for installation in an executive and staff office building addition. For a discussion of the modified rebuy and the new task, see Robinson, Faris and Wind (1967).

The participants were given a list of 27 potential vendors with ratings on quality, delivery and technical assistance. The ratings were based on the performance history of the suppliers. Each vendor was rated either "excellent," "good" or "fair" on each of the three factors so that all possible ratings combinations were presented. The descriptors, "excellent," "good" and "fair," were specifically defined in terms of certain levels of past performance. The respondents were told that the prices quoted by all possible suppliers were very nearly the same so that the price variable could be eliminated from the decision process.

Data Collection

A preliminary questionnaire was shown to a number of typical members of the target group prior to major data collection. Their reactions were used to make minor modifications in the tasks and the instrument.

A mail questionnaire was then constructed and successfully pretested on members of a local National Association of Purchasing Management (NAPM) Chapter in Southwestern Michigan. The universe of the basic study was the 1982 membership rosters of all NAPM Chapters in the States of Michigan and Indiana. The sample was constructed on a chapter by chapter basis.

Questionnaires were sent to 748 individuals. A total of 197 usable responses were received, using a two-wave technique. This was a 26.3 percent response rate. The rate was considered good since the instrument took 45 minutes, on average, to complete. Further, the universe was composed of "busy" professionals and the better than 1 in 4 participation was gratifying. A test for representativeness was also carried out. Chi-square analyses were run on 13 characteristics between the sample and the universe profile. Eleven of the 13 were found to be alike statistically. A comparison was also

made with a national NAPM member profile and a very close match was again found. Hence generalizability was assured.

Data Analysis

The buyers scored each of the 26 vendors on a scale of 01 to 99 using any method of rating assignment they desired. The "excellent-excellent-excellent" vendor was given a score of 100 as a pre-rating reference for the participants. The vendors were randomly listed and then numbered from 1 to 27. The individual scores for the vendors were input to the Kruskal MONANOVA program (Kruskal 1963), which generated part-worths for each performance level on each of the three vendor characteristics. The MONANOVA algorithm employs a conjoint measurement technique.

Initial work showing the applicability of this approach to analyzing marketing decisions was offered by Green and Rao (1971). In the mid-1970's Green and Wind (1975) then applied conjoint measurement to determine which qualities of certain products or services were most significant. Crow and Lindquist (1982) then showed the direct applicability of the technique for determining organizational buyer decision logic use.

After rank ordering the potential vendors for the two purchase decisions, the subjects were asked to provide information about themselves and their firm. The respondents were then asked to indicate the amount of time that they had spent completing the instrument. Their choices were 30, 45, 60, 75 and 90 or more minutes. Finally, the subjects were asked to indicate their level of interest on a seven-point scale. The number "1" position on the scale was "No Interest" and the number "7" position was labeled "Extremely Interested." No labels were provided for the remaining numbered positions.

A series of cross-tabulations related to the hypotheses were then generated using the SPSS program. The Kendal's Tau C value was used to determine association levels among the variables.

Results and Conclusions

The first hypothesis was concerned with the relationship between self-reported time spent on the completion of the questionnaire and interest level. Table 1 is a summary of these data. The Kendal's Tau C value for the comparison was 0.141 with significance level of 0.005.

The results show a relationship in the hypothesized direction between time spent and interest level. However, though the relationship is statistically significant (that is, different from zero), it is weak. The reader can detect this association by comparing shares of individuals at each interest level who spent 60 minutes or more on the task. One notes that these shares shift from the 17 to 32 percent range to the 36 to 47 percent range when comparing the three low interest level groups to the three higher interest level groups, respectively.

TABLE 1
INTEREST LEVEL VS. TIME SPENT

		Time Spent (Minutes)					
Interest Level		30	45	60	75	>90	
No Interest	1	0%	75%	0%	25%	0%	4
	2	44	39	4	9	4	23
	3	41	27	32	0	0	22
	4	28	42	21	4	5	57
	5	18	47	20	10	6	51
	6	15	39	35	8	4	26
Extremely	7	29	29	29	0	14	14
		52	80	43	12	10	197

The percentages are shares of each interest level in each time spent category.

The weak relationship may suggest that other factors are clouding the picture. Decision making style, personal style, the task itself, the accuracy of self-reported time and other considerations may be working here.

The second hypothesis was posed to examine the relationship between interest in performing the tasks and strength of performance level as measured by the respondent's Kruskal's Stress value. The Stress value of 0.025, a very good fit, was the cut-off point. Recall the lower the Stress value, the stronger the fit. Those subjects with task performance Stress values of 0.025 or less were compared with those with Stress values greater than 0.025. The comparison yielded a Kendal's Tau C of 0.024 with a significance of 0.38. The hypothesis was rejected in light of this result. Hence one concludes that there was no relationship between performance and interest for this research task. The applicability of the conjoint method was neither enhanced nor reduced based on interest level.

The final hypothesis was concerned with the self-reported amount of time spent completing the questionnaire and the performance level on the tasks as reflected, again, using the Stress value. The very good fit group was compared to those whose Stress exceeded 0.025. The Kendal's Tau C was 0.026 with a significance value of 0.37. There was no relationship found, and hypothesis three was rejected. Hence, increasing time spent on the questionnaire did not effect performance level.

As an additional note -- 57.8 percent (114 respondents) had a Stress value of 0.025 or less while the remaining 42.1 percent (83 respon-

dents) had values that exceeded 0.025.

Implications

It could be argued that a limitation of the analysis was the use of Stress as a measure of task performance. The authors contend, however, that consistent rank order of potential vendors is a critical task for the purchasing executive and Stress is a strong measure of performance on this task dimension. The buyers in this study tended to be consistent with 57 percent having Stress values of 0.025 or less.

Future research in this area could begin with replication of the study presented here. A look at other research tasks and other types of respondents seems called for. This is a suggestion since the purchasing executives in the project performed a research task that they normally do and this might have confounded the results. That is, the decision is such a common one and, therefore, so internalized that neither interest level nor time is a good measure of task commitment.

Different tasks are also called for in future research. The building addition and the smoke detector/fire alarm coupling may not be appropriate.

The results of this research are preliminary in nature and the conclusions concerning the hypotheses are tentative based on study boundaries.

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AN EXPLORATORY COMPARISON OF NON-METRIC MULTIDIMENSIONAL SCALING AND PRINCIPAL COMPONENTS RESULTS FOR THE SAME DATA

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Abstract

The purpose of this is to examine evidence for the relative effectiveness of principal components analysis and non-metric multidimensional scaling of the same marketing survey data. The results of this study suggest no substantial differences in the degree of simple structure achieved by any combination of dimensional analysis method or correlation measure.

Introduction

Dimensional analysis methods are concerned with the simplified description of a set of variables. Such methods accomplish this purpose by reproducing the relationships among the variables by an isomorphic space of fewer dimensions than the original number of variables. Davison (1985) notes that there are at least three similarities among different types of dimensional analyses. First, all such methods are used to investigate and describe the structure of objects or variables. Second, they start with proximity measurements among pairs of objects, pairs of variables, or perhaps object-variable pairs. Finally, they represent structure in terms of spatial coordinates. The different dimensional analysis techniques differ in their choice of promimities, the experimental procedures used to generate data, and in the relationships assumed between the proximities and the derived spatial coordinates.

Proximities Among Variables

Dimensional analysis methods used to describe variables generally start with numerical proximities between each pair of variables. A proximity is a number which shows the degree of similarity or dissimilarity between two variables (Kruskal and Wish 1978). Many different types of proximities are used. These include Pearson correlations, rank order correlations, probabilities, direct judgments of perceived similarity or dissimilarity, rank orderings of variables according to some perceptual continua, and so forth.

Techniques of Analyzing the Proximities

There are many different methods which can be regarded as dimensional analysis techniques. These include, for example, correspondence analysis (Hoffman and Franke 1986), latent class analysis (Green 1951; Anderson 1954), latent structure analysis (Anderson 1954; Lazarsfeld 1950), cluster analysis of variables (Tryon and Bailey 1970), varieties of factor analysis (Cattell 1978; Harman 1967; Kim and Mueller 1978), metric and non-metric multidimensional scaling (Kruskal and Wish 1978; Thurstone 1931), and multidimensional unfolding analysis (Coombs 1964).

Factor Analysis Methods

Factor analysis (FA) is one of the most often used methods in marketing research and in the social or behavioral sciences. However, FA is a collection of closely related methods with origins in psychological testing (Harman 1967). Cluster analysis of variables (Tryon and Bailey 1970), principal components analysis (Hotelling 1933), maximum likelihood factor analysis (Lawley 1943), the centroid method (Thurstone 1931), and the principal axes method (Kelley 1935) are all examples of "factor analysis."

All the FA methods have certain similarities. Proximities among variables are usually measured by sample Pearson correlations, or by other sample statistics which can be used to estimate the population Pearson correlation (e.g. the polychoric, tetrachoric, point-biserial, biserial, Spearman or Kendall rank order correlations, or various robust/resistant estimators).

The FA methods assume that the variables are measured at the interval level, and that observed scores on variables are linear combinations of underlying common factors (Kim and Mueller 1978; Harman 1967).

Factor analysis is a highly useful method. However, there is some evidence that the popularity of factor analysis and the widespread availability of computer packages has resulted in some misconceptions and some rather "blind" usage of the technique (Ehrenberg 1968; Ehrenberg and Goodhart 1967).

Non-Metric Multidimensional Scaling (MDS) Methods

It has been suggested that the newer MDS techniques may be used as alternative ways of describing relationships among objects generally, or among variables (Kruskal and Wish 1978). Theoretical arguments can be made for the superiority of MDS to FA techniques. For example, MDS requires only that the proximities represent ordinal information about relationships among variables. FA methods assume that the proximities are scalar products of interval level measures. On the contrary, MDS methods do no assume intervality in the original variables or in the proximities. Thus, MDS has an intuitive appeal because many variables in marketing survey data are measured at the nominal or ordinal level (e.g. occupational group or Likert scale responses).

Responses to attitude questions usually are on ordinal Likert scales, and this violates the intervality assumption of FA methods. Small departures from intervality will not affect statistical results, and unreliability of measurement often makes it hard to detect the impact of lack of intervality. However, the magnitude of departures from intervality in attitude scales is unknown, and measurement imprecision is another challenge to be overcome rather than a justification for lack of intervality.

Schiffman, Reynolds and Young [37] have argued for the experimental, mathematical and interpretative advantages of MDS over FA. Shepard [41], Schlessinger and Guttman [38] and Lingoes [31] concluded that MDS yields more parsimonious solutions than does FA.

Language Conventions for this Paper

We are aware that the various forms of factor analysis, principal components analysis and nonmetric multidimensional scaling analysis are different techniques. However, in order to reduce verbiage, we use factor analysis language to refer to similar ideas in all dimensional analysis techniques. For example, in the remainder of this paper, a "factor" refers to a latent dimension; a "loading" refers to the projection of a variable on a latent dimension, and so forth.

Which Method is Best?

The Need for Performance Standards for Dimensional Analyses

The fundamental problem in evaluating different types of dimensional analysis techniques is the paucity of generally applicable performance standards. Davison (1983) notes that there are differences among FA and MDS methods in their assumptions about the data, the experimental procedures used to generate the data, and in the analysis algorithms. The computational methods and statistical tests used in FA and MDS or in other dimensional analysis techniques are quite diverse (see Kruskal and Wish 1978; Kruskal 1964a; Kruskal 1964b; Harman 1967). The diversity of the techniques highlights the need for generally applicable performance standards for dimensional analysis methods.

Criteria For Evaluating Dimensional Analysis Algorithms

There are several different criteria for assessing the performance of MDS or FA. These criteria for assessing the performance of MDS or FA. These criteria may not all be maximized under the best of circumstances, for high performance by one criterion may reduce the performance of an algorithm by another criterion.

First, an effective algorithm should accurately reproduce the observed proximities from the factor loadings. There should be a high positive linear correlation between the original and reproduced proximities, and the means of the sets of original and reproduced proximities should be highly similar.

Second, the solution should contain a minimum number of factors. The sample solution should contain the same number of factors as the population solution.

Third, the solution shold maximize the simple structure. An easily interpretable solution will reveal that certain observed variables are primarily related to certain factors and not to others (see Balloun and Kearns 1975; Long 1983).

Fourth, the factor loadings produced by the different dimension analyses should be similar if the different methods yield similar structural information. This comparison can be made if the loadings are first scaled to a similar metric.

Fifth, different dimension analyses should concur on the relative sizes of the rotated factors. This comparison can be made if the loadings revealed by the different methods are first scaled to a similar metric.

Method

Description of the Sample

Data were gathered via a research instrument mailed to members of the Arkansas Household Research Panel (AHRP). The Consumer Panel consists of over 750 households selected from various geographic units in the state of Arkansas and provides coverage of every city in the state having a population of over 5,000. The mailing of the questionnaire was conducted during the Spring and Summer, 1983. The mailing resulted in 496 usable questionnaires out of 512 mailed out, for a response rate of 97 percent. The high rate of return occurs because of increased cooperation associated with the usage of a volunteer consumer panel. McGrown (1979) reports that 100 percent return rates are frequent in panel data since the panel members have voluntarily agreed to participate.

Description of the Research Instrument

The research instrument was developed as a result of formal group interviews conducted with heads of households. The interviews focused on the heads' of households perceptions and expectations towards the economy, and of questionnaire input from previous studies (Katona 1960, 1964, 1974, 1975; Shama 1978, 1981; Rao and Kiser 1977).

Fourteen statements were developed on consumers' perceptions and expectations of the economy. These statements were measured on a six-point Likert-type scale allowing for responses from "strongly disagree" to "strongly agree," with no neutral poing (cf. Oumlil 1983). In order to assess the nature of the economic impact on consumers' well-being, the statements included were constructed to emphasize consumers' views of the edonomy more than their disposable income. This approach is consistent with Katona's classic reports on the relationship between consumers' perceptions and expectations and consumers' economic behavior (Katona 1960, 1964; Katona, Strmpel and Zahn 1971).

Experimental Methods

In this study the data were gathered in one way only. The respondents rated their answers to each question. Thus, the experimental procedure which eventually yielded the proximities was held constant.

Data Analysis Methods

The basic design of this study was a two-way,

completely crossed factorial analysis of variance design. The researchers calculated two different proximity measures; the Pearson sample correlation, and the gamma correlation. These constituted the "proximities" for analysis. The two matrices of proximities were both analyzed by the principal components method and by non-metric multidimensional scaling.

Proximities Used

The Pearson correlation was chosen because of its high frequency of use; its restrictive assumption about the nature of relationships among variables; and its assumption about the nature of relationships among variables. For example, the vector product interpretation of the Pearson correlation in FA methods assumes intervality of measurement of both variables in a pair. The significance tests related to the Pearson correlation usually assume linear relationships, homoscedasticity and multivariate normality in the population.

The gamma correlation coefficient (Liebetrau 1983) was chosen because it makes much weaker assumptions about the nature of the variables and about the nature of their relationship. The gamma correlation coefficient assumes that the two variables are measured at the ordinal or better level, and that their relationship is weakly monotonic. The significance tests for the gamma correlation coefficient make no "strong" distributional assumptions.

There are variables for which these "weak monotonicity" assumptions are high appropriate. For example, Guttman scale items theoretically show this type of relationship, as do forgetting or learning phenomena. The gamma correlation makes much less restrictive assumptions about the nature of relationships among variables than does the Pearson correlation.

Dimensional Analysis Techniques

Principal components analysis was chosen as the "factor analysis" technique because it makes the earlier-mentioned restrictive assumptions about the nature of the input proximities, and because it is the simplest such method. Non-metric multidimensional scaling was chosen because it starts with the matrix of proximities and it assumes that the input proximities represent only ordinal information about the distances among variables.

Transformations of the Dimensional Solutions

In practice most researchers use either some form of factor analysis or non-metric multidimensional scaling, but not both. Hence, a reasonable comparison of the solutions obtained with different correlation coefficients or different dimensional analysis techniques should not involve rotation of one solution to resemble the other.

The solutions may appear to be different for non-substantive reasons. For example, the apparent differences in the patterns of the loadings revealed by the MDS and FA methods could arise because of the different means or variances of the loadings produced by FA and MDS. The different combinations of correlation coefficients and dimensional analysis methods might yield the same factors, but in different sequences. Finally, the signs of all variables might be reversed for one factor, even though it otherwise is similar under different experimental conditions. Therefore, transformations were undertaken to align (match up the factors in appropriate sequence) and rescale (transform matching factors to the same mean and variance) the solutions.

Estimation of Sampling Errors of the Transformed "Loadings"

The jackknife technique was used to estimate the sampling variances of the rotated and transformed solutions. Two subgroups of the observations were formed from the odd-numbered and even-numbered cases by sequence. The MDS and FA analyses were done separately within the two subgroups besides the entire sample. These analyses formed the basis for the jackknife t-tests for the number of factors.

Results

Number of Dimensions

The Pearson and gamma correlations among the variables are shown in Table 1. Inspection suggests that a two or three dimensional solution may be appropriate.

TABLE 1
PEARSON AND GAMMA CORRELATIONS AMONG 14 EXPECTATION AND PERCEPTION QUESTIONS[a]

Questions	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	100	34	50	60	60	28	-19	-27	-26	-27	-26	-40	-08	36
2	29	100	08	22	38	01	-04	-19	-24	-30	-15	-33	-16	42
3	44	12	100	41	34	12	-02	-12	-12	-06	-06	-22	-12	08
4	58	23	44	100	59	31	-28	-32	-27	-19	-28	-37	-14	17
5	60	30	39	67	100	30	-19	-27	-33	-29	-26	-45	-09	39
6	32	03	17	39	35	100	-38	-18	-10	-15	-26	-08	-12	12
7	-16	-03	02	-22	-21	-39	100	43	23	33	53	11	00	06
8	-27	-20	-12	-30	-30	-27	43	100	40	33	42	33	06	-16
9	-24	-22	-11	-30	-35	-18	23	40	100	51	45	46	18	-27
10	-24	-24	-09	-28	-31	-21	28	41	59	100	59	50	15	-23
11	-23	-12	-11	-33	-31	-37	54	40	46	58	100	43	02	-20
12	-42	-23	-27	-37	-43	-13	17	36	40	44	40	100	32	-45
13	-10	-13	-11	-10	-11	15	-07	10	15	12	01	28	100	-07
14	42	22	15	32	38	17	-09	-22	-22	-17	-19	-28	01	100

[a]Pearson Correlations are below the diagonal, and gamma correlations are above the diagonal.

Decimals have been omitted.

The number of dimensions was estimated by the intermax jackknife t-test for gain in simple structure. For further discussion of the intermax jackknife t-test for the number of factors see Balloun and Oumlil (1986). The jackknife t-test was done separately for each of the combinations of correlations and dimensional analyses. The results of these tests for gain in simple structure as each successive factor was added are shown in Table 2. The results show that in two of the four conditions the two factor solution is most appropriate. The two factor solutions are used in the remaining analyses.

TABLE 2
NUMBER OF DIMENSIONS BY THE INTERMAX TEST
FOR IMPROVEMENT IN SIMPLE STRUCTURE[a]

	Dimension Analysis Method			
	Principal Components		Non-Metric Multidimensional Scaling	
	Correlation		Correlation	
Number of Factors	Pearson	Gamma	Pearson	Gamma
1	0.0000	0.0000	0.0000	0.0000
2	0.8294*	0.8433*	0.9871*	0.8137*
3	0.9474*	0.9412	0.9820	0.9100*
4	0.9550	0.9568	0.9796	0.9582

[a]See Balloun and Oumlil (1986) for discussion of the jackknifed intermax t-test for the number of factors or dimensions. Entries in the table are the jackknifed values of ϕ; the intermax measure of simple structure.

*Significant increase in simple structure (ϕ) by the jackknifed t-test (df = 1; alpha = .05; one tailed).

Reproduction of the Proximities

Goodness of fit of the reproduced to the original proximities was measured by (a) the Pearson correlation between the original and reproduced correlations, and (b) the t-test for difference in means of the original and reproduced proximities. The Pearson correlation between the original and reproduced Pearson and gamma correlations when analyzed by principal components is respectively .97 and .93. When the Pearson and gamma correlations were analyzed by the MDS method, the respective correlations of the reproduced and original proximities were .94 and .96. None of the t-tests were significant (two tailed tests with alpha of .05).

Simple Structure

The data reported in Table 2 suggest no substantial differences in the degree of simple structure achieved by any combination of dimensional analysis method or correlation measure. Within the two dimensional solutions, none of the phi coefficients were significantly different from each other by the two tailed jackknife t-tests with nominal alphas of .05.

Factor Loadings, Communalities and Factor Sizes

The Intermax rotated solutions under each of the four combinations of dimensional analysis methods and correlation coefficients are shown in Table 3. Inspection of the solutions given in Table 3 reveals a high degree of similarity among the loadings under all four combinations of dimensional analysis method and correlation coefficient.

TABLE 3[a]
THE INTERMAX-ROTATED TWO DIMENSIONAL
SOLUTIONS AFTER ALIGNMENT AND SCALING

	Dimension Analysis Method							
	FA[b]				MDS[c]			
	Pearson		Gamma		Pearson		Gamma	
Question	I	II	I	II	I	II	I	II
1	77*	-20	78*	-21	58	-29	58	-29*
2	55	-12	53	-16	81*	03	81	03
3	59*	06*	60*	06	60	-10	60	-10
4	65*	-29*	66*	-29	52	-34	52*	-34
5	75*	-25	75	-26	58*	-29	58	-29
6	14	-41	19	-39	30	-41	30	-41*
7	09	77*	06	74*	11	77*	11*	77*
8	-19	64*	-20*	64*	-13	74*	-13	74*
9	-32	58*	-32*	59	-37*	54*	-37*	54
10	-23	69*	-23	70	-32*	57*	-32*	57
11	-11	83	-11	83	-13*	75*	-13	75*
12	-60	40	-60	42	-40*	52*	-40*	52
13	-30	01	-30	06	-49	14	-49	14
14	58	-11	56	-13	72	-03	72	-03

*Significantly different from zero by the two tailed t-test with alpha of .05.

[a]Decimals have been omitted.

[b]Principal Components method

[c]Non-metric multidimensional scaling

Discussion

Differences Among Methods and Correlation Coefficients

The number of factors detected differed when different combinations of correlation coefficients or dimensional analyses were used. Possibly some other general criteria for the number of factors may reveal greater similarity in the number of factors found for different dimensional analysis methods.

The two dimensional factor structures found do not differ when the dimensional analysis method or the correlation coefficient is different. This is somewhat counter-intuitive since, as mentioned earlier in this paper, the rating scale data involved in this study were ordinal, the correlation coefficients make substantially different assumptions about the nature of relationships among pairs of variables, and the FA and MDS methods make quite different assumptions about the input correlations.

Implications for Future Research

Research on the comparative effectiveness of different dimensional analysis methods is an important but neglected topic. One of the most important contributions of this paper is the introduction of improved dependent variables for measuring the effectiveness of dimensional analyses. The theoretical criteria and specific statistical indices proposed in this paper for comparing the quality of different dimensional solutions are quite general, and hold great promise. For example, the intermax criteria for the number of factors can be applied to the results of any dimensional analysis method.

Furthermore, this paper introduces the idea of considering the choices of proximity measure, experimental methods, or dimensional analysis method as independent variables. In the future,

researchers will be able to compare the effects of quite diverse independent variables on the effectiveness of dimensional analyses. The methods proposed in this paper allow the researcher to directly assess the "goodness of fit" of the sample solutions obtained under a variety of conditions to known population parameters.

The empirical results of this introductory study are necessarily limited. We compared two different correlations and two different specific types of dimensional analysis techniques in one sample. The results are provocative because, within the limitations of the study, the type of correlation and the type of dimensional analysis seem to make no difference in the factor structure revealed.

Future research could broaden the range of (a) experimental conditions, (b) proximities, and (c) dimensional analysis techniques applied to the data. The accuracy of estimates of various population parameters should be estimated under a variety of conditions. The effectiveness of different dimensional analysis algorithms should be compared over a representative and larger sample of data sets.

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Available on request.

SECOND ORDER CONFIRMATORY FACTOR ANALYSIS: AN EXAMPLE

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Abstract

Second order confirmatory factor analysis is a technique for interpreting scales as multi-level as well as multidimensional by bringing various dimensions under the rubric of a common higher level factor. This paper illustrates this technique with a second order confirmatory factor analysis of the Self-Consciousness Scale (Fenigstein, Scheier and Buss 1975) and shows the implications for marketing researchers and marketing practitioners.

Introduction

The Self-Consciousness Scale (SCS) (Fenigstein, Scheier and Buss 1975) has been applied in social psychology (Carver and Scheier 1981) and consumer behavior (Burnkrant and Page 1981) along the original dimensions suggested by its creators. These dimensions as defined by Fenigstein et al. include: (1) private self-consciousness which concerns the degree to an individual focuses on his or her own inner states of mind, e.g., "I reflect about myself a lot" (2) public self-consciousness which concerns the degree to which individuals focus on themselves as social objects with an effect on others, e.g., "I'm concerned about the way I present myself" and (3) social anxiety which reflects the degree to which an individual is uncomfortable in the presence of others, e.g., I get embarrassed very easily." Burnkrant and Page (1984), using confirmatory factor analysis reported that there were four dimensions to the scale. They split private self-consciousness into two dimensions: "self-reflectiveness" (the disposition to think about one's own self) and "internal state awareness" (awareness of inner feelings). Gould (1986), also using confirmatory factor analysis, found that a modified form of the three dimensions better fit the data than the four dimensions of Burnkrant and Page.

However, the overall construct validity of the SCS has not been tested. This question is important because the the scale may be applied in a unified manner with one overall SCS score as opposed to three separate subscale score if it has overall construct validity. In addition, if the three dimensions do not load on one common factor, then the name SCS would be a misnomer since the three factors would not be measuring all be measuring some aspect of self-consciousness. This study investigates the possible presence of a common second order factor in the SCS by utilizing a second order confirmatory factor analysis. The study's main purpose is to demonstrate the use of this type of analysis and to suggest how market researchers and marketing practitioners might use it.

Methodology

Sample

The sample consisted of 169 adults (77 males and 92 females) in a large urban area in the Northeastern U.S. Their ages ranged from 21 to 75 with a mean age of 34. The data was collected by students in marketing classes for course credit. Verification of the questionnaires was obtained by telephoning about 15% of the subjects from a list handed in separately from the questionnaires.

Procedure

Data analysis was performed in two parts, using LISREL VI (Joreskog and Sorbom 1984). In the first part, confirmatory factor analysis was performed on each of the SCS subscales to provide for the internal consistency of each. In the second part of the analysis, a second order confirmatory factor model was tested to see if the three subscale/factors loaded on the common self-consciousness factor.

Results

The results for the first part of the analysis (not shown here in order to save space but available from the author) found three consistent subscales although a number of unreliable items were dropped. The remaining items are shown in the first order factor section of Table 1.

The results for the second part of the analysis, as shown in Table 1, revealed that there is a one common second order factor which may be designated "Self-Consciousness". The goodness of fit as measured by the

Chi-Square was significant which would indicate a lack of fit. However, the Chi-Square is subject to sample size sensitivity for which Carmines and McIver (1981) have suggested another statistic- the relative likelihood ratio which is the ratio between the Chi-Square its degrees of freedom. In the present case, the ratio of less than 2 to 1 indicates an acceptable fit. Further support is provided by the Goodness of Fit Index of .912. Finally, each of the gammas which link the first order factors to the second order factor were significant ($t > 2.00$).

TABLE 1
STANDARDIZED MAXIMUM LIKELIHOOD ESTIMATES

Factor Loadings on the Second Order Factor (Gamma):

Private Self-consciousness (PSC)	.821
Public Self-Consciousness (PU)	.852
Social Anxiety (S)	.529

Squared Multiple Correlations For Structural Equations:

Private Self-consciousness	.609
Public Self-Consciousness	.594
Social Anxiety	.311

Factor Loadings and Squared Multiple Correlations (SMC) for the First Order Factors

	Lambda	SMC
1. *I'm always trying to figure myself out. (PSC)	.663	.440
5. I reflect about myself a lot. (PSC)	.668	.446
7. I'm often the subject of my own fantasies. (PSC)	.551	.303
15. I'm constantly examining my own motives. (PSC)	.648	.428
6. I'm concerned about the way I present myself.(PU)	.649	.421
11. I'm self-conscious about the way I look. (PU)	.696	.485
14. I usually worry about making a good impression. (PU)	.791	.625
19. I'm concerned about what other people think of me. (PU)	.719	.517
4. It takes me time to overcome my shyness in new situations. (S)	.625	.391
8. I have trouble working when someone is watching me. (S)	.587	.345
10. I get embarrassed very easily. (S)	.721	.528
23. Large groups make me nervous. (S)	.698	.487

Total Coefficient of Determination for Structural Equations = .836
Chi-Square = 90.42 Df = 51 Prob. = .001
Relative Likelihood Ratio = 1.77
Goodness of Fit Index = .912
Root Mean Square Residual = .061

* Numbers in original SCS scale.

DISCUSSION AND IMPLICATIONS

The results of the second order factor analysis confirm the construct validity of the SCS as a unitary measure of self-consciousness. What does this mean to the research practitioner or to the user of marketing research? First, it allows for the use of an overall score of SCS or any other scale where a second order factor analysis is confirmed. Overall scores provide an additional interpretive tool which may reveal information not otherwise discernible from analyzing the first order factors alone. In the case of the SCS, for example, use of an overall SCS score would allow for analysis of generalized self-focus irrespective of whether it came from higher scores on one or the other of the first order dimensions. On the other hand, it might be interesting to look at the varying first order scores across individuals who had the same or similar second order scores. In other words, the overall SCS score may be due to higher private self-consciousness for one individual and higher public self-consciousness for another individual. On the whole such analysis results in more information and a broader range of interpretive power.

In addition, in many marketing problems, there are often many highly correlated variables which result in multicollinearity problems in many forms of analysis as well as difficulty in providing meaningful structural or holistic interpretations. Second order factor analysis (or in some cases even higher order factor analysis) by reducing the number of dimensions for some parts of the analysis/interpretive process allows for global interpretation, on the one hand, while building a hierarchical structure which retains the information provided in the root lower order factors. Such a form of analysis might not only be useful in interpreting and applying scales but also in segmentation analysis where common higher order segments may contain

smaller first order segments. Other possible uses of this technique might be in the areas of product/brand classification where various levels of product categories might be determined and in various forms of attribute nalysis where higher, more global and lower, more particular or specific orders of attributes may be discerned. Only experience over time will tell how useful higher order confirmatory factor analysis may be to marketing researchers and practitioners; this paper has provided one small illustration as a way to trigger research in this area.

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WHERE ARE DEPENDENT CHI-SQUARED TESTS IN MARKET RESEARCH TEXTS?

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Abstract

Multiple answers per respondent are not properly analyzed with chi-squared contingency-table analysis because the normal tabled critical values of the chi-squared statistic for a specified alpha level no longer apply. Current marketing research texts ignore these dependent analysis situations frequently addressed by student researchers. An appropriate testing procedure is to scale down the individual chi-squared test significance levels and use specialized tables to obtain critical values that control the probability error rate. An approximation procedure is provided that can be used in th classroom. Similar procedures could be easily discussed in introductory research texts.

Introduction

In one form or another, the chi-squared tests is one of the most widely used tests in marketing research, and the serious researcher can be well advised to become familiar with its requirements (Churchill, 1983). The most common forms of the chi-squared tests found in the training texts of the market researcher are the chi-squared test of independence and the chi-square goodness of fit tests (see **table 1**). Illustrations and descriptions of the application of the chi squared tests in introductory resource texts almost universally describe the implicit situations that only one chi-squared test was planned on the data from a market research survey.

Experience tells us that often more than one chi-squared test is planned on the data from a single survey and the tests are not independent. It follows that when two contingency tables are formed by using multiple responses from the same individuals, the two chi-square tests that could be made, one for each table, cannot be independent. Therefore, multiple answers per respondent are not properly analyzed with chi-squared contingency-table analysis because the normal tabled critical values of the chi-squared statistic for a specified alpha level no longer apply (Churchill, 1983, p. 591). However, multiple answers may be analyzed when more than one cross-tabulation is conducted with the same data when appropriate critical values of the chi-squared statistic are employed. Special tables for selected percentiles can be found in Dayton and Schafer (1973). However, complications posed by practical applications often require the necessity of computing critical values at "odd ball" percentiles not contained in these tables.

Therefore the purpose of this presentation is to increase the awareness among market research educators of the lack of coverage of appropriate procedures for analyzing dependent chi-squared tests in introductory text material. This lack of coverage requires the educator to provide appropriate procedures for the student to use when two or more contingency table analyses are done from multiple responses of the same individuals responding to a market research survey. A secondary purpose of this presentation is to illustrate a procedure, and an approximation to the procedure, that can be used when multiple dependent chi-squared analysis are to be made.

Background: Controlling the Probability Error Rate

If, in the design, there are n chi-squared contingency analyses to be conducted, and if n is greater than or equal to 2, this collection of tests is called a family. Let NIF be the number of Type I error misstatements in the n tests of the family. The probability error rate defined to be P [NIF > 0], is most frequently controlled by multiple comparison procedures. The researcher controls the probability error rate by choosing critical values based on individual significance levels, $\alpha_1, \ldots, \alpha_n$, for each of the n tests so that P [NIF > 0] $\leq \alpha$. This means that if a researcher does a number of independent research projects each having a family of chi-squared tests then it is expected that in the long run 100 x $(1-\alpha)$ percent of the research projects will make no Type I misstatements and in α x (100) percent of the projects one or more Type I misstatemetns will be made.

A standard procedure in these simultaneous inference tests of significance is to control the probability error rate under the null hypothesis, and then see what can be done about controlling error rates and power under the alternatives (Miller, 1981).

In general, P [NIF > 0] cannot be determined without a knowledge of the joint probability of the incorrectnesss of the n tests in the family. However bounds can be used for the independence and unspecified dependence situations. In the case of independence, there is an exact relation given by standard statistical computations:

$$P\,[NIF > 0] = 1 - \sum_{i=1}^{n} (1-\alpha_i). \qquad (1)$$

This states that the probability that at least
In the case of unspecified dependence the

following Bonferroni inequality, as stated in Miller (1981), holds:

$$P\ [NIF > 0] \leq \alpha_1 + \alpha_2 + \ldots + \alpha_n. \qquad (2)$$

This provides an upper bound on the probability error rate which can be determined from the separate behavior of members' significance levels in the family. It explicitly allows individual members' chi-squared tests to have individual significance levels if desired. For example, if ten individual chi-squared tests at the .05 level were carried out the bound on the probability error rate would be .5, (P [NIF] > 0] $\leq$ .5). If five of the ten were at the .01 level and the reamining were at the .03 level, then P [NIF > 0] would be less than or equal to .20. The Bonferroni inequality also states that if we have ten dependent chi-squared tests to perform and we wish to have our probability error rate controlled to be .05 or less, then each individual test could be made equally at the .005 level, (.05/10), to maintain control.

One concludes from these statements that when more than one chi-squared statistical tests are performed from multiple answers per respondent of a marketing research study, one simply scales down the individual significance levels (α_1, α_2, ..., α_n) in order to control the probability error rate where $\alpha = \alpha_1 + \ldots + \alpha_n$ (Dayton and Schafer, 1973; Miller, 1981).

When the probability error rate is not controlled, there is real danger of overstating results. A good practice would be to compute the Bonferroni bound, equation (2), on the probability error rate prior to testing to determine if it is satisfactory. For example is .05 or .50 (or 1.0 if each seaparate test is conducted at the .10 significance level) satisfactory for ten tests in a family?

Current Research Training Practice

Although procedures have been in place to scale down the individual sifnificane levels, it is seldom taught to students or mentioned in textbooks and the literature (Miller, 1983). A convenience sample of current marketing research texts support this statement. In Table 1 it can be seen that all 14 address the chi-squared test form of Goodness of Fit and/or Independence. Seven out of fourteen address the related sample dependence issues of repeated measures on dichotomous variables and/or matched pairs contingency table analysis (McNemar, 1947; Cochran, 1950). Further, discussion on McNemar's test and Cochran's Q test can be found in Lehmann (1975), Siegel (1956), and the texts in **Table 1** with check marks in the Related Samples column. Both tests require a different computational procedure than the one for independence.

Only one of the fourteen texts discussed the multiple test multiple response dependent chi-square testing procedure. This text (Churchill, 1983) provides in a footnote a reference where appropriate analyses procedures are discussed and where some specialized tables can be found. Could it be that the omission of appropriate procedures from introductory market research texts is because of the inconvenience of placing extensive specialized tables like tht of Dayton and Schafer (1973) in them? If so, a simple percetile approximation procedure using a hand calculator could potentially encourage the placement in tese texts of procedures for dependent chi-squared contingency table analyuses. An example of the approximation procedure follows.

TABLE 1

CHI-SQUARE COVERAGE IN MARKETING RESEARCH TEXTS

	Goodness of Fit and/or Independence	Ralated Samples McNemar's & Cochran's Q	Bonferroni Dependent Samples
Aaker and Day (1983)	✓		
Barker (1983)	✓		
Boyd, Westfall and Stasch (1977)	✓		
Churchill (1983)	✓	✓	✓
Dodge, Fullerton and Rink (1982)	✓	✓	
Green and Tull (1978)	✓		
Hartley, Prough and Flaschner (1983)	✓	✓	
Kinnear and Taylor (1983)	✓		
Kress (1982)	✓	✓	
Luck, Wales, Taylor and Rubin (1982)	✓	✓	
Nelson (1982)	✓	✓	
Peterson (1982)	✓		
Tull and Hawkins (1984)	✓	✓	
Zikmund (1982)	✓		

Calculating Critical Values

When controlling for the probability error rate over a family of n tests, the researcher may need to calculate many "odd ball" percentages. For example, if there are six-chi-squared tests in the family with 10 degrees of freedom in each and an overall probability error rate of .05, then if each test has equal significance levels, we would need the chi-squared vaue at the 99.16667 percentile with 10 degrees of freedom. [1 -.05/6) = (1 -.0083333) = .9916667]. Most textbook tables give only a few percentiles of the chi-square distribution and usually not the 99.1667th. However, they usually five the ordinates of the normal curve up to two decimal places. Thus the following approximation from Johnson and Kotz (1970, page 176) of:

$$\chi^2_{\nu,\varepsilon} = \nu(z_\varepsilon \sqrt{2/9\nu} + 1 - 2/9\nu)^3 \qquad (3)$$

can be used where z_ε is the ordinate of the upper $1-\varepsilon$ percentile of the standard normal curve and ν is the degrees of freedom from the individual chi-squared contingency table. $\chi^2_{\nu,\varepsilon}$ is the critical value for an individual test from the number of the family where $\alpha_I = \varepsilon$. The value of $\chi^2(10,.0083333)$ is 23.7, [23.7 = 10 $(2.39\sqrt{2/90} + 1 - 2/90)^3$], upon taking the same number of significant positions in $z_\varepsilon = 2.39$. Thus the six chi-squared tests would use the critical value 23.7 as an approximation to the tabled value of 23.736 from Dayton and Schafer (1973).

Illustration

The analysis of ten chi-squared tests from a single survey will be used as the basis of an illustration. The degrees of freedom for each individual test are found in column (1) of **Table 2.** Abritrary assignments of individual test significance levels are given in column (2). Thus the spectrum of different individual significant levels crossed with either the same or different significant levels of individual tests are possible. From colums (2) of **Table 2** it is seen that the probability error rate , P[NIF>0], is controlled to be less than or equal to .10 by summation of the 10 individual test significance levels. Column (4) **table 2** gives the critical value of the individual tests computed by equation (3) and column (5) gives the values from the tables in Dayton and Schaefer (1973). Since the tables have overall significance levels of .01 and .05 only, subsets of the individual tests had to be used that totaled .01 or .05 and the instructions from table use in Dayton and Schafer (1973) carefully followed.

From this illustration it is clear that the reseracher can weight the realtive importance of individual tests by assignment of individia; test significance levels. These significance levels can be different for tests with identical degrees of freedom. In the event that tabled values are not available and the approximatin is used, the results in **Table 2** illustrate an agreement to at least two significant figures between the approximation procedure, colums (4), and the specialized table use, column (5). If each individual test were conducted at the .10 significance level, the probability error rate would be 1.0 and thus not controlled.

Conclusion

Current marketing research texts ignore the frequent dependent analysis situations of two or more contingency table analses done from multiple responses of the same individuals. However, appropriate analysis procedure are available tht scale done the indiidual significance levels of each separate test in

TABLE 2

Illustration and Comparison of Single Survey Critical Values

Degrees of freedom per individual test (1)	Individual test significance level (2)	Number of tests to be conducted (3)	Approximate critical value via equation (3) (4)	Tabled critical value Dayton and Schafer (1973) (5)
1	.0125	1	6.16	6.239
2	.0125	1	8.75	8.764
3	.0025	1	14.4	14.321
3	.02	1	9.80	9.837
4	.0125	1	12.7	12.762
4	.02	1	11.6	11.668
6	.0025	2	20.4	20.249
8	.0025	1	23.9	23.774
11	.0125	1	24.0	24.056

order to control the probability error rate. These procedures could be included in the texts without the need of extensive specialized tables if an approximation to chi-squared percetiles could be used.

Educators may need to provide appropriate procedures for the student to use when faced with this frequently occuring analysis need where the probability error rate is to be controlled. Increased awareness of appropriate procedures and their approximations for dependent chi-squared testing analyses in market research surveys should improve the appearance record of appropriate analysis procedures in basic training tests.

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RESEARCH IN PROGRESS

INCOME EFFECT ON CONSUMPTION BEHAVIOR

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ABSTRACT

As a response to a changing socioeconomic environment, consumers engage in appropriate adaptive behaviors. This paper identifies a typology of such inflation induced adaptive behaviors in relation to food consumption. Utilizing factor analysis, six types of adaptive behaviors were identified. To add to the description of these six behaviors, a cluster analysis of the factor scores was conducted. Significant variation in the six adaptive behaviors was found when related to consumers' income levels. Implications of the research as well as methodological issues are discussed.

INTRODUCTION

Consumer behavior is concerned with the acquisition, consumption, and disposition of goods, services, and ideas by decision making units. The process of acquisition, consumption, and disposition is highly complex and is mainly determined by forces interacting in the environment within which the behavior is to take place. One such force is inflation. Since 1973, inflation coupled with scarcities has caused negative feelings of pessimism and uncertainty. What this amounts to is that inflation causes consumers to change their consumption patterns in order to cope with shrinking purchasing power. Consumers respond by delaying purchases that can be delayed (e.g., consumer durables), substituting less expensive items normally purchased (e.g., cheaper cuts of meat), or buying less whenever possible.

There is ample observational evidence to indicate that consumers have changed their buying habits during periods of adverse economic times. Over the past several years, living costs have been rising while the real per capita disposable income has been declining. Theoretically, the consumer can maintain his customary spending habits if a rise in income matches a rise in prices. But in the real world, this is not so, therefore, the consumers must adapt their consumption behaviors to maintain their standards of living.

Thus, an understanding of the consumers adaptive behavior will help marketing management to better understand the changes taking place within the environment. This will provide insights as to how to adjust and adapt their marketing strategies and practices to the changing consumer behavior patterns.

ADAPTIVE CONSUMER BEHAVIOR

The concept of adaptive consumer behavior deals with the ways by which consumers attempt to maintain their accustomed standard of living to an adversely changing economic environment. Changes in the economic environment cause a great deal of diversity of reaction. People constantly adjust to their own individual situations. But when there is a high response is likely to occur. The theory of social change suggest that there is usually a lag between an environmental change and the corresponding consumer adaptive response. Consumers will generally continue their usual levels of consumption. Eventually the behavior of individual consumers will need to change in order to adapt to this new environment. This adaptive behavior is a gradual process. Initially, changes encompass the behavior modification that will least affect the consumers' accustomed life style. The consumers may increase their borrowing and/or reduce their savings before resorting to more permanent changes that will have a direct impact on their life style such as modifying their consumption behavior. These adaptive behavioral actions seem to be taking place in adverse economic environment in the recent past.

The aim of this research is threefold. First, the types of adaptive behaviors exhibited by the consumers in relation to food consumption are investigated and identified. Adaptive behaviors in relation to food consumption were chosen primarily because food accounts for a significant proportion of the average family's budget. Furthermore, it is assumed that since shopping for food is a frequent event, consumers are more likely to exhibit adaptive behaviors. Second, an investigation is carried out to determine whether adaptive food consumption behaviors differ across socio-demographic and food buying characteristics. Finally, the number and sizes of distinct consumer segments within each factor is identified via a clustering technique.

FACTORS INFLUENCING ADOLESCENT SHOPLIFTING

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Introduction

In 1981, customer shoplifting was estimated at over $16 billion annually (Forbes 1981) and annual retail losses were on the rise (Conner 1980) intensifying the need to handle this problem. Because of these figures, retailers are interested in not only being able to predict who will shoplift, but also in effectively preventing shoplifting.

In the past, research has focused primarily on descriptive and attitudinal data about shoplifters (Kraut 1976; Gold 1970; El-Dirghami 1974) that were obtained from apprehended shoplifters only. This procedure presented a significant bias. However, this research will sample adolescents in general, which will contain both apprehended and non-apprehended shoplifters.

Literature Review

Psychologist David Elkind suggests that adolescents with family or peer conflict are more likely to demonstrate rowdy or aberrent behavior. Since Shoplifting is a deviant behavior, it seems reasonable that:

H1: Shoplifters will have more reported family and peer conflict than non-shoplifters

Gender differences could also play an important role in the motivation for shoplifting. Family influences play a more dominant role for girls than boys (Gecas et al. 1974; Horrocks and Weinberg 1970). Thus,

H2: Female shoplifters will have more reported family conflict than male shoplifters.

Lawrence Kohlberg suggests that adolescents move through stages of moral development (Kohlberg 1970) with the final stages being signified by showing respect for authority and being aware of "right" behavior. Thus, it seems reasonable that:

H3: Shoplifters will be more likely to have a positive attitude toward shoplifters and shoplifting than non-shoplifters.

Shoplifters because of their already partial deviant behavior can also be expected to take part in other non-acceptable behaviors. Thus,

H4: Shoplifters will be more likely than non-shoplifters to engage in other non-acceptable behavior.

Method

A survey was conducted of middle and high school students in a large southwestern metropolitan area. Questionnaires were administered within regularly scheduled classrooms to approximately 150 students, ages 11 to 19. Trained graduate students visited four schools and administered the anonymous questionnaires to the students while trying to minimize the threat involved. Of the 143 questionnaires used for the analyses, 57% were male and 43% were female. Approximately 37% had shoplifted at least one item in the past year. Shoplifting Behavior was measured by asking respondents how often they had taken a number of specified items without paying in the past year. Family conflict, peer conflict, attitude toward shoplifters and shoplifting and other non-acceptable behaviors were all multi-item summed scales based on the respondents agreement with the statements. For more information on the specific items, please contact the authors.

Results

T-Tests were used to test the hypotheses comparing the appropriate groups. Hypothesis one was not supported, the means between shoplifters and non-shoplifters were not significantly different at $p<.05$.

Hypothesis 2 was only marginally supported at $p<.15$. Female shoplifters perceived more family conflict than males ($\bar{X}$ (females) = 10.2; $\bar{X}$ (males) = 9.0) but the difference was not significant at $p<.05$.

Hypothesis 3 stated that shoplifters would have more positive attitudes toward other shoplifters and shoplifting than non-shoplifters. This hypothesis was supported for both perceptions of shoplifters ($T=3.27$, $p<.005$) and perceptions of shoplifting as a crime ($T=2.31$, $p<.01$).

Hypothesis 4 stated that shoplifters will also be more likely to engage in other non-acceptable behavior. This hypothesis was supported at $p<.001$ ($T=3.35$).

Although all of the stated hypotheses were in the predicted direction, only a few were significant based on the limited sample size used.

This study examined perceived differences among shoplifters and non-shoplifters and thus can not be used to imply causation here. Attitudes toward other shoplifters and toward the crime of shoplifting are more positive for shoplifters. This indicates that shoplifters may not believe that shoplifting is a crime. This suggests that consumer education programs targeted at adolescents may be a viable way to help curtail this problem.

(References may be obtained from the authors).

INFLUENCE OF STORE IMAGE ON TASTE PERCEPTIONS: A QDA APPROACH

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Abstract

The Quantitative Descriptive Analysis (QDA) technique is being suggested in this study as a valuable method in measuring consumer attribute perception of products. Unlike perceptual mapping, QDA allows visual comparisons of brand alternatives, particularly if these alternatives are characterized by a large number of salient attributes. The study applies the technique to two "brands" of tomato juice, a national brand and a generic "brand." Results, in the form of a graphical presentation, vividly highlight the differences in attribute perceptions.

The QDA Technique

The QDA is a multidimensional scaling technique which permits comparison between a number of brand alternatives by providing individual profiles of each. QDA starts by asking respondents to identify product attributes. Subjects sample the product and record their responses regarding its perceived properties on an interval scale. The results are then transformed into numbers using an overlay.

For presentation, attribute means are plotted on a polar coordinate scale, where the intensity of each attribute is reflected by its mean's distance from the intersection. A profile for each product results when the mean points on the polar axes are connected. Resulting profiles for a number of competing brands or for different versions of the same brand can be compared by superimposing these resulting profiles on each other. Open spaces between profile brands represent perceived differences. To show how this method can be effective in measuring attribute perceptions, an experiment involving two "brands" of tomato juice was undertaken.

Attribute Perceptions of Generics

A convenience sample of 100 university undergraduates was chosen to evaluate selected attributes of tomato juice from Jewel and Aldi. A before-and-after experimental design was used. After being presented with appropriate descriptive words, subjects were asked to taste samples of tomato juice and to quantify and record sensory properties on an interval scale using a QDA score sheet. Eight attributes were measured. The data was compiled and analyzed to determine perceptual differences resulting from store image, and these differences were tested at the .05 level of significance using the Z test. The experiment was divided into two stages: (1) a "blind" taste test, where "brands" were concealed, and (2) an "open" taste test, where "brands" were revealed.

Results and Analysis

Two sets of means for the eight attributes were obtained and plotted on a polar coordinate scale to produce two profiles, one for the "blind" test (**Figure 1**) and the other for the "open" test (**Figure 2**). Visual examination of the "blind" taste test profiles for Jewel's and Aldi's generic tomato juice shows them to be very similar, indicating that subjects could not sufficiently discriminate between the samples on the attribute dimensions being tested. When "brand" identities were revealed, however, significant differences between the two profiles emerged. The Z test indicated statistically different mean values between the two "brands."

Conclusion

The QDA technique allowed a good visual comparison of the two tomato juice "brands," in spite of the large number of salient attributes on which comparisons were made. Results, in the form of a graphical presentation, made it possible to highlight the differences in attribute perceptions.

FIGURE 1
PROFILES RESULTING FROM "BLIND" TASTE TEST

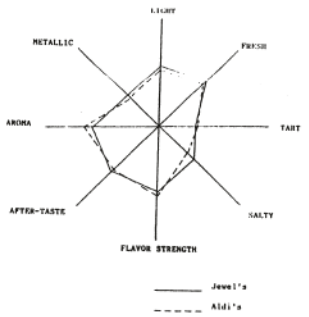
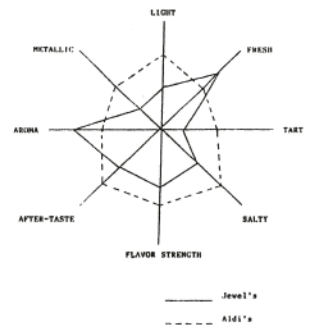


FIGURE 2
PROFILES RESULTING FROM "OPEN" TASTE TEST



AN ANALYTICAL COMPARISON OF SINGLE-STAGE AND TWO-STAGE MODELS OF CONSUMER BEHAVIOR

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Abstract

This paper addresses an interdisciplinary issue: the use of economic models of consumer behavior in the field of marketing. The main purpose of this research is to examine the implications of modelling consumer behavior utilizing two-stage utility models as against conventional single-stage utility models. The condition under which both types of models yeild the same observable behavioral pattern is studied. Based on this condition, it is then argued that two-stage models provide a better framework for explaining empirical findings in marketing.

Introduction

This paper examines the analytical implications of modelling consumer behavior utilizing two-stage utility models as against conventional single-stage models. Two of the more popular two-stage models that have found wide application in marketing are the ones developed by Becker (1965) and Lancaster (1966). Verma (1980) derives the sales-advertising structural relationship using the household production model. Prabhaker and Kamakura (1983) use this model to derive the characteristics of deal-prone consumers. Hauser and Simmie (1981) indicate the use of Lancaster's model in product positioning. Ratchford (1975) relates the scaling models commonly used in marketing to Lancaster's model. The use of two-stage models of consumer behavior is clearly gaining in popularity. Thus it is essential to appreciate the differences and similarities between the single-stage and the two-stage models.

Theory

In the two-stage models consumers are assumed to go through two stages of behavior. For example in the household production model (Becker, 1965), consumers are assumed to maximize utility over commodities. This is the first stage of behavior and is called the consumption process. The second stage of behavior is the production process wherein commodity outputs are produced, using market goods and household time as inputs, at minimum cost. Two-stage approaches to consumer behavior have focused on the fact that the variety of products and brands available in the market may not directly yield consumer utility. However, these market products are used as inputs in a 'transformation' process, that gives rise to certain utility generating entities. For example, a certain brand of toothpaste could be used because its cavity-fighting property yields consumer utility. This illustrates the Lancaster (1966) approach where product attributes are viewed as being direct sources of consumer satisfaction. On the other hand, the household production approach suggested by Becker (1965) is based on the notion that market goods and household time are combined by the consumer to produce certain commodities from which utility is derived. As an illustration, the act of viewing a movie is a commodity that is produced by the consumer by combining his own time, purchasing the admission ticket, transportation from and to the movie theatre, etc.

Issues

It can be shown that, from an analytical perspective, a consumer's purchase behavior is identical whether he adopts a two-stage or single-stage model of utility maximization. It is therefore impossible to infer a consumer's utility maximization process by just observing his purchase behavior. Second, two-stage models provide an excellent framework for the incorporation of prior information. This is directly due to the greater number of parameters entering the two-stage framework. It is therefore possible to better explain consumer purchase-behavior using these models. Third, the Lancaster model of consumer behavior will always yield the same predicted purchase behavior as the traditional utility model, for a given consumer.

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THE DIMENSIONS OF CONSUMPTION NEEDS: A CONCEPTUALIZATION

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Abstract

Needs are a central concept for understanding individuals in their role as a consumer. Need structures from many sources have been applied to the act of consumption. Based on a synthesis of these structures, a three-dimensional model of consumption needs is proposed. This model not only serves as a conceptual tool but also has the potential of serving as a means of measuring the need satisfying ability of different products.

The Three Dimensions of Consumption Needs

A need is a lack, a deficiency (real or perceived). The terms "needs" and "motives" are generally used interchangeably which identifies the additional aspect of needs of providing an energizing (causal) and a directing (toward resolution) dimension to behavior. A general definition of consumption is the expenditure, barter or other such means of direct exchange for acquiring products, for individual use and/or disposition. Consumption Needs can thus be defined as: those deficiencies/lacks that produce problem recognition (and energize and direct behavior), which can be alleviated, solved or satisfied through the use and/or disposition of products obtained via expenditure, barter or other direct exchange means.

General need structures proposed by scholars in other disciplines (e.g. Murray 1938; Maslow 1970) have been adopted by students of consumption needs with a few consumer research generated structures advanced (e.g. Fennel 1975; Hanna 1980). By examining these various need structures fundamental underlying dimensions of needs become evident. These dimensions, utilizing very broad indusive terms for categories, are Physical-Functional Needs, Psycho-Social Needs, and Situational Needs.

The Physical-Functional (P-F) Dimension of needs captures all the tangible needs. These needs are of a basic, physiological, and material nature. Basic existence needs, the intended functional/-utilitarian aspects of products and the results of the use of products would be found here.

The Psycho-Social (P-S) Dimension of needs captures those needs that are intangible. This intangibility manifests itself in the needs' general character (e.g. love, autonomy, etc.) and also in the needs' link to a product. That is, the link between the need satisfying capability of a product is relatively intangible when this need is for love. All the needs of psychological or sociological nature are found in this category. Here it is not the functional/utilitarian aspect of a product that is generally applied to satisfying needs but its meaning.

The Situational (S) Dimension of needs captures the transitoriness and situational variability present in the other two dimensions. An item may provide need satisfying ability in certain situations and at certain times. This dimension considers the number of situations across which the other dimensions of needs may occur.

A Conceptual and Analytical Tool

As a conceptual and analytical tool the three dimensions of consumption needs can be viewed as a cubic model. A consumer can be thought of as evaluating competing items for their overall need satisfying ability across the three need dimensions. The overall need satisfying capacity of items can be compared by examining the overall volume of consumption needs satisfied by each item. Satisfied volume of needs is found by evaluating the interaction/applicability of each dimension of needs across each of the other two dimensions. Items at various levels of competition (e.g. brand level, product class level, etc.) can be compared in this manner both within or between levels.

Both the presence (i.e. activation) and salience (i.e. importance) of consumption needs can be conceptualized via this model. Presence would be determined by whether a need is satisfied by a particular item. Salience would be determined by the number of components on the other two dimensions across which a need is satisfied. For comparison of less involving, routine, items a reduced model consisting of only the P-F and P-S dimensions may be used. For more high involvement items that require more extensive evaluation the complete model, including the S dimension, would reflect the consumer's assessment process.

Various ways can be proposed for analyzing consumption needs using the three-dimensional model. For instance, to begin analysis the components of the P-F dimension would be ascertained by asking subjects to respond to questions regarding the physical needs satisfied and functional aspects of the item(s) under examination. In a like manner, the components of the P-S dimension would be obtained. For low involvement evaluations only these two dimensions need be examined. An approach for completing the analysis in this case would be to have subjects assess, on a rating scale, each P-F need as to its likelihood of concurrently satisfying each P-S need. This score would be a representation of the volume of needs satisfied by that item.

Items for which the consumer engages in extensive evaluation would require completion of the procedure noted above plus the additional step of analyzing the above two dimensions across the S dimension. Subjects could rate each component of the P-F and P-S dimension regarding the number of situations in which each is likely to be satisfied (e.g. very many to very few). Alternatively, the primary two dimensions could be evaluated as to the likelihood of being satisfied in each of a finite list of situations. Again the summed score here would represent the volume of needs satisfied by an item.

(References available on request.)

THE FAMILY LIFE CYCLE: STILL A USEFUL CONCEPT IN MARKETING?

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Abstract

The Family Life Cycle (FLC) concept was developed in the 1950s by sociologists and has been used in marketing in studies of consumer behavior and segmentation. This paper uses the Public Use Microdata Sample (PUMS) of the 1980 Census of Population and Housing to explore the extent to which the FLC model reflects current social realities. The study concludes that as important sectors of society are not included in the model, its usefulness in todays world is doubtful. The Household, rather than the family, is suggested as the preferred unit of analysis.

The Family Life Cycle Concept

In 1957 Lansing and Kish introduced the concept of the Family Life Cycle (FLC) to allow classification of families into significant, mutually exclusive groups that could be used to analyze their behavior and needs over time. At the center of the concept is the family and the role the individual plays in it. Just as the individual starts with birth, goes through distinct stages of development - childhood, adolescent,adulthood, maturity, death - so does the family. The Family Life Cycle assumes that the family is a universal unit and all members of society participate in it. Marketers adapted the concept to explain family consumption and market segmentation.

A review of current literature suggests that forms other then the traditional nuclear family have evolved. These are not included in the FLC model. Thus, a new typology is needed to describe the socioeconomic forces, one that will incorporate the new social forms and not be totally dependent on the family as its focus.

Study Design

In order to fit the Family Life Cycle model to data describing the population of the United States the study uses the 1980 Census Public Use Microdata Sample (PUMS). This data source has all the advantages of the Census of Population - the universality of coverage and the accuracy of Census Bureau operations - without the limitation imposed by the Bureau of the Census prepared tables.

The Public Use Microdata Sample is a sample of questionnaires obtained in the course of conducting the 1980 Census of Population and Housing.The sampling unit in the 1980 Census was the housing unit. Information on each housing unit is contained in a 193 character Household record. For each person within the housing unit there is a 193 character person record containing information regarding sex, age, marital status, relationship within the head of the household, ancestry, employment status, education, occupation, and many others.

The PUMS data file provides coded information on all the questions that were asked in the question naire. The user of the files is free to combine variables, recode them, explore relationships between the variables. The file is a very rich source of information with a great deal of flexibility.

For the purpose of the study the 1 in a 1000 national PUMS file was used.To the extent possible by the composition of the PUMS file the Family Life Cycle stages were duplicated and the degree to which they included the population as a whole was explored. Selected characteristics, believed to be associated with consumption, such as age of the head, size of the household, income, and number of rooms in the housing unit, tenure, and automobile ownership were examined. The results are summarized below.

Findings

The results of the research show that only a small proportion of households fit into the Family Life Cycle model. These findings are consistent with Wells & Gubar's who found that 23% of the 1970 population did not fit the model. As the model parameters have not been precisely defined they are difficult to match. However the following indicate that the model does not effectively describe the 1980 population.

. Twenty seven percent of all households are non-family.

. The median size of household is a two person household; 38% of married couple households, 43% female headed family households, and 48% of male headed family households are two person households.

. The Family Life Cycel model does not account for at least 16% of the households; male or female headed family households (12%) and two or more person non-family households (4%).

. Most households (54%) do not contain children under 18. The proportion varies depending on the age of the head of household: 67% of households with the head under 25 years of age; over 90% of households when the head is 65 or over. Only for householders 25 to 44 do more than half of households contain children under eighteen.

. Female headed family households are more likely to contain children under 18 than married couple households with the same age of head.For example when the head is under twenty-five, 51% of married couple households and 82% of female headed households contain children under 18.

. Consumption of durables, for example housing, does not conform to the FLC model. The number of rooms in a housing unit seems to be influenced more by income than the stage in the Family Life Cycle, age, or size of the household.

Conclusion

The basic assumptions underlying the FLC model no longer hold. The married couple family has ceased to be the dominant social institution.Non-family households including individuals of all ages have been growing in importance.Single parent households containing children of all ages are becoming more prevalent.Many married couples forego having children, and many couples do not marry, or consist of partners of the same sex. Extended life expectancy, the changing role of women, and new living arrangements are some of the factors that have changed social structures.

The household, rather than the family, is a better predictor of market behavior and needs.It is reasonable to assume that people who share a housing unit also share a lifestyle, and have common consumption needs. This study has demonstrated that for some goods the household income is a good predictor of consumption patterns.

PERCEPTION OF HUSBANDS AND WIVIES IN FAMILY DECISIONS MAKING: IN AN ORIENTAL CULTURE A MULTIDIMENSIONAL SCALING APPROACH

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Abstract

This paper attempted to investigate husband-wife influence at different stages of the family purchasing decision process and to see if differences in perception exist between working wives and non-working wives in family purchasing decisions. Findings showed that husband-wife influence at different stages existed, and their perceptions of various purchase decisions were consistent across different stages. Results also supported a shift from wife-dominant purchase decision making to joint decision making in the case of working wives.

Introduction

There has been considerable research in the field of marketing concerning the family decision-making process. Most research is conducted as though individuals make decisions independent of other household members (Kasulis and Hughes, 1984). However, it was found that husbands and wives performed different roles in purchasing decisions. Employing a convenient sample of fifty couples of married college students, Kenkel (1961) discovered that husbands assume an instrumental role in helping their spouse make final purchasing decisions while wives assume an expressive role to decide on colour, style, and design which conform with social norms. Davis (1970) further improved the idea of the roles of husband and wife in purchasing decisions. The results of his study rejected the belief that family purchasing decisions took a unidimensional or bidimensional role structure.

He concluded that an "overall" power (dominance) score for the family is not appropriate as consensus between husband and wife can be reached in purchasing products in specific categories. Along the same lines, Scanzoni (1977) also identified changing sex roles in family decision making.

Ferber and Lee (1974) successfully confirmed that among newly married couples there was a high tendency for joint decisions and that wives in American society tended to take the role of family financial officer. Szybillo, Sosanie and Tenenbein (1979) also supported this finding by indicating that husbands and wives did exert, to a great extent, independent influences on the household purchase decisions, while Cosenza and Davis (1980) reported that the locus of familial control appears to shift when the wife becomes employed. However, different findings were found. Sheth (1984) explained that greater incidence of working wives has created time pressure within the family, encouraging individual decision making for many products that might ordinarily be purchased on a joint basis. Filiatrault and Ritchie (1980) revealed that husbands tend to dominate decision making more in family decision-making units (husband, wife, and children) than in those where no children are present.

While research efforts were made on joint decisions, the focus of study has been shifted to an international comparison of family decisions. Green, Verhage and Cunningham (1979) were amongst the earliest to compare how American and Dutch consumers differ in household purchase decisions. It was found that substantial and significant differences exist between the two countries. wives in the U.S. play a more autonomous role than the Dutch wives in family decision making but purchase decisions in Dutch families tend to be made on more of a joint basis than in US families. Along the same lines, Tan, Teoh and McCullough (1986) compared responses of dyads of husbands and wives on buying decisions in a cross-cultural analysis between Singapore and the United States. Discrepancies between the two were found.

However, perceptual differences between husband and wife were related to the family's values orientation in Singapore but not in the U.S. These research findings seemingly suggest the existence of cultural difference and support the need for contextualisation of consumer behaviour in a specific culture as advocated by Engel (1985). Therefore, this paper tries to achieve the following objectives:

- investigate husband-wife influence at different stages of the family purchasing decision process;
- measure the congruence of role perception between husbands and wives at different stages of the family purchasing process; and
- investigate if differences in the perception between family purchasing decisions exist between working wives and non-working wives

in an oriental culture.

*Authors wish to express their gratitude to Mr. Chan, Kwan Chung and Mr. Lai, King Chee, both students of the Chinese University, for their kind assistance in data collection. Thanks are due to Mary Bension for her editorial comments.

For the rest of the paper, please contact the authors.

SOCIAL IMPACT ASSESSMENT, DEVELOPING COUNTRIES AND MARKETING OPPORTUNITIES

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Abstract

Social Impact Assessment (SIA) is a type of mandated research which is typically implemented during the planning stages of development projects. To facilitate the use of this source of secondary data by marketers, we will provide an overview of what SIA is and present the results of a questionnaire on SIA sent to a sample of international marketing managers.

The Potential of Social Impact Assessment

One of the truisms of development is that the countries, subcultures, and regions which most desperately need injections of investment capital and marketing activity are simultaneously those which usually have the least to offer the potential investor. Recent, adequate, and meaningful secondary information sources and data bases are one set of basic business tools which developing countries habitually fail to provide.

Encouragingly, although developing countries suffer from a general lack of accessible secondary research data, an existing social science can easily generate such information. Social Impact Assessment (SIA) is a type of mandated research which is typically used when developmental organizations (such as the World Bank) evaluates proposed development projects. Routinely required when applying for funding, developing countries either perform such work or cooperate with those authorized to perform it (Walle 1985). This information is then provided to ultimate decision makers who use it in forging policies and allocating funds (D'Amore 1978).

Sadly, once used to analyze a specific project, most SIA research is swallowed up by the file cabinet never to see the light of day again, even though it is often a part of the public record and available to anyone who wants it. The data found in SIA's, furthermore, often includes exactly the type of information of interest to those considering investing in or marketing to developing countries. Letting such valuable secondary data stand idle is unfortunate and against the best interests of developing countries and multinationals.

The Pilot Research

Little, if any, primary research has been conducted on corporate awareness of and attitudes toward SIA. As an initial step in this regard, the authors conducted a pilot study among a small sample of Northeast Ohio firms involved in international business.

Although the survey was exploratory, the executives' attitude patterns tended to be quite consistent in the following areas:

* recognize the void of secondary data available from Third World and developing countries;
* consider SIA to be more qualitative ("soft") and see it as being more valuable in forging long-term demand forecasts;
* recognize the quality of World Bank research, but feel it is generally not available "quickly enough" nor in a form that is useful to business; and
* do see SIA as a tool that would be potentially valuable to business in making investment and marketing (product/channel) decisions.

Additionally, the survey findings indicate that more information needs to be made available to companies concerning when and how to employ SIA. The "bottom-line" is that the responding executives are intrigued by SIA's potential, such as "... in determining whether a boomtown was a 'window of opportunity' or 'gilded trap leading to disaster'," but lack the specific knowledge required to make effective use of such information.

Implications for Marketers

Marketing research personnel and strategic planners should commit themselves to learning more about SIA and SIA researchers who often lack a knowledge of the methods of business. In specific, SIA researchers often come from Anthropology and Sociology: disciplines relatively unknown to the business disciplines. Marketers can legitimately prod SIA researchers to become aware of the needs of business and to respond accordingly; conversely, we must simultaneously practice what we preach by adjusting our professional toolkit to embrace SIA techniques and methodologies.

SIA techniques and/or existing research teams, furthermore, may be employed to provide primary research as well. If this is done, however, marketers must acquire appropriate research skills and keep an open mind regarding unfamiliar research methods. Those who do will be poised to tap a vast array of tools, techniques, and data sources.

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THE MARKETING SYSTEM CONCEPT AND AN ENVIRONMENTAL ANALYSIS: THE CASE OF NIGERIA

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Abstract

Given that marketing exists within an environment, this paper presents a normative perspective on the limited relevance of marketing in an environment characterized by persistent shortages. As an example, the Nigerian environment is examined. The investigation revealed that Nigerian sellers with a higher reliance on imported raw materials and incidental constraints find demand increases hard to tackle. The key words in the Nigerian environment seem to be allocation and rationing, and not marketing.

Introduction

The concept of marketing as a system, first introduced by F. E. Clark in 1922, suggests that marketing activities could be viewed as a "process" interdependent on the environment (Clark 1922). Investigations into the approaches taken to characterize the "systems" concept reveal that the logic and properties of systems, system-system, and system-environment relationships have received only a superficial treatment. This situation highlights the existence of confusion over semantics and perspectives in such treatment.

Although critical analyses on the nature of marketing abound (Hunt 1976a, 1976b; Kotler 1984; Robin 1980), little or no concern seems to exist for clarifying the concept of a "market" (Stidson 1980). This article attempts to elucidate on a theoretical perspective hoping to present a normative view of the relationships that exist between a market and its environment. Specifically, the thought process is extended to include the case of Nigeria, exemplifying an environment that reduces the relevance of marketing.

The Nature of a Market

Based on established viewpoints (Fraser 1937; Bohannan and Dalton 1962), a market can be conceptualized as a mechanism for conducting transactions. Both exchange and transaction are highly correlated. Making a distinction between them at this point is in order. A transaction can be seen as "that aspect of behavior which provides interconnections between individual acts of choice" (Glaser 1985). More specifically, "a market transaction can be defined as a voluntary, commercial agreement between parties creating legal obligations for rendering of [goods and] services" (Shaw and Dixon 1980).

The Nature of the Environment

There is little doubt about the dynamism characterizing the environment in terms of the manifestations of its underlying constitution. This dynamism is partially reflected in the concept of the "causal texturing" of the environment. According to Emery and Trist (1965) causal texture refers to the "extent and manner in which the variables relevant to the constituent systems and their interrelations are, independently of any particular system, causally related or interwoven with each other." They described the causal texturing of the environment on the basis of distribution and organization of goals and strategies of the constituent systems. Emery and Trist (1965) identified four levels of environments based on the above, namely (a) placid - randomized environment; (b) placid - clustered environment; (c) disturbed - reactive environment, and (d) turbulent field. The United States economy is characterized as a turbulent field while Nigeria could fall into the first level.

The argument posed here is that marketing systems relevance to the environment tends to increase as one moves from the first level toward the fourth. The question that arises at this juncture is: At what level(s) of the environmental texture is the marketing system necessary for the firm's adaptation to the environment? The question is partly answered by the examination of the Nigerian environment and its support of marketing.

The Nigerian Environment and Its Marketing System

From the afforementioned classification, it is clear that the behavior of buyers and sellers in a placid, randomized environment is devoid of choice. It is the sellers' market in the extreme sense. None of the marketing management philosophies seem operative. Marketing in such environments appears irrelevant. A case study revealed that such circumstances exist in the Nigerian economy. Specifically, Nigeria can be characterized by the following conditions: 1. near perfect monopoly, 2. scarcity of goods and thus rationing, 3. competition is almost non-existent, and 4. lack of product variety and differentiation.

CONCLUSION

This paper proposes that the placid, randomized environments characterized by long term short supply condition tend to violate one of the tenets of exchange. In such environments there are seldom instances where the buyer has the capacity to freely accept or reject an offer, therefore an exchange is not consumated. Exchange being the core concept of marketing, the relevance of marketing is being questioned. This was demonstrated by the Nigerian case study where most product categories tend to give the consumer little choice.

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MILK CONSUMPTION BEHAVIOR OF ADULTS: INSIGHTS FROM NEW ZEALAND

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Abstract

Milk consumption behavior of adults between the ages of 25-49 were investigated using a telephone survey. It was found that the bulk of milk was drunk by a relatively small portion of the respondents and consumption decreased with increasing age. Plain milk was consumed at home principally in the evening and almost always cold. Attitudes towards plain and flavoured milk consumption are reported.

Introduction

Previous research (Berry 1980; Survey Research Ltd. 1983) indicates that "milk as a drink" accounts for one-third of the total consumption of milk by volume. However, there appears to be a trend towards decreased "milk drinking" as people get older (Berry 1980). This drop in consumption is particularly noticeable in the 30-39 year age group. Attitudinal research (D'Arcy-MacManus & Masius 1980) has indicated a variety of negative attitudes to milk which influence milk consumption patterns. According to their research, adults considered that they required less milk and tended to control their intake more closely than children. It was considered to be fattening when consumed in excess and was not considered to be an appealing drink. Milk was seen as a beverage which must be consumed cold and was regarded as a nourishing but unexciting product, particularly in comparison with most other beverages.

Although much research has been carried out in New Zealand on milk (J. Inglis Wright Ltd. 1960; McNair 1979; Market Research Centre 1979; Market Research (NZ) Ltd. 1980), there is little information about "milk drinking" patterns of adults. Particularly information about the consumption of the various fluid milk products such as pasteurized, homogenized, non-fat, UHT (ultra heat treated) and reconstituted milk is lacking.

The fluid milk sector of the Dairy Industry is of significant importance in any major dairy producing country because fluid milk normally realizes a significantly higher price to the dairy farmer than does surplus milk utilized for manufactured products. While the consumption of fluid milk varies among different countries, on the average nearly 30 percent of total milk production is in the form of liquid milk consumption (Lorentzen 1978). Therefore, both dairy farmers and milk bottlers are very much interested in increasing the total volume of fluid milk consumed by the public. The price differential between fluid and surplus milk is especially important in those countries where per capita consumption is declining.

Many authors (Boehm 1976; Shrimper 1975) found that age is a significant factor in explaining the amount of fluid milk consumed. A U.S.A. survey (USDA 1970) found that children under the age of 10 consumed three times as much milk as people over 35 years. Lu and Marshall (1973) found that milk consumption dropped with progressing age in Canada with similar findings (Street 1974; Nelson 1977) in Australia to support this hypothesis. Adults aged 25-49 are regarded as a particularly important demographic group. They tend to be low consumers of milk and the size of the group is expected to increase in future years with the projected aging of society. Consequently, information is required about the milk consumption patterns of the 25-49 year old group to aid the development and marketing of products suited to their needs.

The purpose of this study is to obtain information about the milk drinking patterns of 25-49 year olds in the Christchurch area. Specific objectives are: 1) to identify the percentage of 25-49 year olds who drink milk products; 2) to identify the reasons for consumption of particular types of milk; 3) to determine where and when particular age groups drink milk and to discover the proportion of flavoured milk which was home-mixed versus commercially prepared. It is hoped that this information may provide insights to increase the consumption of milk as a drink amongst the 25-49 year old sector of the population.

Methodology

A telephone survey was conducted in Christchurch by a single interviewer using a pre-tested questionnaire. The questionnaire took approximately five minutes to complete and included questions regarding the frequency, place, reasons, type of milk drunk and attitudes towards plain and flavoured milk consumption.

The sample consisted of 198 adults aged 25-49 whose names were obtained from the Christchurch telephone directory. Column and row numbers were determined by use of a random number table to select telephone numbers. Analysis of the demographic information from the sample indicated that the sample was representative of New Zealand population with 20 percent of surveyed households having only one adult aged 25-49 and 80 percent having two or more.

Please contact the authors for the rest of the paper.

GLOBAL STRATEGIC MARKET PLANNING: RECENT PERSPECTIVES AND EMERGING CONCEPTS

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Abstract

This paper reviews the recent developments and the emerging concepts in global strategic planning. It underscores the need for better integration of these concepts into comprehensive models that generate normative and practical implications.

Introduction

The globalization of markets has inspired a large body of literature (JIBS Special Issue 1984). These studies have enhanced our understanding of global planning in terms of refined approaches to strategy formulation to compete more effectively in the increasingly competitive global marketplace. Recent market transformations, however, have generated newer challenges in global planning. We are now experiencing a profound convergence of consumer psychographics, accelerated cultural homogenization, and the emergence of cross-national market segments. Global brand dominance and effective competitive positioning have therefore become more significant in global strategic planning. This paper discusses these concepts and calls for their integration in newer planning models.

Recent Perspectives

Recent scholarly perspectives on global planning can be classified into two domains: conceptual contributions and modeling studies. Conceptual studies have contributed discussions on competitive choice behavior, global expansion options, and strategy formulation typologies into the planning literature. Modeling studies, on the other hand, developed and applied selectively, planning archtypes which fueled debate on their reliability and applicability in a global context. They also raised questions about the appropriate variables and methods to be used in the application and control of such archtypes. These studies form the foundation upon which more comprehensive models can be built which incorporate concepts that have emerged only in the 1980s (Levitt 1983).

Emerging Concepts

Three interrelated planning concepts have emerged with the last few years: (1) exploitation of competitive advantages due to global economies of scope (vs. scale); (2) effective management of the interdependencies in the global value chain (GVC); and, (3) global competitive positioning (Hamel and Prahalad 1985, Robinson 1986).

Current research argues that economic gains may be greater due to scope than due to scale. Gains sourced in component production, international joint ventures, and global brand dominance may outweigh benefits due to cost efficiency or market share dominance. Building a global presence through marketing product "families" over contiguous global distribution networks or exploiting R&D advantages in specified "hubs" may be more beneficial than achieving worldwide cost efficiency.

Current research also shows that managing GVC linkages horizontally; that is, exploiting strategic resources (e.g., know-how, brand recognition) more efficiently across the firm's GVC may be more significant than the management of independent subsidiaries or product lines. This approach may be more conducive to cross-subsidization of the firm's strategic resources and selective externalization of its marketing operations. Progress on the firm's learning and experience curves may be smoother if this planning philosophy is adopted (Kogut 1984).

Current research further contends that newer competitive positioning typologies must also be incorporated into global planning. This is due to newer mandates for cross-subnational market segmentation, specialization in chosen links of the GVC, and appropriate strategic alignments relative to competitors. Learning (from analogous cross-national target segments), heterogenous standardization (cluster by cluster), and building global brand dominance may be enhanced with this approach to global strategic planning.

Conclusions

These emerging concepts now mandate the formulation of more comprehensive models of strategic market planning. To provide valid normative and practical implications, such models should integrate the emerging concepts discussed herein in an effective manner.

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THE QUEST FOR INTERNATIONAL MARKETING SUCCESS

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Abstract

Once unchallenged, the industrial power of the U.S. is now being threatened in the world markets. Lack of domestic political-legal support, cheap labor sources and technological superiority of foreign firms are the most frequently mentioned factors for the decline of U.S. industrial power. All of these seem to indicate that U.S. corporations fail in global marketing due to reasons beyond their control. However, an examination of these three factors suggest that there probably is a fourth reason. It is suggested that the organizational approach of today fails to adequately recognize the fact that it is people who make organizations successful, and people come to organizations as members of society whose values are changing.

The Threatened U.S. Supremacy

With trade deficits of in excess of $150 billion the U.S. industrial supremacy in the world markets is at best questionable. Manufacturing looks like a disaster area by most measures. The share of manufacturing in the gross national product dropped from 30% in 1953 to 21% in 1985 in current dollars. Between 1972 and 1984 the share of merchandise exports in total exports plunged from 64% to 56%. The growth rate in percentages of exports in electric and electronic equipment plunged from 22% in 1970 to 5% in 1984. For instruments these numbers are 20% and 3%. For machinery exports the growth dropped to a minus 0.5% in 1984 from a high of 20% in 1970. All of these are high profitability industries. These figures lead some to believe that the U.S. is faced with a serious problem (Report to the President 1985), although there are some who think that the numbers are misleading (Edfelt 1986). Those who believe that there is a problem most frequently cite three reasons.

Political and Legal Reasons

U.S. corporations have long been complaining about the governmental regulations and lack of support. The U.S. is known to control international business for reasons of national security, foreign policy, short supply, internal politics and for sheer propaganda. Anti trust laws, the U.S. foreign corrupt practices act, the export administration act, the act of state doctrine are shown as examples of restrictive regulations.

Input Costs

Another frequently cited reason is the cheap labor prices of foreign manufactures. Numbers clearly indicate that labor cost (in terms of current dollars) is much lower especially in the far eastern countries. The line of thought suggested is that low labor input costs leads to lower prices, and lower prices mean competitive advantage in international markets.

Technological Factors

The U.S. seem to be technologically inferior especially in comparison to her top competitor Japan. Manufacturing technology in Japan seem to be far superior (Tsurumi 1986), Ayres and Miller 1982, Capdevielle and Alvarez 1981). Such technological inferiority is given as the most important reason for plant closings in the U.S. (Schmenner 1976).

How Valid are the Excuses

There is not much to say about the alleged technological inferiority of U.S., the numbers seem clear. However, it is important to note that technological inferiority is the result of managerial mistakes not a reason for them. Therefore technological inferiority cannot be accepted as an excuse. As for the others, it is interesting to note that foreign manufacturing investment in the U.S. has been increasing much faster than U.S. companies are investing abroad. This illustrates that foreign manufacturers are neither bothered by the domestic legal-political environment nor are afraid of the high labor prices. Therefore, one may conclude that the U.S. firms should not be bothered by them either. The secret to the success of foreign competitors lies in their ability to manage their corporations. This is illustrated by the cases where a money losing corporation after taken over by Japanese managers suddenly becomes profitable with the same technology and labor force. It seems that the U.S. corporations fail more on the management of human resources.

Conclusion

Businesses are infested with absenteeism, turnover, alcoholism, drug addiction, mental illness, and deliberate sabotage by workers (Viola 1977). The reason for this is "The organizational approach of today fails to recognize adequately that man moves in and out of organizations as a member of society. Organizational behavior has not given adequate attention to societal forces, as they are affecting human values and, indeed, changing them" (Viola 1977 p:178). If U.S. organizations want to be successful against foreign competitors they need to review the compatibility of the managerial values which have not changed since the scientific management movement as opposed to the rapidly changing societal values and with the "new morality".

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WHO WILL WIN THE RACE FOR PROFITS IN SPACE?

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Abstract

Space business is big business. Space commercialization revenues are expected to exceed $52 billion annually by the year 2000. These revenues are expected from the production and marketing of such products and services as satellites, computer hardware and software for space R&D, and transportation into space. The USA, USSR, European Space Agency (ESA), Japan, and PR China are involved. This research provides an overview of the commercialization of outer space, competitors, and obstacles. Marketing implications are given, and a prediction on who will win the race for profits in space.

Introduction

Mention "space race" and most people think of a battle for military supremacy waged between the USA and the USSR. But a new race has developed, and the spoils are economic, not political. It is a push to command the lion's share of the commercialization of outer space. This research sheds light on a subject neglected in the marketing literature: international competition in space commercialization. It is divided into five sections: (1) overview of space commercialization; (2) international competitors; (3) obstacles; (4) marketing implications; and (5) conclusions.

Overview of Space Commercialization

The commercialization of outer space can be broken down into seven major areas: (1) transportation and launch services; (2) communications satellites; (3) remote-sensing satellites; (4) manufacturing and materials processing in space (MMPS); (5) space stations; (6) defense; and (7) ground-based support.

Transportation and launch services consist of transporting payload (cargo) into space for experiments and/or production (e.g., alloys, drugs), and launching communications satellites into orbit. Communications satellites represent the most mature of space industries. Since the Soviet deployment of Sputnik in 1957, some 2500 satellites have been deployed for various countries (e.g., USA, USSR, West Germany) and firms (e.g., AT&T, RCA). Remote-sensing satellites, stationed in a variety of orbits around the Earth, photograph, map and transmit data used to evaluate geological formations (for oil and gas exploration), oceans (for fish movement and maritime activities), land (for earthquake and volcanic activity), crop conditions (for yield forecast), and weather conditions (for weather forecasting and airline flights). MMPS involves the production of certain pharmaceuticals and alloys in space.

Space stations would be scientific research, manufacturing/processing, satellite-repair, and shuttle/spacecraft refueling facilities in space. Defense includes military satellites, space weapons, and research on President Reagan's "star wars" Strategic Defense Initiative (SDI). Ground-based support includes computers for monitoring and controlling spacecraft (IBM), the manufacture of components for space shuttles (McDonnell Douglas, GE, Rockwell International, etc.), and providing space insurance (e.g., Lloyds of London).

International Competitors

The USA is the leader in (1) transportation and launch services (2) communications satellites and (3) remote-sensing satellites. The USSR is on par with the USA in defense, but ahead in MMPS. ESA is competitive in space transportation and PR China will be in the future. Japan will be tough to beat in each area of space commercialization.

Obstacles

Some obstacles to space commercialization are lack of space insurance, safety, technological barriers, costs, profit squeeze, long payback periods (8-15 years), and reluctance of the private investment community or governments to provide funds for space ventures.

Marketing Implications

These obstacles have marketing implications. Some are: (1) small companies will concentrate their marketing efforts on products made on Earth, and neglect space commercialization/marketing; (2) large companies will enter into joint ventures to defray the heavy capital outlay that space ventures entail, thereby spawning new collaborative marketing efforts among large firms; and (3) in order to meet the large investment costs of space commercialization, multinational collaboration will grow in importance.

Conclusions

The USA, ESA, and Japan are close rivals in space commercialization. The USA will win the race for profits in space because more than its other rivals, it is wealthier, and technologically superior. It also has the political will to win. The USSR, on the other hand, is motivated more by military supremacy than by profits. The USSR will be equal to the USA in achievements in space.

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Available on request.

TRADE MODELS AND THE MULTINATIONAL CORPORATION: A COMPARISON OF ASIAN AND LATIN AMERICAN EXPERIENCE

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Abstract

This paper examines the economic models of ISI (import substitution industrialization) versus EXPRO (export promotion model) in light of the post-WWII experience of two substantial areas of the developing world: Latin America and Asia.

Introduction

The Multinational Corporation (MNC) has increasingly come under the control of more and more individual countries. Where, in the past, the MNC was under the control of the home nation alone, the developments following World War II have brought each of the MNC's subsidiaries under increasingly stricter control by the host nations. In more recent time even the parent corporation has found itself under heavy pressure from host nations to modify its global plans.

After World War II, it became increasingly obvious to Latin American nations that the region's reliance on primary-product exports had produced a degree of susceptibility to fluctuations in demand that would not lead to the levels of internal development sought by local governments. This recognition led to the general acceptance of a model for development that was based strongly on the avoidance of dependence on the industrialized nations. Latin nations felt that their entire economic and political well-being depended on the whim of the industrialized nations who made the international decisions. The issue of "persistently deteriorating terms of trade" for the region's major export goods was espoused by Raul Prebisch and was soon taken up by most of the developing world.

These concerns led to the establishment of an import substitution industrialization (ISI) policy that was readily accepted by most of the economists and political leaders of the region as the only viable road to economic autonomy.

From this point on, the leading criterion for acceptance or rejection of an investment by an MNC was the ability of this investment to produce goods internally that were previously imported. This model led to inefficiencies that became institutionalized within the host nations with resultant high prices that detracted from economic growth potential. The only goal served was that of independence but that soon deteriorated into isolation.

The Asian nations also embarked on a model of development that included strong priorities for avoidance of dependence. These nations, however, soon recognized that independence leading to isolation was not in their best interests and therefore, embarked on an alternate development plan that required interdependence. This model emphasized the need for export promotion rather than import substitution.

The export promotion model (EXPRO) required foreign investment also. However, the primary criterion for selection of foreign investment became its ability to export its output.

Export products require that the investing firm must be able to produce goods that are immediately acceptable to world markets from a product quality aspect and a world price competitive aspect.

Whether or not the products of a subsidiary of an MNC are suitable for the host nation's markets are of small consequence in this EXPRO model. The overwhelming characteristic is that they be suitable to world markets and can therefore obtain the foreign exchange necessary for the host nation to import whatever goods it needs or desires at world prices.

Methodology

Presentation and examination of the data demonstrating the utilization of these models with regard to: economic growth, selection of foreign investment, internal development will demonstrate the need for the modern MNC to pay close attention to the economic models of potential host nations that involve trade models inimical to the long-run goals of the MNC.

Analysis

The study will show that the recent trend of MNCs becoming "good neighbors" to their host countries is fading as a new version of the MNC is emerging: the World Trade Company (WTC). This WTC has as its principal goal: the worldwide maximization of efficiency of production and distribution of goods and services through the efficient worldwide allocation of scarce resources.

HAS THE COUNTDOWN BEGUN FOR IMPORTED GROCERY PRODUCTS IN HONG KONG?

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Introduction The Crown Colony of Hong Kong has been very much in the news recently, because experts are trying to predict what will happen in 1997, the first major political change for this area in 99 years. The P.R.C. has stated that there will be no major administrative changes, that Hong Kong will still be a separate customs area and free port, that it will still be able to continue its own version of capitalism, and if there are any changes, they will come about gradually or not until after a long adjustment period.

However, many of us have become wary about promises from Communist nations, and we have seen how much China itself has changed in recent years. For example, the PRC policy now is one child per family, period. Will this be extended, ten years from now to Hong Kong, since, to Beijing, it will simply be another part of this vast country? We have no up-to-date census figures on Hong Kong's number of children per family, but observation in that colony revealed many families out walking two, three, or four children on a Sunday afternoon.

What is our preconception of Hong Kong as a market for grocery products from the many MNS's in the U.S. and in Europe? Is the colony so distant from North America and the continent of Europe that shipment of consumer goods will be prohibitive because of freight costs? What is the makeup of this British colony, and how will it change when administrations change to drastically, only a decade hence? Is there an adequate supply of grocery products available from Asian nations, which are so much closer at hand? Do conventional supermarkets stock the variety of consumer items that we are used to in most U.S. and European major cities? Are marketing channels more like our own, or more like the complicated Asian system we see in Japan?

Research Method These are some of the questions which prompted this research in Hong Kong. We visited 10 supermarkets in Hong Kong and Kowloon, recorded all products as to manufacturer and country of origin, and talked to store managers and local businessmen to try to get background as to why certain products are now being stocked, and why others are not.

Findings Branded food products are now offered in Hong Kong supermarkets from 23 nations of the world. This is the highest number of countries, and the widest variety we have found in research conducted in Australia, central Europe, Kenya, and the Caribbean. In addition, non-food branded products were stocked from 13 nations.

Local manufacture of foreign grocery products consists of those made in company owned plants and those made by a local licensee. The proportion of non-food products made in Hong Kong is twice as great as the proportion of food products:

8% of branded food products made locally
15% of branded non-food products made locally

The explanation we received for this difference is that Hong Kong is too small to be a major agricultural source so that not many canned or packaged foods are made there. But the colony's know-how permits it to make detergents, for example, in relatively little space, and space seems to be at a premium in this crowded city.

Policy of MNC's We focused our attention on several large MNC's to determine what they are currently selling in Hong Kong stores, and from what areas of the world these products are coming. This might be a clue toward opening up a far greater market in the PRC when it takes over the administration of Hong Kong in 1997.

Nestle offered the widest variety: 23 products made in 11 different countries. This encompassed Europe, the U.S., Australia and Asia. (Detail and discussion in the complete paper.)

Procter and Gamble is currently selling 13 products here, primarily from the U.S. but also from the U.K. and West Germany.

Colgate-Palmolive makes 2 products locally but imports 4 others from Europe; no U.S. products go to Hong Kong, vs. P&G's 80% U.S. products.

Unilever ships products from plants in China, Hong Kong, Malaysia and Singapore, and the remainder from the U.K. Again no U.S. products.

Quaker exports 4 products from the U.S. and the others from Australia and Malaysia.

General Foods uses licensees in the Philippines and Korea, but none in Hong Kong, and sends two-thirds of its products here from the U.S.

The Future As 1997 grows nearer, here are some of the adaptations which MNC's currently in Hong Kong supermarkets might consider:

1. Build a local plant since the Chinese border will ceast to exist, and supply both Hong Kong and the PRC from it.
2. Build a plant in Canton, the closest large Chinese city, which could service Hong Kong easily and be nearer the heartland of the PRC.
3. Seek out aggressively Hong Kong companies which might be potential licensees, and try them out prior to the 1997 change. If the relationship is good, continue it and expand their output to the Chinese market. If not, chalk it up to experience.
4. To a lesser extent, plan (3) could be used in Canton, except that there seems to be some political restraint now which may gradually disappear. Even so, Unilever is shipping product now from a Chinese plant to Hong Kong.

Summary Of the leading MNC's who make grocery products, most are now in Hong Kong. Our research showed that the usual avenue to this colony is via exports, although a variety of other avenues are used. Even the "big three" of the soap industry follow different marketing practices.

All are concerned, we are sure, with Hong Kong's change in 1997. We are beginning to see the countdown now.

THE GENERALIZED SYSTEM OF PREFERENCES: IS IT THE ANSWER TO LDCs NEEDS FOR EXPORT DEVELOPMENT?

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Abstract

This research is mainly concerned with "Preferential Market Access". It refers to the Generalized System of Preferences which is a program offered to LDCs. Most of the LDCs, however, are small users of the GSP. The study provides a guideline for LDCs to increase their elligibility. LDCs can reap more benefits from the GSP, but they should formulate new international marketing policies to face the challenges in the 1990's.

Introduction

This study is mainly concerned with export development process of LDCs. Improving access to industrial country markets will be our main objective and we shall therefore focus our attention on preferential tariffs.

Preferential Access to Industrial Country Markets

No one should expect that protectionism to disappear within a couple of years. Despite the trade liberalization efforts, the protectionist measures of the industrialized countries are likely to continue in the future. For this reason LDCs should find some other ways of improving access to the world markets. How can this be accomplished in the new international economic environment and what are the main challenges faced by LDCs in the 1990's? Lets dwell briefly upon two important matters which could affect the world trade in the period ahead. The first of these are the "New GATT Round" which began in the fall of 1986 and the Multi-Fiber Agreement (MFA) which was renewed in 1986. The basic goal of the new round is to bring world trade more comprehensively under the scope of GATT. Despite these positive developments, the International Textile Agreement called the MFA still remains to be an obstacle for LDCs. By means of this agreement such major importing countries as the U.S. and Canada have imposed great restrictions on the textile trade. Textile on the other hand, is a very important sector for LDCs. However, quantitative restrictions on textile imports imposed by developed countries through MFA have negatively affected the exports and the economic growth of many LDCs.

For these reasons one of the areas where the international trade with LDCs can be expanded is duty-free trade under the Generalized System of Preferences (GSP). This program is identified as the granting of preferential access to industrial country markets to exporters based in LDCs. GSP is a program which is offered by twenty developed nations to approximately 130 designated beneficiary countries. It provides LDCs with duty free or preferential treatment on several agricultural and industrial products provided the products meet certain requirements. This research in progress is primarily intended to illustrate the Generalized System of Preferences of Major developed countries. The number of products offered by each developed country, the number of beneficiary countries, the percentage of GSP imports to total imports, selected country's share of total GSP benefits and basic conditions for elligibility are the main fields of our study. Our research findings have also indicated that although preferential treatment is offered to 130 developing countries, the LDCs that benefit from GSP are very few. Developing countries like Turkey and Egypt could use the GSP much more effectively then they had in recent years. But many shipments of these countries were small and many products which were elligible for the program had not received duty-free treatment due to administrative errors. The program was also unknown to many LDCs because of inadequate information.

Conclusion

No one can argue about the benefits of the GSP program in an environment where the "New Protectionism" is likely to occur. For this reason the New Trade Round will be a bargaining session for LDCs and the improvement of the GSP will be on the agenda for the new GATT negotiations. There is no reason why LDCs should not obtain more benefits from GSP. As a tool in International Marketing GSP offers great advantages. Needless to say it serves as a catalyst to modify the export promotion process in developing countries.

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TRANSFER OF MANAGERIAL TECHNOLOGY TO IRELAND BY MULTINATIONAL CORPORATIONS

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Abstract

This paper analyses the Transfer of Managerial Technology with special emphasis on the role of Multinational Corporations (MNC) by way of their subsidiaries. Republic of Ireland has been chosen to investigate the roles of the MNC's in this process. 120 foreign subsidiaries representing 1/3 of the total foreign based companies receiving grants from the Industrial Development Authority (IDA) of Ireland in excess of 10 million Irish pounds (Appx: 15 million US $) have been surveyed. 77% of the MNC subsidiaries believe that there is an ongoing transfer of technology between parent and Irish subsidiary companies. Transfer of Managerial Technology in the financial management area has the highest score (100%) while production management reached 80%, and marketing management and personnel management have scored equal percentages (70%).

Introduction

Transfer of technology and channels of transfer have been studied by several researchers, business and international business academics and marketing scholars evaluated several aspects of this phenomenon. International organisations, like United Nations and Organisation for Economic Cooperation and Development (OECD) have also studied this phenomenon, science-policy units of several national research organisations spent lengthy time and money to see the implications of transfer of technology (Dalgic 1982). The role of Multinational Corporations (MNC's) in this transfer process has been studied from different angles. Transfer of manufacturing technology, transfer of Research and Development Management (R & D) are among these studied subjects. The role of MNC 's in the transfer of management technology is a new area of study. Despite several researches covering several aspects of technology transfer, this area has not paid attention to scholars, until very lately. Although some studies have been carried out on this subject, we believe that there is much to be said and investigated. This study is one of the pioneering studies from Ireland.

Transfer of Technology and Management Technology

The activities of MNC's and their patterns of investment represent an important route for the international transfer of technology. MNC's and technology transfer are fundamentally complementary. Such is the comparative advantage enjoyed by the MNC in technology transfer that the growth of this corporate form owes much to the exploitation of the possibilities of transfer. The bulk of MNC Research and Development (R & D) is carried out in the parent company, direct intervention by these corporations almost inevitably involves a process of technology transfer (Hawkins & Prasad 1981). MNC's control much of the worlds commercial technology and are perhaps the most important vehicle for the international transfer of technology (Hawkins & Prasad 1981). Further, successful MNC's almost always depend upon a unique technology or know-how to maintain their international market advantage. The international policy debate of the 1960's and early 1970's on how to control MNC's have been transformed and absorbed into the international debate over technology transfer (Dunning 1979). However the MNC often not merely supplies technology but may constitute a more or less permanent organised linkage, facilitating the continuous flow of technological information among various parts of the enterprise located in different nations. (Hawkins & Prasad 1981)

Other writers have also touched on this area and observed that apart from inter government grants and loans, the main institution for the transmission of resources in the post war period has been MNC's operating through a network of wholly majority owned foreign subsidiaries (Dunning 1979).

Perhaps the most important efficiency property of the MNC is that it is an organisation made capable of transferring know-how in a relatively efficient fashion (Dunning 1979). The mode of this transfer is internal to the firm rather than through external markets. This internalisation permits effective parental control, allows long-term planning, avoids market uncertainties, allows discriminatory pricing and may reduce external interference, notably by government. It is through the use of internal markets in capital labour, management, technology and intermediate goods, that effective control of foreign subsidiaries is exercised (Molloy 1978). The importance of this statement is that lack of know-how is one of the principal features of underdevelopment. (Behrman 1970). The corollary is that modernisation requires the utilisation of the world stock of available knowledge. Second, even among countries of similar levels of economic development, the differential distribution of know-how and expertise means that mutually advantageous trading in know-how is profitable but will take place only if institutional modes exists to provide the appropriate linkage mechanism and governance structures to surround transactions. MNC provide this structure

For the rest of the paper, please contact the authors.

A PROFILE OF EXTENSION COURSES OFFERED BY BUSINESS SCHOOLS

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Abstract

A research study was undertaken to investigate the nature and direction of extension programs available in a selected group of state-supported schools in order to ascertain the national trends in business program offerings.

Results of the study indicate that there is a growing enrollment in business courses at the universities surveyed. Marketing and finance courses have experienced the greatest percentage increase, followed by management and accounting for the period between 1979-1984.

Business Colleges Face New Challenges

In the last few years, a trend evidenced in continuing education is the increasing popularity of business courses offered on extension at off-campus locations. While opponents of extension programs suggest that such courses compete with courses offered on-campus and thereby take away from the existing "market," others argue that extension programs are an educational necessity designed to meet the specific needs of a particular segment of the student population.

This study was designed to investigate the nature and direction of extension programs available in a selected group of state-supported schools in order to ascertain the national trends in business program offerings. A national sample of 200 universities was used, with a response rate of 57%. Of the responding schools, 53% offered extension programs in business for college credit at off-campus locations.

The findings presented in this paper deal primarily with those institutions that indicated they offered business programs at off-campus locations and are based on a preliminary analysis of the survey data.

1. Trends

A. Student Enrollment. There has been a jump of 57.8% in total enrollment in business courses during the last 5 years, due in part to the fact that many institutions first began offering extension programs after the 1979-80 academic year. In the same period, university and college enrollments declined slightly.

B. Course Offerings. The number of courses offered in the four major fields of business (marketing, finance, management, and accounting) has increased over the 5-year period. Since accounting courses constituted a large portion of extension offerings in the base year, this field's percentage of offerings grew at a substantially lower rate than those of other fields. Management and accounting courses comprised the bulk of extension offerings in business.

2. Staffing

Results of this study show the following: 48% of responding schools treat extension teaching as an extra load for their faculty members for which they are paid extra; remuneration, in most cases, was not enough to yield enthusiastic faculty response to teach these courses, and 33% of respondents consider staffing difficulties one problem encountered in expanding off-campus programs.

3. Financing

In financing their extension offerings, 65% of respondents indicated their programs in business are self-supporting and do not receive funding from the general budget or any other source.

4. Academic Credit

The overwhelming majority (97%) of the schools did accept extension courses for college credit; however, 45% of these schools indicated that it was not possible for a student to complete his degree exclusively through off-campus offerings.

5. Problems of Expanding Service

The following factors, in order of importance, were indicated as problem areas in carrying out or expanding extension service: (1) staffing difficulties (33%); (2) financial limitations (21%); (3) lack of administrative support (17%); (4) lack of student interest (11%); (5) lack of off-campus physical facilities (10%); and (6) negative effect on on-campus enrollment (4%).

6. Course Duration

Of the responding schools, 63% offer off-campus extension courses on a semester basis, 33% offer these courses on a quarter basis, and the remainder had a different arrangement.

7. Commitment to the Philosophy of Extension

Five factors were rated in order of importance in terms of administrators' attitudes towards off-campus extension programs: (1) the university has a responsibility to the larger community (32%); (2) off-campus program complements the on-campus program (31%); (3) the university's prime responsibility is to its on-campus students (26%); (4) administration is indifferent (6%); and (5) off-campus program competes with on-campus program (5%).

FREE POINTS: AN EXPERIENTIAL EXERCISE IN SALES MANAGEMENT

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Abstract

A highly quantitative sales management case led to student decision making based purely on the numbers. An experiential exercise was used to illustrate the impact of these actions on the feelings, morale, and productivity of the employees. Since grades generate the maximum amount of stress for most students, one student was given absolute authority over nine other students' grades. This stress over grades led to an effective simulation of the human feelings experienced by both the salespeople and the sales manager.

Introduction

Current training of business students seems to be producing people who are very "numbers" oriented but not "people" oriented. The Harvard Business School is in the process of changing its program to improve the people skills of its graduates (Business Week March 24, 1986). Jenkins, Reizenstein, and Rodgers (1984) surveyed the level of satisfaction of MBAs' skills for various populations. Fortune 500 presidents were most satisfied with MBAs' analytical skills but least satisfied with their interpersonal skills, ranked 14, (last!) out of 14. Interestingly, Deans of AACSB accredited MBA programs ranked satisfaction with MBAs' interpersonal skills 9 out of 14, while the faculty of AACSB MBA programs ranked interpersonal skills 6 out of 14.

Experiential exercises[1] are an effective way to develop human relations abilities. These procedures can stimulate the emotions and sensitivity of the participants. These exercises simulate how you would feel if you experienced a particular situation. This is very different from thinking or talking about how you would feel and "as if-ing" the feelings.

The Situation

Milford Industries (A) (1983) describes a situation where a new sales manager has only quantitative data, i.e., territories, sales, calls, etc., since the previous sales manager died leaving sketchy notes. From this, most students recommended changing territories, commission plans, probations, and firings all from the numbers. A dramatic illustration of what was not in the numbers was provided by a variation of the experiential exercise, "Dividing the Loot: Symbolic Feedback" (Pfeiffer and Jones 1974). Here though, the feedback was not symbolic, but was a real way to improve the student's grade.

The class was broken into groups of about ten. Each group was instructed to select a leader who would have absolute power over "extra points" to be assigned to each student's final grade. This selected and simulated the sales manager who had power over rewards and punishments. The leader had 5.00 points to distribute, which had to be allocated unequally between all group members. The leader allocated their own points out of the group's pool. Thus, the leader felt the pressure of: Should I help my people as I will be working with them for the rest of the semester or should I cheat them to benefit myself?

The group had the further task of recommending criteria for allocating the extra points, but knew the leader had final authority. This simulated the salespeoples' ability to "talk about" the compensation but they were still helpless with a tyrant. This demonstrated the relative powerlessness of the existing salespeople.

Results

At present, the best measures of the effectiveness of this exercise are the worried looks, redness of faces, sweat, etc. of the students involved. Post course discussion has also provided data on the positive impact of this exercise. A pencil and paper measure of the impact of this exercise is being developed.

Subjective measures are not publishable in the JMR, but gut feelings are a key component of day-to-day management. This exercise can have a positive impact on the subjective judgment of future marketing managers.

[1] An excellent source of experiential exercise materials is from University Associates, 8517 Production Avenue, P. O. Box 25240, San Diego, CA 92126. The exercise used in this paper is a variation of one published by University Associates. If this approach is of interest to the reader, their materials are invaluable.

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RECRUITING A NEW MARKETING GRADUATE: WHAT CRITERIA ARE IMPORTANT FOR TODAY'S INDUSTRIAL MARKETING MANAGER?

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Abstract

As marketing educators we can lose sight of the skills that our marketing graduates must have when they seek career opportunities with industrial firms. This study investigates those skills that industrial marketing managers and vice-presidents regard as important factors in the recruitment of marketing majors.

Methodology

A mail questionnaire was administered to 450 industrial marketing managers and vice-presidents who were randomly selected from the 1986 membership directory of the American Marketing Association. Exhibit I contains the questions that were included in the survey. A Likert scale was used for each question to allow the respondents to indicate their degree of agreement or disagreement. A 50 percent response rate was achieved. The hypotheses tested were:

H_o: there is no difference in the criteria that marketing managers and vice-presidents of industrial firms look for in the recruitment of new four year marketing graduates.

H_i: there is a difference in the criteria that marketing managers and vice-presidents of industrial firms look for in the recruitment of new four year marketing graduates.

A chi-square goodness of fit test with 60 degrees of freedom was used to test the hypothesis at a level of significance at .005.

Findings

The questionnaire instrument and the survey results are presented in Exhibit 1. Based on the data collected, industrial marketing managers and vice presidents tend to place more importance on some skills necessary for students to have than others. The three skills viewed to be most important were:

_____ writing skills
_____ verbal skills
_____ strategic planning concepts

The three skills viewed to be the least important included:

_____ knowledge of state and federal governmental purchasing behavior
_____ possession of a technical background
_____ knowledge of pricing skills

EXHIBIT 1

1. It is important to have strong writing skills.
2. It is important to have strong verbal skills.
3. It is important to have a thorough understanding of the industrial buying process.
4. It is important to have the ability to conduct primary research studies.
5. It is important to have the ability to conduct secondary research studies.
6. It is important to have a thorough knowledge of various pricing strategies.
7. It is important to have a clear distinction between consumer goods and industrial goods.
8. It is important to have a clear understanding of strategic planning concepts.
9. It is important to have a strong understanding of state and federal governmental purchasing behavior.
10. It is important to have strong quantitative skills.
11. It is important to have strong understanding of industrial channel strategy.
12. It is important to have strong understanding of promotional strategy in industrial marketing.
13. It is important to have a technical background.
14. It is important to have a thorough understanding of computers.
15. It is important to have a strong understanding of financial analysis and accounting skills.
16. It is important to have strong selling skills.

TABULATED RESULTS

Question	Strongly Agree 1	2	3	4	Strongly Disagree 5
1	58%	41%	1%	0%	0%
2	80	20	0	0	0
3	10	41	40	9	0
4	10	52	28	10	0
5	10	56	26	8	0
6	13	52	22	12	1
7	22	44	23	10	1
8	29	52	13	5	1
9	2	13	48	31	6
10	20	55	23	2	0
11	9	41	39	9	2
12	23	49	23	4	1
13	8	34	30	25	3
14	11	38	41	9	1
15	10	63	18	8	1
16	20	44	31	5	0

Further Research

An area for further research would involve an investigation of the course content deemed important by industrial marketing faculty. The findings of such a study could then be compared to the results of this study to afford a comparative analysis between industrial marketing practitioners and industrial marketing faculty.

TOWARD STRONGER NONPROFIT MARKETING TEXTS

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Abstract

Based on a review of about 40 nonprofit marketing plans, this paper suggests that, as they mature, nonprofit marketing texts would be strengthened if they envisioned marketing research as a less formal, more personal, and more census-like process, if they discussed collaborative analysis as closely as competitive analysis, if they included a fuller discussion of the development of mission statements, including organizational values, and if they pressed for more broadly-based and market-oriented systems for evaluating marketing effectiveness.

Analysing The Environment

The chapters on marketing research in our nonprofit textbooks are, except for the examples, transplants from our corporately-oriented texts. However, most voluntary sector managers rely more heavily than their corporate counterparts on research already available in the public domain. And, because nonprofits are often addressing community needs, publicly-financed studies are often available to them. Thus, our nonprofit texts should contain a fuller discussion of the effective management of secondary sources of marketing information. In addition, the survey instruments involved in nonprofit marketing plans are significantly different from those which are pictured in our texts. For example, concept testing and questionnaires are often handled in less "professional" ways than our textbooks now endorse. Consequently, the marketing plans of nonprofit organizations are seldom built on the rigorous broadly-based sample surveys that our textbooks seem to suppose.

Organizational Missions

A mission statement is an even more pivotal part of a marketing plan for a nonprofit enterprise. Yet, in what appears to be a paradox, these statements are often, by the test of the commercial textbook, unworkably vague. That means nonprofit marketing texts should provide a more openminded discussion of the inclusion of values in those statements, and a consideration of the possibility that, in the realpolitik of the voluntary sector, it may be the better part of wisdom to hold up a mission statement which is, by design, ambiguous but inspiring.

Competitive Analysis

Managers of charitable enterprises, especially in the social service field, tend to see their central problem as one of rationing rather than marketing. Yet marketing theorists tend to ignore the reality that human enterprises are not only preserved by competition, but also nourished by collaboration.

In their marketing plans, nonprofit managers manifest that fact. Indeed, nonprofit marketers may identify more potential collaborators than they do competitors.

If nonprofit marketing texts are to become rigorous about collaborative analysis, then marketing academics have much work ahead of them.

Evaluating Marketing Performance

Perhaps the most common shortcoming of marketing plans in voluntary organizations is the lack of a built-in mechanism for appraising the effectiveness of the actions they propose.

Commonly, this lack of rigour is explained and excused by the statement that "nonprofits have no bottom line". This is neither an adequate nor a sufficient justification.

Partly as an alternative to buyer-based measures of performance, non-profit managers may turn to vendor-based evidences of professionalism. Accepted tests of professional dedication may even subvert conventional measures of marketing performance.

In future texts, then, we need a more openminded understanding of the factors which divert nonprofit managers from the trenchant tests of effectiveness which our closing texts chapters now call for. Then we must go on to show how that marketing viewpoint can be enforced through sets of performance measures which are balanced, perceptive, parsimonious, diagnostic, and market-oriented.

THE MEDICARE HMO CHOICE FOR THE ELDERLY: AN ANALYSIS OF NEEDS AND CONCERNS

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Rajshekhar G. Javalgi, Marquette University

FOCUS OF THE RESEARCH STUDY

Marketing of a prepaid health plan to Medicare beneficiaries presents some new challenges to HMOs. Whereas the traditional HMOs targeting the employed population are characterized by group marketing, Medicare HMO marketing focuses primarily on individuals. The success of Medicare HMOs depends on whether they can convince the elderly to switch from the standard fee-for-service arrangement under which they currently receive health care, to a prepaid health plan. Understanding the consumer behavior of Medicare beneficiaries becomes a critical factor in designing effective marketing strategies for Medicare HMOs. Because of the relative newness of Medicare HMOs, there has been a dearth of published research studies which focuses on the health care choice processes of the elderly.

The focus of the present research is on understanding: 1. The major dimensions of considerations which are important in choosing between the standard (fee-for-service) Medicare and Medicare HMOs; 2. How the elderly who prefer the Medicare HMO alternative differ in their needs and background characteristics from those who prefer the standard Medicare; and 3. The major concerns which the elderly have regarding switching to a Medicare HMO. Data for the study were collected through personal interviews with 254 Medicare beneficiaries in the Milwaukee area.

FINDINGS

Major Need Dimensions

Survey respondents were asked to rate the importance of fifteen possible considerations which the elderly may take into account in their choice between a Medicare HMO and the standard Medicare. The importance ratings were factor analyzed using a varimax rotation.

By examining the heavy loadings (0.40 or higher) and relationships among the heavy loaders, the major needs dimensions of the elderly in regard to the Medicare HMO decision may be labeled: 1. Quality, 2. Value, 3. Convenience, and 4. Continuity. Quality correlated with preventive care, good health care when out-of-state, emergency care access, warm and personal medical care, and access to high quality hospitals. Value involved an assessment of the benefits coverage and costs in terms of money and effort. Convenience reflected access to hospital, distance to doctor's office, waiting time, and availability of all services in one location. Continuity reflected an evaluation of alternative health care plans in terms of ability to continue with the respondent's current physician and hospital.

Profile of Potential Switchers

Survey participants were asked: "If you were to make a choice now, would you continue with the standard Medicare program you currently have, or would you switch to a Medicare HMO?" Nearly 40% of the respondents indicated that they would switch to a Medicare HMO.

Potential Medicare HMO enrollees placed relatively more importance on keeping their out-of-pocket medical expenses low, knowing those expense levels in advance, eliminating claims-related paper work, access to all the medical services they need in one location, comprehensive coverage of all health care services they need, and access to doctors highly competent in medical problems of the elderly. Those who are likely to stay with the standard Medicare placed relatively more emphasis on continuity of medical care relationships with their current physicians and hospitals. No statistically significant relationships were found between intention to join a Medicare HMO, and age, education or income.

Concerns Regarding Medicare HMOs

Survey participants were asked the open-ended question: "What concerns or questions do you have about joining Medicare HMOs designed for senior citizens?" A content analysis of the responses revealed the following major categories of concerns the elderly have in regard to Medicare HMOs: 1. Constraints on choice of physicians and/or hospitals; 2. Insufficient knowledge or lack of understanding of HMOs; 3. Concerns about quality of care in Medicare HMOs; 4. Affordability and costs; 5. Financial stability and viability of HMOs in general; 6. No perceived advantages with Medicare HMOs.

IMPLICATIONS

Medicare HMOs face a major challenge in their marketing communication efforts because of the many concerns, misconceptions and questions the elderly have regarding HMOs. They need to educate the elderly about the nature of HMOs, because lack of such knowledge is likely to inhibit the elderly consumers' acceptance of the new health care delivery system. Medicare HMOs should also instill confidence among the elderly about their quality of care as well as their future financial stability and viability. Medicare HMOs, above all, should be able to convince the elderly that any potential restrictions on choice of physicians/hospitals are more than compensated by the gains from joining them in terms of more comprehensive benefits, lower out-of-pocket costs, and elimination of claims-related paperwork.

PROCLIVITY TO DONATE TIME: DO HEAVY, MODERATE, LIGHT, AND NONDONORS VARY?

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INTRODUCTION

This study profiles demographic and sociographic characteristics as well as media habits of heavy, moderate, light, and nondonors to volunteer dependent organizations. Insights gained will help administrators design appropriate courses of action. This becomes very important at a time when volunteer organizations face stiff challenges in attracting donors.

METHODOLOGY

Data were collected through telephone interviews from a random sample of residents of a Midwestern city with a population of 85,000. Respondents were asked the number of organizations to which they volunteered. Heavy donors volunteered for 4 or more organizations, moderate 2-3, light 1 and nondonors 0. The four donor groups were then compared using chi-square or ANOVA tests.

RESULTS

There was a positive relationship between education and donation proclivity. This was also reflected in occupation: those who were upscale in occupation were more likely to be heavy or moderate donors. There were no other statistically significant differences between the four groups. Home ownership, household size, presence of children, length of residence, age, and marital status were unrelated to donation proclivity.

The four groups were also compared on involvement in various social activities. Differences emerged with respect to playing chess, bridge, golf, and racquetball; attending sporting events, plays, movies, and concerts; entertaining at home; and engaging in water sports and photography.

Heavy and moderate time donors are most active in these social activities; light donors more so than nondonors. In general, heavy and moderate donors differ in that heavy donors do more things involving several people while moderate donors do more things involving one other person or the immediate family.

All groups are regular readers of newspapers and devote similar amounts of time to radio listening. However, nondonors are heavier viewers of TV than are heavy donors while the latter are heavier readers of magazines. Jazz and classical music are most popular among heavy donors while country music is favored more by light and nondonors.

DISCUSSION

Crossing existing/new products with existing/new markets forms four options: market penetration, market development, product development, and diversification. In market penetration, the organization would encourage current volunteers to devote increased time to the kinds of things now being done. Market development would necessitate bringing in new volunteers. Product development would require the organization to find new activities that might appeal to their current stock of donors. Diversification would involve both defining new activities and locating new volunteers. Given that nonprofit groups are guided by specific missions, both product development and diversification are unlikely candidates for strategies without a redefinition of mission. Moreover, the problem facing these organizations most often is that of filling their current needs. Thus market development and market penetration are more likely approaches.

Market penetration would focus on current donor markets. Heavy and moderate donors are committed to several organizations so there may be limited additional time they can donate. Thus a given organization would need to convey that their activities are more worthy of volunteer time than those of other organizations--in other words, a more aggressive differentiation approach to convince these donors to divert their time from others to this organization. This message would aim at people under 35 or over 55, with higher education and white collar or managerial/ professional occupations. They can best be reached via newspapers (particularly Sunday), magazines (if feasible), and, to a lesser extent, radio shows featuring almost any format other than rock or country. Light donors are another, maybe more fruitful target. Since they have some proclivity to donate time now, the basic message to this group would be to donate more time. These people are more apt to be 25 or younger with high school education -- or are in college -- or hold blue collar jobs. They are best reached via Sunday newspapers or radio with country or rock music.

Organizations whose volunteer activities require more social activity (eg. theatre groups) might find it more beneficial to attempt to penetrate the heavy/moderate group. Those whose activities require less social activity (eg. Big Brothers/Sisters) might find trying to penetrate the light donor group to be more successful.

Market development would try to bring nondonors into the organization. Since this group has not expressed proclivity to donate time, they will be a difficult group to cultivate. They are generally less educated, hold blue collar jobs or are not in the labor force; three fourths are under 35 or over 55. They are the least gregarious of all four groups -- the only things they engage in more are hunting and fishing. While the issue of appropriate appeals exceeds the scope of this study, whatever messages are used, would best reach this market through Sunday newspapers, TV, and radio shows featuring rock or country. Organizations that might attempt market development are probably those whose activities do not require a great deal of social interaction.

BANKING: TAKING A MARKETING PERSPECTIVE

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Abstract

The paper presents a brief review of the use of marketing in the banking industry since deregulation. Deregulation has exposed banking to increased competition from a proliferating group of financial service providers. As retail banking changes in the 1980s and 1990s, the importance of the development of an effective marketing program will magnify. Marketers will become more strategic and less tactical in orientation, emphasizing strategic planning. Banking institutions can choose to compete on rates, which will always meet with some success, or through products, services and promotions aimed at a particular target market. A bank needs to have a contemporary image and create products for the up-and-coming affluent individual. A successful marketing program will build a strong customer base by understanding its market, and will respond quickly to changes in both the market environment, and be knowledgeable in new products and services designed for the retail market.

IS THERE A PSYCHOGRAPHIC PROFILE OF THE SERVICE USER

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Abstract

An exploratory psychographic study was conducted to learn if AIO items could adequately profile the life-style of users of each of 8 common personal and household services. Step-wise regression was employed to select those AIO items that would describe the user of the service and usage level. Of the 8 services, only 2 developed R^2 over .30. The hypothesis of unique service psychographic profiles was not substantiated since so few items contribute to the profile and the relationships (R^2) were too low.

The Study

Without doubt, there are heavy users of most type services. As U.S. business moves more and more into a service oriented economy, strategic marketing for services will become focused on the heavy user of the service. While heavy users tend to be identified by appropriate demographic variables, it also would be desirable to learn if users and heavy users of a service can be identified by their psychographic values. Psychographic profiles tend to be described by response to attitude (A), interest (I), and opinion (O) scales.

A battery of 168 AIO items was administered to nearly 200 adults. The items were culled from various published psychographic studies. All items were formatted into a 5 point verbal scale of 'agree very strongly' to 'disagree very strongly' or 'describes me very well' to 'describes me not at all'. The respondents were believed to form a fairly homogeneous segment of the population since all were local residents and were parents, relatives, or friends of the data collectors - college students. Though not representative of the total population, their relative homogeneity served to reduce household income variation. Since income is a strong determiner of service use behaviors, this relative income homogeneity permited the assumption that variation in the desire for or use of a service for this set of adults would be largely a function of the respondent's psychographic values. For each respondent, a level of service involvement, interest, or desire was measured for each of the 8 services.

The hypothesis was that each service would have a unique set of AIO items that would differentiate the users of each service from the users of the other services. To select these items, the correlations of the AIO items with the 8 service items were calculated. All AIO items that correlated .25 or higher (statistically significant) with a specific service were identified and separated out for further study. Step-wise regression analysis was employed. The expectation was that those AIO items that entered into the regression equation would essentially define a psychographic pattern or profile of AIO variables that could differentiate users from non-users and heavy users from light users. For each of the 8 services, a multiple regression equation was developed.

The Data and the Findings

Table 1 below shows the level of R^2 attained for each of the tested services.

TABLE I
USING AIO ITEMS
TO PREDICT SERVICE BEHAVIOR

R^2	Service Behaviors
	Household Services Used
.17	Plumbers
.46	Painters
.09	Electricians
.39	Household Cleaning
	Professional Services Used
.17	Accountants
.14	Lawyers
.23	Financial Advisers
.06	Health Care Professionals

Only two of these equations have R^2 over .30; the other 6 have R^2 of .17 or less. From these relatively low levels of relationship and predicting ability and from observation that very few items entered into each equation, the hypothesis of the existence of unique psychographic service profiles is not proved.

Evaluation and Conclusions

Since the hypothesis of service user psychographic profiles was not substantiated, 3 possible explanations are suggested to account for the obtained results. First, step-wise regression may not be an appropriate analystic procedure for deriving a service user profile since the technique 'discards' those AIO items that correlate highly with the selected items. Alternate analytic procedures to consider might be Factor Analysis or Discriminant Analysis.

Second, the set of AIO items in this study may have been inadequate to properly define a user profile for the services. Third, the services studied may have been inadequately defined and measured. Also, only a limited number of all possible services were examined in this study.

The moderately high correlations between the service items themselves suggests that a better approach might be to group together similar type services and develop an overall user score for the service category. It may be that more definitive service psychographic profiles would emerge.

INCLUDING THE UNRANKED HALF IN A TWO-STAGE RANKING PROCEDURE

Tansu Barker, University of Saskatchewan, Canada

Marketing researchers use a variety of rating scales with a continuum of numbered categories in order to be able to represent the range of possible attitude evaluations. Often respondents are asked to rank order attitudes on the basis of given criteria. Ranking preferences towards an object, a brand, a commercial, an idea, etc. appear to be popular for primarily two reasons:

1. Ranking is intuitively appealing. It is easy to use and to explain to the respondents because it is a very familiar activity. According to Hauser and Shugan (1980) ordinal preference data should be collected rather than internal or ratio in order to encompass most of the population.

2. The ranking task approximates the processes used by consumers in making purchase decisions when available alternatives are being compared (Brown et al. 1973).

When the number of items to be ranked exceeds half a dozen, which is not uncommon in marketing, there is little confidence in the respondents' ability to differentiate the choices in the middle of the range. Hence, a useful idea is to ask the respondents to split the items into several classes (1. stage) and rank order them within each class afterwards (2. stage). Depending on the number of classes and items in each class, this procedure may be cumbersome for the respondents as well as the fact that the researcher may be more interested in the "top" of the range. An acceptable alternative is to ask the respondents to select say the top 3 out of the 6 items presented (1. stage) and then rank order these among themselves (2. stage). When this procedure is utilized, many researchers are reporting simply the rankings received by each item as follows:

Item	1. rankings	2. rankings	3. rankings
A	Xa1	Xa2	Xa3
B	Xb1	Xb2	Xb3
C	Xc1	Xc2	Xc3
D	Xd1	Xd2	Xd3
:	:	:	:
Y	Xy1	Xy2	Xy3

Often attempts are made to provide a composite score for each item ranked by computing a score based on assumptions regarding the implied rankings by those who did not rank a given item in the top 3. If there were 6 items, usually the implied ranking for those who did not select item A at the end of stage 1 would be 4.5 as it is half-way between third and sixth. The fact that this implicit ranking is used for every item regardless of the actual distribution of the established rankings between 1. and 3. is worth pursuing further.

It is proposed that investigating the actual distribution of the rankings between, say, 1. and 3. for each item could be used to improve on using 4.5 as the ranking for those cases where the item was not ranked in the top 3. Looking at the actual distribution of the rankings to propose something about the inferred rankings beyond, say, the top 3 would undoubtedly improve the accuracy of the composite score for each item. However, inference of rankings is complicated by the issue of order. That is, if items A and B have the following rankings by 200 respondents

	First	Second	Third
A	75	40	15
B	15	40	75

it seems intuitively appealing that their rankings for 4 through 6 would be different. This issue may be investigated by looking at alternatives such as squaring and weighting, using the geometric mean or the harmonic mean and comparing results against actual rankings provided by data obtained from respondents who have actually ranked the items.

This approach results in a pair of vectors, one which is the true rankings, r, and another one that is estimated, $\hat{r}$. What needs to be done is to test the equality of these two vectors. One way is to consider the equality of the correlation of the two vectors. More accurate measures might be the mean sqaured error (MSE) or the mean absolute deviation. It would be useful to obtain two true vectors r_1 and r_2 from the same group of respondents and compare the equality of the repeat rankings r_1 and r_2 versus $\hat{r}$ to establish consistency.

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THE DEGREE OF RIVALRY (COMPETITION) IN AN INDUSTRY CAN BE MEASURED

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Abstract

A relationship between rivalry (competition), concentration measures and the number of firms in an industry was reported in an earlier paper (Cooke, 1987). A numerical application of the concept is presented in this paper.

Introduction

It was noted (Cooke, 1987) that if the number of firms in an industry was constant then various measures of concentration changed with changes in the degree of rivalry. If the number of firms changed but rivalry did not change the concentration measure still changed. From this it was concluded that a concentration measure is a function of the number of firms and the degree of rivalry in an industry. For a detailed explanation of the relevant research see Cooke (1974, Ch. 6 and 1987). A numerical example of this concept as applied to one industry is shown in this paper.

The basic equation is:

$$c = e^{-\frac{6 - r}{n + 1}}$$

Where, in an industry, c is the semi-logarithmic distribution of market shares (a summary measure of concentration), n is the number of firms and r is the degree of rivalry. Using Kotler's (Cooke, 1974, pp 154-5) degrees of rivalry:

- r = 1 when the degree of rivalry is on the boundary between tacit cooperation and healthy rivalry,
- r = 2 for healthy rivalry,
- r = 3 when the degree of rivalry is on the boundary between healthy rivalry and limited warfare,
- r = 4 for limited warfare and
- r = 5 for a degree of rivalry on the boundary between limited warfare and open warfare

The Airline Industry

Government policy from the middle of the 1950's to the late 1970's was to equalize the market shares of the trunk airline carriers in order to make the industry more competitive (Cooke, 1974, p 147).

In the 1949-1951 period (three years) there were sixteen trunk carriers and the slope of the semi-logarithmic distribution of market shares was 78.6% with an r squared of 0.976. That is each firm in the industry had 78.6% of the market share of the next larger firm and the actual data fit this relationship very well. The four-firm concentration ratios were 0.693 (1949), 0.689 (1950) and 0.702 (1951) which are quite high, indicating according to conventional wisdom little competition.

By 1966 there were only eleven firms in the industry and this decrease is usually taken as an indication that the degree of competition has decreased even more. For the 1966-1969 period the four-firm concentration ratios were 0.663 (1966), 0.677 (1967), 0.671 (1968) and 0.665 (1969). These figures are not significantly different than the 1949-1951 figures but they do indicate a slight increase in competition. Thus the two commonly used indicators of the degree of competition are giving contradictory signals. The semi-logarithmic distribution of market shares for 1966-1969 was 79.4% (r squared equals 0.974) which also indicates a small increase in competition.

Substituting these values for the number of firms and the degree of competition in the above equation results in a value for r of 1.9 during the 1949-1951 period and a value of 3.2 during the 1966-1969 period. This is a significant difference and it indicates an appreciable increase in competition. Using Kotler's terms, the change is from almost healthy rivalry (2.0) in the 1949-1951 period to close to limited warfare (4.0) in the 1966-1969 period. Note that 3.0 is the boundary between healthy rivalry and limited warfare.

This is a totally different analysis than that obtained by looking at the change in the number of firms or even the change in the two summary measures of competition. This significant increase in the degree of rivalry is supported by the facts which is that it was CAB policy to move in this direction and the policy was working. More important a careful analysis of the numbers supports this conclusion. With the change in the number of firms from sixteen to eleven a significant decrease in competition is expected but both summary measures of concentration actually indicate a slight increase in competition. It isn't that the number of firms decreased and competition stayed the same, it is that competition actually increased. The number of firms in an industry and various conventional concentration measures are by themselves poor indicators of competition. Competition is measured by both not just one of them.

Conclusion

Recognizing that concentration measures are a function of the number of firms in an industry and the degree of rivalry makes it possible to obtain a more accurate measure of rivalry (competition) since information on the number of firms in an industry and the semi-logarithmic distribution of market share is readily available.

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"DOUBLE VOTING" IN MAIL SURVEYS
THE POTENTIAL AND THE REALITY

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Abstract

This paper presents the results of two studies investigating the incidence of "double voting" by respondents in multi-wave mail surveys. Two separate surveys with a total sample in excess of 1300 were conducted. In both cases these were genuine studies, but dealt with innocuous topics. The results appear to indicate that the tendency for respondents to register their opinions more than once is limited. This, however, may not be the case in surveys involving topics of a somewhat controversial nature.

Introduction

The notoriety of poor response rates associated with mail surveys is well documented. Typically two major issues arise. One involves techniques for improving response rates and the second deals with the associated problem of non-response bias. However, the authors felt there could well be a third, and heretofore overlooked, problem area which stems from one approach to coping with the first.

Across all social science research perhaps the most common method for increasing responses in mail surveys is multiple mailings. Herein lies the potential for problem area three. In even the most mundane and pedestrian of survey topics, there could well exist a subset of the population for whom it is something of a burning issue. Given the opportunity to register an opinion multiple times, (i.e., "double vote") these persons could easily be tempted to do just that.

In the absence of or in conjunction with the foregoing, some other possibilities also exist which could result in multiple responses from any given individual. Conceivably there is a personality type in existence in whatever numbers which gets a thrill out of completing questionnaires regardless of the topic. Alternatively, questionnaire completion could be a break in the routine for the retired and/or unemployed and they might complete and return all questionnaires received simply as a relief from boredom. Another segment of the population might exist which feels compelled out of a sense of civic duty to fill out survey forms. These persons would certainly represent candidates for "double voting." Lastly there could be others who register multiple responses through a process as simple as forgetfulness or mistrust of the U.S. Postal Service to have delivered the first one properly.

The possibility of the operation of any or all of the foregoing began to intrigue us and we decided to investigate.

Methodology

Two separate and unrelated projects arose in a timely fashion and allowed us to pursue the possibilities of "double voting" behavior. The sample sizes of the two studies were 603 and 719.

Once the master lists had been prepared and the mailing labels created, a coding process took place. Each sample member was assigned a number and a corresponding number was placed deep inside the self-addressed and franked return envelope. Duplicate mailing labels were cut and a second mailing, complete with identical codes, followed the first by about two weeks. Both of these surveys were bonafide and legitimate projects and completely unrelated to one another. Furthermore the mailing lists were totally different. In essence then we offered "double voting" opportunities to well over 1300 individuals. The coding process allowed us to keep tabs on the incidence of this behavior.

The results are shown in Table 1.

TABLE 1

		STUDY #1	STUDY #2
	Questionnaires Sent	603	719
	Total Questionnaires Received	180	370
	Total Questionnaires Received (%)	29.85	51.46
	Total Usable Questionnaires Received	146	335
	Total Usable Questionnaires Received (%)	24.21	46.59
DOUBLE VOTING BEHAVIOR	Total	1	18
	% of Total	.17	2.5
	% of Total Returns	.56	4.86
	% of Total Usable Returns	.68	5.37

Conclusions and Implications

Study #2 yielded considerably more response and also more double voting. However, this is by no means a linear relationship. In the main, it appears that double voting surfaces as pretty much a non-issue.

However, it must be pointed out that both of these surveys were completely innocuous in nature. What might happen in the presence of a controversial topic is another story. It's conceivable, if not downright likely, that subsets of any given sample exist which might be easily triggered by a "hot" topic.

The authors are currently in the process of replicating this study. This time, however, the mailing lists were judiciously selected and the surveys are far less bucolic. It will be interesting indeed to compare these results to the foregoing.

AN ANALYSIS OF THE PROPERTIES OF FOUR SCALES MEASURING ATTITUDES TOWARD SEXUAL EMBEDS IN ADVERTISING

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Introduction

Evidence concerning the existence of sexual embeds has been offered by Kilbourne, Ridley, and Painton (1985), Key (1980), and Widing, Hoverstad and Luke (1986). Critics of the practice state that the practice is unethical, immoral, manipulative, in need of legislation, frequently used, and, to some degree, effective. (Key 1980, Kelly 1979, cf. Moore 1982.) It is also of interest, however, to measure subject/respondent opinions to assess their viewpoints.

The Scales

Six scales for measuring attitudes toward and perceptions of the use of sexual embeds in advertising were developed and administered to a convenience sample of undergraduate students who had been exposed to a series of ads. One of these ads (Gillette Foamy) contained only a copy and picture of a man's face while shaving and was determined not to have any sexually oriented content. Another ad, with an overt sexual theme showed a partially clad man and a woman reclining on a bed and the copy read "Calvin Klein Shave Gel for Men." The third ad was for Edge Shave Gel and was determined to have four sexually oriented embeds in the ad. A description of this ad is provided by Widing, Hoverstad and Luke (1986). The scale names, description, and a measure of internal consistency (Cronbach's Alpha) are provided below.

The first four scales are intended to measure attitudes towards the use of sexual embeds in advertising, whereas the last two deal with perceptions about the practice which are not necessarily positively or negatively reflective of attitudes toward the practice.

Validity

Validity was evaluated by comparing subjects' responses on the four attitude scales for sexual embeds (Moral, Manipulative, Objectionable, and Controlled) to their overall attitudes toward the three ads. It would be expected that valid scales would correlate significantly with attitudes towards the Edge ad (containing sexual embeds), but not with attitudes toward the Gillette (no sexual embeds) or the Calvin ad (sexual content but no sexual embeds). However, a valid scale should also discriminate by not correlating with either the ad with no sex (Gillette) or the ad with overt sex (Calvin). The latter is the tougher test due to the presence of sex which is somewhat related to embedded sex (i.e., a similar but conceptually distinct issue).

The Table provides the correlations among the four scales and attitudes toward the ads. The correlation was significant for three of four scales (Objectionable, Manipulative and Controlled). Subjects who view sexual embeds negatively on these three scales also have less favorable attitudes toward the Edge ad. However, the correlation for Moral was not significant ($p = .101$).

TABLE
CORRELATIONS AND SIGNIFICANCE OF SEXUAL EMBED SCALES WITH ATTITUDES TOWARD THE ADS

Scale	Gillette Ad	Edge Ad	Calvin Ad
MORAL	-.09	.12	.30*
OBJECTION	.05	.29*	.26*
MANIPULATE	-.02	.29*	.15
CONTROL	-.07	.33*	.20*

* $p < .05$

No correlations were significant for the Gillette ad which was expected. For Calvin, however, three of the four scales did correlate significantly with attitudes toward Calvin (Moral, Objectionable, and Controlled) and the other was marginally significant on Manipulative ($p < .10$). The scales, however, did not discriminate between the ad with embedded sex (Edge) and the ad with overt sex (Calvin.) A test of differences between the correlations indicated that no difference existed for Objectionable, Manipulative, and Control. The difference on Morality was marginally significant ($p < .10$); however, the correlations were stronger for Calvin which was in the opposite direction than that expected. This suggests that subjects who felt sexual embeds were more morally harmful had less favorable attitudes toward Calvin than the ad with sexual embeds (Edge). Further, while the other three correlations were nominally higher for Edge versus Calvin, these differences were not significant ($p > .10$).

Scale 1: "Moral" (Alpha = .87) refers to whether subjects feel the use of sexual embeds in advertising is morally harmful to the viewer.

Scale 2: "Objectionable" (Alpha = .84) refers to whether subjects personally object to the use of sexual embeds in advertising.

Scale 3: "Manipulative" (Alpha = .79) refers to whether subjects find the use of sexual embeds in advertising manipulative of viewers' attitudes.

Scale 4: "Controlled" (Alpha = .89) refers to whether subjects feel that the use of sexual embeds requires tighter regulation.

Scale 5: "Widespread" (Alpha = .90) refers to subject perceptions about how frequently sexual embeds are used in advertising.

Scale 6: "Tool" (Alpha = .82) refers to subject perceptions about how effective the use of sexual embeds are in advertising.

THE SELECTION OF ADVERTISING MEDIA AN APPLICATION OF THE ANALYTICAL HIERARCHY PROCESS

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Abstract

The analytic hierarchy process (AHP) was used as a model in the selection of advertising media. A three level hierarchy was created: overall focus, advertising campaign objectives and the alternatives media forms. The final output of the AHP procedure consisted of the relative efficiency of each media to fulfill the main objective of the advertising campaign. Television was superior to print media to achieve five of the six advertising objectives being considered.

The Analytical Hierarchy Model

The analytical hierarchy process developed by Thomas Saaty in (1972) as a measurement system designed to evaluate complex systems and consider alternate courses of action in terms of achieving the primary objective. The method uses dominance matrices and their corresponding measurement by developing trade-offs in the course of structuring and analyzing a series of simple reciprocal pairwise comparison matrices.

The approach consists of three parts or phases:

1. The construction of a hierarchy-breaking down a problem into separate parts.
2. The establishment of priorities-ranking elements of the problem by relative importance.
3. The principle of logical consistency-insurance of the first two steps that the elements are grounded properly and ranked in a logical fashion (Saaty, 1980).

In a practical mode: If one first defines an overall objective (or set of objectives), then lists all relevant outcomes for consideration and, third, establishes the judgemental criteria, a three level hierarchy may be heuristically developed.

Research Design

This paper will take one of the criteria for the selection of an advertising media: objectives of an advertising campaign; and, show how the AHP model can choose the media which most emphasizes the objective of the campaign given the highest priority.

The hierarchy for the objectives of an advertising campaign will consist of three levels. The highest level is the overall objective of selecting an advertising medium. The lowest level includes the alternative medias: television, radio, magazines, newspapers, direct mail, and telephonemarketing. The intermediate level of the hierarchy contains the different objectives of the advertising campaign: name recognition, draws attention, stimulates need, positive image, details attributes and provides exposure.

A questionnaire was developed to compare each media alternative (two at a time) in regard to its ability to attain the advertising objective. It was designed in matrix form to facilitate pairwise comparisons. Three hundred people were surveyed, from communities in northern N.J. They were asked if the two media were equally effective in achieving the objective; or if not equal, how much was one media form better or worse than the other. The scale for pairwise comparisons was the one suggested by Saaty (1980).

Results and Conclusions

Television was judged to be superior to other media for achieving 5 of the 6 advertising objectives used in this study, namely: name recognition, drawing attention, stimulating needs, creating a positive image and providing exposure. Print media was rated superior to television for achieving: detailing the attributes of a product. It is to be noted that when prioritising the six advertising objectives (obtaining second level hierarchy values), detailing the attributes of a product was given the lowest priority (judged least amenable to advertising copy). The global (composite) rating for television was .4609 while magazines (the second highest media selected) was .1795. These figures provide an estimate of the extent of superiority of television over magazines to achieve these six advertising objectives.

This survey concerns advertising in general/ If the AHP analysis was applied to a unique application such as deciding the best medium for advertising products at the "wholesale" level, television would probably have been given a lower priority (effectiveness).

Costs must also be considered. While television received a priority value roughly three times that of print media, taking into account the actual dollar amounts as well as comparative cost effectiveness for achieving each advertising objective, results may have differed appreciably. A constraint such as a limited budget would sharply affect priorities.

In general, the analytic hierarchy process can be a significant aid in examining business problems by allowing the quantification of multiple comparisons across interrelated strata which at first instance appears cumbersome to measure and analyze.

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A TEST FOR REACTIVITY IN PAIRED COMPARISON TASTE TESTS

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Abstract

An experiment designed to explore the extent of subject reactivity in paired comparison taste tests is outlined. The experiment yielded a high degree of subject reactivity.

Introduction

One frequently used type of product test, the paired-comparison taste test, may magnify minor differences due to subject reactivity: participants in a consumer test realize they are test subjects and they assume that differences exist among the different products and it is their job to find them (Boyd, Westfall, and Stasch 1985).

Research Procedure

This research was conducted using three comparable experimental groups composed of students at a small east coast urban university. The students were given two glasses of cola and asked which they preferred. The students were also given the opportunity to indicate "I prefer neither product." Each of the three groups was given a different treatment:

Experimental Group I: two identical cola products

Experimental Group II: two fairly similar (as measured by price) cola products

Experimental Group III: two fairly dissimilar (as measured by price) cola products

Hypotheses

Hypothesis 1: There will be no significant difference between the proportion of subjects indicating "I prefer neither product" within each of the three experimental groups.

Hypothesis 2: There will be no significant differences in the preference distributions for Experimental Group I (identical products) and Experimental Group II (fairly similar products).

Hypothesis 3: There will be no significant differences in the preference distributions for Experimental Group I (identical products) and Experimental Group III (fairly dissimilar products).

The group testing identical products should have a significantly higher proportion of subjects refusing to make a choice, so Hypothesis 1 is expected to be rejected. If the taste test has the ability to distinguish between products that are fairly dissimilar, we should see a rejection of Hypothesis 3. If, however, Hypothesis 2 is also rejected we will have additional support for the thesis that taste tests exaggerate minor differences.

Results and Discussion

Where subjects were given identical products, only 20% indicated no preference between the two products. This indicates a degree of reactivity among 80% of the subjects in Experimental Group I who attempted to find a difference between two products when in fact none existed.

The percentage of subjects indicating "I prefer neither product" was the highest for the group which tested the identical products (Group I 20%; Group II 7%; Group III 16%). When truly different products were used, the percentage of subjects indicating "I prefer neither product" declined, although the difference was only marginally significant in one of the two cases.

We were not able to reject either Hypothesis 2 or Hypothesis 3, but the chi-square statistic obtained while testing Hypothesis 3 was larger than that obtained in the testing of Hypothesis 2. This indicates that although not statistically significant, the differences in preference distributions are greater in the experimental group where the actual difference between the products is greater.

Conclusions

Within the experiment there was a high degree of reactivity. Eighty percent of the subjects who were given identical products to taste stated that they preferred one product over the other. Discussion with the subjects during debriefing indicated that the wording of the "I prefer neither product" statement may have been misleading. Some subjects interpreted this statement as meaning "I don't like either product" and felt that they liked both products. This situation may have forced them to choose either 1 or 2.

We cannot reject the hypothesis that the preference distributions for each of the three experimental groups are all identical. This leads us to seriously question the ability of paired-comparison taste tests to provide an accurate measure of product differences. Some caveats are appropriate here. This test was conducted in a classroom setting using students. Thus, the situation in no way approximates the actual use situation and the results cannot be generalized beyond the student population.

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A THEORY OF THE FIRM IN IMPERFECT COMPETITION USING A RELATIVE MEASURE (MARKET SHARE) AND THE ENTIRE MARKETING MIX

by Ernest F. Cooke, Loyola College in Maryland

Abstract

Conventional microeconomic theory focuses on price as a determinant of demand and uses absolutes. The purpose in writing this paper is to present a theory of the firm that is more realistic because it uses all elements of the marketing mix and further uses relative measures such as market share which more readily recognize competitive relationships.

Introduction

The purpose in writing this paper is to propose a competitive model using relative measures of seller behavior and seller performance for the major areas of seller interaction. One aspect of this model will be the use of the four major areas of the marketing mix: product, price, place and promotion. Another aspect will be the use of relative measures such as market share, relative price, promotion share and so on. The third feature of this approach will be a theoretical method of looking at the non-price part of the marketing mix as a whole. One major point is that market share is a powerful analytical tool (Cooke, 1983b).

The Marketing Mix: It has been suggested (Cooke, 1983a, p. 266) that sellers sell and buyers buy a marketing mix, not just a thing or a product. This is a key aspect of the model being presented here, particularly since the elements of the marketing mix are highly interrelated and interdependent (Cooke, 1983a p. 266). The four major interrelated elements of the marketing mix are a package and it is the package that is marketed not individual elements of the package.

Demand: The demand for the product of a single seller in an industry is determined by two different sets of factors. One set of factors determines the demand for the entire industry. These factors are the average price of the product, the price of all other products (substitutes, complimentory and general price level--income effect), the income of the buyer and the buyer's taste toward the product. The other set of factors determines the demand for one seller in relation to the demand of all other sellers. These are the factors of product quality, availability, price and promotion of one seller in relation to that of all his direct competitors. To determine the demand of one seller in relation to his direct competitors it is desirable to use a relative measure such as market share rather than an absolute measure such as sales in physical units. Market share is the ratio of one seller's demand to total market demand, it is relative sales. The determinants of market share are relative product quality, availability, price and promotion. Market share of a given seller is a function of effective product quality expenditure share of the that seller, effective availability expenditure share, relative price, the effective promotional expenditure and lagged market share to account for the carryover effect. This is Kotler's fundamental theorm of market share determination (Cooke, 1982). The pitfalls of using an absolute measure of demand is illustrated in this simple example. There are two sellers in a market which is characterized by a highly inelastic total demand curve. One seller raises prices 10% and the other seller raises prices 20%. Buyers are otherwise indifferent to the marketing mixes of the two sellers and knowledge is perfect. Buyers will make their purchases from the first seller and will stop purchases from the second. If analysis is done on the basis of absolute sales an increase in price for the first seller results in increased sales which is inconsistent with theory. If analysis is done on the basis of share the observer will note an increase in market share (to 100%) for the first seller when relative price decreases which is consistent with theory. In markets with several sellers and different determinants of both total demand and a single seller's relative demand relative measures are more appropriate. Also common factors such as the state of the economy cancel out (Cooke, 1983b).

Dividing the Mix

It is possible to separate the marketing mix into two components, price and the rest of the mix. By holding the rest of the mix constant while varying price a relationship between price and market share is established for one seller if the total marketing mix of all sellers also remains constant. If this is done for all sellers (an experiment which requires all elements of the marketing mix to be held constant except for price which is varied for each seller at the same time), over a sufficiently wide range, it is possible to determine a price for equal market shares. This price at the market share which is equal for all sellers becomes a measure of the rest of a seller's marketing mix. Thus the seller who commands the highest price at this point has the mix of product quality, availability, promotion and image (including carryover), and the psychological aspects of price and place deemed most desirable by buyers as a group because they are willing to pay more for the non-price (which includes the psychological aspect of price) part of that seller's mix. Conversely, the seller whose mix becomes desirable to the buyers as a group only when its price is the lowest has the least desirable non-price part of the mix to buyers. If this measurement technique were valid it would permit measuring the effectiveness of the non-price part of the marketing mix since the expenditures for the non-price part are known. The difference between the value as determined by this technique and the cost as determined by the expenditures is a measure of the effectiveness of these expenditures.

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GATEKEEPERS: THEIR VIEWS ON COMMUNITY MENTAL HEALTH CENTERS

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The marketing of health services has gained significant attention in recent years. New organizations and new journals have emerged to productively channel the growing body of information in this field. One interesting segment of this field is the marketing of mental health centers.

Introduction

The obvious market for mental health care centers is people with mental health problems, but what is the potential size of this market. National research has shown that fully 20% of the adult population in the United States is troubled at any given time (Time, 1984). Further, between 29% and 38% of the adult population will experience at least one psychiatric problem in their lifetimes (Ahmed, 1984). Clearly, a substantial market for mental health care services exist.

What is particularly alarming about the statistics is that while a significant number of people suffer from mental health problems, only a small percentage of those people afflicted actually receive treatment. The logical question to be asked from a marketing perspective is "Why?" One answer is that while a large number of people do have mental health problems, many people do not have problems which are severe enough to require professional treatment.

Given that not all mental health problems will require treatment, what about those individuals who do require help. Two logical scenarios exist: (1) The individual recognizes that a problem exists and seeks help for it, or (2) The individual does not recognize the problem, but is referred or forced to seek help by another individual or agency. The first scenario, while important, is not directly related to the focus of the present study. The purpose of this study was to examine the attitudes of those individuals who would commonly be viewed as the referral agents who influence individuals with problems to seek help at a mental health center. As potential gatekeepers to mental health client referrals, the attitudes and opinions towards mental health centers by referral agents can be an important part of the marketing effort by such centers.

One logical approach to successfully market a mental health center would be to target the referral agents. These referral agents might be reasonably viewed as the gatekeepers to success. Literature does exist to support this assertion. For example, a 1984 study concluded that most people sought help from medical doctors rather than from mental health specialists. Two studies in 1980 and 1981 concluded that gatekeepers do exist and they can be divided into several categories with varying degrees of influence (Kohler, 1983). One interesting aspect of the study was to determine what effect, if any, the mental health propaganda which was prevalent during the 1960 to 1970 era had on the referral agents. It was hypothesized that younger referral agents would have more favorable attitudes toward mental health attitudes than would older referral agents.

Methodology

Four subsamples were selected to represent what was considered to be potential referral agents for mental health center clients. The four subsamples included: (1) local clergy members, (2) local high school counselors, (3) local physicians, and (4) local business people. A fifth subsample was designed to act as a control sample against the first four subsamples. The fifth subsample consisted of a random sample taken from the general population in the selected market area.

The questionnaire was partitioned into four major sections. The first section was designed to obtain scaled information about the sample's attitudes toward the term "mental health" and other general mental health issues. The second section of the questionnaire was designed to gather data about who the respondents would contact if they had a mental health problem, and how important they felt it would be for an individual to seek help if he or she had a mental health concern in seven possible problem areas. The third section specifically asked the respondent to rate the mental health care service provided by four local mental health care delivery agents in the market area. The questions were designed to make direct comparisons between the agencies on 18 important health care service dimensions. The final section consisted of demographic/sociographic variables which were believed to be important for cross-referencing with selected attitude patterns which might emerge.

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A LISREL APPLICATION IN SALES MANAGEMENT: MODEL TESTING AND REFINEMENT

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Abstract

This study is concerned with an LISREL V application to a sales management survey of 77 General Motors dealers. Of eight sales models considered, the Walker-Churchill-Ford model was tested with mixed conclusions. The results supported extrinsic and intrinsic satisfaction as a function of role conflict and ambiguity, but did not confirm performance as a function of aptitude, motivation, role conflict and ambiguity. This is attributed to a lack of correlation between indicators of performance, aptitude and motivation. The results address issues and difficulties of measuring these indicators more than the viability of the WCF model.

Background and Approach

LISREL statistical applications are an increasingly common approach to handling and analyzing sales manager and management surveys, which yield sample sizes quite reasonable for the circumstances, but not sufficiently robust for many variables and complications related to modern marketing models [Joreskog and Sorbom 1982]. This study of 77 sales managers in a defined state territory is a superficially good response rate. While the usual variety of statistical tools were weighed, LISREL is considered more practical, useful and valid for the circumstances and research design [Darden and Perrault 1975, Acito 1984, Fornell and Larker 1984].

Eight sales management models were considered for comparison and testing in this study. They are: [1] Walker-Churchill-Ford [1985], [2] Oliver and Brief, [3]Futrell and Shul, [4] Bagozzi, [5] Doyle and Shapiro, [6] Teas,Wacker, Hughes, [7] Berhman and Perreault, [8] Hunt Chonko, Wood. The Walker-Churchill-Ford model and factors proved to be the most directly related and quantifiable for purposes of this survey; and certain aspects of the Bagozzi [1982] approach and methods were particularly helpful concerning causality and the nature of factor relationships.

Results, Testing

LISREL statistical applications are of recent origin, and yet the statistical package is now in its 6th edition. Widely discussed in marketing modeling, it has been available to the U.S. research community for a only short time [Joreskog and Sorbom 1982]. LISREL V was utilized in this research. The study results concerning sales managers'performance and satisfaction supported only hypotheses concerning extrinsic and intrinsic satisfaction as a function of role conflict and ambiguity. It did not "accept" performance as a function of aptitude, motivations, role conflict or ambiguity.

Conclusions, Implications

The conclusions are several: 1) the LISREL statistical application is especially helpful in medium sized samples of this type, addressing complex modeling relationship, 2) a review of related sales management research shows large gaps in industry coverage and 3) many apparently complementary studies are barely related in terms of a discipline-wide or thematic research effort. There are also important issues in the literature of varying research methods concerning the same questions, the temporal nature of specific efforts covering more than a decade, a variety of companion studies which have used diverse and often unrelated survey instruments and procedures. On balance, the entire research picture is spotty and quite incomplete, and therefore the various theoretical frameworks and sales management models should be considered either provisional or just partially tested.

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