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CONSUMER CHARACTERISTICS AND POST-PURCHASE SATISFACTION:  
A COMPARATIVE STUDY OF ACCOUNTING AND  
HOTEL AND RESTAURANT MANAGEMENT MAJORS

By  
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## ABSTRACT

### CONSUMER CHARACTERISTICS AND POST-PURCHASE SATISFACTION: A COMPARATIVE STUDY OF ACCOUNTING AND HOTEL AND RESTAURANT MANAGEMENT MAJORS

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This study examined the relationship between consumer characteristics and post-purchase satisfaction. The question at issue was whether the relationships differed between purchasers of competing brands. The expectation that differences exist between brands receives implicit support in market segmentation theory. The marketing literature, however, provides no empirical evidence on this question although evidence does exist that consumer characteristics are associated with satisfaction.

The brand choice upon which the study focused was the selection of academic major by university students. The research subjects were Michigan State University seniors enrolled in accounting or hotel and restaurant management. The research design was a cross-sectional, ex post facto survey. The data were collected using a questionnaire personally distributed to classes in which subjects were concentrated.

The personal characteristics data collected included

measures of demographics, self-image, values, and activities, interests, and opinions. All data, including the satisfaction measures, were subjected to cluster analysis reduction procedures. For each group of students, the relationship between consumer characteristics and satisfaction was evaluated using both bivariate (product-moment correlation) and multivariate (multiple regression) analysis. At both levels attention was directed to a comparison between groups of the strength and direction of associations exhibited between given variables and satisfaction.

The tentative results of the bivariate analysis were reinforced by the results of the more rigorous multivariate analysis. The multiple regression analysis yielded clearly identifiable differences between groups in the association of given variables with satisfaction. Satisfaction was related to choice of major (brand choice). Specifically, an individual's satisfaction with accounting was greater if that individual reflected the characteristic labeled social desirability but was low in the characteristic labeled individualism. In contrast subjects high in individualism reported greater satisfaction with hotel and restaurant management. Although the emphasis of the study was not placed on maximizing the prediction of satisfaction, it should be noted that the majority of variance in satisfaction was not explained by consumer characteristics.

The essence of the analysis is that the belief that consumer satisfaction is related to brand choice is supported.



It is, therefore, consistent with the implications of marketing theory and segmentation theory in particular. An increased understanding of the processes involved in the generation of consumer satisfaction requires, therefore, that the analysis not be restricted to consideration of sellers' actions. Instead more attention should be paid to variations among consumers and the market mechanisms through which buyer-seller interaction takes place.

This dissertation is dedicated  
to my wife Sandra  
and to my sons Lee, Reid, and Kelly

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## CHAPTER I

### INTRODUCTION

#### Purpose of Study

The purpose of this study is to investigate selected aspects of marketing theory dealing with market segmentation and post-purchase evaluative phenomena. Segmentation and post-purchase issues are important components of both marketing theory and marketing practice. Of the two areas post-purchase questions have the shorter tradition of empirical research. The tradition is even shorter for the area within the range of post-purchase concerns that is coming to be known as satisfaction research. This study focuses on this area.

Pioneer studies in the area of consumer satisfaction frequently show the influence of prior segmentation studies. For the most part, however, these studies have drawn on segmentation theory rather than attempted to test or extend it. Consequently, satisfaction research has developed with a set of focal concerns largely independent of segmentation theory. The intent of this study is to attempt to establish stronger links between the two research domains. The purpose is to investigate whether the logic of segmentation theory is substantiated by empirical evidence when extended beyond purchase to include evaluative judgments.

### Theoretical Background

Webster defines satisfaction as "1. satisfying or being satisfied 2. something that satisfies; specif., a) anything that brings gratification, pleasure, or contentment."<sup>1</sup> Given this definition it would seem that the subject of satisfaction would inspire neither controversy nor differences of opinion. For the most part this has been true. Satisfaction is highly valued and pursued. It is likely that most people would agree with Confucius that: "The superior man is satisfied and composed; the mean man is always full of distress."<sup>2</sup>

There are indications, however, that in certain circumstances, times, or places other goals or values are preeminent. John Stuart Mill illustrated this very aptly with the statement: "It is better to be Socrates dissatisfied than a pig satisfied."<sup>3</sup> Charles Steinmetz elaborated on the theme that the world belongs to the dissatisfied when he said:

For me the one underlying principle of all human progress is that "divine discontent" which makes men strive for better conditions and improved methods. . . . Through my years of experience I have come to see that one can never rest in this game of life, because it is a race that is never-ending. Those who stay in front of the pack have learned this truth early in their careers, and that is why they are in front. The men in the rear are the easily satisfied, the ones who are content with little.<sup>4</sup>

Steinmetz clearly valued the dynamic notions of achievement and progress as more worthy than satisfaction which he saw as a static state.

More recently it has been observed that satisfaction



in the context of consumption may be a mixed blessing. Olander (1977) argued that satisfaction measures are inadequate as indicators of consumer welfare for purposes of public policy formation. His argument is premised on a view of satisfaction as a function of the level of aspiration. Since aspirations change, this is equivalent to measuring with a rubber yardstick. Likewise, if frustration leads to lowered aspirations, what appears to be satisfaction may be little more than resignation. Olander concluded that more time should be spent on objective indicators of welfare rather than using subjective measures such as satisfaction.

Engledow (1977) addressed the value of satisfaction as a managerial performance indicator and concluded that it doesn't measure up. He saw the concept as ill-defined and lacking operational measurement devices, pointing out that, "a thorough reading of any current marketing text reveals that the discussion of satisfaction generally ends with the ringing endorsement of the marketing concept in chapter one."<sup>5</sup> Generally speaking, his view is more benign than that of Olander who is less certain that satisfaction should be a major objective of the firm or is admirable in society. Olander's reluctance is a reminder that guidance of an economic system by overt preferences via the principle of consumer sovereignty is not ethically neutral. Thorstein Veblen, best known to marketing students as the originator of the phrase "conspicuous consumption" which redirected

attention toward consumer motivation and social motives in particular, expressed serious reservations about grounding analysis of economic efficiency upon consumers. He viewed the tendency toward conspicuous consumption as being very common and reflective of competitive urges.

He concluded that:

In order to meet with unqualified approval, any economic fact must approve itself under the test of impersonal usefulness - usefulness as seen from the point of view of the generically human. Relative or competitive advantages of one individual in comparison with another does not satisfy the economic conscience and therefore competitive expenditure has not the approval of this conscience.<sup>6</sup>

A reviewer of Veblen's work reemphasized this point:

Thus for Veblen the orthodox analysis of the allocative mechanism had little meaning. The definition of efficiency vis-a-vis the ability of the system to meet the demands of the individual consumer was inconsistent with Veblen's definition of efficiency vis-a-vis society. It further overlooked the important fact that the individual was manipulated by business through salesmanship to suit the ends of business. The consumer could scarcely be taken as the benchmark for the analysis.<sup>7</sup>

The question raised by Olander and Engledow cannot be ignored by satisfaction researchers. It should be noted, however, that they are minority voices. Most students of satisfaction issues appear to be in sympathy with Pfaff's answer to the question of whether satisfaction is good.

I say yes, indeed. I prefer satisfaction to dissatisfaction. More seriously, we have to consider several goals simultaneously, of which consumer satisfaction is one. Other goals being attained equally, I prefer more satisfaction to less satisfaction. Beyond a certain level of consumer satisfaction, other goals are not equal any more and this is where the tradeoff question comes in.<sup>8</sup>

In similar fashion there is general support for the point

of view expressed by Day: "I see no insurmountable difficulties in measuring an individual's satisfaction or dissatisfaction with the overall outcome of a specific recent personal consumption experience."<sup>9</sup> The growing body of research dealing with consumer satisfaction provides evidence of agreement with Day.

An understanding of the reasons for the growing interest in satisfaction research requires a brief review of the treatment of satisfaction in economic and marketing theory. The economists of the nineteenth and early twentieth centuries believed that the amount of satisfaction derived from the consumption of a particular market basket of goods was measureable. It was called utility and the unit of measurement (with a cardinal scale) was the util. This was a dubious assumption, and modern utility theory has progressively trimmed away strong assumptions about utility and human psychology as they were demonstrated to be unneeded for efficient theory.

Modern utility theory employs ordinal utilities, and in modern theory "the only thing that can be said on the basis of these utilities is that market baskets with higher utilities are preferred by the consumer to market baskets with lower utilities, and that market baskets with equal utilities are equivalent in the eyes of consumers."<sup>10</sup> The question of which market baskets maximize the consumer's utility is answered by reference to the consumer's indifference map, or set of indifference curves, which represent

tastes or preferences. The consumer's indifference map is deduced from actual behavior according to the theory of revealed preference. Since a rational consumer is postulated and the consumer possesses complete market information, satisfaction is presumably maximized within the budget constraint by the choice process.

An elaboration of conventional demand theory has been offered by Lancaster (1971). In his view, "traditional demand theory, like the traditional theory of the firm, has its roots in the economics of an earlier, and simpler, society, when there were fewer products, each more or less standard, and a simpler technology."<sup>11</sup> Consequently, it possesses the "coarse structure" necessary to demonstrate broad substitution effects among goods which are typically aggregates such as "automobiles," "clothing," and "food" rather than individual items. While it serves this purpose well, it is inadequate to deal with important current issues in demand:

The omission in the traditional analysis of any provision for using information concerning the technical characteristics of goods renders it completely incapable of handling the most important aspects of demand in an advanced society -- the effects of product variations and differentiates, model changes, new goods, and new variants of existing goods.<sup>12</sup>

In an earlier work on demand theory, Hicks (1956) had discussed the possibility that economists should view consumer behavior as similar in structure to that of entrepreneurs. That is, objectives are established according to preferences, and then an evaluation of alternative means of

reaching the objectives is required. The commodities purchased would more accurately be viewed as means to the attainment of objectives rather than as the objectives themselves. While Hicks concluded that technical difficulties precluded developing this view, Lancaster set about to overcome the problems.

Lancaster's analysis is premised on the belief that "it is the characteristics of goods, not the goods themselves, in which people are interested."<sup>13</sup> The working hypothesis of his book is that "individuals differ in their reactions to different characteristics, rather than in their assessment of the characteristics content of various goods collections."<sup>14</sup>

The differences between Lancaster's analysis and traditional theory are differences of degree rather than kind. He views traditional theory as a special case of his own more general theory. To the extent this is true, his work brings us closer to an understanding of consumer preferences and purchase behavior than the work of his fellow economists. Because of his reluctance to "psychologize", however, we merely substitute unanswered questions about the relationships among preferences and goods characteristics for the older questions about preferences and goods. We are left, then, with the same almost-axiomatic identity between consumption goals and the expression of preferences through purchases which characterizes demand theory.

The empirical study of consumer behavior by economists has undoubtedly been impeded by this basic component of demand theory. Much of the effort that has gone toward improving consumer welfare has been devoted to the supply side of the market equation, i.e. to industrial organization and structure and the market behavior of individual firms.

Within the marketing discipline the situation has been somewhat different. The roots of the field in economics are evidenced by the key role played by the marketing variant of the theory of revealed preference: that consumers are the best judges of what is in their own best interests. The professional, managerial, decision emphasis which characterizes marketing has encouraged more extensive empirical investigations of consumer behavior in recent years, particularly in the highly developed western economies. Indeed, recognition of the need to know more about consumer behavior evolved as marketing became a more important function within the firm.

Yet, the quality of the need for information kept the scope of this investigation within relatively narrow confines. In economics the welfare orientation required a level of abstraction sufficiently removed from the realities of the marketplace that many serious questions relating to consumption were not scientifically studied. In marketing, by way of contrast, the needs of the firm required that attention be focused on the choice process; the determinants

of repurchase behavior. Evaluative judgments were simply seen as less useful than behavioral measures of brand switching and brand loyalty. The prevailing view in the early sixties was expressed in Hollander's statement that "the devices for identifying and measuring consumer satisfaction in any general sense are limited to votes in the marketplace, which is probably the most significant argument for a free marketplace."<sup>15</sup> This statement was accurate not because efforts to develop alternative measures had failed but rather because of the absence of any sustained effort in that direction.

Even prior to that time, Alderson (1958) had anticipated the likelihood that "some day marketing may need to look beyond the act of purchasing to a study of consumption proper."<sup>16</sup> He saw the need arising as a consequence of choice problems in conditions of abundance and involving marketers' attempts to encourage acceptance of product proliferation and other innovations. He raised the questions:

What is the use of a plethora of goods unless the buyer derives genuine satisfaction from them? What is the justification of surfeit if the acquisition of goods serves as a distraction from activities which are essential to the preservation of our culture and of the integrity of our personalities?<sup>17</sup>

He suggested the name hedonomics for a field of study involving the "management of the capacity to enjoy."<sup>18</sup> This hypothetical discipline would clearly differ from marketing in which consumer motivation and choice processes are important because of their impact on the firm. It is also

unlike consumer economics or home economics where individual or household purchase behavior is studied within a framework of economic optimization.

Alderson's proposed new discipline is also dissimilar to the concerns with social indicators and the quality of life although these areas of research are of recent origin and share an interest in human welfare. Each of these fields of study contains its own stimuli for a renewed interest in the consequences of exchange processes.

Two relatively recent phenomena have forced recognition within marketing of the limited understanding that exists about the post-purchase phase of consumption behavior and, more specifically, the determinants and predictors of satisfaction and dissatisfaction. The first of these was the diffusion of the marketing concept through the business world and, subsequently, through organizations not characterized by profit-seeking. The second was the consumer movement.

The marketing concept shifted the focus of organizational influence and decision-making away from an internal, production orientation and toward an external market orientation. The welfare consequences of any system of voluntary exchange began to surface for more explicit treatment as marketers postulated consumer satisfaction as a commercial objective. A fairly typical statement of the role of satisfaction in the marketing concept is provided by DeLozier and Woodside:



"The marketing concept can be defined as the philosophy of focusing all the activities of the organization on satisfying customer needs through the use of integrated marketing to achieve maximum profits through customer satisfaction."<sup>19</sup>

Explicit inclusion of customer satisfaction in discussions of the firm's objective function heightens both its sophistication and its complexity. The decision-making process is complicated by the expansion of inputs. Likewise, attention is called to the paradoxical combination of both mutuality and conflict of interest between the parties involved in exchange.

Obvious problems associated with maximizing customer satisfaction (e.g., distributing products free) have forced recognition of the need for balance and compromise in structuring organizational actions toward achieving multiple objectives. As a result, customer satisfaction may be compromised or subordinated in the objective function such that the amount of satisfaction the firm attempts to deliver is related to its competitive objectives and the competitive environment.

Although the problems associated with implementing the marketing concept have been recognized (Stampfl, 1978), it has been argued that it is not inclusive enough. DeLozier and Woodside cite two common criticisms of the marketing concept: "(1) The marketing concept overlooks the conflict between individual want satisfaction and long-run

public interest. (2) The goal of the marketing concept represents only interest -- profits for the organization."<sup>20</sup> One response to these complaints is reduced concern with stockholders and expanded interest in "stakeholders", people who are influenced in a variety of ways by the organization's decisions. The societal marketing concept developed by Kotler reflects this approach: "The societal marketing concept is a management orientation aimed at generating customer satisfaction and long-run consumer and public welfare as the key to satisfying organizational goals and responsibilities."<sup>21</sup>

To the extent the marketing concept is difficult to operationalize, the societal marketing concept is even more so. Neither concept incorporates the reality of consumer dissatisfaction with existing purchase patterns which is the intentional result of aggressive marketing efforts designed to build demand for a new product or service. Notwithstanding conceptual and operational difficulties and an occasional minority opinion, the concept of consumer satisfaction has assumed an important position in marketing theory.

It is not surprising, however, given the prevailing pragmatism of modern managers, that operationalized versions of dissatisfaction have received more managerial attention than satisfaction per se. Brand or institutional loyalty has been interpreted as an acceptable indicator of satisfaction. Attempts to measure satisfaction directly

have been viewed as difficult, expensive, and of little value if indeed it was even possible.

Dissatisfaction, however, was another thing. It need not be sought in order to be measured. The firm can tolerate or perhaps even ignore small amounts of dissatisfaction, treating it as a noncritical concern. By the same token, low intensity dissatisfaction may be expressed through brand switching or other non-threatening means. However, the firm's ability to compete and its social sanction are threatened by expression of high levels or large amounts of dissatisfaction.

It is for this reason that the consumer movement has also been important in the expansion of interest in the evaluative component of the post-purchase phase. The movement encompasses a broad range of issues touching in some fashion virtually all aspects of modern marketing programs. Among them are selling and advertising practices, safety concerns, and resource waste. These and related issues are important but incidental to the purpose of this study. The facets of the consumer movement of greater relevance to this study are those providing specific evidence of consumer dissatisfaction with goods and services. It is this dissatisfaction which is so antithetical to normative marketing theory and the consumer satisfaction which it embraces.

The most tangible evidence of dissatisfaction is the large volume of consumer complaints filed regularly

with the Better Business Bureaus, Attorneys General offices of the various states, the Office of Consumer Affairs at the federal level, assorted trade associations, and numerous regulatory agencies. Unlike other features of the consumer movement which critics discount because evidence of general support is lacking, complaint volumes do provide documentation of widespread dissatisfaction. At the same time, there is growing research support for the belief that complaints are merely the tip of the dissatisfaction iceberg.

The consumer movement clearly constitutes a basic challenge to current marketing thought and practice. It challenges students of the field to address the methodological and measurement issues related to consumer satisfaction that have escaped empirical examination and have been discussed more from a philosophical point of view. A better understanding is needed of the interactive process involving consumer characteristics, market stimuli, decision-making, and post-purchase evaluation of the level of satisfaction attained. As Engledow pointed out: "Empirical evidence on how satisfactions link together and interact and conceptual frameworks for analyzing satisfaction information are lacking."<sup>22</sup>

There has been a dramatic increase in recent years in the number of research studies focusing on the post-purchase phase of consumer decision processes and satisfaction issues in particular. Most of the material cited

subsequently in the literature review chapter was published in the 1970's. As the number of studies has increased, the subject area has become increasingly fractured with growing diversity in research topics and methodologies employed.

The researcher faces a number of options in selecting productive research areas and specific topics within the domain of satisfaction research. It is an ironic parallel with the problems consumers face in choosing among the proliferation of products and services available in a modern economy.

Traditionally, economists and marketers have agreed that a wide range of choices is valuable for consumers and an asset for an economy. The reasons for favoring extensive choice differ in the two disciplines. In virtually all schools of economic thought, choice is seen as an indicator of healthy competition. Healthy competition is believed to be beneficial to the public because market power resides more with consumers than producers, and there is reduced likelihood that sellers can charge high prices and command monopoly profits. It should be emphasized that these conditions hold when the goods in question are undifferentiated commodities, and the choice is therefore restricted to source of supply. It presumably is made solely on the basis of price. A differentiated product provides the seller with a degree of monopoly power and therefore works against market efficiency. Mansfield points out that

efficiency is the dominant interest of most economists:

Some people favor competition simply because it prevents the undue concentration of power and the exploitation of consumers. But to the economic theorist, the basic argument for a perfectly competitive economy is the fact that such an economy satisfies these conditions [for welfare maximization].<sup>23</sup>

Alternatively, marketers promote the advantages of choice as flowing from the natural heterogeneity of demand. Their belief is that consumers' preferences are frequently characterized by dissimilarity rather than similarity, and the availability of many choices, particularly in the non-price attributes of products, insures that demand will be well met. This theory was most fully developed in Alderson's functionalist theory.<sup>24</sup> One of the fundamental conceptions of this theory was the heterogeneous market which was "one in which there was a precise match between differentiated units of supply and differentiated segments of demand."<sup>25</sup> Heilbroner concedes that point somewhat grudgingly although his preference for efficiency is not concealed:

And where product differentiation results in variations in the product itself -- and not just in its "image" -- one must ask whether the aim of an affluent society is to produce the largest possible quantity of a standardized product at the cheapest possible cost or to offer an array of differing products that please our palates, admittedly at somewhat higher costs. Few consumers in a rich society would prefer an inexpensive uniform to more expensive but highly individualized clothes. From this point of view, even the wasteful parade of car styles has a certain rationale.<sup>26</sup>

It is unarguable that consumers respond positively to a wide range of choices in the market place. The managerial

strategy of market segmentation is a pragmatic response to this situation.

It is also true that such phenomena as product proliferation, expansion of shopping opportunities, scrambled merchandising, and a mass of advertising messages create special problems for consumers. Limitations faced by consumers in time, energy, and information processing capabilities place barriers in the way of utility maximization as postulated by economists and optimal need satisfaction as seen by marketers. If choice is generally viewed as good, it is also true that some observers see the modern consumer as suffering from too much of a good thing. Birmingham states flatly: "The increasing complexity of the modern market place has rendered the unaided individual almost defenseless against modern merchandising techniques."<sup>27</sup>

### Problem Statement

The benefits of product-market competition to the consumer are clearly not obtained without cost. Conspicuously absent has been any attempt to assess whether the benefits in terms of customer satisfaction are worth the cost. Marketers typically accept a positive accounting of the issue a priori or ignore it completely.

This study addresses a question which is a subset of the larger problem. No attempt is made to build in or evaluate costs. The investigation does deal, however,

with one aspect of the benefit side of the equation. The research problem is to determine whether it is possible to identify through measures of satisfaction whether consumers gain by virtue of the availability of purchase options. Stated more narrowly the question is this: Is customer satisfaction independent of brand choice?

The term satisfaction is used here in a manner consistent with Hunt's conclusions after reviewing several different conceptualizations:

Satisfaction is a kind of stepping away from an experience and evaluating it. You may have a pleasurable experience and then be satisfied as you evaluate that experience. If it were not a stepping away, we'd call it happiness or pleasure or a warm feeling or something like that. Satisfaction is not the pleasurableness of the experience, it is the evaluation rendered that the experience was at least as good as it was supposed to be. One could have a pleasurable experience that caused dissatisfaction because even though pleasurable, it wasn't as pleasurable as it was supposed or expected to be. So satisfaction/dissatisfaction isn't an emotion, it's the evaluation of an emotion, and as such it becomes a quasi-cognitive construct and we would expect the laws of judgment to affect satisfaction.<sup>28</sup>

The prediction based on marketing theory is fairly straightforward. The relevant theory is segmentation theory which is premised on a conception of the market similar to Alderson's, that is, a market in which both supply and demand are heterogeneous. Such a market according to Alderson "can be said to be cleared by information. The consumer must know that the appropriate segment of supply is precisely what he specified."<sup>29</sup> The implication is that because of unique personal characteristics or



motivation structure the consumer will be dissatisfied with any product other than the differentiated product specified. Therefore, satisfaction would be associated with rather than independent of brand choice.

Wendell Smith recognized the limitations of this view in his early work on market segmentation. He saw that "some divergence in demand is the result of shopping errors in the market. Not all consumers have the desire or the ability to shop in a sufficiently efficient or rational manner as to bring about selection of the most needed or most wanted goods or services."<sup>30</sup> What is not known is how frequently this occurs or how best to detect it when it does happen. It would be cause for concern with the performance of the economy if an increasing trend in "shopping errors" were detected.

If, however, there were no discernible differences in levels of satisfaction with different brands, one might argue that the differences among brands were trivial, and the justification for multiple brands must rest on other grounds. To be more precise, this interpretation might arise if the predictors of satisfaction do not differ among brands.

#### Methodological Summary

A brief summary is presented here of the material given a detailed treatment in Chapter III. The core of the analysis is a comparison of satisfaction prediction

functions for two selected brands within a product class. The product class selected for study was academic majors within the College of Business of Michigan State University. The two brands chosen for analysis were majors in accounting (ACC) and hotel and restaurant management (HRI).

The population of interest was defined as individuals who had attained senior status in either ACC or HRI at the time of data collection, which was during the Fall 1977 and Winter 1978 terms. A complete census of the population was attempted. Questionnaires were distributed with the cooperation of instructors in classes known to contain high concentrations of seniors in the two majors. Completed questionnaires totaled 306 of which 180 were from ACC majors and 126 were from HRI majors.

The instrument itself was designed to gather two principal kinds of information. The first was data to be employed as the dependent or criterion variable. Twelve Likert-type scale items were used to tap the satisfaction-with-choice-of-major construct. The twelve items were reduced to a six item scale through the use of cluster analysis and reliability analysis.

The second main category of information collected was intended for use as independent or predictor variables. Three kinds of personal characteristics data composed this category. They were demographic, self-image descriptors, and activities, interests, and opinion (AIO) statements.

The analysis centered on the self-image and AIO data which totaled sixty four items. These items were subjected to cluster and reliability analysis which reduced the number of items to forty-four and assigned the forty-four items to eight clusters. These eight clusters then became the predictor variables of central interest in the subsequent analysis. Both criterion and predictor variables were developed using intermingled data from all 306 cases.

The predictor variables had their origins in a principal components factor analysis employing oblique rotation. Multicollinearity was then a possibility. Pearson product-moment coefficients were computed for all combinations of the eight clusters in order to check for multicollinearity.

The first phase of the analysis itself was the computation of correlation coefficients for satisfaction and each predictor variable for both ACC and HRI students. In order to test whether the coefficients for satisfaction and a given predictor variable differed significantly between ACC and HRI students, it was necessary to use the Fisher  $r$  to  $Z$  transformation.

Stepwise multiple regression procedures were employed to develop predictive equations for both ACC and HRI students. Regression weights were checked to see which predictor variables were significantly different from zero. In the critical test, regression weights for variables

significant in at least one of the equations were tested for significant differences.

A third regression equation was computed with the combined responses of ACC and HRI students. The purpose was to determine whether the conclusions regarding predictive relationships were altered by intermingling data from the two groups.

A working hypothesis underlying this study, was that majors in ACC and HRI were perceived as dissimilar by the subjects. This assumption was tested with t-tests of the differences between means.

#### Limitations

The principal limitations of this study lie in the research design employed and the particular purchase situation studied. The design had the capability of providing partial data at best in assessing the net gain or loss resulting from product differentiation. Assuming that the research hypothesis is supported, cost inputs are required to make a full accounting of affects.

A longitudinal design would have advantages over the cross-sectional design used. With a cross-sectional design it is impossible to say anything about purchase motives, their stability, and their relationship to evaluative criteria. It is also likely that more light can be shed on the importance of personal characteristics in evaluative criteria if the design were ambitious enough

to allow comparisons with other possible factors of importance, e.g., product performance.

The choice of academic major as the purchase decision to study has advantages discussed elsewhere. The disadvantage is that the great bulk of consumer purchases are very different in terms of expense, time requirements, personal commitment, and so on. Consequently, the results cannot be generalized.

FOOTNOTES: CHAPTER I

<sup>1</sup>Webster's New World Dictionary, ed. David B. Guralink (2d Coll, ed,; Cleveland: World Publishing Co., Inc., 1974), p. 1265.

<sup>2</sup>Confucius, The Confucian Analects, bk. 7:36, quoted in John Bartlett, Bartlett's Familiar Quotations, ed. Emily Morison Beck (14th ed.; Boston: Little, Brown and Company, 1968), p. 71b.

<sup>3</sup>John Stuart Mill, Utilitarianism (1863), quoted in John Bartlett, Bartlett's, p. 619b.

<sup>4</sup>Charles P. Steinmetz, "The World Belongs to the Dissatisfied," The American Magazine 85 (May, 1918), p. 39.

<sup>5</sup>Jack L. Engledow, "Was Satisfaction a Pig in a Poke?" Business Horizons 20 (April, 1977), p. 87.

<sup>6</sup>Thorstein Veblen, The Theory of the Leisure Class (New ed,; New York: Modern Library, 1918), p. 98.

<sup>7</sup>Lawrence Nabers, "Veblen's Critique of the Orthodox Economic Tradition," Thorstein Veblen: A Critical Reappraisal, ed. Douglas F. Dowd (Ithaca, N.Y.: Cornell University Press, 1958), p. 111.

<sup>8</sup> Martin Pfaff, quoted in H. Keith Hunt, "CS/D - Overview and Future Research Directions," Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction, ed. H. Keith Hunt (Cambridge, Massachusetts: Marketing Science Institute, 1977), pp. 485-486.

<sup>9</sup>Ralph L. Day, "Toward a Process Model of Consumer Satisfaction" Conceptualization and Measurement, p. 177.

<sup>10</sup>Edwin Mansfield, Microeconomics (New York: W. W. Norton & Co., 1970), pp. 30-31.

<sup>11</sup>Kelvin Lancaster, Consumer Demand (New York: Columbia University Press, 1971), p. 8.

<sup>12</sup>Ibid.

<sup>13</sup>Ibid., p. 7.

<sup>14</sup>Ibid.

<sup>15</sup>Stanley C. Hollander, "Measuring the Cost and Value of Marketing," MSU Business Topics (Summer, 1961), p. 22.

<sup>16</sup>Wroe Alderson, "The Analytical Framework for Marketing," Proceedings: Conference of Marketing Teachers from Far Western States, ed. Delbert Duncan (Berkeley: University of California, 1958), p. 27.

<sup>17</sup>Ibid.

<sup>18</sup>Ibid., p. 28.

<sup>19</sup>M. Wayne Delozier and Arch G. Woodside, Marketing Management (Columbus, Ohio: Charles E. Merrill Publishing Company, 1978), p. 6.

<sup>20</sup>Ibid.

<sup>21</sup>Phillip Kotler, Marketing Management: Analysis, Planning, and Control (3rd ed.; Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1976), p. 18.

<sup>22</sup>Engledow, p. 90.

<sup>23</sup>Mansfield, p. 422.

<sup>24</sup>Wroe Alderson, Dynamic Marketing Behavior (Homewood, Illinois: Richard D. Irwin, Inc., 1965), pp. 25-32.

<sup>25</sup>Ibid., p. 26.

<sup>26</sup>Robert L. Heilbroner, The Economic Problem (3rd. ed.; Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 562.

<sup>27</sup>Robert L. Birmingham, "The Consumer as King: The Economics of Precarious Sovereignty," Consumerism: Search for the Consumer Interest, ed. David A. Aaker and George S. Day (2nd. ed.; New York: The Free Press, 1974), p. 183.

<sup>28</sup>H. Keith Hunt, "CS/D - Overview and Future Research Directions," Conceptualization and Measurement, pp. 459-460.

<sup>29</sup>Alderson, Dynamic Marketing Behavior, p. 30.

<sup>30</sup>Wendell R. Smith, "Product Differentiation and Market Segmentation as Alternative Marketing Strategies," Journal of Marketing 21 (July, 1956), p. 4.



## CHAPTER II

### LITERATURE REVIEW

#### Scope

A researcher studying the post-purchase phase of consumer behavior may find that several existing lines of research relate to or offer insight into the problem at hand. Among the areas of research most likely to have a direct impact are those related to brand loyalty, brand switching, cognitive dissonance, satisfaction and dissatisfaction, and complaining. More general studies dealing with pre-purchase aspects of the choice process, learning theory and market segmentation may also be relevant, but the relationship would typically be more indirect. Indeed, the link simply grows more tenuous as other marketing research areas are scanned. It is impossible, however, to divorce post-purchase phenomena totally from the pre-purchase activities of buyers and sellers and from the act of purchase itself. Consequently, the researcher is obliged to become increasingly more selective in reviewing the literature as the search proceeds further from the area of most direct concern.

### Post-purchase Processes

This study is most closely associated with the investigation of consumer satisfaction and dissatisfaction. Empirical studies in this area have a very recent history in the marketing literature although proprietary studies have undoubtedly been numerous over the years. The absence of studies of satisfaction as well as the direction and scope of post-purchase research prior to the seventies is suggested by Engel, Kollat, and Blackwells' (1973) review of the evidence.

Their chapter titled "Postpurchase Processes" is the shortest chapter in the book, a graphic demonstration of the relative lack of interest in this part of the buying process. The content of the chapter also illustrates the dominant perspectives employed in early post-purchase research. The general model used specifies two outcomes: (1) further behavior and (2) postpurchase evaluation. The discussion of behavior focuses on finances, installation, use, and complementary goods and services. More germane for this study is their discussion of postpurchase evaluation which is divided into three categories: (1) reward and satisfaction, (2) attitude change, and (3) post-decision dissonance. The subject attracting the most attention was dissonance.

Festinger's (1957) theory of cognitive dissonance sparked substantial interest in marketing. Underlying cognitive dissonance theory is the broader psychological

perspective of consistency or balance theory which is premised on "the notion that the person tends to behave in ways that minimize the internal inconsistency among his interpersonal relations, among his interpersonal cognitions or among his beliefs, feelings, and actions."<sup>1</sup> Consistency theory is compatible with both the simple, rational man of economics and his more sophisticated, complicated brother residing in marketing, and it is not surprising that Festinger's theory stimulated wide interest in its marketing implications.

The theory postulates that the psychological tension created by dissonant cognitions is a motivating force for the restoration of consonance or consistency. Since decision making requires the selection among alternatives, including the rejection of attractive ones, it almost always leads to dissonance. Purchase behavior, of course, falls under the heading of decision making. Much of the body of dissonance theory research has focused on the extent to which dissonance is a pervasive phenomenon.

Summaries and reviews of the research findings have been published by, among others, Aronson(1968), Chapanis and Chapanis (1964), and Margulis and Songer (1969). Engel, Kollat, and Blackwell (1973) extracted a number of antecedent conditions for the occurrence of dissonance from this extensive body of literature. It was most likely to occur at a significant level when:

- (1) a minimum level of dissonance which is tolerable is surpassed.<sup>2</sup>
- (2) the action is irrevocable.<sup>3</sup>
- (3) unchosen alternatives have desirable features.<sup>4</sup>
- (4) several desirable alternatives exist.<sup>5</sup>
- (5) the decision engenders a high level of commitment because of its psychological importance.<sup>6</sup>
- (6) each of the available alternatives has some desirable unique features.<sup>7</sup>
- (7) the decision process is voluntary and free from outside pressure.<sup>8</sup>

Presumably, dissonance would be greater if several of these conditions exist simultaneously. It is understandable that Engel, Kollat, and Blackwell would conclude that "postdecision dissonance is largely confined to extended problem-solving situations."<sup>9</sup> The extended problem-solving situation obviously contains more of the antecedent conditions than occur with limited problem solving or routinized response behavior.

Interest in cognitive dissonance within marketing has waned during the seventies in comparison with the volume of research published during the sixties. A number of reasons may be advanced for the decline. Among them are:

- (1) diminishing marginal returns from research effort
- (2) frequent inability to rule out alternative explanations
- (3) dissonance reduction may occur in several ways, many of which are not threatening to sellers
- (4) dissonance is essentially a short-range phenomenon and therefore not a major concern
- (5) the antecedent conditions normally do not exist in the packaged goods area where behavioral research has a longer history and greater financial support
- (6) interest has shifted to more topical areas of concern.

The possibilities are not mutually exclusive.

Although a decline in interest in cognitive dissonance in marketing situations is evident, the idea cannot be ignored. It frequently appears, as it should, as a possible or alternative explanation for aspects of other processes being investigated. Despite the attention it has received, cognitive dissonance theory has not been integrated into the more general theoretical work in consumer behavior. It is not indexed in Howard and Sheth's (1969) early theoretical work which emphasized information processing in a learning theory context and has since become a major reference work in the consumer behavior literature. Neither is it included in Howard's (1977) more recent applications-oriented book.

### Complexity Theory

Consistency theory itself is increasingly being viewed as too narrow to provide general explanation for consumer motivation although its applicability to studies of the post-purchase phase has not been diminished. The inadequacies of consistency theory have been most evident to those seeking a better understanding of consumer reactions to new products, other marketing innovations, and novelty seeking in general. They have turned to what have been called "complexity theories" for additional insight into these processes (McGire, 1972; Venkatesan, 1973).

The most ambitious advocate of a central role for

complexity theory is Scitovsky (1976). The extent of his commitment is indicated by his statement that "variety is not the spice of life, it is the very stuff of it."<sup>10</sup> His book is of particular interest because it deals not just with the psychology of motivation but with evaluative judgments as well. This is indicated by the subtitle: An Inquiry into Human Satisfaction and Customer Dissatisfaction.

The scope of his essay clearly extends beyond the short-range effects of cognitive dissonance and, indeed, beyond the market-related events of principal interest to marketers. His argument might be interpreted as a speculative extrapolation of selected psychological findings. Consequently it is not proposed as a general theory of consumer behavior but is offered as an attempt to integrate empirical results of studies in psychology with the largely non-empirical consumer behavior propositions in economics. Scitovsky's background in economics required him to study an entirely different literature in preparing his analysis, and some omissions were to be expected. Among the omissions, however, were Katona's work and the entire marketing literature of consumer behavior. Despite these limitations, Scitovsky's essay is of interest because it deals at a very general level with a subject of emerging interest in marketing.

Scitovsky reports the results of studies in which citizens of various countries were asked to rate their

own happiness. His conclusion was that one's chances of happiness seems to improve with a rise in rank on the national income scale. If, however, everybody's income is rising, no change in happiness is reported. He proposed several possible explanations involving the satisfaction of status, work satisfaction, enjoyment of novelty, and addiction. He also emphasized that market exchanges and economic conditions are only part of the happiness equation.

The theme that evolves from Scitovsky's book is that income level and purchasing power by themselves are no guarantee of happiness. In fact, the mass production and specialization which characterize the advanced economies and are necessary for a high standard of living may interfere with the processes which create human satisfaction. The search for satisfaction in work is consistent with the Puritan heritage but consumption activities have no such legitimating foundation in American history. Consumption skills, therefore, are underdeveloped just as culture is undervalued. In the principal consuming choice which we face, the choice between comforts and pleasures, we lack skill in ordering and skill in consuming. Scitovsky argues that "when we behave rationally, we seek the best available choice or the best compromise between mutually incompatible considerations; one can go very wrong, however, in identifying the available choices and the relevant considerations."<sup>11</sup> Additionally "we gradually dismantled

the Laws of God and came to believe in man as final arbiter of what is best for himself."<sup>12</sup> In doing so not only was research discouraged and delayed but the belief itself is arguably indefensible.

The merits of the arguments notwithstanding, economists and marketers alike have operated upon the assumption that man is the best judge of his own interests or, more moderately, that the distance between buyer and seller prevents the seller from being a good judge. The economic incentives inherent in trade prevent the seller from being an unbiased judge. Also, it has been argued that marketers responsibility should stop with the development and offering of a product/service mix. The emergence of an institutionalized consumer protection movement has made this largely an academic issue.

A related issue involves the extent to which the assumed rationality of the consumer yields decisions not only consistent with his welfare but meet a higher standard of satisfaction per se. Scitovsky argues that for a variety of reasons rationality provides no guaranty of satisfaction. Implicit in his conclusions is that individuals, particularly in the United States, exhibit tendencies to misunderstand their needs and to misinterpret the possible means of satisfaction.

The temptation exists to view the possible marriage of consistency theory and complexity theory as a major step toward a general theory. The post-purchase



studies of the seventies have not, however, employed any framework general enough to include both types of phenomena. Brand loyalty studies might be viewed as investigations of an aspect of consistency, but its most common expression, cognitive dissonance theory, rarely appears in recent studies of posterior evaluations. The orientation of the general model building attempts in consumer behavior toward learning theory and information processing makes them ill-suited as a mechanism to integrate consistency and complexity theories.

#### Attitude Change

A second category of postpurchase evaluation in the Engel, Kollat, and Blackwell book (1973) attitude change, is discussed briefly and adds very little to knowledge of post-purchase processes. The issue is discussed in the context of encouraging customers to engage in attitude discrepant behavior by means of cents-off coupons or free samples. Consequently, it is narrower and of less value than the third category of their discussion of postpurchase evaluation, reward and satisfaction.

#### Reward and Satisfaction

This section is illuminating both for what it says and for what it doesn't say. The authors report that "thousands of studies in the learning of literature [sic] affirm that a response is reinforced to the extent that it serves to reduce the motivation drive state."<sup>13</sup>

Therefore, positive reinforcement of an act of purchase and use will increase the probability of a similar purchase. The mathematically oriented models of brand loyalty are built upon this proposition.

Interesting questions arise, however, when attention is focused on what is meant by reinforcement or reward when the situation is one involving consumer judgment. The questions involve not only consideration of the standards against which comparisons are made but the nature of the decision itself, the decision environment, and the timing of the evaluation.

Review of the satisfaction related studies published in the marketing literature and the extent to which they address these issues will be deferred momentarily. The empirical nature of many of these studies requires a somewhat narrow focus. One general, almost global, inquiry into various aspects of satisfaction will be considered first. This is the work of William Leiss (1976). Leiss' essay is a provocative piece in which marketers will find some conventional, unconventional, and radical ideas.

Although Leiss approaches his subject matter from a slightly different direction than Scitovsky, he arrives at the similar conclusion that "individuals are led to misinterpret the nature of their needs and to misunderstand the relationship between their needs and the ways they may be satisfied."<sup>14</sup> The motivations that underlie the two books are, however, clearly at odds. Scitovsky is

vulnerable to being labeled as an epicure. He respects the yearning for new things as a source of progress, civilization, and satisfaction. Leiss, on the other hand, recommends that the "present rate of innovation and productive applications should be reduced considerably"<sup>15</sup> and that we need "a reorientation of our social and economic behavior away from dependence on a high-consumption life-style"<sup>16</sup>

Leiss argues that an understanding of the possibilities for satisfaction that exist in highly developed economies or in his terminology, "high-intensity market settings," are obscured by debates about wants versus needs, need hierarchies, authentic versus artificial needs, biological versus cultural, or simple versus complex needs. To him the main point is that "all human needs are routed indirectly toward sources of satisfaction by the agency of culture."<sup>17</sup> He views modern society as the first large-scale attempt to strive for stability and authority through the achievements of economic production and the satisfaction of needs rather than inherited privilege or traditional associations. Necessary conditions included production and exchange with capitalism providing catalytic and legitimating functions. Inevitably, there was an emergence of "the necessity of stimulating and managing the growth of the sphere of consumption [marketing]."<sup>18</sup>

A central position in the Leiss essay is held by

his statement that "high-intensity market society encourages its citizens to orient their search for the satisfaction of their needs more and more exclusively toward consumption activities in part by neglecting other possibilities for individual self-fulfillment."<sup>19</sup> He extended this into a version of Gresham's Law applied to consumption: "Wants for ever greater numbers of commodities tend to depreciate all types of desires that are not dependent upon the consumption of things"<sup>20</sup> Leiss admits that it is difficult to develop an understanding of what satisfaction of needs really means, and he contends, additionally, that the "meaning of satisfaction of needs will become increasingly ambiguous as the consumer pursues the will-o'-the-wisp of gratification through a jungle of commodities."<sup>21</sup>

Given the sheer number of items available to consumers, Leiss argues that even the most unbiased package of information about goods is of little assistance. As a consequence choice is little more than volunteering for a grand experiment to determine which claims are most valid. Leiss appears indifferent to the direct implications of this belief. Indeed, he fails to develop the effects upon satisfaction in situations where purchase is infrequent and the only claim that can realistically be evaluated is for the product that is purchased. He is more concerned with the implications of his statement that "the realm of needs becomes identical with the range

of possible objects."<sup>22</sup> Product proliferation is followed by need proliferation and, inevitably, by increased likelihood of dissatisfaction. This argument is consistent with that developed by anthropologist Marshall Sahlins (1972) in a somewhat polemical essay on economic anthropology. Sahlins views scarcity as a relation between means and ends, that is, as a situation in which the only reliable guide is felt or perceived scarcity. Thus, it is more a psychological phenomenon than an economic one. It follows that the volume of goods and advertising messages in the United States combine to produce scarcity unapproached in degree anywhere else. There is a kinship between this position and the expression of similar thoughts by Daniel Bell, (1975) an observer of the social scene who occupies a position more in the mainstream.

Sahlins provides an interpretation of anthropological evidence, albeit a minority viewpoint, that primitive hunter-gatherer societies maintained an adequate level of satisfaction with a working day less extensive than our own rather than occupying all their waking hours seeking subsistence as is commonly believed. Leiss' contention that material abundance provides no sense of contentment, that progress is partially illusory, is softened by a paradoxical statement about a possible solution. A concern underlying his essay is his view that the advanced economies are ransacking the natural

environment in a search for resources that is ultimately futile. By the same token the inevitable shortages of materials and energy are not catastrophic because the high-intensity market setting provides a mechanism through the education of desires to substitute images for things. Those persuaded by his analysis can breathe easier about human survival. It would seem, however, that in deference to his arguments about the relation between goods and satisfaction one must conclude that human society will not find satisfaction in images either.

Despite the growing literature in marketing under the rubric of macro-marketing, there is no work directly comparable to that of Scitovsky or Leiss, although some evolution in that direction is discernible. The marketing literature over the past ten to twelve years has reflected a gradual transition in this area from concern with narrow, short-range outcomes to more general, long-range evaluations.

### Consumerism

The social phenomenon variously described as consumerism or the consumer movement provided the impetus behind much of the current literature relating to consumer satisfaction. Consumerism has been described by one observer as "a social movement seeking to augment the rights and powers of buyers in relation to sellers."<sup>23</sup> In this view it had to do with the reactions of consumers to institutional business practices such as advertising,

pricing, warranties, etc. and economic structures and motivations in general rather than displeasure with dealings involving specific firms and specific situations. It was to be expected, then, that a general interest in diagnosis and prognosis would arise. A number of works appeared that addressed questions related to the origins or causes of the movement, its durability, its direction and its impact on business and government (Aaker and Day 1974; Broffman, 1971, Cravens and Hills, 1970; Gaideke and Etcheson, 1972, Greyser and Diamond, 1974; Hermann, 1970; Kotler, 1972; Monsen, 1973; Murray, 1973).

The general, historical orientation which characterized these works suggested a variety of areas of inquiry amenable to empirical research. One such line of research focused on the extent of sympathy for the consumer movement, identification of issues of greatest concern, and profiling those most attracted to the movement (Barksdale and Darden, 1972; Diamond, et al, 1976; Granzin and Grikscheit, 1974; Grikscheit and Granzin, 1975; Hustad and Pessemier, 1973).

#### Complaining Behavior

A second line of research developed around the complaining behavior of consumers. Research in this area has the advantage of dealing with a visible, tangible manifestation of dissatisfaction. While general consumerism concerns are of interest to public agencies in

the formation and administration of public policy, complaining behavior is arguably a more important managerial issue because of the need to interpret and respond to individual complaints.

One segment of these studies has a strong managerial flavor. Kraft's (1977) work supports the expectation that attitude change is negative and repatronage intentions diminish markedly when the retailer is blamed by the consumer for resulting dissatisfaction. Other studies have developed descriptive data about the rate and nature of corporate responses to consumer complaints (Resnik, et al, 1977; Boschung, 1976; Kendall and Russ, 1975; Pearson, 1976; Thomas and Shruptine, 1975). The conclusion generally drawn is that complaints, either unsolicited or associated with warranties, are an important source of feedback about the operation of marketing programs. Firms can and should use this data in a positive fashion to improve competitive performance, but too few take advantage of the opportunity.

Another branch of the literature on complaints emphasizes better understanding of the process that generates complaints. The focus is more basic than applied. Understanding and prediction are central elements and control is peripheral. The descriptive approach is typified by the Best and Andreasen (1976) study. The authors perceived the complaint process as composed of problem perception, voicing of complaints, and achievement of results. They examined the relationship between each part



of the process and problem type, purchase type (34 categories), and household type. Best and Andreasen found that problem recognition and complaining were lower in low socio-economic groupings than in higher groups. A more noteworthy finding, however, was that purchase shortcomings lead to complaints in only about one third of all instances where dissatisfaction was recalled. Additionally, only a very small fraction of consumer problems move into the domain where third party institutions such as Better Business Bureaus or courts are involved.

This is an important point in light of the increasing attention being paid to complaints as an indicator of the general level of satisfaction among consumers. Critics of this practice have been able to point to both increasing numbers of official outlets for complaints and more forthright policies of complaint solicitation as tentative explanations of the growing volume of documented complaints. The argument is that there is no evidence of any change in the level of dissatisfaction, only that the number of official expressions has increased. The absence of good historical benchmark data renders this argument inconclusive. It is true, however, that only a very small percentage of transactions ever result in complaints.

A stated objective of the Best and Andreasen study was "to see how well the complaints households make to businesses and complaint handling institutions represent, in subject matter and number, the problems households

perceive about goods and services."<sup>24</sup> Their findings with respect to the number of complaints lead to the conclusion that complaints to businesses are not representative and those to complaint handling institutions are even less so. Other investigators whose research dealt with this issue as a secondary interest have generated similar results (Day and Landon, 1976; Mason and Himes, 1973; Thomas and Shruptine, 1975; Wall, et al, 1977; Warland, et al, 1975). With respect to the subject matter of perceived problems, Best and Andreasen's findings support the interpretation that complaints are only partly representative. The evidence is that costly problems, not surprisingly, are more likely to elicit complaints.

The need to interpret and respond to complaints has also focused attention on complainers, again to determine if they are representative of the general population. Implicit in this interest was the existence of a hypothetical chronic complainer. The identification of such an individual would probably lead to minimization of the importance of complaints. To this point no such chronic complainer has been isolated.

Investigations of complainer characteristics have run the full range of individual attributes commonly associated with segmentation studies. Consistent with purchaser segmentation studies, demographic data have been associated with complaining behavior in irregular fashion. The closest thing to a pattern in the repeated attempts

to link complaining behavior with demographic variables is a frequent finding that complainers are younger, have more income, and have more education than non-complainers (Landon and Emery, 1974; Liefeld, et al, 1975; Warland, et al, 1975; Thorelli and Puri, 1977). Wall, Dickey and Talarzyk (1977) found a significant relationship for income only. In contrast Kraft (1977) found associations between complaining behavior and occupational, racial, marital, and age characteristics but none for education and income. Granbois, Summers, and Frazier (1977) found virtually no association at all between the tendency to complain and demographic variables across the five problem areas which they investigated.

Skeptics of the use of demographics in purchase segmentation studies have long argued that the relatively easy access to and measurement of demographic data is insufficient reason to expect them to be associated with purchase behavior. To the extent this is true for purchase behavior, it is also true for complaining behavior. Although demographics are routinely included, a number of studies have tested hypothetical mechanisms which lead to complaining behavior. Almost all of the studies deal with psychological processes in some respect.

While the cognitive dissonance processes discussed earlier suggest a theoretical explanation of complaining behavior, there are no empirical studies to assist in evaluating the theory. Most studies, by way of contrast,

deal in some degree with the role of expectations. Miller (1977) drew heavily on level of aspiration theory (Lewin, et al, 1944) in postulating four types of expectations which he labeled ideal, expected, minimum tolerable, and deserved. These reflect respectively what an individual feels performance "can be", "will be", "must be", and "should be". Similar concepts of predictive expectations (straightforward estimates) and normative expectations (performance that ought to be delivered) were tested for their relationship with complaining behavior by Granbois, Summers, and Frazier (1977). They found, much to their surprise, that neither had much of an association with complaining. Furthermore, their evidence suggested that those holding less idealistic norms for problem frequencies had a tendency to complain more. The most striking finding in this study was that the variable with the strongest association with complaining behavior was the individual's perception of the stores willingness to provide a remedy. The implication is that consumers are more likely to complain when the effort is likely to be fruitful. This study dealt only with the relationship between customers and retail stores. Conflict avoidance, therefore, might also be a factor in the absence of complaining.

Kraft's (1977) study, in contrast, focused on the distinguishing features of individuals who had gone beyond the buyer-seller interaction and had filed complaints with a District Attorney's office. He found strong support

for his hypothesis that complainers are more likely to report a perception that purposeful deception or intent to defraud on the part of the seller was the cause of the problem. An earlier attempt to determine whether differences between complainers and noncomplainers was related to whether locus of control was internal or external (Collins, 1974) found only small differences. Attribution theory does offer, however, a largely unexplored potential to improve insight into these processes.

In a study which employed a variety of predictor variables, Wall, Dickey, and Talarzyk (1977) found that internal influences and personal characteristics were the best predictors of the tendency to complain. Product (clothing) performance problems, and satisfaction levels were not good predictors. In another recent study (Zaichkowsky and Liefeld, (1977), however, researchers were unable to distinguish complaint letter writers from a general sample of the population on the basis of personality type.

Part of the difficulty might exist in the likelihood that both complaining and non-complaining groupings are relatively heterogeneous. Warland (1977) provides support for this view in a study which grouped consumers using clustering techniques. He found two types of complainers which he labeled concerned and unconcerned and three types of noncomplainers which he labeled unconcerned, concerned, and uniformed. It seems likely that information

is lost when subcategorizations such as these are ignored.

The confusion arising from diverse and often contradictory findings about complaining behavior may also be related to the absence of an integrating framework.

Landon (1977) has proposed a phenomenological model with the intent of organizing and synthesizing existing knowledge as well as suggesting important conceptual linkages. In Landon's model complaint behavior is a function of dissatisfaction, the importance of the dissatisfaction, the benefit from complaining, and personality. With the exception of personality, each of these predictor variables is also treated as a criterion variable. Dissatisfaction, for example, is viewed as a function of the discrepancy between expectations and perceived performance. Importance is viewed as a function of product cost, search time, physical harm, and ego involvement. The third variable, benefit from complaining, is perceived as a function of the expected value of the payoff from complaining less the cost of complaining. Both of these variables are again treated as criterion variables. The expected payoff from complaining is a function of the importance of dissatisfaction and the nature of the defect while the expected cost of complaining is a function of the firm's image, complaining experience, and the nature of the defect. Not too surprisingly, demographic variables are not proposed as important considerations, although further elaboration of the model would probably lead to their inclusion.

Many of the studies cited previously yielded results consistent with Landon's model, but the nature of the variable linkages remains uncertain because there have been no studies of sufficient scale and complexity to control for even a few of the possible influences. Although numerous studies of complaining behavior deal with satisfaction only implicitly, there is an increasing tendency to investigate the two subjects jointly in a manner consistent with Landon's model. Satisfaction is clearly a factor in complaining, but the subject has a research tradition, albeit brief, which is independent of any concern with complaints.

#### Satisfaction

The first study reported in the marketing literature to purportedly address the measurement of satisfaction and its relationship with key variables was Cardozo's (1965) experiment involving ballpoint pens. His article was mistitled since no measurement of satisfaction itself was reported. Rather, product performance ratings were presumed to be the equivalent of satisfaction measurement. Although his study was later criticized on methodological grounds,<sup>25</sup> his conclusion that effort expended in purchasing positively influenced product evaluation led him to the provocative conclusion that "customer satisfaction, then, may be more a global concept than simply product evaluation".<sup>26</sup>

Cardozo's study inspired Olshavsky and Miller (1972)

to undertake an experiment with a broader set of hypotheses regarding the effects of disconfirmed expectancies. The outcomes they were interested in were product performance ratings and perceptions of product quality rather than satisfaction per se. They concluded, interestingly, that engaging in puffery or overstatement of the quality of a complex product (a reel tape recorder) led to more favorable evaluation (and presumably satisfaction) than did understatement but that ethics and consumerism direct sellers away from such practices.

Anderson (1973) continued this line of research with another ballpoint pen experiment which dealt with disconfirmed expectancies in light of the outcomes predicted by four psychological theories: (1) cognitive dissonance (2) contrast (3) generalized negativity, and (4) assimilation-contrast. Satisfaction was again treated vaguely since perception of product performance was the dependent variable. His findings supported assimilation-contrast theory in which the size of the disparity between expectations and product performance is critical. Large disparities, i.e., those which fall within the consumers latitude of rejection, are subject to contrast effects, but small disparities, i.e., those within the latitude of acceptance, are subject to assimilation effects. Anderson also produced evidence that was supportive of Cardozo's suggestion that effort is related to positive evaluation. Anderson obtained a positive relationship between evaluation



and the amount of product information provided. He explained it in terms of commitment to the product, but it should be noted that information search was not incorporated in the design.

The most recent study in this line of research (Oliver, 1977) tended to reinforce the conclusions of the earlier research. Swan (1977) investigated the importance of expectations in the setting of a field experiment involving the opening of a new department store. He concluded, unsurprisingly, that satisfaction is related to fulfillment of expectations, but he also suggested that confidence may act as a moderator variable in the process of evaluation.

Miller (1977) argued very persuasively, however, that simplified measures of expectations may act to screen or mask fundamental evaluative processes. He contended that it makes sense to think of four "types" of expectations: ideal, expected, minimum tolerable, and deserved. Unless the type of expectation is dealt with explicitly, there may be no way of determining how the types interact or which may be most relevant for the determination of the expectations-performance gap that is frequently viewed as critical in the evaluative process. With the exception of the Granbois, Summers and Frazier (1977) study cited previously, this expanded notion of expectations has not been explored empirically. Their study involved a limited adaptation of Miller's framework but employed it in a

study of complaining behavior rather than satisfaction per se.

A number of studies referenced in this review were published as part of proceedings from a conference which marked an expansion of interest in the study of satisfaction and indicated the multiple directions of current research.<sup>27</sup> One obvious change is a direct confrontation with issues previously dealt with only implicitly or at best by assumption. The operational simplifications employed in viewing product ratings as measures of satisfaction and complaints as dissatisfaction are recognized as impeding enhancement of understanding of the processes involved.

The 1976 conference emphasized conceptual issues and measurement problems. In a follow-up conference in 1977 complaining behavior was added as a focal topic, and the emphasis shifted to empirical studies.<sup>28</sup> A number of these studies referenced with respect to findings on complaining behavior also produced results of direct interest on satisfaction. Wall, Dickey, and Talarzyk (1977) examined both satisfaction and complaining activity related to clothing performance. They concluded from a multivariate analysis that "knowledge of consumers' activities, interests, and opinions, demographic characteristics and textile product experience and knowledge can be used to effectively 1) predict consumers' clothing performance satisfaction, 2) discriminate between consumers

who are satisfied and consumers who are not satisfied with clothing performance."<sup>29</sup> Most marketers would likely find reassurance, however, in their findings that the first variable to enter the regression to predict satisfaction was a factor score for performance problems with clothing. Performance problems were less important than personal characteristics and internal influences in the determination of whether or not action would be taken if an item were judged to be unsatisfactory.

One characteristic of the more recent explorations of satisfaction related phenomena is more finely developed theory. Recent studies are less likely to appear as fishing expeditions or trial and error efforts where the objective is the identification of useful satisfaction correlates. A parallel may be seen in the early segmentation studies where the search for purchase correlates was associated more with ease of variable measurement and inclusiveness of variables considered than with explanatory theory. Despite this parallel there was no recognition in the satisfaction literature of the overlap of the two areas until Miller (1977) addressed satisfaction measurement in explicit segmentation terms.

Miller attempted to establish the existence of segments based on demographic and psychographic characteristics before testing for differences in satisfaction with food stores where the subjects regularly shopped. This was an alteration of the more common practice of first

classifying consumers as satisfied or dissatisfied. His objective was to identify the "types of characteristics typical of highly satisfied or dissatisfied consumers."<sup>30</sup> This is consistent with many other satisfaction studies and with purchase segmentation studies with allowance for the concern with brand choice rather than satisfaction.

Miller's purpose was primarily methodological. He did conclude, however, that his approach yielded results similar to those of other studies.

It should be noted that not all research on the subject of satisfaction was reviewed here. Specifically, the substantial literature dealing with job satisfaction and the more modest literature on life satisfaction were excluded. Also omitted was work in psychology which emphasized the importance of reinforcement. The rationale for these exclusions was that they were too tangential to the purpose of this study.

### Segmentation

Positing the prediction of satisfaction in segmentation terms may have a substantial effect in satisfaction research. It was argued previously that much of the satisfaction research fit established segmentation research structures. If, however, the two areas overlap it seems prudent to evaluate the state of the art in segmentation studies in order to build upon it rather than simply replicate it.

Weisenberger's (1977) study is useful in this regard

because of its thorough review of the bases and methods of investigation that have been employed in segmentation research. In attempting to identify generalized, non-product-specific market segments, Weisenberger faced a decision on the appropriate bases(s) to employ, and preparation for this decision required an evaluation of all possibilities. His review led to the conclusion that demographic and socioeconomic bases offer little promise, partly because of contradictory or ambiguous evidence generated in numerous studies and partly because they cannot contribute much to an understanding of why an individual buys a product. The early satisfaction research is much like the early segmentation research in focusing first on demographic and socioeconomic variables.

Weisenberger concluded that the best opportunity to identify generalized market segments lay in the use of life style concepts as expressed by an individual's activities, interests, and opinions. This conclusion is apparently shared by other researchers since most recent segmentation research dealing with issues related to bases have employed life style notions (Richards and Sturman, 1977; Goldberg, 1976). For certain kinds of segmentation studies, demographic variables may prove to be more valuable, however, than they are at present. The best evidence was provided by Blattberg, et al (1978) in a study of deal-prone segments. The distinguishing feature of his research was a model which incorporated

specific hypothesis relating the demographic predictor variables and the criterion variable.

Wind (1978A) introduced a special market segmentation research section in the Journal of Marketing Research by drawing four conclusions about current efforts. The first was that the preponderance of attention is still devoted to searching for bases of segmentation. In one of the special section articles, Wind (1978B) used the term "basis" as synonymous with dependent variable. Consequently, there is some confusion about his intended meaning. The fact that a given variable may be treated as either a predictor or criterion variable depending on the researchers purposes, does not help clarify matters.

While treating satisfaction as a criterion variable has the appearance of being no different than using deal-proneness, brand preference, or product usage, there is a notable difference. Segmentation has assumed a position of importance in marketing because of its presumed value as an aid to managerial decision making. Homogeneous clusters of customers are of value because of similarity of elasticities, response function coefficients, or marginal responses. With respect to satisfaction segments (assuming they exist and can be identified), it is not readily apparent what the marketing program implications are.

Interest in overlapping satisfaction and segmentation research may be sustained by development of its

utility to management, but it seems more likely that in the immediate future macromarketing concerns and general theory development will provide the motivation. Miller's (1977) study provided much of the stimulus for this study, but Westbrook and Newman (1978) helped establish its relevance by demonstrating that the process of purchasing may be a source of dissatisfaction and segmentation concepts help to understand why.

The present research is premised on the hypothesis that a consumer may judge a product or service as unsatisfactory for reasons unrelated to the objective performance criteria normally considered most important. The reasons postulated are largely unexplored and involve consumers purchasing in an imperfect market environment. Also, it is not necessary to disavow rationality in purchase behavior to observe that "perfection" in identifying and selecting the best purchase option is difficult to achieve. Dissatisfaction with purchase processes, such as that identified by Westbrook and Newman (1978), is consistent with the possibility that an unknown part of dissatisfaction with specific goods and services results from imperfections in buying behavior and in the market environment.

If this scenario is plausible, one aspect of a competitive market system that deserves attention for its effect on customer satisfaction is the brand choice decision. In the idealized model, informed consumer choice among the numerous product configurations available

should lead to high levels of satisfaction. The applied orientation of the marketing researcher, however, requires that the idealized model be tested against reality. The consumer choice commonly promoted as a major benefit of a market economy is clearly one of its distinguishing characteristics and begs evaluation for its effect on satisfaction.

To this point satisfaction research, even satisfaction segment research, has not been designed with this issue in mind. A variety of issues exist for exploration. Miller (1977) suggested that accounting for differences in performance levels might be accomplished by holding the brand constant while identifying satisfaction segments. Again, the interest lies in performance levels rather than the process and effects of brand choice. Miller's study of satisfaction segments addressed satisfaction with the foodstore usually patronized as the criterion variable. The subjects patronized numerous foodstores and satisfaction levels varied across foodstores, but the only recognition of possible interaction among consumer characteristics, store characteristics, and patronage motives was a satisfaction index involving a questionable multiplication of importance weights and store descriptor ratings.

In a study which is closer to this research methodologically, Maddox (1977) explored supermarket satisfaction factor analytically. Maddox concentrated on store attributes rather than customer characteristics as



predictors and found that, consistent with segmentation theory, customers weighting certain factors highly tend to patronize stores possessing those factors.

Store patronage is somewhat similar to brand preference, but no studies have yet been published which address satisfaction as it relates to brand choice rather than product classes and focus on the most promising customer characteristics, life style variables.

### Summary

Each of the areas reviewed in this chapter is of potential value to marketing managers in developing and implementing successful marketing programs. They are of value, also, in public policy formation and evaluation. The principal limitation, however, is the frequent absence of recognition of interdependence among these concerns. This study explores one such area, the relationship between market segmentation and post-purchase evaluation.

FOOTNOTES: CHAPTER II

<sup>1</sup>William J. McGuire, "The Current Status of Cognitive Consistency Theories," Behavioral Science Foundations of Consumer Behavior, ed. Joel B. Cohen (New York: The Free Press, 1972), p. 253.

<sup>2</sup>M. T. O'Keefe, "The Anti-Smoking Commercials: A Study of Television's Impact on Behavior," Public Opinion Quarterly 35 (1971), pp. 242-248.

<sup>3</sup>H. B. Gerard, "Basic Features of Commitment," Theories of Cognitive Consistency: A Sourcebook, ed. R. P. Abelson et al (Chicago: Rand McNally, 1968), pp. 456-463.

<sup>4</sup>H. J. Greenwald, "Dissonance and Relative vs. Absolute Attractiveness of Decision Alternatives," Journal of Personality and Social Psychology 11 (1969), pp. 328-333.

<sup>5</sup>J. W. Brehm and A. R. Cohen, "Re-evaluation of Choice Alternatives as a Function of Their Number and Qualitative Similarity," Journal of Abnormal and Social Psychology 58 (1959), pp. 373-378.

<sup>6</sup>C. A. Kiesler, "Commitment," Theories of Cognitive Consistency, pp. 448-455; Gerard; J. W. Brehm and A. R. Cohen, Explorations in Cognitive Dissonance (New York: Wiley, 1962), p. 300.

<sup>7</sup>Brehm and Cohen, "Re-evaluation of Choice."

<sup>8</sup>A. R. Cohen, H. I. Terry, and C. B. Jones, "Attitudinal Effects of Choice in Exposure to Counter-Propaganda," Journal of Abnormal and Social Psychology 58 (1959), pp. 388-391; L. Festinger and J. M. Carlsmith, "Cognitive Consequences of Forced Compliance," Journal of Abnormal and Social Psychology 58 (1959), pp. 203-210; A. R. Cohen, J. W. Brehm, and W. H. Fleming, "Attitude Change and Justification for Compliance," Journal of Abnormal and Social Psychology 56 (1958), pp. 272-278; T. C. Brock, "Cognitive Restructuring and Attitude Change," Journal of Abnormal and Social Psychology 64 (1962), pp. 264-271.

<sup>9</sup>James F. Engel, David T. Kollat, and Roger D. Blackwell, Consumer Behavior (2d. ed.; New York: Holt, Rinehart, and Winston, Inc., 1973), p. 537.

<sup>10</sup>Tibor Scitovsky, The Joyless Economy (New York: Oxford University Press, 1976), p. 23.

<sup>11</sup>*Ibid.*, p. viii.

<sup>12</sup>*Ibid.*, p. 4.

<sup>13</sup>Engel, Kollat, and Blackwell, p. 532.

<sup>14</sup>William Leiss, The Limits to Satisfaction: an Essay on the Problems of Needs and Commodities (Toronto: University of Toronto Press, 1976), p. x.

<sup>15</sup>*Ibid.*, p. 91.

<sup>16</sup>*Ibid.*, p. x.

<sup>17</sup>*Ibid.*, p. 54.

<sup>18</sup>*Ibid.*, p. 87.

<sup>19</sup>*Ibid.*, p. 28.

<sup>20</sup>*Ibid.*, p. 20.

<sup>21</sup>*Ibid.*, p. 6.

<sup>22</sup>*Ibid.*, p. 93.

<sup>23</sup>Philip Kotler, "What Consumerism Means for Marketers," Harvard Business Review 50 (May - June, 1972), p. 49.

<sup>24</sup>Arthor Best and Alan R. Andreasen, Talking Back to Business: Voiced and Unvoiced Consumer Complaints (Center for Study of Responsive Law, 1976), p. 100.

<sup>25</sup>Richard W. Olshavsky and John A. Miller, "Consumer Expectations, Product Performance, and Perceived Product Quality," Journal of Marketing Research 9 (February, 1972), pp. 19-21.

<sup>26</sup>Richard N. Cardozo, "An Experimental Study of Customer Effort, Expectations, and Satisfaction," Journal of Marketing Research 2 (August, 1965), p. 249.

<sup>27</sup>H. Keith Hunt (ed.), Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction (Cambridge, Massachusetts: Marketing Science Institute, 1977).

<sup>28</sup>Ralph L. Day (ed.), Consumer Satisfaction, Dissatisfaction, and Complaining Behavior (Bloomington, Indiana: Indiana University, 1977).

<sup>29</sup>Marjorie Wall, Lois E. Dickey, and W. Wayne Talarzyk, "Predicting and Profiling Consumer Satisfaction and Propensity to Complain," Consumer Satisfaction, p. 97.

<sup>30</sup>John A. Miller, "Data Reduction Techniques and the Exploration of Satisfaction Segments," Consumer Satisfaction, p. 102.

## CHAPTER III

### RESEARCH METHODOLOGY

#### Introduction

This research was designed to address the question of whether or not consumer satisfaction is related to brand choice. As discussed previously, the expectation created by the natural heterogeneity of demand and diversity of choice in the market is that people are satisfied by different things. If so, satisfaction may be related to brand choice.

Alternative research designs are available to study this question, and the design choice depends partly on the researcher's motivation. Experimental and longitudinal research designs are most desirable from the point of view of illuminating causal relationships, but they have been excluded here for lack of sufficient time and resources. Also, research efficiency is typically improved by a sequential approach which postpones causal analysis until associational relationships are well established.

This study is more properly described as a cross-sectional, ex post facto survey. While not so rudimentary as to be described as exploratory, it is perhaps best described as preliminary. It is preliminary in the sense that longitudinal and experimental studies require data

such as is sought here in order to be designed effectively.

The research hypothesis at the heart of this research is: there are no differences in the variables predicting (associated with) customer satisfaction between purchasers of two brands within a given product class.

This hypothesis is best tested in the context of a purchase decision likely to be characterized by extensive problem solving. According to Howard, this occurs "when consumers are confronted with a brand from a product class they have never before encountered."<sup>1</sup> In a situation such as this consumers encounter greater complexity and experience higher levels of uncertainty than in situations where familiarity leads to habitual and limited problem solving behavior. Extended problem solving is characterized by the processing of great amounts of information and a long decision time. These characteristics would be most pronounced when they exist jointly with a purchase decision involving substantial commitments of time, expense, and ego-involvement. This obviously would be a major decision with important consequences. Any effects of brand choice on satisfaction are more likely to surface in such an environment than in one involving frequently purchased, low valued, mature products for which the differences among brands are small.

The purchase decision which meets the stated criteria and was chosen for investigation in this study was the selection of academic majors by university

undergraduate students. It is a decision characterized by substantial financial outlays, ego-involvement, and long-range consequences. It is also a decision for which there is little opportunity to draw on prior purchase and consumption experience.

The selection of a specific undergraduate population, product class, and brands was made on the basis of accessibility for data collection purposes and size of the various purchase groups. For reasons of convenience and accessibility, the subjects chosen were undergraduate students at Michigan State University. The product class selected from the set of possibilities offered by this institution was academic majors within the College of Business, which had the largest number of undergraduates enrolled of any college within the University. Similarly, within this product class attention was directed toward two specific brands (academic majors): accounting (ACC) and hotel and restaurant management (HRI). They were selected because they were the two largest majors within the College of Business. Consequently, they had the potential to produce the largest number of survey respondents. This was an important consideration because the anticipated use of multivariate statistical analysis rendered the question of sample size indeterminate.

The principal limitation of selecting for investigation the choice of academic majors is inseparable from its advantages. As a purchase situation offering a probability

of positive research findings in excess of the typical purchase situation, this situation is clearly not representative of the broad range of purchase decisions. The value of this research lies more in the attempted illumination of relationships among variables than in its generalizability. The common criticism of the use of student subjects for study of purchase decisions of general interest is not relevant here. The decision situation providing the context for this study clearly requires a student subject group.

Subsequent sections of this chapter will provide an overview of the research approach and discuss in some detail the rationale for and development of the research instrument, the analytical procedures to be employed, and data gathering procedures.

### Research Approach

The approach taken in this study involves the measurement of satisfaction with choice of major. This process is reviewed in the following section titled "Dependent Variable". It also involved measurements of several different kinds which may be jointly described by the phrase "personal characteristics of respondents." The issues involved and techniques employed are discussed in the subsequent section titled "Independent Variables". The section titled "Analytical Procedures" reviews the statistical procedures used to search for the existence of



associations between dependent and independent variables for the two groups of students and to test for the significance of any differences that occur. The last section of this chapter reviews the procedures used to acquire the data.

## Research Instrument

### Dependent Variable

The dependent variable in this study is identified as satisfaction with choice of undergraduate major. The central issue, however, is not satisfaction per se. Rather it is the question of whether or not the predictors of satisfaction vary between those students majoring in ACC and those majoring in HRI.

A thorough analysis of satisfaction measures was conducted by Aiello, Czepiel, and Rosenberg (1977). They reviewed the diverse ways of operationalizing satisfaction, the variations in scope of satisfaction interests from product/service to system, the variation in conceptual approaches, and the different scale formats available.

The practice employed in this research follows that used by Czepiel, Rosenberg, and Akerele (1975). They stated that: "To avoid confusion of the terms satisfaction and dissatisfaction, the word satisfaction will refer to the global concept. Its subsets would then consist of positive satisfaction and negative satisfaction

(dissatisfaction)."<sup>2</sup> There has been a difference of opinion in the literature, however, as to whether satisfaction and dissatisfaction are different points on a single scale or are in fact parallel concepts. In reviewing the limited research on this subject Aiello, Czepiel, and Rosenberg concluded that "the question of whether the concepts of satisfaction and dissatisfaction are different ends of the same scale or parallel scales, or even a mixed scale remains unresolved."<sup>3</sup>

An objective of their research was to evaluate alternative measures of the satisfaction construct and the relationship between measures taken at the system, enterprise, and product/service levels. The scales used included a simple satisfaction scale, an expectational scale, a mixed scale, and an affect scale. With the exception of the affect scale, these scales are purely historical. That is, they involved a present judgment or evaluation of a prior experience. This is a common practice and is consistent with their observation that "to the extent that there is any agreement among consumer satisfaction researchers, there is agreement that satisfaction can be experienced only during or after consumption."<sup>4</sup> It appears that this conclusion follows from a priori agreement among researchers rather than from fruitless attempts to identify other forms of satisfaction. There is no evidence in the literature, for example, of the possibility of "anticipatory satisfaction." This hypothetical state

might exist when expectations, which are largely cognitive in nature, are combined with evaluative judgments associated with satisfaction. The result would be satisfaction with an upcoming experience or event as distinguished from a present or past occurrence.

For many products and services, the determination of when purchase takes place or consumption is completed is not a major difficulty. For the selection of academic major, however, these determinations are more problematic. The acquisition of the "product" takes place fragmentarily over an extended period of time, sometimes several years, depending on the requirements imposed by the university and the inclinations of the student. In a sense, consumption begins with the first course in the discipline. What the student receives in the transaction with the university is not immutable. The educational product clearly is related to the effort and abilities of students as well as those of the university. The duration of consumption is also variable. This is particularly true of occupationally related or professional education as opposed to a traditional liberal education. For reasons having to do with opportunity and personal preference, an individual who has completed a major program may use the acquired knowledge and skills over a lifetime, intermittently, or not at all.

The indeterminate period of consumption is similar to that of a durable good with a long expected life. In

both cases questions are raised as to the appropriate time or times for the measurement of satisfaction. Because of changes taking place over time, multiple measures are perhaps desirable. Also, it seems likely that the measure(s) of satisfaction employed may need to be altered because of the changes in experience and expectation that occur over time. If so, the point during the consumption process at which the measurement is to be taken should be selected before the measurement device.

In this study, the decision was to measure satisfaction among individuals with declared majors in ACC and HRI who had attained senior status. This is clearly a relatively early point in the consumption process, but one that is not without its advantages. At this level students have taken a substantial part of the coursework required. As a result they have also had opportunities to test their expectations regarding the substantive content of the coursework, the type of instruction, the difficulty of the work, and so on. They have also opportunities to become members of a group of people with similar occupational interests and have access to the information flowing through the group's information network. Information available in this network frequently involves data, rumor, or speculation about consequences of major selection that remain in the future such as changes in job availability, salaries, working conditions, etc. It can therefore play a role in creating or changing

expectations, and more importantly for this study, have an influence on satisfaction with the selection of major decision. Measurement of satisfaction among seniors should therefore reflect the possibility of the joint influence of experience and expectations.

Measurement of satisfaction at a later point in time, after occupational experience has been acquired and the influence of expectations diminishes, has some merit but also has disadvantages. This particular area has been studied extensively under the title of job satisfaction by organizational behavior researchers. The emphasis in this research has quite logically been on the conditions and requirements of employment. As the length of time increases between the decision to pursue a major and the measurement of satisfaction with that decision, the likelihood increases that changes in the subjects will interfere with accurate measurement.

A distinction must be drawn between two types of evaluations in selecting and measuring the dependent variable. The difference between satisfaction with specific employment in a field and satisfaction with the decision to prepare and train for employment in a selected field must be noted. While the two evaluations are similar, they are not identical.

In this study attention was focused on the latter evaluation, the evaluation of the decision to pursue a specific career. This led to a somewhat unique resolution

of the concern with specification and measurement of satisfaction.

At the center of this issue is the fact that there is a lack of consensus in the marketing literature as to what satisfaction is and, as a result, how to operationalize its measurement. As Aiello, Czepiel, and Rosenberg pointed out, "consumer satisfaction has been defined in many ways, most of which recognize satisfaction as a measure of the 'gap' between the actual performance and some standard."<sup>5</sup> There is substantial disagreement, however, about what to use as a standard and whether such a standard can be obtained indirectly from measures of dissatisfaction. The lack of accepted general measures combined with the possibility of an expectational component in this research led to the conclusion that a measure of satisfaction designed specifically for major selection was appropriate.

The construction of the satisfaction measure used in this study began with small focus group interviews conducted with convenience samples of seniors in ACC and HRI. The group discussions focused on the identification of specific goals, objectives, and expectations associated with the selection of an academic major and upon features of the students' experiences that led to evaluative, satisfaction-type judgments. As a result of these interviews, twelve questionnaire items were constructed to tap various aspects of the satisfaction construct. These

twelve items, which were included in the questionnaire in the same AIO statement format as items subsequently analyzed as predictors, are listed below:

1. Major courses are pretty much what I thought they would be like.
2. If I were starting college all over again, I would pick the same major.
3. I expect to get the kind of job that I want.
4. At this point, I would not consider changing majors.
5. I have no regrets about picking the major I am now enrolled in.
6. I think my selection of a major was a wise decision.
7. There are lots of jobs for a person with a degree in my field.
8. Based on my own experience, I would recommend that other students pick the same major that I did.
9. The salaries being offered to graduates in my field look pretty good to me.
10. I am at least as interested in my field now as when I picked my major.
11. If I were to go to graduate school, I would stay in the same field.
12. Fundamentally, I am satisfied with my selection of a major.

Respondents were asked to indicate the extent of their agreement or disagreement with each statement by circling a number according to the following correspondence:

1. Very strong agreement
2. Strong agreement
3. Mild agreement
4. Neither agree nor disagree, don't know, not sure
5. Mild disagreement
6. Strong disagreement
7. Very strong disagreement

This seven point Likert-type scale was used both for scale items which were part of satisfaction measurement and for AIO statements used as predictors. Likert scales typically are constructed with five or seven response

options although the number of categories may vary widely. In this study the seven point scale was chosen for consistency and ease of analysis. One group of items used to develop predictors employed a semantic-differential format which typically offers seven response options. Also, the use of seven point scale leads to a broader range of data points and facilitates the analysis described in a subsequent section.

The twelve satisfaction items were then subjected to cluster analysis via PACKAGE<sup>6</sup> with the combined data for all respondents. The analysis yielded one cluster, including all twelve items, with an eigenvalue greater than 1.0. A number of items were ultimately deleted from the scale when it was examined against the criteria of: (a) item content considerations, (b) the pattern of intercorrelations with other items, and (c) whether elimination of an item would result in a larger coefficient alpha. The last two criteria were evaluated with the sub-program RELIABILITY in SPSS.<sup>7</sup>

In successive steps the items eliminated were 1 and 11, 9, 8, 7, and 4. The resulting scale, which included items 2, 3, 5, 6, 10, and 12, had a coefficient alpha of .89987. This was the scale used to measure satisfaction as the dependent variable in subsequent analysis.

### Independent Variables

The satisfaction measurement employed as the



dependent variable in this study was tailored to the specifics of the purchase situation. The selection of independent or predictor variables, however, was influenced by the findings of both segmentation research and psychological research in general. In both cases there are measures in general use although the nature of the population of students required some adaptation.

Marketing theory and business practice both incorporate the belief that personal characteristics influence purchase and, by extension, satisfaction. The researcher's task in investigating these and related issues is to incorporate appropriate personal characteristics. The use of characteristics that transcend a selected purchase situation, as has been the intention in this study, increases the likelihood that findings are not restricted and relevant only to that purchase situation. It may be, however, that the opportunity to establish stronger associations between the variables of interest is traded off with this purpose in mind.

Three types of data were obtained from survey respondents. The first section of the questionnaire, reproduced in Appendix A, dealt with demographic and socioeconomic data. In most marketing studies, concern in this area centers on age, race, family size and composition, education, occupation, income, social class, and related measures. The population for this study, however, is a unique segment of the population at large, and the

measures in general use have limited applicability. The student population is relatively similar in age, and the response categories for age used, for example, by the Census Bureau would allow little or no differentiation of student respondents for this variable. Likewise, the experience of a university education marks a major transition point in life at which point the conventional demographic and socio-economic measures that are premised on greater stability lose their value. Where conventional measures have been included, some instances of adaptation of response categories were necessary (e.g., age). In addition a number of other measures were included (e.g., grade point average and percentage of college expenses earned) which involved respondent data associated specifically with the university educational experience.

Because demographic and soci-economic data have proved to be of limited value in the prediction of brand selection decisions, two other types of data were sought, and greater emphasis was attached to them in the analysis. The first is data from a set of 26 pairs of self-image semantic differential adjectives. This set, with some slight differences, was used by Miller (1977) in his study focusing on a search for satisfaction segments. Twenty-four of the bipolar self-descriptor adjective pairs were drawn originally from an analysis of impressions of personality by Wishner and Asch (1969). Two which Miller added, Easily Satisfied - Hard to Please and Satisfied with Life -

Dissatisfied with Life, were also included, and two others which Miller added were excluded. In five of the adjective pairs, one term was changed to make the two terms more clearly opposites. Respondents were asked to check which of seven points between the two contrasting terms most accurately described themselves.

The third category of data is based on thirty-eight statements in the form of activity, interest, and opinion (AIO) statements which have become increasingly common in marketing studies with the expansion of interest in life-style or psychographic variables for segmentation purposes. These statements were drawn from three sources. Ten were selected from a set of forty-four statements used by Miller (1977). They were judged to be of more general value than the remainder which dealt in some respect with food shopping. On the questionnaire these are item numbers: 60, 62, 63, 65, 67, 68, 70, 73, 75, and 78. Another sixteen items were generated in the small group discussions with ACC and HRI seniors referred to previously. These deal naturally with the subjects of occupations, career objectives, working conditions, work attitudes, etc. On the questionnaire these are item numbers: 61, 64, 66, 69, 70, 71, 74, 76, 77, 79-84, and 86.

The remaining group of twelve items, questionnaire item numbers 48-59, constitute a dimension of values scale developed to measure four basic value dimensions: acceptance of authority, need-determined expression,

equalitarianism, and individualism. This scale was developed by Withey (1965) as a shortened form of a scale developed in the study of interpersonal relations research by Bales and Couch (1969). This scale was attractive as a means of incorporating these value measures into the analysis in concise fashion. Generally speaking, it would have been desirable to include in independent variables a broad range of attitude measures from an inventory such as that compiled by Robinson and Shaver (1973). The problems which would result from lengthening the questionnaire and complicating data collection made this approach not feasible.

The response format for this group of thirty-eight statements was the same as that for the satisfaction variable used as the dependent variable. Respondents were asked to circle a number from one to seven indicating the extent of their agreement with each statement. Number one indicated very strong agreement and number seven indicated very strong disagreement.

The emphasis in this study is on the possibility of differences existing in the importance of respondent characteristics for the prediction of satisfaction among those selecting different brands (majors). It is important that the variables employed as predictors have sufficient predictive value to allow comparisons between the two groups. Because the emphasis is on comparisons, it is not necessary that the variables be selected in order to

maximize their predictive value. Indeed, if the intent were to maximize the prediction of satisfaction, the range of predictor variables employed would not be restricted to consumer characteristics. The use of general measures such as the self-image adjective pairs and Withey's dimensions of values scales combined with items specifically developed for this study provided assurance that an acceptable level of prediction would be attained.

The absence of independent variables believed a priori to be associated with satisfaction with major selection and the volume of respondent data generated created a need for data reduction and the generation of more concise, parsimonious predictors. The procedure employed was again similar to that used in developing the satisfaction scale. The sixty-four questionnaire items with seven-point scale responses (self-image adjectives and AIO statements) were analyzed with the blind cluster analysis procedure in PACKAGE. Seven clusters (eigenvalues greater than 1.0) emerged from this analysis. Each of these clusters was more sharply delineated by removing selected items from the scale. As in development of the satisfaction scale, the criteria for examining each cluster were: (a) item content considerations, (b) the pattern of intercorrelations with other items, and (c) whether elimination of an item would result in a larger coefficient alpha. Subprogram RELIABILITY in SPSS was used in evaluating the last two criteria.

Items not fitting any cluster or removed from one by this process were pooled and again subjected to cluster analysis. This residual analysis of residual unused items failed to reveal any additional clusters with eigenvalues greater than 1.01. The eight clusters that resulted from this analysis used forty-four of the original sixty-four items. The basic analysis involving the prediction of satisfaction employed these eight clusters as predictor variables. A summary of information about the eight variables is presented in Table 1, and more detailed information about the composition of each variable is presented in Appendix B

TABLE 1  
PREDICTOR VARIABLES

VARIABLE NUMBER	COMMON THEME	NUMBER OF ITEMS	COEFFICIENT ALPHA
1	Strength, high standards	8	.777
2	Socially active	8	.731
3	Social desirability	9	.738
4	Platitudes	7	.580
5	Need-determined expression	3	.557
6	Acceptance of authority	3	.702
7	Importance of money	3	.546
8	Individualism	3	.483

The clustering procedure in PACKAGE used to develop these predictor variables was a principal components factor analysis employing oblique rotation. While this

makes it easier to insure that the resulting factors have meaning, it increases the chances of multicollinearity among the factors. Table 2 was constructed to assess the correlations among clusters for respondents in ACC, HRI, and for all respondents combined.

TABLE 2  
CORRELATIONS BETWEEN CLUSTERS

CLUSTER NUMBER	CLUSTER NUMBER						
	1	2	3	4	5	6	7
2	.129	r					
	.039	r					
	.090	r					
3	.175	-.242					
	.020	-.206					
	.105	-.218					
4	.093	.083	.073				
	-.065	-.022	-.089				
	.030	.038	-.000				
5	.004	.047	.147	.073			
	.061	-.007	-.047	.184			
	.017	.039	.075	.116			
6	-.071	-.040	-.008	.025	.009		
	.062	.112	-.060	.008	-.155		
	-.015	.021	-.031	.017	-.063		
7	-.178	-.031	.050	-.011	-.204	.013	
	-.307	.034	.019	-.003	-.036	-.195	
	-.230	.001	.044	-.010	-.115	-.074	
8	.185	.174	.017	.135	.154	.009	-.024
	.264	.132	.008	.295	.219	.002	-.096
	.201	.167	.028	.195	.202	.007	-.042

Visual examination of the correlations leads to the conclusion that the eight clusters used as the basic predictor variables are relatively free of multicollinearity.

### Analytical Procedures

This section deals first with the procedures employed to evaluate the linkage between predictor and criterion variables. The methods of determining whether differences between groups are statistically significant are then reviewed. This constitutes the core of the analysis. A supplementary analytical procedure is then described for the determination of whether respondents perceive the two majors as dissimilar.

The initial phase of the analysis involved computation of Pearson product-moment correlation coefficients ( $r$ ) for satisfaction and each of the eight predictor variables. Subprogram REGRESSION in SPSS was used to compute the correlation matrices for both ACC and HRI students because of interest in the differences, if any, among each of the eight pairs of coefficients.

The Fisher  $r$  to  $Z$  transformation was used to answer the question of whether the correlation coefficients were significantly different.<sup>8</sup> This transformation allows the researcher to convert a sample  $r$  value to a  $Z$  value on a one to one basis. Inferences may then be made in terms of  $Z$  and restated in terms of correlation. The hypothesis test of equal correlation then takes the form of the ratio

$$\frac{Z_1 - Z_2}{\sigma_{(Z_1 - Z_2)}}$$



where  $z_1$  and  $z_2$  are transformed values of the correlation coefficient for the ACC and HRI samples and

$$\sigma_{(z_1-z_2)} = \sqrt{\frac{1}{N_1-3} + \frac{1}{N_2-3}}$$

A second and related approach to the same inferential problem is offered by multiple regression procedures. The confounding effects created when there is some covariation among the predictor variables are controlled by this procedure. Although there is evidence of minimal multicollinearity, multiple regression techniques allow the specification of the contribution of a given variable to the prediction of the criterion variable when the other variables are held constant. The two approaches would be expected to yield similar results.

To verify this expectation, two regression equations were computed using subprogram REGRESSION and the stepwise procedure for inclusion of each variable. One equation regressed satisfaction with choice of major on the eight predictor variables for ACC students and the other did the same for HRI students. In both instances, the first concern is the determination of which, if any, of the predictor variables have significant regression weights. This question may be answered immediately by reference to SPSS output. The next question is whether significant differences exist between the regression weights for ACC and HRI students. This test is feasible only when,



for a given predictor, the regression weight is significant in at least one of the two equations. The statistic which facilitates this test is

$$Z = \frac{B_1 - B_2}{\sqrt{(SE_{B_1})^2 + (SE_{B_2})^2}}$$

where  $B_1$  and  $B_2$  are the unstandardized regression weights and  $SE_{B_1}$  and  $SE_{B_2}$  are their respective standard errors.

While this constitutes the basic test of the central hypothesis, some additional analyses were conducted. An additional regression equation was computed for all respondents combined. The intent was to compare this equation with those of ACC and HRI separately to see if the intermingling of respondents selecting different majors led to different conclusions about the relationships between predictor and criterion variables.

Additional regressions were run for both groups in order to determine if the demographic and socio-economic data added significantly to the prediction of satisfaction with choice of major. The emergence of one variable as significant in the ACC group led to an additional analysis of variance to explicate this finding better.

A final analysis was conducted to test the operating assumption that the two brands (majors) at the center of this research were perceived as dissimilar in the eyes of the subjects. The principal value of this analysis

lies in its use to minimize alternative interpretations of the central research findings. The data needed for this analysis were generated by questionnaire items 98-113. Each respondent was asked to indicate his or her perception of ACC and HRI as majors. Eight selected characteristics or attributes of academic majors were expressed in modified semantic differential form. A check mark indicated the respondent's perception of the association of each attribute with ACC and HRI, respectively. The analysis of this data involves both independent and paired sample t-tests of the difference between means.

#### Data Gathering Procedures

It was determined that accessing the population of ACC and HRI seniors to ask their cooperation with the study could be done fastest and at least expense through scheduled classes. Accordingly, class lists were reviewed in order to identify the classes which had high concentrations of seniors in either of the two majors. Consideration was given to the likelihood that some students might be enrolled in more than one of the identified classes and whether this might create problems. The conclusion was reached that there appeared to be no feasible way of avoiding this possibility. It was not judged to be an issue, however, because the combined effect of instructions to complete only one questionnaire and the time required would discourage subjects from completing more than one.

The professors responsible for each of the

identified classes were approached to explain the purpose of the research, seek their cooperation, and specify the arrangements for returning completed questionnaires. The objective of the arrangements was to remove any barriers of inconvenience which might raise the non-response rate. Subjects were generally offered the options of: (a) returning them to a subsequent class at which time they would be picked up, (b) leaving them with their professor, or (c) depositing them in the researcher's departmental mail box. On occasion a professor offered the use of class time for completion of questionnaires, and there was no need for special arrangements for returns.

Because the questionnaire distribution took place near the end of the fall term, 1977, some professors felt that scheduled use of class time allowed insufficient flexibility to distribute questionnaires. As a result of this and because of a desire to increase the size of the respondent group, the same procedure for distribution and collection of questionnaires was followed at the start of the winter term, 1978.

For the fall term, this involved ten ACC classes, 257 questionnaires distributed, and 111 completed questionnaires returned. For the winter term, 130 questionnaires were distributed through seven classes, and 69 were completed and returned. For the HRI students during the fall, 71 questionnaires were distributed in three classes, and 62 were returned. In the winter term 126 were distributed

in three classes and 64 were returned. Usable responses totaled 306 with 180 of these being ACC majors and 126 being HRI majors.

The data gathering procedures ended with the punching of the data on to standard 80-column IBM computer cards.

FOOTNOTES: CHAPTER III

<sup>1</sup>John A. Howard, Consumer Behavior: Application of Theory (New York: McGraw-Hill, 1977), p. 9.

<sup>2</sup>John A. Czepiel, Larry J. Rosenberg, and Adebayo Akerele, "Perspectives on Consumer Satisfaction," Proceedings of the American Marketing Association (Chicago, Illinois: American Marketing Association, 1975), pp. 119-123.

<sup>3</sup>Albert Aiello, Jr., John A. Czepiel, and Larry J. Rosenberg, "Scaling the Heights of Consumer Satisfaction: an Evaluation of Alternative Measures," Consumer Satisfaction, Dissatisfaction and Complaining Behavior, ed. Ralph L. Day (Bloomington, Indiana: Indiana University, 1977), p. 44.

<sup>4</sup>Ibid.

<sup>5</sup>Ibid., p. 43.

<sup>6</sup>This computer program was authored by John E. Hunter and Stanley H. Cohen and is available at the Computer Institute for Social Science Research, Michigan State University.

<sup>7</sup>Norman H. Nie et al, Statistical Package for the Social Sciences (2d. ed.; New York: McGraw-Hill, 1975), and SPSS-6000 Supplement (East Lansing, Michigan: Michigan State University, 1978).

<sup>8</sup>William L. Hays, Statistics for Psychologists (New York: Holt, Rinehart, and Winston, 1963), p. 532.

## CHAPTER IV

### RESEARCH FINDINGS

In this chapter the results of the analytical procedures described in Chapter III are reviewed and discussed. The bivariate relationships between satisfaction and the eight predictor variables are reviewed first. Attention is focused primarily on the differences between ACC and HRI students with respect to the correlations between satisfaction and each of the eight predictor variables. The discussion then advances to the multivariate procedures used. The results are reviewed for the multiple regression analysis including comparisons of regression weights for the equations computed. The multiple regression analysis is then expanded to include the demographic variables. Finally, perceived attributes of the two majors are compared for ACC and HRI students.

#### Bivariate Analysis

In the bivariate phase of the analysis, Pearson product-moment correlation coefficients were computed between the eight predictor variables and satisfaction for both ACC and HRI students. The principal value of the correlation coefficient is that it shows the direction of the relationship, or whether the variable is positively or negatively associated with satisfaction. The coefficient



of determination ( $r^2$ ), however, is a more useful statistic for prediction because it shows the percentage of the total variance in satisfaction that is explained by a given variable. It is, therefore, a direct indicator of the strength of the association. The computations of  $r$  and  $r^2$  were made with subprogram REGRESSION of SPSS and are summarized in Table 3.

TABLE 3

## BIVARIATE CORRELATIONS: SATISFACTION WITH PREDICTORS

Predictor Variable	ACC Students			HRI Students		
	$r_1$	$r_1^2$	$n_1$	$r_2$	$r_2^2$	$n_2$
1	.029	.000	177	-.052	.033	124
2	.281	.079	180	.305	.093	125
3	.374	.140	179	-.018	.000	125
4	.025	.001	176	.021	.000	120
5	.174	.030	179	-.019	.000	125
6	.018	.000	179	.129	.017	126
7	.152	.023	180	.161	.026	125
8	.133	.018	179	.307	.094	124

The values of the coefficients of determination for ACC students ranged from .000 for predictor number 6 (acceptance of authority) to a high of .140 for predictor number 3 (social desirability). For HRI students the values ranged from .000 for predictor number 3 (social desirability) to .094 for predictor number 8 (individualism). Because intercorrelations exist among the predictor variables, the individual coefficients of determination cannot be

added to obtain an estimate of their joint predictive value. Instead, it is necessary to use multiple regression analysis. It is clear, however, from the low  $r^2$  values that most of the variation in satisfaction is not explained by this set of predictor variables.

An important qualification should be noted in interpreting the results of both bivariate and multivariate analysis. Predictive efficacy was a secondary issue in the research design. Had it been the major consideration, the design would have incorporated other variables believed a priori to be important determinants of customer satisfaction. Specifically, the activities of sellers relating to transactions with consumers would necessarily be included. This would have included the ability of sellers to live up to the claims of their offerings and to deal with consumers openly, honestly, and courteously.

The primary issue in this study was, however, hypothesized differences in the influence of selected variables in the prediction of satisfaction between purchasers of competing brands. Given this, correlation coefficients are useful statistics. The signs of the correlation coefficients in Table 3 reveal that for five of the eight variables the correlation with satisfaction was positive for one group of students and negative for the other group. These five variables were: number 1 (strength), number 3 (social desirability), number 4 (platitudes), number 6 (acceptance of authority), and number 8 (individualism).

Nevertheless, the coefficients were small. Consequently, it was desirable to test whether the differences obtained were merely due to chance. The statistical test for determining the significance of such differences uses the Fisher  $r$  to  $Z$  transformation. The test of significance is based on the computation of  $Z'$  as follows:

$$Z' = \frac{Z_1 - Z_2}{\sigma_{(Z_1 - Z_2)}} = \frac{Z_1 - Z_2}{\sqrt{\frac{1}{n_1 - 3} + \frac{1}{n_2 - 3}}}$$

The one-to-one correspondence of correlation coefficients to  $Z$  values and the computed  $Z'$  values are shown in Table 4.

TABLE 4  
TRANSFORMATIONS: CORRELATION COEFFICIENTS TO  $Z$  VALUES

Predictor Variable	Satisfaction				$z'$
	ACC Students		HRI Students		
	$r_1$	$z_1$	$r_2$	$z_2$	
1	.029	.029	-.052	-.052	.69
2	.281	.289	.305	.315	.22
3	.374	.393	-.018	-.018	3.48 <sup>a</sup>
4	-.025	-.025	.021	.021	.39
5	-.174	-.176	-.019	-.019	1.33
6	-.018	-.018	.129	.130	1.25
7	.152	.153	.161	.162	.08
8	-.133	-.134	.307	.317	3.82 <sup>a</sup>

<sup>a</sup>significant at .001

The differences proved to be significant for only two variables: number 3 (social desirability) and number 8 (individualism). The conclusion supported by this analysis is that, other things being equal, the characteristic of social desirability contributed more to satisfaction among ACC students while the characteristic of individualism contributed more to satisfaction among HRI students.

This may be viewed as offering evidence that satisfaction is influenced by factors not relating to a seller's actions, factors which may be outside the seller's control. This suggests that the availability of choices among brands contributes to consumer satisfaction if the brands possess attributes well matched to differences in relevant characteristics among consumers such as social desirability or individualism.

#### Multivariate Analysis

Multiple regression can be used to attain two different objectives. First, it offers a means of evaluating the overall or combined contributions of independent variables in predicting the dependent variable (satisfaction with choice of major). Second, it offers the opportunity to evaluate the contribution of a given independent variable when the effects of other independent variables are controlled. For the purposes of this study, the second objective is more important although the first is not ignored.

The stepwise procedure employed enters variables

one by one into the regression equation with the order determined by the contribution of each variable to explained variance in the criterion variable. The variable with the highest contribution is entered first and the remainder are entered in descending order. The procedure also permits the deletion of variables that do not meet pre-established criteria for inclusion.

Stepwise regression was run first for ACC students with attention directed to the predictor variable regression weights and whether they were statistically significant. Regression weights proved to be significant in the ACC group for four of the eight variables. They were: number 3 (social desirability), number 2 (socially active), number 7 (importance of money), and number 8 (individualism). The B values or regression weights ranged from  $-.31$  to  $.47$ . The 95% confidence limits, computed as  $B \pm 2SE_B$  where  $SE_B$  is the standard error of B, indicated statistical significance by the fact that the upper and lower limits were either both positive or both negative so that zero did not fall between them. Summary statistics for the four significant variables are presented in Table 5.

When a parallel regression analysis was performed for the HRI students, only two variables had significant regression weights. They were number 8 (individualism) and number 2 (socially active). These two variables were also significant in the ACC equation. Therefore, the

variables for which comparison of regression weights could be made were limited to four variables previously identified: number 3 (social desirability), number 2 (socially active), number 7 (importance of money), and number 8 (individualism). Each of these four variables produced a statistically significant regression weight, that is, a weight different from zero, in one of the two equations. This was a necessary condition for a test of differences in weights between the two equations to be meaningful. Table 6 presents summary statistics for these four variables in the HRI equation.

TABLE 5  
MULTIPLE REGRESSION RESULTS: ACC

Predictor Variable	B	SE <sub>B</sub>	95% Confidence Limits
3	.47	.10	.27, .69
2	.22	.07	.08, .36
7	.38	.15	.08, .67
8	-.31	.13	-.56, -.06

The confidence limits of variables 8 and 2 have common signs. This indicates that the regression weights are in fact not zero and that a relationship does exist between the predictor variables and satisfaction. Likewise, the contrasting signs on the confidence limits for variables 3 and 7 indicate that zero falls within the limits. The regression weights are, therefore, not significant at

the  $\alpha=.05$  level.

TABLE 6  
MULTIPLE REGRESSION RESULTS: HRI

Predictor Variable	B	SE <sub>B</sub>	95% Confidence Limits
8	.80	.22	.37, 1.22
2	.33	.11	.10, .56
3	-.11	.14	-.39, .17
7	.46	.24	-.01, .94

The central concern of this research is whether the regression weights for given variables are different in the two equations. The test of the significance of differences in regression weights utilizes the formula

$$Z = \frac{B_1 - B_2}{\sqrt{(SE_{B_1})^2 + (SE_{B_2})^2}}$$

where  $B_1$  and  $B_2$  are the unstandardized regression weights and  $SE_{B_1}$  and  $SE_{B_2}$  are their respective standard errors.

This test was conducted for each variable which was significant in at least one of the two equations, that is, variables 3, 2, 7, and 8. Two variables were identified for which the differences in regression weights were significant. They were number 3 (social desirability) and number 8 (individualism). The Z values were, respectively, 3.37, significant at .005, and 4.36, significant at .0001.

These same two variables were identified in the

bivariate analysis as having correlation coefficients which differed significantly. The bivariate and multivariate analyses thus yielded consistent results. Therefore, the multiple regression results reinforced the conclusion that the characteristic of social desirability contributed more to satisfaction among ACC students while the characteristic individualism contributed more to satisfaction among HRI students. Satisfaction was clearly related to brand choice. Other things being equal, an individual's satisfaction with ACC was greater if that individual reflected the characteristic social desirability but was low in individualism. At the same time, an individual high in individualism could expect greater satisfaction with the HRI major.

A slightly different perspective of the value of considering brand choice in the prediction of satisfaction may be gained by comparing not just equations for individual brands but also the equation for all respondents combined. To facilitate the comparison an additional regression analysis was performed on the total sample with no distinction according to academic major. This yielded three variables with significant regression weights. They were: number 2 (socially active), number 7 (importance of money), and number 3 (social desirability). Table 7 displays the summary results for these three variables.

These findings were then compared with those cited previously for the ACC and HRI groups. Attention was



focused upon the differences among the lists of significant variables and upon the coefficient of multiple determination ( $R^2$ ). This statistic shows the percentage of variance in the criterion variable explained by the combined effect of the significant predictors. The significant variables and  $R^2$  for each of the three regressions are shown in Table 8.

TABLE 7

## MULTIPLE REGRESSION RESULTS: TOTAL SAMPLE

Predictor Variable	B	SE <sub>B</sub>	95% Confidence Limits
2	.27	.07	.15, .40
7	.35	.14	.09, .62
3	.22	.09	.05, .39

TABLE 8

SIGNIFICANT PREDICTORS AND  $R^2$  BY GROUP

Group	Significant Predictors ( $\alpha = .05$ )	$R^2$
ACC	3, 2, 7, 8	.236
HRI	8, 2	.165
Total Sample	2, 7, 3	.121

The dissimilarities in the significance of predictors are more striking than the similarities. Variable 2 (socially active) was the only variable to appear in all three equations. Its identification as a relevant issue in satisfaction with academic major was, therefore,

independent of whether the analysis was focused at the product class level (total sample) or at the brand choice level (ACC or HRI). With respect to the other three variables, analysis for the total sample either distorted or concealed their importance for the two groups. Variable 8 (individualism) was significant among both groups, but because the signs of the weights were different, its effects were concealed in the total sample. Likewise, variable 3 (social desirability) appeared to be significant, but the effect was confined totally to the ACC group. It is clear that decomposing the total sample to examine the brands separately yielded richer information about which consumer characteristics were related to satisfaction.

The combined strength of these characteristics in the prediction of satisfaction was also improved when the two groups were considered independently. The percentage of variance in satisfaction explained by the significant variables ( $R^2$ ) was 23.6 for ACC and 16.5 for HRI but just 12.1 for the total sample. The lower  $R^2$  for the total sample can be attributed to the offsetting effects of the contrasting signs for variable 8 (individualism) and variable 3 (social desirability) in the ACC and HRI equations. Breaking down the analysis from the product class level to that of individual brands produced two related but distinguishable benefits. The first was more accurate identification of variables associated with satisfaction with the choice of major. The second was the

improvement in the prediction of satisfaction. The fact of the improvement was more important than the size of the improvement since predictive efficiency was a secondary issue.

The essence of the analyses is that the belief that consumer satisfaction is related to brand choice is supported. The differences that exist among consumers are important in the prediction of satisfaction. And studies of satisfaction conducted at the level of product class tend to obscure the identifiable differences among brands. This study was deliberately focused on consumer characteristics rather than sellers' actions as sources of satisfaction. This approach was adopted not because consumer characteristics were presumed to be the major causes of satisfaction but because differences among consumers, expressed in their preferences, constitute a foundation of market segmentation theory. Nonetheless, market segmentation theory extended to its logical consequences in terms of consumer satisfaction has not been subjected to empirical tests.

Although the results discussed above constitute the heart of the analysis, there are two additional aspects to the study. First, the multiple regression analysis was expanded to include demographic data. Several researchers have published results of segmentation studies that support the view that demographic data are less valuable than AIO data in developing a better understanding of brand selection

decisions and consequences.

The only variables included in the stepwise regression procedure were those for which the first order correlation coefficient with satisfaction was significant at  $\alpha=.05$ . There were five variables in all. They are questionnaire item numbers 5 (age), 6 (sex), 12 (percentage of college expenses earned), 15 (employment status), and 16 (hours employed per week). When these variables were included in the analysis for ACC students, only the sex variable had a statistically significant regression weight, thereby improving the prediction of satisfaction. None of the demographic variables had statistically significant regression weights in the HRI equation. The difference between regression weights for sex in the two equations was not significant at the  $\alpha=.05$  level.

#### Brand Perceptions

The second aspect dealt with perceptions of the characteristics of the two majors held by ACC and HRI students. The analysis served two purposes. Most importantly, it answered the question of whether the two majors were perceived as dissimilar by the respondents. It also provided an opportunity to gain insight into some of the processes at work in the formation of evaluative, satisfaction judgments. The data used in this analysis were generated by questionnaire items numbered 93 through 113. With these items respondents first reported their

perceptions of eight attributes or characteristics of ACC as a major in modified semantic differential form. They then did the same for HRI with the identical set of attributes. The eight attributes were: (1) job opportunities, (2) starting salaries, (3) self-employment possibilities, (4) size of employing firms, (5) quantitative skills needed, (6) human relations skills needed, (7) growth opportunities, (8) and difficulty of program.

While the research hypothesis in this study is that there are no differences in the role of variables predicting satisfaction between competing brands, the expectation was that differences do exist. This expectation was based on concepts of market segmentation theory and research findings of segmentation studies dealing with choice processes. Implicit in this theory is the precondition that the brands be perceived by consumers as being different in some key respects. If consumers do not perceive differences among brands, the appearance of choice is merely an illusion, and no differences would be expected in the role of predictor variables.

Consequently, the study assessed the comparative perceptions held of the two majors. Objective differences between majors in ACC and HRI exist in the form of differences in courses, faculty, and associations with industries. When making or evaluating choices of major, however, differences that consumers perceive are more important than objective differences. This is true whether or not the

perceptions are consistent with the objective differences.

The first question posed was: do ACC and HRI students hold similar perceptions of ACC as a major? The question was answered by reference to the responses to each of the eight attributes of ACC as a major. The mean scores, T values, and significance levels for each of the eight characteristics are summarized in Table 9.

TABLE 9  
PERCEPTIONS OF ACC AS A MAJOR

Characteristic	Mean Scores		T Value
	ACC Students	HRI Students	
Assurance of a job	6.08	5.47	-3.94 <sup>a</sup>
Level of starting salary	5.47	5.35	.94
Appropriateness for self-employment	2.91	4.24	-6.27 <sup>a</sup>
Likelihood of employment with a large firm	5.36	5.60	-1.43
Quantitative skills required	6.00	5.88	.92
Human relations skills required	5.67	3.28	13.22 <sup>a</sup>
Personal growth opportunities	6.03	4.15	10.77 <sup>a</sup>
Difficulty of courses	6.34	5.99	2.73 <sup>b</sup>

<sup>a</sup>significant at .001

<sup>b</sup>significant at .05

The mean scores differed significantly between the two groups on five of the eight measures: assurance of a

job, appropriateness for self-employment, human relations skills required, personal growth opportunities, and difficulty of courses. ACC students perceived their major as more difficult, offering better assurance of employment, better preparation for self-employment, and more growth opportunities while requiring more human relations skills than did HRI students. There were no differences in perceptions of starting salary levels, quantitative skills required, and likelihood of employment with a large firm. The perceptions of ACC held by the two groups were characterized more by differences than similarities. The common element of the differences was a more positive view of ACC held by ACC students as compared to HRI students.

Respondents were then asked to indicate their perceptions of the same eight characteristics of HRI as a major. The responses are summarized in Table 10.

In this case the mean scores differed significantly for seven of the eight characteristics. The exception was human relations skills required, for which the two groups were in agreement. HRI students saw their major as being more difficult than ACC students did. They also saw it as offering better assurance of a job, better preparation for self-employment, better opportunities for personal growth, greater likelihood of employment with a large firm, as well as requiring more quantitative skills than did ACC students. They were more pessimistic than ACC students, however, about the level of starting salaries.

TABLE 10

## PERCEPTIONS OF HRI AS A MAJOR

Characteristic	Mean Scores		T Value
	ACC Students	HRI Students	
Assurance of a job	4.49	5.95	-9.11 <sup>a</sup>
Level of starting salary	3.51	2.84	4.21 <sup>a</sup>
Appropriateness for self-employment	3.69	2.56	5.34 <sup>a</sup>
Likelihood of employment with a large firm	4.34	5.23	-5.03 <sup>a</sup>
Quantitative skills required	3.87	4.77	-4.92 <sup>a</sup>
Human relations skills required	6.51	6.60	- .90
Personal growth opportunities	5.20	6.05	-5.26 <sup>a</sup>
Difficulty of courses	3.55	4.03	-2.98 <sup>b</sup>

<sup>a</sup>significant at .001

<sup>b</sup>significant at .005

As was the case with ACC, the students' views of HRI were characterized more by differences than similarities. In a pattern parallel to that of ACC, the common element of the differences was a positive view of HRI among HRI students. The sole exception to this general trend was the more pessimistic view of starting salaries held by HRI students.

The similarity of the results for both ACC and HRI majors suggests that students in both groups are subject to a halo effect whereby they perceive their own major as being superior. A conclusion of this sort, however, would be



premature. A review of how ACC students perceive the two majors in a direct comparison, attribute by attribute, and a similar comparative review of HRI student perceptions is required to reach such a conclusion. Such an analysis was performed using paired observations arranged casewise within each group of students. Attention was focused on differences in mean scores. Table 11 shows the results for ACC students and Table 12 for HRI students.

TABLE 11

ACC STUDENTS:  
 PAIRED COMPARISONS OF ACC AND HRI AS MAJORS

Characteristic	Difference in Mean Scores	T Value
Assurance of a job	1.65	11.35 <sup>a</sup>
Level of starting salary	2.07	17.47 <sup>a</sup>
Appropriateness for self-employment	-.70	-3.21 <sup>b</sup>
Likelihood of employment with a large firm	1.03	5.60 <sup>a</sup>
Quantitative skills required	2.17	14.80 <sup>a</sup>
Human relations skills required	-.87	-7.71 <sup>a</sup>
Personal growth opportunities	.93	5.97 <sup>a</sup>
Difficulty of courses	2.79	20.20 <sup>a</sup>

<sup>a</sup>significant at .001

<sup>b</sup>significant at .005

At first glance the results reported in Tables 11 and 12 appear to reinforce the earlier findings. Differences appear to dominate as was the case previously. The

differences between means are significant in all instances at the .05 level and in most cases at the .001 level. Indeed, the condition that brands be perceived as being dissimilar appears to have been met.

TABLE 12  
HRI STUDENTS:  
PAIRED COMPARISONS OF ACC AND HRI AS MAJORS

Characteristic	Difference in Mean Scores	T Value
Assurance of a job	-.46	-3.01 <sup>b</sup>
Level of starting salary	2.51	14.47 <sup>a</sup>
Appropriateness for self-employment	1.66	6.69 <sup>a</sup>
Likelihood of employment with a large firm	.40	2.54 <sup>c</sup>
Quantitative skills required	1.14	7.35 <sup>a</sup>
Human relations skills required	-3.32	-19.30 <sup>a</sup>
Personal growth opportunities	-1.96	-10.60 <sup>a</sup>
Difficulty of courses	1.98	13.60 <sup>a</sup>

<sup>a</sup>significant at .001

<sup>b</sup>significant at .005

<sup>c</sup>significant at .05

The emphasis to this point has been placed on differences, but it should be noted that some patterns of similarity do exist. Both ACC and HRI students give the ACC major higher ratings than HRI for the level of starting salaries, likelihood of employment with a large firm, quantitative skills required, and difficulty of coursework.

Both groups also agree on a higher rating for HRI in terms of human relations skills required. The three characteristics which indicate disagreement between the two groups are assurance of a job, appropriateness for self-employment, and personal growth opportunities. In each case the students reported a belief in the superiority of their own majors. ACC students rated ACC higher, and HRI students rated HRI higher.

If there was a tendency to perceive one's major in a relatively positive light, it was weaker than appeared to be the case earlier. It is possible that the tendency exists and is strongest for such an attribute as growth opportunities. They are experiential and personal. Information about them is not easily available for dissemination to students in other majors. Similarly, the tendency may be weakest for those attributes which are more objective and about which comparative information is readily available.

The scale item dealing with self-employment possibilities is of particular interest. In the regression analysis reported earlier, the most closely related predictor variable was number 8 (individualism). One of the AIO items in this scale directly addressed the issue of self-employment. The statement was: I would like to run my own business. The individualism predictor was positively associated with satisfaction with HRI and was negatively associated with satisfaction With ACC. The result presents something of a paradox. Students in HRI perceive relatively

greater likelihood for self-employment with an HRI major. Moreover, individualism, with which self-employment is related, is a positive predictor of satisfaction. By way of contrast, however, ACC students perceive the ACC major as a better one for self-employment. Yet individualism is negatively related to satisfaction.

There is a temptation to conclude that self-employment opportunities associated with HRI are determining variables in the selection of the HRI major but are unimportant in the selection of ACC. Although it is consistent with these results, it would be an inappropriate conclusion. The reason for this is that the study did not deal directly with choice criteria. The emphasis in the design of this study was placed on the prediction of satisfaction. It was not placed on the prediction of choice. The absence of data directly related to the choice process at the time of major selection precludes this interpretation.

A possibility that cannot be excluded because of the nature of the cross-sectional design employed is that the attitudes toward self-employment among the respondents developed subsequent to the selection of a major. The interrelationships among variables important in the choice process and those associated with satisfaction require longitudinal research designs to analyze them and draw meaningful conclusions.

The link between predictor number 8 (individualism)

and the self-employment characteristic was interesting and provocative in terms of "causal" relationships which were not studied directly. But it is peripheral to the fundamental purpose of this investigation which was to determine whether satisfaction is related to or influenced by brand choice.

The evidence generated in this empirical study leads to the conclusion that, in a situation characterized by perceived differences among brands, and one that contains many of the attributes of extensive problem solving behavior, satisfaction is indeed related to brand choice. The mathematical association between satisfaction and the personal characteristics employed as predictor variables differed between purchasers of the two brands. Differences were measured in terms of both strength and direction of the association. The implication is that the differences that exist among people may cause them to experience more or less satisfaction with their purchase decisions depending on the choices they make among competing brands.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Objectives

The central concern of this dissertation is an empirical test of a fundamental element of market segmentation theory — the belief that consumers benefit from the ability to choose among marketplace offerings. The test does not take the form of a total cost-benefit analysis. No attempt was made to assess the costs associated with the provision of choice alternatives or accrued as a result of engaging in choice processes. Similarly, no attempt was made to assess the gains from each of the several ways consumers are presumed to benefit from the availability of choice options. For example, considerations of economic structure dealing with the effect of substitutes on commodity prices were not considered.

The study focused specifically upon consumers' evaluations of their satisfaction with a specific purchase decision. Attention was then directed to the possibility that a common set of predictor variables would differ in importance between purchasers of two brands within a given product class. The presence of such differences would be evidence of the social value of market segmentation. Variation in the predictors of satisfaction would suggest that

the goal of consumer satisfaction is well served by an abundance of differentiated market offerings, particularly if the attributes of the offerings are well matched with the differences in consumer motivations.

A necessary step in the resolution of uncertainty in this area is the generation of empirical evidence as to whether or not consumer satisfaction is independent of, or unaffected by, brand choice. Such is the purpose of this study.

### Background

Recent years have witnessed the gradual evolution of marketing into a position of greater importance among the functions of management. Simultaneously, consumer behavior has developed as an area of concern within marketing. The shift away from an internal, production-oriented mode of management toward an external, marketing-oriented emphasis was consistent with the need to understand consumer decision processes better.

Consumer satisfaction was not a new concept that emerged with a new-found recognition of the importance of consumers to the firm. The idea is of indeterminate age and had been expressed for years by the statement that the consumer was "king". Its impact upon the integration of managerial activities, however, has been heightened in the past quarter century by the frequent incorporation of the marketing concept into corporate policy statements.

Given the pragmatic tradition of marketing, it is

understandable that the focus of most research in consumer behavior would be, and remains still, the determinants of choice among market alternatives. Only within the past decade has an interest developed in satisfaction as an evaluative component of the post-purchase phase of the consumer decision process.

It seems logical to expect research interest to grow as evidence accumulates that increased knowledge would be of value. There is evidence that the stakes marketers have in understanding consumers' evaluative processes are increasing. This evidence is directly related to the growth in recent years of the influence of the consumer movement. The movement can be traced at least to the turn of the century, but its influence has been more cyclical than steady. The most recent upsurge of interest in consumer problems has also been the most wide-ranging, encompassing the general area of the rights and responsibilities of buyers and sellers and such specific areas as consumer safety, product liability, advertising puffery, and others too numerous to mention. There can be little doubt that the movement shares responsibility for the increased interest in consumer satisfaction.

In recent years consumers have increasingly been encouraged to be more aggressive in seeking redress for market-related dissatisfaction. The advice has come from formally organized consumer groups, self-appointed consumer leaders, politicians, bureaucrats, the press, and increasingly



from business firms themselves. As consumer complaints have escalated, governmental units and businesses alike have become more sensitive to consumer problems, and the number of consumer affairs departments has multiplied.

Legislative remedies are an increasingly common response to growing volumes of complaints. Notwithstanding efforts by the business community to resolve dissatisfaction directly with its customers, incidents of dissatisfaction are more often than in the past evolving into both public and political issues. The stakes increase when this happens, and the value of a better understanding of consumers' evaluative processes also increases.

The small but growing body of published work in marketing dealing with complaining behavior, satisfaction, and related subjects is very eclectic in nature. One approach that is apparent reflects a short-run, pragmatic, managerial point-of-view. It is particularly evident in many of the studies dealing with complaint handling. A second approach addresses the problem at the aggregate systems level far removed from the interests of most individual managers. These studies have a strong social welfare flavor. A third approach, and one which is compatible with the objectives of this study, attempts to answer relevant theoretical questions without sacrificing the opportunity to produce results of managerial value.

The prevailing theory that is particularly relevant for this study is market segmentation theory. Among the

premises of segmentation theory are heterogeneity of demand and preferences. Different people buy different things. Accordingly, it is considered wise strategy for marketers to offer, where possible, a diversity of product service combinations.

These premises have been given partial but incomplete recognition in the studies of satisfaction in the context of segmentation theory. As a result segmentation theory has not contributed as much as is possible to satisfaction research. At the same time it has not been subjected to tests of its validity that can best be conducted within satisfaction research.

A common approach employed in the studies in question might be called the profile method. Researchers using this method attempt to construct sets of descriptive characteristics of complaining or noncomplaining and satisfied or unsatisfied consumers. This is similar to work done with purchasers of various products or brands and is based on the assumption that groupings of similar customers exist. The research task is to identify the characteristics associated with the clusters. With the exception of a limited number of studies dealing with the role of expectations, most recent satisfaction work has not employed a process approach explicitly linking choice behavior with evaluative phenomena.

One consequence of research designs employed to this point is the possibility of misinterpretation of satisfaction segments. A second, more important point is that a

major premise of current marketing theory has gone untested. That premise, which follows logically from heterogeneity of demand, is that consumers not only buy different things but are also satisfied by different things. To believe otherwise is to suggest that the choices consumers exercise when selecting among brands are little more than an illusion, that random selection processes would yield equivalent satisfaction. Because the premise is fundamental and contradictory evidence would be disruptive, it is desirable to seek empirical answers rather than depend upon assumption.

### Methods

The purpose of the research design was to operationalize the question of whether the prediction of satisfaction differed among purchasers of two specific brands within a product class. The product class selected for investigation was business school degree curricula at Michigan State University. Two specific brands were chosen for direct comparison: majors in accounting (ACC) and hotel and restaurant management (HRI). The research subjects were students who had selected one of the two majors and had attained senior status.

The source of the data for the analysis was a self-administered questionnaire in the context of a cross sectional ex post facto design. The questionnaire was distributed in classes which had substantial concentrations of seniors in the two majors. Usable responses totalled 180 from the 387 distributed to ACC students and 126 from the

197 distributed to HRI students.

The basic test of the central research hypothesis required the computation of multiple regression equations for both groups. Satisfaction with choice of major was the criterion variable and a common set of predictor variables was used. Statistical tests were then conducted to determine which variables were statistically significant in the two equations and whether the regression coefficients differed significantly between the two equations for given variables.

The dependent or criterion variable was a six item scale which resulted from the application of cluster analysis and scale reliability tests to the twelve questionnaire items dealing with satisfaction with selection of major. The twelve original items were developed to reflect aspects of the satisfaction construct which arose in small group interviews with convenience samples of ACC and HRI seniors.

The independent or predictor variables included demographic data, self-image adjectives in semantic differential form, and AIO statements. The majority of the individual items had been used by other researchers studying satisfaction questions. Some were adapted from other studies and some new items were developed from the small group interviews.

Data reduction techniques similar to those used with the criterion variable were employed with the predictor

variables. The self-image adjectives and AIO statements which were hypothesized to have greatest predictive value were reduced to eight predictor variable scales which included 44 of the original 64 questionnaire items. These scales were developed using the combined responses of ACC and HRI students. It should be noted that the various items used in the development of predictor scales were general measures rather than being included because of a hypothesized association with satisfaction with one or both of the two majors.

#### Summary of Findings

Of the eight predictor variables employed in the multiple regression analysis, four were noteworthy. All four were statistically significant in the ACC equation, and two of the four were significant in the HRI equation. Of interest is the finding that the regression weights for two variables share the same sign in both equations, but for the other two the signs are reversed. More importantly, in two of the four comparisons the differences in regression weights in the two equations were statistically significant. In one of the two the signs were reversed. With regard to the central research hypothesis, then, the findings is that satisfaction is not independent of brand choice. There is evidence in this case of differences in the variables predicting satisfaction between purchasers of competing brands in a given product class.

An additional regression equation was developed

for ACC and HRI students combined. The purpose was to compare with the other equations in order to determine whether decomposition of product class purchasers into brand categories in any way altered the perception of which variables contributed to prediction of satisfaction. The finding was that it very definitely did so. The most dramatic illustration involved a variable which was significant in both ACC and HRI equations but did not appear in the equation for the total sample. In another instance a variable appearing in total sample equation did so because of a predictive influence concentrated almost totally in just one of the groups.

When the analysis was expanded to include demographic variables, the results were incidental as expected. The last finding relates to the question of whether ACC and HRI students see the two majors as different. For the eight characteristics of the majors for which perceptions were reported, T values for the differences in mean scores were virtually all statistically significant. There is no question that the majors are seen as dissimilar.

#### Implications For Marketing Theory and Practice

The results of this study are not revolutionary. Segmentation theory creates certain expectations which were realized by the results. The theory deals explicitly with the association of consumer characteristics and the attributes of differentiated products but only implicitly with the evaluative judgments that follow purchase. This study

provides explicit evidence that the factors associated with satisfaction with a purchase decision differs between brands. As such it is supportive of prevailing marketing theory.

The implications for marketing practice are more thought provoking. The notion of consumer satisfaction as part of the marketing concept and good management in general is hardly novel. This study tends to reinforce its value. If a firm is astute in understanding its potential customers and devising effective strategies for reaching well-chosen target markets, it will undoubtedly develop some potential business that is unsought or perhaps even unwanted. The prospect of a sale may be higher than the likelihood the buyer will be satisfied. The corollary of the statement that different people are satisfied by different things is that different people are dissatisfied with different things. The focus here has been on satisfaction, but preventing the development of dissatisfied customers may be equally as difficult and more important in some respects.

Rather than accepting "fringe" customers and other unplanned business unquestioningly, marketers may choose to adjust their programs to attract desired customers while at the same time repelling those who may generate immediate sales but have a strong likelihood of dissatisfaction. This implies that competing brands are dissimilar in their need-satisfying potential and that the consequences of dissatisfaction are more serious than simply brand switching.

It will likewise be important for marketers to

determine the extent to which the criteria consumers use in selecting products differ from the criteria used in evaluative judgments. It is possible that buyer and seller alike can benefit from the early provision of information known to be commonly used in post-purchase evaluation. As a very general statement, one might conclude that the marketer who possesses a better understanding of the determinants of satisfaction than exists among competitors has an edge in designing marketing programs that are effective and efficient.

#### Limitations and Future Research

This study is limited by the specifics of the purchase situation studied and the cross-sectional design. Consequently, it is far from a definitive study with respect to questions of satisfaction vis-a-vis brand choice much less the larger theoretical issues of segmentation and choice theory.

Because the findings are tentative, a number of possibilities for related research efforts are suggested. A question that might arise upon examination of the results of this study is whether the outcome will be different in varied purchase situations. In the situation studied, marked differences were perceived between the two choices which were compared. The purchase also involved a substantial expense, time commitment, and ego involvement and may be viewed by some as irreversible. As these conditions are relaxed, in particular the perception of



differences between brands, the relationship between brand choice and satisfaction might be expected to weaken. It may be argued that these conditions might indeed diminish as a product market matures.

A significant question that remains for future research turns on the strength of the predictive relationship. Specifically, will the relationship be stronger if predictor variables are not of general origin as was the case here but are instead selected for testing as a result of a postulated association with satisfaction with the object or objects under investigation?

A research question involving analytical techniques also remains to be answered. This study employed R-factor analysis in construction of the predictor variables because of a concern with the correlation between characteristics. Alternatively, Q-factor analysis which deals with the correlation between units (individuals) could be employed to determine if similar individuals who make different selections within a product class report different levels of satisfaction.

Irrespective of the analytical technique considered most appropriate, the analysis can be enriched in future studies by expanding the number of brands under study at one time. This would be true for studies that vary widely in terms of basic questions under study.

The most ambitious studies that remain to be conducted are those incorporating longitudinal analysis. If

the nature of linkages between selection criteria and evaluative processes are to be better understood, this is essential. In this study, for example, the emphasis on evaluation precluded dealing directly with choice processes. As a consequence there was little basis for anything but speculation about what they were. The brand choice decision has been studied extensively but its relationship to evaluative processes is largely unexplored. Ideally, longitudinal studies would follow stable, representative groups of consumers over a long enough period of time to gather data extending across the processes from extensive problem solving related to new ideas or products through purchase behavior, consumption, and evaluation. A wide variety of products and services would be studied reflecting differences in goods classification, degree of competition, and competitive strategies. The likelihood of such large-scale projects is undoubtedly quite low.

#### Concluding Comments

The main stimulus for this study was a research study which purported to identify satisfaction segments but in the process appeared to disregard an implication of segmentation theory itself. Upon investigation, no research could be found which directly addressed the point in question, and it became the central hypothesis for this study. The hypothesis was that the predictors of satisfaction vary between brands within a product class. The specific situation chosen for investigation offered the appropriate

test conditions if the hypothesis was sound. The major finding was that support for the hypothesis did exist in the situation studied. It remains to be seen how general or how strong the relationship is in other evaluative contexts. The major conclusion is that segmentation theory and general marketing theory received an additional accumulation of affirmative support in the findings of this study.

## APPENDIX A

## APPENDIX A

### RESEARCH INSTRUMENT

Your cooperation in completing the attached questionnaire is deeply appreciated. The validity of the study is dependent upon completion of the questionnaire by a high percentage of seniors such as yourself majoring in either accounting or hotel and restaurant management. The focus of this study is the evaluation of decision choice, in this case the selection of an academic major, and its relationship to personal characteristics.

While your assistance in this study is wholly voluntary, I would like to reemphasize its value and importance. Also, each participant will remain anonymous.

James C. Cooper  
Ph.D. Candidate  
Michigan State University

5. Age: Under 21\_\_\_, 21\_\_\_, 22\_\_\_, 23\_\_\_, 24\_\_\_, 25\_\_\_,  
26-30\_\_\_ over 30\_\_\_.
6. Sex: female\_\_\_, male\_\_\_
7. Marital status: single\_\_\_, married\_\_\_, widowed\_\_\_,  
divorced\_\_\_, separated\_\_\_.
8. Expected term of graduation: F 77\_\_\_, W 78\_\_\_,  
Sp 78\_\_\_, Sum 78\_\_\_, after Sum 78\_\_\_.
9. Major: accounting\_\_\_, hotel and restaurant mgt. \_\_\_
10. No. of times major changed: 0\_\_\_, 1\_\_\_, 2\_\_\_, 3\_\_\_,  
4\_\_\_, more than 4\_\_\_
11. Have you earned a degree in another field? yes\_\_\_ no\_\_\_
12. Percentage of college expenses earned: 0<20\_\_\_, 20<40\_\_\_,  
40<60\_\_\_, 60<80\_\_\_, 80-100\_\_\_

13. Current gradepoint average: under 2.0\_\_\_\_, 2.0<2.5\_\_\_\_,  
2.5<3.0\_\_\_\_, 3.0<3.5\_\_\_\_, 3.5-4.0\_\_\_\_
14. Do you have work experience in a job that is closely related to your major field of study? yes\_\_\_\_, no\_\_\_\_
15. Are you presently holding a job? yes\_\_\_\_, no\_\_\_\_
16. If yes, how many hours per week do you work? less than 10\_\_\_\_, 10<20\_\_\_\_, 20<30\_\_\_\_, 30 or more\_\_\_\_
17. What is your credit hour load this term? less than 7\_\_\_\_, 7-10\_\_\_\_, 11-13\_\_\_\_, 14-16\_\_\_\_, more than 16\_\_\_\_
18. Father's education in years: Elem.1-4\_\_\_\_, Elem.5-7\_\_\_\_, Elem.8\_\_\_\_, High School 1-3\_\_\_\_, High School 4\_\_\_\_, College 1-3\_\_\_\_, College 4 or more\_\_\_\_
19. Mother's education in years: Elem.1-4\_\_\_\_, Elem.5-7\_\_\_\_, Elem.8\_\_\_\_, High School, 1-3\_\_\_\_, High School 4\_\_\_\_, College 1-3\_\_\_\_, College 4 or more\_\_\_\_
20. Size of your high school graduation class: less than 50\_\_\_\_, 50<100\_\_\_\_, 100<300\_\_\_\_, 300<500\_\_\_\_, over 500\_\_\_\_
21. Present housing arrangements: MSU housing (dorm or apt.)\_\_\_\_, fraternity, sorority, or co-op\_\_\_\_, living with parents\_\_\_\_, owned housing\_\_\_\_, off-campus rental\_\_\_\_.

For each pair of contrasting adjectives check the point that most accurately describes you.

- |                         |       |       |       |       |       |       |                        |
|-------------------------|-------|-------|-------|-------|-------|-------|------------------------|
| 22. Stingy              | _____ | _____ | _____ | _____ | _____ | _____ | Generous               |
| 23. Inactive            | _____ | _____ | _____ | _____ | _____ | _____ | Active                 |
| 24. Easily satisfied    | _____ | _____ | _____ | _____ | _____ | _____ | Hard to Please         |
| 25. Patient             | _____ | _____ | _____ | _____ | _____ | _____ | Impatient              |
| 26. Dominant            | _____ | _____ | _____ | _____ | _____ | _____ | Submissive             |
| 27. Well Informed       | _____ | _____ | _____ | _____ | _____ | _____ | Uninformed             |
| 28. Foolish             | _____ | _____ | _____ | _____ | _____ | _____ | Wise                   |
| 29. Sociable            | _____ | _____ | _____ | _____ | _____ | _____ | Unsociable             |
| 30. Satisfied with Life | _____ | _____ | _____ | _____ | _____ | _____ | Dissatisfied with Life |

31. Decisive	—	—	—	—	—	—	—	Indecisive
32. Critical	—	—	—	—	—	—	—	Tolerant
33. Unbending	—	—	—	—	—	—	—	Yielding
34. Unintelligent	—	—	—	—	—	—	—	Intelligent
35. Cautious	—	—	—	—	—	—	—	Impulsive
36. Impolite	—	—	—	—	—	—	—	Polite
37. Self-centered	—	—	—	—	—	—	—	Other-centered
38. Inflexible	—	—	—	—	—	—	—	Flexible
39. Talkative	—	—	—	—	—	—	—	Quiet
40. Practical	—	—	—	—	—	—	—	Impractical
41. Humane	—	—	—	—	—	—	—	Ruthless
42. Unjust	—	—	—	—	—	—	—	Just
43. Stubborn	—	—	—	—	—	—	—	Compliant
44. Aggressive	—	—	—	—	—	—	—	Unaggressive
45. Sensitive	—	—	—	—	—	—	—	Insensitive
46. Stupid	—	—	—	—	—	—	—	Bright
47. Dishonest	—	—	—	—	—	—	—	Honest

Here are some statements which some people believe and others don't. Indicate how strongly you agree or disagree with each statement by circling the appropriate number.

- 1 Very strong agreement
- 2 Strong agreement
- 3 Mild agreement
- 4 Neither agree nor disagree, don't know, not sure
- 5 Mild disagreement
- 6 Strong disagreement
- 7 Very strong disagreement

48. Young people sometimes get rebellious ideas but as they grow up they ought to get over them. 1 2 3 4 5 6 7
49. You have to respect authority and when you stop respecting authority, your situation isn't worth much. 1 2 3 4 5 6 7

50. Obedience and respect for authority are the most important things in character that children should learn. 1 2 3 4 5 6 7
51. The solution to almost any human problem should be based on the situation at the time, not on some general idea of right or wrong. 1 2 3 4 5 6 7
52. Do what you want to do that's fun and worry about the future later. 1 2 3 4 5 6 7
53. Since no values last forever, the only real values are those that fit the needs of right now. 1 2 3 4 5 6 7
54. A group of people that are nearly equal will work a lot better than one where people have bosses and ranks over one another. 1 2 3 4 5 6 7
55. Everyone should have an equal chance and an equal say in most things. 1 2 3 4 5 6 7
56. Everyone should have what he needs, the important things we have belong to all of us. 1 2 3 4 5 6 7
57. We should all admire a man who starts out bravely on his own. 1 2 3 4 5 6 7
58. In life a person should for the most part "go it alone", working on his own and trying to make his own life. 1 2 3 4 5 6 7
59. One should not depend on other persons or things, the center of life should be found inside oneself. 1 2 3 4 5 6 7
60. I enjoy planning work carefully before carrying it out. 1 2 3 4 5 6 7
61. The likelihood of a 9-5 job routine is depressing. 1 2 3 4 5 6 7
62. The government has too much control over business. 1 2 3 4 5 6 7
63. When I am in a group that is discussing a problem, I seldom influence the solution or action that is adopted. 1 2 3 4 5 6 7
64. I would like to run my own business. 1 2 3 4 5 6 7



65. Students should have more power in university affairs than they do now. 1 2 3 4 5 6 7
66. If you want something done right, you have to do it yourself. 1 2 3 4 5 6 7
67. Businessmen in general are as honest as other people 1 2 3 4 5 6 7
68. You can't change human nature. 1 2 3 4 5 6 7
69. I will accept the job that offers the most money. 1 2 3 4 5 6 7
70. Business has too much influence on government decisions. 1 2 3 4 5 6 7
71. I intend to work for a living rather than live to work. 1 2 3 4 5 6 7
72. You can't get rich working on a salary. 1 2 3 4 5 6 7
73. Public welfare programs tend to make people work less hard than they should 1 2 3 4 5 6 7
74. I would rather work with people than mostly by myself. 1 2 3 4 5 6 7
75. You usually get what you pay for. 1 2 3 4 5 6 7
76. Having a job that is interesting is more important to me than how much it pays. 1 2 3 4 5 6 7
77. In our society success is measured by how much money you make. 1 2 3 4 5 6 7
78. You usually have to stand up for your rights so people won't take advantage of you. 1 2 3 4 5 6 7
79. Job prospects were an important factor in my selection of an academic major. 1 2 3 4 5 6 7
80. My family is supportive of my selection of a major. 1 2 3 4 5 6 7
81. Making a lot of money is important to me. 1 2 3 4 5 6 7
82. The university is really not much help in picking a major. 1 2 3 4 5 6 7
83. Before picking a major, I thoroughly checked out a lot of other possibilities. 1 2 3 4 5 6 7

- |     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| 84. | I've always known what kind of career I wanted.   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 85. | My major courses are pretty much what I thought they would be like.                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 86. | Most of my close friends at MSU are not in the college of business.                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 87. | If I were starting college all over again, I would pick the same major.                           | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 88. | I expect to get the kind of job that I want.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 89. | At this point, I would not consider changing majors.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 90. | I have no regrets about picking the major I am now enrolled in.                                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 91. | I think my selection of a major was a wise decision.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 92. | There are lots of jobs for a person with a degree in my field.                                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 93. | Based on my own experience, I would recommend that other students pick the same major that I did. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 94. | The salaries being offered to graduates in my field look pretty good to me.                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 95. | I am at least as interested in my field now as when I picked my major.                            | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 96. | If I were to go to graduate school, I would stay in the same field.                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 97. | Fundamentally, I am satisfied with my selection of a major.                                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Indicate your perception of accounting as a major by checking the appropriate point on each scale.

- |     |  |   |   |   |   |   |   |   |  |
|-----|--|---|---|---|---|---|---|---|--|
| 98. | Minimal assurance of a job upon graduation | — | — | — | — | — | — | — | Substantial assurance of a job upon graduation |
| 99. | Starting salaries are low                  | — | — | — | — | — | — | — | Starting salaries are high                     |

- |      |  |                 |  |
|------|--|-----------------|--|
| 100. | A good major if you<br>want to be self-em-<br>ployed | — — — — — — — — | A poor major if you<br>want to be self-em-<br>ployed |
| 101. | Employment with a<br>large firm is un-<br>likely     | — — — — — — — — | Employment with a<br>large firm is likely            |
| 102. | Requires minimal<br>quantitative skills              | — — — — — — — — | Requires substantial<br>quantitative skills          |
| 103. | Requires minimal<br>human relations<br>skills        | — — — — — — — — | Requires substantial<br>human relations<br>skills    |
| 104. | Offers limited per-<br>sonal growth<br>opportunities | — — — — — — — — | Offers high personal<br>growth opportunities         |
| 105. | Very easy course<br>of study                         | — — — — — — — — | Very difficult course<br>of study                    |

Indicate your perception of hotel & restaurant mgt. as a major  
by checking the appropriate point on each scale.

- |      |  |                 |  |
|------|--|-----------------|--|
| 106. | Minimal assurance<br>of a job upon<br>graduation     | — — — — — — — — | Substantial assurance<br>of a job upon<br>graduation |
| 107. | Starting salaries<br>are low                         | — — — — — — — — | Starting salaries<br>are high                        |
| 108. | A good major if you<br>want to be self-<br>employed  | — — — — — — — — | A poor major if you<br>want to be self-<br>employed  |
| 109. | Employment with a<br>large firm is un-<br>likely     | — — — — — — — — | Employment with a<br>large firm is likely            |
| 110. | Requires minimal<br>quantitative skills              | — — — — — — — — | Requires substantial<br>quantitative skills          |
| 111. | Requires minimal<br>human relations<br>skills        | — — — — — — — — | Requires substantial<br>human relations<br>skills    |
| 112. | Offers limited per-<br>sonal growth<br>opportunities | — — — — — — — — | Offers high personal<br>growth opportunities         |
| 113. | Very easy course<br>of study                         | — — — — — — — — | Very difficult course<br>of study                    |

## APPENDIX B

# APPENDIX B

TABLE 13  
PREDICTOR VARIABLE COMPONENTS

Variable Number	Questionnaire Item Number	Descriptive Adjective or AIO Statement
1	33	unbending
	24	hard to please
	32	critical
	38	inflexible
	25	impatient
	43	stubborn
	37	self-centered
	26	dominant
2	29	sociable
	39	talkative
	30	satisfied with life
	44	aggressive
	23	active
	31	decisive
	74	I would rather work with people than mostly by myself.
	63	When I am in a group that is discussing a problem, I seldom influence the solution or action that is adopted (negative).
3	46	bright
	34	intelligent
	42	just
	41	humane
	36	polite
	28	wise
	47	honest
	40	practical
	45	sensitive

TABLE 13 (cont'd.)

Variable Number	Questionnaire Item Number	Descriptive Adjective or AIO Statement
4	57	We should all admire a man who starts out bravely on his own.
	56	Everyone should have what he needs, the important things we have belong to all of us.
	66	If you want something done right, you have to do it yourself.
	68	You can't change human nature.
	55	Everyone should have an equal chance and an equal say in most things.
	65	Students should have more power in university affairs than they do now.
	78	You usually have to stand up for your rights so people won't take advantage of you.
5	53	Since no values last forever, the only real values are those that fit the needs of right now.
	52	Do what you want to do that's fun and worry about the future later.
	51	The solution to almost any human problem should be based on the situation at the time, not on some general idea of right or wrong.

TABLE 13 (cont'd.)

Variable Number	Questionnaire Item Number	Descriptive Adjective or AIO Statement
6	50	Obedience and respect for authority are the most important things in character that children should learn.
	49	You have to respect authority and when you stop respecting authority, your situation isn't worth much.
	48	Young people sometimes get rebellious ideas but as they grow up they ought to get over them.
7	69	I will accept the job that offers the most money (negative).
	76	Having a job that is interesting is more important to me than how much it pays.
	81	Making a lot of money is important to me (negative).
8	58	In life a person should for the most part "go it alone," working on his own and trying to make his own life.
	59	One should not depend on other persons or things, the center of life should be found inside oneself.
	64	I would like to run my own business.

## BIBLIOGRAPHY



## BIBLIOGRAPHY

- Aaker, David A. and Day, George, S. (ed.) Consumerism: Search for the Consumer Interest. 2nd ed.; New York: The Free Press, 1974.
- Aaker, David A. and Day, George S. "Corporate Responses to Consumerism Pressures," Harvard Business Review. 40 (November-December, 1972), pp. 114-124.
- Aiello, Albert Jr., Czepiel, John A., and Rosenberg, Larry J. "Scaling the Heights of Consumer Satisfaction: an Evaluation of Alternative Measures," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: Indiana University, 1977, pp. 43-50.
- Alderson, Wroe. Dynamic Marketing Behavior. Homewood, Illinois: Richard D. Irwin, 1965.
- \_\_\_\_\_. "The Analytical Framework for Marketing," Proceedings: Conference of Marketing Teachers from Far Western States. ed. Delbert Duncan; Berkeley: University of California, 1958, pp. 15-28.
- Anderson, Rolph E. "Consumer Dissatisfaction: the Effect of Disconfirmed Expectancy on Perceived Product Performance," Journal of Marketing Research. 10 (February, 1973), pp. 38-44.
- Aronson, E. "Dissonance Theory: Progress and Problems," Theories of Cognitive Consistency: a Source book. ed. R. P. Abelson et al; Chicago: Rand McNally, 1968, pp. 5-27.
- Bales, R. and Couch A. "The Value Profile: A Factor Analytic Study of Value Statements," Sociological Inquiry. 39 (1969), pp. 3-17.
- Barksdale, Hiram C. and Darden, William R. "Consumer Attitudes toward Marketing and Consumerism," Journal of Marketing. 36 (October, 1972), pp. 28-35.
- Bartlett, John. Bartlett's Familiar Quotations. ed. Emily Morrison Beck; 14th ed.; Boston: Little, Brown and Company, 1968.

- Bell, Daniel. "Revolution of Rising Entitlements," Fortune. 91 (April, 1975), pp. 98-103.
- Best, Arthur and Andreasen, Alan R. Talking Back to Business: Voiced and Unvoiced Consumer Complaints. Center for Study of Responsive Law, 1976.
- Birmingham, Robert L. "The Consumer as King: The Economics of Precarious Sovereignty," Consumerism: Search for the Consumer Interest. ed. David A. Aaker and George S. Day; 2nd ed.,; New York: The Free Press, 1974, pp. 181-192.
- Blattberg, Robert; Buesing, Thomas; Peacock, Peter; and Sen, Subrata. "Identifying the Deal Prone Segment," Journal of Marketing Research. 15 (August, 1978), pp. 369-377.
- Boschung, Milla. "Manufacturer's Response to Consumer Complaints on Guaranteed Products," Journal of Consumer Affairs. 10 (Summer, 1976), pp. 86-90.
- Brehm, J.W. and Cohen, A.R. Explorations in Cognitive Dissonance. New York: Wiley, 1962.
- \_\_\_\_\_. "Re-evaluation of Choice Alternatives as a Function of Their Number and Qualitative Similarity," Journal of Abnormal and Social Psychology. 58 (1959), pp. 373-378.
- Brock, T.C. "Cognitive Restructuring and Attitude Change," Journal of Abnormal and Social Psychology. 64 (1962), pp. 264-271.
- Broffman, Morton H. "Is Consumerism Merely Another Marketing Concept?" Business Topics. 19 (Winter, 1971), pp. 15-21.
- Cardozo, Richard N. "An Experimental Study of Consumer Effort, Expectations, and Satisfaction," Journal of Marketing Research. 2 (August, 1965), pp. 244-249.
- Chapanis, N. and Chapanis A. "Cognitive Dissonance: Five Years Later," Psychological Bulletin. 61 (1964), pp. 1-22.
- Cohen, A.R., Brehm, J.W., and Fleming, W.H. "Attitude Change and Justification for Compliance," Journal of Abnormal and Social Psychology. 56 (1958), pp. 272-278.

- Cohen, A.R., Terry, H.I., and Jones, C.B. "Attitudinal Effects of Choice in Exposure to Counter-Propaganda," Journal of Abnormal and Social Psychology. 58 (1959), pp. 388-391.
- Collins, Barry E. "Four Components of the Rotter Internal-External Scale: Belief in a Difficult World, a Just World, a Predictable World, and a Politically Responsive World," Journal of Personality and Social Psychology. 29 (March, 1974), pp. 381-391.
- Cravens, David W. and Hills, Gerald E. "Consumerism: a Perspective for Business," Business Horizons. 13 (August, 1970), pp. 21-28.
- Czepiel, John A., Rosenberg, Larry J., and Akerele, Adebayo. "Perspectives on Consumer Satisfaction," Proceedings of the American Marketing Association, 1975. Chicago: American Marketing Association, 1975, pp. 119-123.
- Day, Ralph L. (ed.) Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. Bloomington, Indiana: Indiana University, 1977.
- \_\_\_\_\_. "Toward a Process Model of Consumer Satisfaction," Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction. ed. H. Keith Hunt; Cambridge, Massachusetts: Marketing Science Institute, 1977, pp. 153-183.
- Day, Ralph L. and Landon, E. Laird. "Collecting Comprehensive Consumer Complaint Data by Survey Research," Advances in Consumer Research. ed. Beverlee B. Anderson; 3 (1976), pp. 263-268.
- Delozier, M. Wayne and Woodside, Arch G. Marketing Management. Columbus, Ohio: Charles E. Merrill Publishing Company, 1978.
- Diamond, Steven L., Ward, Scott, and Faber, Ronald. "Consumer Problems and Consumerism: Analysis of Calls to a Consumer Hot Line," Journal of Marketing. 40 (January, 1976), pp. 58-62.
- Engel, James F., Kollat, David T., and Blackwell, Roger D. Consumer Behavior. 2nd ed.; New York: Holt, Rinehart, and Winston, Inc., 1973.
- Engledow, Jack L. "Was Satisfaction a Pig in a Poke?" Business Horizons. 20 (April, 1977), pp. 87-94.

- Festinger, Leon and Carlsmith, J.M. "Cognitive Consequences of Forced Compliance," Journal of Abnormal and Social Psychology. 58 (1959), pp. 203-210.
- Festinger, Leon. A Theory of Cognitive Dissonance. Evanston, Illinois: Row and Peterson, 1957.
- Frank, Ronald E., Massy, William F., and Wind, Yoram. Market Segmentation. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972.
- Gaedeke, Ralph M. and Etcheson, Warren W. (ed.) Consumerism: Viewpoints from Business, Government and the Public Interest. San Francisco: Canfield Press, 1972.
- Gerard, H. B. "Basic Features of Commitment," Theories of Cognitive Consistency: A Source-book. ed. R.P. Abelson et al; Chicago: Rand McNally, 1968, pp. 456-463.
- Goldberg, M. E. "Identifying Relevant Psychographic Segments: How Specifying Product Function Can Help," Journal of Consumer Research. 3 (December, 1976), pp. 163-169.
- Granbois, Donald; Summers, John O.; and Frazier, Gary L. "Correlates of Consumer Expectation and Complaining Behavior," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: Indiana University, 1977, pp. 18-25.
- Grazin, Kent L. and Grikscheit, Gary M. "A Differential Study of Citizen Opinions Concerning Government Control of Business," Combined Annual Preceedings, 1973. ed. Thomas V. Greer; Chicago: American Marketing Association, 1974, pp. 476-481.
- Greenwald, H. J. "Dissonance and Relative vs. Absolute Attractiveness of Decision Alternatives," Journal of Personality and Social Psychology. 11 (1969), pp. 328-333.
- Greyser, Stephen A. and Diamond, S.L. "Business is Adapting to Consumerism," Harvard Business Review. 52 (September-October, 1974), pp. 38-40.
- Grikscheit, Gary M. and Granzin, Kent L. "Who Are the Consumerists?" Journal of Business Research. 3 (January, 1975). pp. 1-12.
- Hays, William L. Statistics for Psychologists. New York: Holt, Rinehart, and Winston, 1963.

- Heilbroner, Robert L. The Economic Problem. 3rd ed.; Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972.
- Herrmann, Robert O. "Consumerism: Its Goals, Organizations, and Future," Journal of Marketing. 34 (October, 1970), pp. 55-60.
- Hicks, J.R. A Revision of Demand Theory. Oxford: Clarendon Press, 1956.
- Hollander, Stanley C. "Measuring the Cost and Value of Marketing," Business Topics. Summer, 1961, pp. 17-27.
- Howard, John A. Consumer Behavior: Application of Theory. New York: McGraw-Hill, 1977.
- Howard, John A. and Sheth, Jagdish N. The Theory of Buyer Behavior. New York: John Wiley & Sons, Inc., 1969.
- Hunt, H. Keith. (ed.) Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction. Cambridge, Massachusetts: Marketing Science Institute, 1977.
- Hunt, H. Keith. "CS/D - Overview and Future Research Directions," Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction. ed. H. Keith Hunt; Cambridge, Massachusetts: Marketing Science Institute, 1977, pp. 455-488.
- Hunter, John E. and Cohen, Stanley H. "Package: A System of Computer Routines for the Analysis of Correlational Data," Education and Psychological Measurement. 29 (1969), pp. 697-700.
- Hustad, Thomas P. and Pessemier, Edgar A. "Will the Real Consumer Activist Please Stand Up: An Examination of Consumers' Opinions about Marketing Practices," Journal of Marketing Research. 10 (August, 1973), pp. 319-324.
- Kendall, C.L. and Russ, Frederick. "Warranty and Complaint Policies: An Opportunity for Marketing Management," Journal of Marketing. 39 (April, 1975), pp. 36-43.
- Kiesler, C.A. "Committment," Theories of Cognitive Consistency: a Sourcebook. ed. R.P. Abelson et al; Chicago: Rand McNally, (1968), pp. 448-455.
- Kotler, Philip. Marketing Management: Analysis, Planning and Control. 3rd ed.; Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1976.

- \_\_\_\_\_. "What Consumerism Means for Marketers," Harvard Business Review. 50 (May-June 1972), pp. 48-57.
- Kraft, Frederick B. "Characteristics of Consumer Complainers and Complaint and Repatronage Behavior," Consumer Satisfaction, Dissatisfaction and Complaining Behavior. ed. Ralph L. Day: Bloomington, Indiana: Indiana University, 1977, pp. 79-84.
- Lancaster, Kelvin. Consumer Demand. New York: Columbia University Press, 1971.
- Landon, E. Laird, Jr. and Emery, Donald R. "Causal Attributions of Consumer Dissatisfaction as a Predictor of Consumer Complaint Action: a Preliminary Report," paper presented at the Association for Consumer Research meetings, Chicago, November 9, 1974.
- Landon, E. Laird, Jr. "A Model of Consumer Complaint Behavior," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana; University of Indiana, 1977, pp. 31-35.
- Leiss, William. The Limits to Satisfaction: an Essay on the Problems of Needs and Commodities. Toronto: University of Toronto Press, 1976.
- Lewin, Kurt; Demb, Tamara; Festinger, Leon; and Sears, Pauline S. "Level of Aspiration," Personality and the Behavior Disorders: a Handbook of Experimental and Clinical Research. ed. J. McV. Hunt; Vol. 1, New York: The Ronald Press, 1974.
- Liefeld, J.P., Edgecombe, F.H.C., and Wolfe, Linda. "Demographic Characteristics of Canadian Consumer Complainers," Journal of Consumer Affairs. 9 (Summer, 1975), pp. 73-80.
- Maddox, R. Neil. "Consumer Satisfaction with Supermarkets: A Factor Analytic Study," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day: Bloomington, Indiana: Indiana University, 1977, pp. 163-166.
- Mansfield, Edwin. Microeconomics. New York: W.W. Norton & Co., 1970.
- Margulis, S.T. and Songer, E. "Cognitive Dissonance: a Bibliography of Its First Decade," Psychological Reports. 24 (1969), pp. 923-935.

- Mason, Joseph B. and Himes, Samuel H., Jr. "An Exploratory Behavioral and Social-Economic Profile of Consumer Action about Dissatisfaction and Selected Household Appliances," Journal of Consumer Affairs. 7 (Winter, 1973), pp. 121-127.
- McGuire, William J. "The Current Status of Cognitive Consistency Theories," Behavioral Science Foundations of Consumer Behavior. ed. Joel B. Cohen; New York: The Free Press, 1972, pp. 253-274.
- SPSS-6000 Supplement. East Lansing, Michigan: Michigan State University, 1978.
- Miller, John A. "Data Reduction Techniques and the Exploration of Satisfaction Segments," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: Indiana University, 1977, pp. 102-114.
- \_\_\_\_\_. "Studying Satisfaction, Modifying Models, Eliciting Expectations, Posing Problems, and Making Meaningful Measurements," Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction. ed. H. Keith Hunt; Cambridge, Massachusetts: Marketing Science Institute, 1977, pp. 72-91.
- Monsen, R. Joseph. Business and the Changing Environment. New York: McGraw-Hill, 1973.
- Murray, Barbara B. (ed.) Consumerism: the Eternal Triangle. Pacific Palisades, California: Goodyear Publishing Co., 1973.
- Nabers, Lawrence. "Veblen's Critique of the Orthodox Economic Tradition," Thorstein Veblen: A Critical Reappraisal. ed. Douglas F. Dowd; Ithaca, N.Y.: Cornell University Press, 1958.
- Nie, Norman H., Hull, C. Hadlai, Jenkins, Jean G., Steinbrenner, Karen, Bent, Dale H. Statistical Package for the Social Sciences. 2nd ed.; New York: McGraw-Hill, 1975.
- O'Keefe, M.T. "The Anti-Smoking Commercials: a Study of Television's Impact on Behavior," Public Opinion Quarterly. 35 (1971), pp. 242-248.
- Olander, Folke. "Consumer Satisfaction a Skeptics View," Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction. ed. H. Keith Hunt; Cambridge, Massachusetts: Marketing Science Institute, 1977, pp. 409-452.

- Oliver, Richard L. "A Theoretical Reinterpretation of Expectation and Disconfirmation Effects on Posterior Product Evaluation: Experiences in the Field," Consumer Satisfaction, Dissatisfaction and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: University of Indiana, 1977, pp. 2-9.
- Olshavsky, Richard W. and Miller, John A. "Consumer Expectations, Product Performance, and Perceived Product Quality," Journal of Marketing Research. 9 (February, 1972), pp. 19-21.
- Pearson, Michael M. "A Note on Business Responses to Consumer Letters of Praise and Complaint," Journal of Business Research. 4 (February, 1976), pp. 61-68.
- Resnik, Allen; Gnauk, Brain; and Aldrich, Rodney. "Corporate Responsiveness to Consumer Complaints," Consumer Satisfaction, Dissatisfaction and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: Indiana University, 1977, pp. 148-152.
- Richards, Elizabeth A. and Sturman, Stephen S. "Life-style Segmentation in Apparel Marketing," Journal of Marketing. 41 (October, 1977), pp. 89-91.
- Robinson, John P. and Shaver, Phillip R. Measures of Social Psychological Attitudes. Rev. ed.; Ann Arbor, Michigan: Institute for Social Research, 1973.
- Sahlins, Marshall. Stone Age Economics. Chicago: Aldine, 1972.
- Scitovsky, Tibor. The Joyless Economy. New York: Oxford University Press, 1976.
- Smith, Wendell R. "Product Differentiation and Market Segmentation as Alternative Marketing Strategies," Journal of Marketing. 21 (July, 1956), pp. 3-8.
- Stampfl, Ronald W. "Structural Constraints, Consumerism, and the Marketing Concept," Business Topics. Spring, 1978, pp. 5-16.
- Steinmetz, Charles P. "The World Belongs to the Dissatisfied," The American Magazine. 85 (May, 1918), pp. 38-40.
- Swan, John E. "Consumer Satisfaction with a Retail Store Related to the Fulfillment of Expectations on an Initial Shopping Trip," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: University of Indiana, 1977, pp. 10-17.



- Thomas, William R. and Shruptine, F. Kelly. "The Consumer Complaint Process: Communication and Resolution," Business and Economic Review. 21 (June, 1975), pp. 13-22.
- Thorelli, Hans B. and Puri, Yash R. "On Complaining in Norway and the Role of the Information Seekers," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: Indiana University, 1977, pp. 130-138.
- Veblen, Thorstein. The Theory of the Leisure Class. New ed.; New York: Modern Library, 1918.
- Venkatesan, M. "Cognitive Consistency and Novelty Seeking," Consumer Behavior; Theoretical Sources. ed. Scott Ward and Thomas S. Robertson; Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1973, pp. 354-384.
- Wall, Marjorie; Dickey, Lois E.; and Talarzyk, W. Wayne. "Predicting and Profiling Consumer Satisfaction and Propensity to Complain," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: Indiana University, 1977, pp. 91-101.
- Warland, Rex. H., Herrmann, Robert O., and Willits, Jane. "Dissatisfied Consumers: Who Gets Upset and Who Takes Action," Journal of Consumer Affairs. 9 (Fall, 1975), pp. 148-163.
- Warland, Rex. "A Typology of Consumer Complaints," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: Indiana University, 1977, pp. 144-146.
- Webster's New World Dictionary. ed. David B. Guralink; 2nd Coll. Ed.; Cleveland: World Publishing Co., Inc., 1974.
- Weisenberger, Terry Mathew. "Generalized Market Segments: a Study Using Selected Convenience Goods in Vigo County, Indiana." Unpublished Ph.D. dissertation, Michigan State University, 1977.
- Westbrook, Robert A. and Newman, Joseph W. "An Analysis of Shopper Dissatisfaction for Major Household Appliances," Journal of Marketing Research. 15 (August, 1978), pp. 456-466.
- Wind, Yoram. "Introduction to Special Section of Market Segmentation Research," Journal of Marketing Research. 15 (August, 1978), pp. 315-316.

- \_\_\_\_\_. "Issues and Advances in Segmentation Research," Journal of Marketing Research. 15 (August, 1978), pp. 317-337.
- Wishner, Julius. "Reanalysis of 'Impressions of Personality'," Psychologic Review. (March, 1960), pp. 96-112.
- Withey, S. "The U.S. and the U.S.S.R.: A Report on the Public's Persepective on United States-Russian Relations in Late 1961," Components of Defense Policy. ed. D. Bobrow; Chicago: Rand McNally, 1965, pp. 164-174.
- Zaichkowsky, Judy and Liefeld, John. "Personality Profiles of Consumer Complaint Letter Writers," Consumer Satisfaction, Dissatisfaction, and Complaining Behavior. ed. Ralph L. Day; Bloomington, Indiana: Indiana University, 1977, pp. 124-129.

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