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VALUE IN EXCHANGE: THE CONSUMER PERSPECTIVE

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Presented for the

Doctor of Philosophy

Degree

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Mary Jane Burns

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DEDICATION

This dissertation is dedicated to Greg Little.

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ABSTRACT

This research investigated the consumer's perspective of value in the exchanges that take place between product providers and product users. Different types of value meanings were identified, defined and measured. Proposed relationships between value types and important consumer behaviors were also tested. A combination of qualitative techniques (depth interviews and focus groups) and quantitative methods (LISREL) were used to meet the research objectives of this dissertation. Findings suggest that consumers' postpurchase evaluations are the result of a complex process that is driven by the combined effects of 1) the product's functional performance and 2) the product's ability to enhance user well being.

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CHAPTER 1

PROBLEM DEFINITION

CHAPTER OVERVIEW

Strategy considerations receive significant attention from both academicians and practitioners. There is widespread agreement that successful planning, implementation and control is vital for the long term viability of business. However, often overlooked in the study of strategy is a comprehensive examination of consumer behavior and how consumer behavior concerns must be completely integrated into strategy decisions.

The purposes of the first chapter of this dissertation are: 1) to identify an area of research that merits closer examination, and 2) to define a problem that will be addressed in the subsequent study. As a means to that end, this chapter initially presents a number of issues related to strategy that must be considered if American businesses are to achieve and sustain advantage in today's competitive markets. It is through the examination of these strategy issues that a clear research opportunity emerges: a strategy is only as strong as the foundation on which it is built. It is ultimately necessary to return to the fundamentals of understanding markets and customers before strategy issues can be resolved and implementation improved.

INTRODUCTION

As growth in U.S. Gross National Product slows (1990 Statistical Abstract of the United States), the outlook for American business remains uncertain. Several factors have contributed to loss of competitiveness in world and domestic markets including "changing competition, continuing technological innovation, and evolving customer preferences" (Webster 1988, p. 30). With increasing concern about falling U.S. productivity (Peters 1987) and loss of markets (Jacobson and Aaker 1987), American businesses have sought strategies to achieve competitive advantage.

Competitive advantage is a frequently used term that is synonymous with a number of related concepts but has no widely accepted meaning (Day and Wensley 1988). Often, terms like "differential advantage" (Alderson 1965), "distinctive competence" (Day and Wensley 1988; Webster 1988) and "positional superiority" (Day and Wensley 1988) are used to convey the idea that one firm has some kind of edge over its competitors from the customers' point of view. In other words, customers perceive that one firm's offering is superior in some way to the offering of other companies. A related term, "sustainable competitive advantage" (Day 1984; Day and Wensley 1988; Porter 1985) refers to a firm's ability to maintain that superiority over time (Narver and Slater 1990). Regardless of the terminology, the notion that a firm can achieve and sustain advantage over its competitors is closely

related to the desirable outcomes of customer satisfaction and loyalty, market share and profitability. (Day and Wensley 1988). In fact, Levitt (1980) suggests that success can be attained by creating differentiation in any aspect of a firm's offering.

Achieving and maintaining competitive advantage is therefore a desirable objective towards which many companies strive. In the U.S., "quality" and quality-related programs have been adopted by firms as a means to regain competitive advantage in world markets. The next section examines the nature of the way quality programs in this country have been implemented and their success in moving U.S. business towards the goal of competitive advantage.

QUALITY, STRATEGY AND COMPETITIVE ADVANTAGE

"Quality is fast becoming one of the competitive issues of the 1980s and 1990s" (Garvin 1988, p. xi). Thus, implementing "quality" related programs has become an integral part of business strategies (Jacobson and Aaker 1987). Quality has been linked to 1) market share improvements (Bertrand 1987; Curry 1985; Phillips, Chang and Buzzell 1983; 2) higher return on investment (Curry 1985; Jacobson and Aaker 1987; Phillips et al. 1983), 3) lower costs (Phillips et al. 1983; Ross and Shetty 1985; Sullivan 1986a) 4) reduced customer sensitivity to price (Huber, Holbrook and Kahn 1986), and 5) increased profits (Curry and Riesz 1988; Narver and

Slater 1990; Zeithaml, Berry and Parasuraman 1988).

The Evolution of the "Quality" Strategic Perspective

The focus of quality programs has evolved over time. Garvin (1988) identifies four eras of quality: 1) inspection, 2) statistical quality control, 3) quality assurance and 4) strategic quality management (p. 3). As is evident by the labels of the first three eras, initially the concept applied to physical product attributes and the processes related to producing goods. Improving the quality of products and related processes provided a rather specific goal that facilitated implementation. However, despite the implementation of quality programs,

> approaches to quality remained largely defensive throughout this period. The main objective of the quality department was still the prevention of defects...Quality was still viewed negatively - as something that could hurt a company if ignored - rather than as a possible basis for competition. That view finally changed in the 1970s and 1980s, when the strategic aspects of quality were recognized and embraced (Garvin 1988, p. 20).

"Quality" in the current "Strategic Quality Management" era represents more of a philosophy of business with an emphasis on consumer needs and customer perceptions (Garvin 1987, 1988; Ishikawa 1985; Peters 1987; Takeuchi and Quelch 1983). Garvin (1987) states that "quality means pleasing customers, not just protecting them from annoyance" (p. 103). As such, the "Strategic Quality Management" era represents a shift from previous views on quality in that it:

- o is primarily concerned with strategic impact
- o emphasizes the market and customer wants and needs
- o involves goal setting, strategic planning and mobilizing the entire organization
- o must be championed by top management (Garvin 1988, p. 37)

As the concept of "quality" has broadened beyond inspection, detection, and measurement to become an integral part of strategy, the success of quality management programs bears closer scrutiny.

The Implementation of Strategic Quality Management in the U.S. - Competitive *DIS*advantage

Despite the tremendous advances that Americans have made in improving the quality of their products, "foreign competitors are often far ahead in offering products and services of superior quality" (Garvin 1988, p. 216). These quality differences are manifested in increasing worldwide market shares of Japanese high tech products and falling U.S. shares (Fortune, May 6, 1991). Three important factors can be identified as impeding the progress of U.S. firms in achieving and maintaining competitive advantage through "quality" related mechanisms. First, the fact that U.S. firms have had to "play catch up" in quality has been a major detractor to American industries' ability to re-emerge as a global economic force. Second, the implementation of quality programs in this country has shortcomings. Finally, the concept of quality has been too narrowly defined.

Reactive Perspective of Quality - Playing "Catch-Up"

Clearly, many U.S. firms are behind in quality considerations and continue to look to Japan for guidance to improve competitiveness (Garvin 1988). The result is one of the fundamental shortcomings of quality programs in this country: they tend to be reactive in nature. American industry has basically followed the Japanese lead in quality related issues. While U.S. businesses have been trying to produce goods and services that match Japanese quality criteria, the

> Japanese are redefining and expanding the term. [As American businesses narrow the quality gap, the standards have changed.] 'Any manufacturer can produce according to statistics,' contends Mazda Chairman Kenichi Yamamoto. In Japan that's now called atarimae hinshitsu - quality that is 'taken for granted.' In a defect free world, the Japanese argue, it is fine touches that will impress consumers. Taken individually, these flourishes may be nearly imperceptible. But the Japanese are betting that the cumulative effect will be dazzling. 'It's a very subtle expression of quality, and it works almost on the subconscious level,' says J. Jesse Snyder, an analyst for AutoPacific Group in Santa Ana, Calif. (Business Week 10-22-1990, p. 84-85).

Limitations in the Implementation of U.S. Programs

Many forces contributed to Japan's initial success in adopting and implementing quality programs. "Motivation and the need to improve, top management involvement, a national organization and infrastructure, centralized leadership, and massive training programs were all elements of the Japanese effort but missing from the United States in the postwar

period" (Garvin 1988, p. 195). Even those U.S. firms that eventually embraced quality programs, often do not implement them to the full extent (Sullivan 1986a).

In addition, quality programs mandate a focus on customer wants and needs. However, this mandate is difficult to implement. McGee and Spiro (1988) report that "the limitations of using the customer to direct corporate strategy are that customers don't always recognize their needs, can't verbalize their needs, can articulate needs only in terms of the familiar, and cannot predict how their needs will be changed by interaction with society" (p. 43). Therefore, although "many companies are putting more emphasis on service quality to gain a competitive edge..., they're finding that it isn't always easy to understand what customers want or to keep them satisfied" (Bennett 1990, p. B1).

Definitional Issues

The previous two factors support the notion that quality related strategies as they are presently utilized in this country are of limited use in providing competitive advantage. However, a more fundamental concern with strategic quality management programs' potential to provide sustainable advantage is a function of the very nature of the concept of quality. Even an evolving concept of quality to which the Japanese adhere may restrict opportunities for all businesses.

The multidimensional nature of the concept of "quality"

is well documented (Garvin 1987). In fact, five approaches to defining "quality" have been identified (Garvin 1988). First, quality can relate to some type of underlying excellence (transcendent approach). Second, a product based, attribute focused approach is possible. A third approach is user based and refers to "precise combinations of product attributes that provide the greatest satisfaction to a specified consumer" (Garvin 1988, p. 43). A fourth dimension of quality is manufacturing based and associated with design and engineering considerations. Finally, a value based approach that involves quality and price factors can exist.

The transcendent definition of quality is quite general and "offers little practical guidance...Quality remains maddeningly elusive" (Garvin 1988, p. 42). As a vehicle for providing actionable measures to achieve competitive advantage, this definition is therefore unacceptable. The other four definitions also are problematic as means to sustainable advantage. At first glance, they seem to encompass a wide range of opportunities for a company to consider in the quest for success. However, closer examination reveals that these definitions support strategic functioning only at a product attribute level.

Researchers contend that when customer considerations are addressed, they are almost exclusively being viewed in terms of design requirements (Sullivan 1986a, 1986b). Therefore, even though the "voice of the customer" (Sullivan 1986b) is

heard, the focus of company actions tends to be associated with product attribute features (Garvin 1988). Consumers also define quality in rather narrow terms. A recent survey indicated that Americans rank the attribute related factors of reliability and durability as the top two components of quality (Fortune 12-3-1990, p. 39-40).

A focus on product attributes has limitations in that product attributes are inherently transient and unpredictable in nature when considering the attainment of differential advantage. In addition, strategic action at a quality attribute level is rather reactionary. Broader consumer wants and needs related to product consequences or benefits may provide a better source of advantage. Action at a product consequence or benefit level is more proactive and conducive to the development of breakthrough opportunities. The following examples demonstrate the benefits of assessing consequence level analysis as 1) providing sustainable advantage and 2) promoting innovative developments in products.

Consider the nature of Quality Function Deployment (QFD). QFD is "an overall concept that provides a means of translating customer requirements for each stage of product development and production" (Sullivan 1986b, p. 39). If customers desire a quiet ride in a car (a benefit consequence), there are a number of attributes that can be designed and built to provide that requirement. Better

weather stripping may be one of those possibilities. In theory, there are no barriers to keep one firm from eventually meeting the quality of the company that is producing the best weather stripping. Competitive advantage is not easily maintained for the lead firm and the firm seeking to improve quality will likely face similar limitations. Thus, the attribute, weather stripping, does not foster the attainment of competitive advantage. In addition, up to a point, improvements in weather stripping may be possible from an engineering and design standpoint, but may be indiscernible to a consumer. Therefore, incurring the extra costs of improving attribute quality may not provide any overt positive returns.

However, imagine the advantage of the company that looks beyond producing attributes to determining why that consumer has that requirement. By assessing the "why," a firm may be able to find additional or innovative ways to meet customer demands. Using the current example, suppose a customer wanted a quiet ride because he/she has a long commute and dictates memos while driving. A firm might gain advantage by addressing how better to serve the business person that "works" on the way to the office by offering, as optional equipment, a voice-operated dictaphone installed in the dashboard. The kind of insight a company gains by obtaining information about desired customer benefits or consequences related to attributes will likely provide better opportunities to achieve and sustain competitive advantage.

Another hypothetical example involves the company that determines, through market research, that a target segment favors red cars. Suppose the company manufactures red cars, but subsequent sales are far below estimates. The company may not have obtained the right information. The firm acted on attribute based data (desirability of the color red), without understanding the consequences or benefits to the customer of the color red. A red car might have indicated a certain level of "sportiness." This "sportiness" might have been achieved by a number of other attributes (hub caps, body design, etc.) Similarly, the color red, in the absence of other indicators of a sports car, would not make a boxy sedan appealing to those that wanted a more "racy" vehicle. By acting on the attribute level alone, the company missed what was truly important to its target market. Since the concept of "quality," as it is envisioned by consumers and U.S. companies is mainly attribute based, the implementation of a strategy that relies on "quality" as a core concept for achieving differential advantage may have significant shortcomings in facilitating the achievement of competitive advantage.

As such, quality can be one of the many customer wants and needs, but it does not necessarily represent an exhaustive list. Instead the concept is more likely to represent only one of many desirable dimensions of a firm's offering.

Summary of Quality, Strategy and Competitive Advantage

The limitations of quality management programs in providing competitive advantage to U.S. companies have been identified. First, the fact that U.S. firms have had to turn to the Japanese for guidance restricts American ability to achieve advantage. Again, it is difficult for a follower to become a leader, unless that leader stands still, and there are no indications that the Japanese will relinquish that leadership. Rather, they also seek ways to continuously improve their products and services.

Second, the implementation of quality programs in this country has been rather restricted, to date. It appears that despite all the American rhetoric on being customer oriented, firms still view quality programs in a very narrow process oriented fashion (Sullivan 1986a). As a result of 1) U.S. firms' struggling to catch a moving Japanese target and 2) implementation shortcomings, the quality programs U.S. businesses have attempted to implement for years are now providing them with parity, at best.

The third factor related to the limitations of quality applies to all who adopt the concept as a central strategic philosophy. The notion of "quality" is too narrow to provide sustainable competitive advantage. The basis for the perceived superiority of one firm's offering can take many forms. High quality is only one way to differentiate a product and/ or service from those of the competition.

However, it is by no means the only source of advantage. As a result, it is necessary to examine other strategic options that relate to competitive and sustainable advantage.

NEW STRATEGY DIRECTIONS

If advantage is to be achieved and sustained, businesses must adopt a philosophy that is founded on a concept that encompasses a wide range of strategic opportunities, yet, at the same time, can be operationalized in such a way to avoid implementation pitfalls. To identify this concept, a return to one of the fundamentals of marketing - exchange - is warranted.

The Exchange Process

Stripping the process and concepts under consideration to the bare minimum reveals that the quest for an appropriate strategic philosophy centers on two primary parties - the firm and the consumer - and the interactions or exchanges that take place between them. Capturing the essence of the transfer between parties will provide a concept that has the desired robustness for current strategic considerations.

The substantive characterization of what is exchanged has been identified as "value" (Emerson 1987; Houston and Gassenheimer 1987; Miller 1988a). Given that two social units (the marketer and the market) are necessary for exchange, Kotler (1972) suggests that "the marketer is attempting to get

value from the market through offering value to it. The marketer's problem is to create attractive values. Value is completely subjective and exists in the eyes of the beholding market. Marketers must understand the market in order to be effective in creating value" (p. 50).

Exchange can take many forms including utilitarian exchange, symbolic exchange and a mix of the two (Bagozzi 1975). Utilitarian exchange is founded in economic theory and refers to an exchange of goods for money based on use, anticipated use or some type of tangible benefits. Symbolic exchange is associated with "the mutual transfer of psychological, social or other intangibles entities between two or more parties" (Bagozzi 1975, p. 36). Mixed exchange occurs when some combination of the two is evident.

Since the type of exchange may vary (e.g., social, utilitarian, symbolic, etc.) the nature of what is exchanged - value - can take on many conceptualizations. For example, the value that is transferred in an economic exchange may be very different from the value that is transferred in a social exchange situation. As such, "value" in exchange is a much broader term than previously discussed in this chapter when the value based approach to defining quality was considered.

To summarize, the exchange of value can be viewed from both a company and a customer perspective since value flows to and from both stakeholder groups (Miller 1988a). Therefore, "value" plays a pivotal role in the study of marketing

strategy and consumer behavior. Understanding the concept and valuation processes becomes crucial to gaining insight into how consumers judge product offerings and to the development of sound business strategies.

Conceptualization of Value as Related to Strategy

Several researchers have recognized that "value" is closely related to a number of strategy considerations. For example:

> What the customer thinks he is buying, what he considers 'value,' is decisive - it determines what a business is, what it produces and whether it will prosper (Drucker 1954, p. 37).
>
> The basic purpose of all the firms' activities should be the delivery of superior value in products and services" (Webster 1988, p. 38).
>
> To prevent its competitors from overcoming whatever buyer-value superiority it has created, a business must constantly discover and implement additional value for its customers, which necessitates a range of appropriate tactics and antics (Narver and Slater 1990, p. 22).

In addition to association with general strategic issues, value has been conceptually linked to competitive and sustainable advantage.

Value and Competitive Advantage

Porter (1985) contends that "competitive advantage grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it" (p. 3). In other words, a "firm must find market niches that value,

and provide further opportunities to develop, its competitive advantage" (Webster 1988, p. 33).

Value has been associated with competitive advantage for several years. Alderson (1957) stated that "what is important in competition is differential advantage... it is the unending search for differential advantage which keeps competition dynamic. A firm which has been bested by competitors according to certain dimensions of value in products or services always has before it the possibility of turning the tables by developing something new in other directions" (p. 101-102).

More recently, Narver and Slater (1990) suggest, "for an organization to achieve consistently above-normal market performance, it must create sustainable competitive advantage (SCA)... That is, it must create sustainable superior value for its customers. The logic of SCA is that for a buyer to purchase offering X, the buyer must perceive that the expected value to him of that offering (i.e., that proposed solution to his need) exceeds that expected value to him of any alternative solution" (Narver and Slater 1990, p. 21).

Achieving competitive advantage through the development and implementation of value related strategies promotes a business outlook that fosters the integration of customer and competitor concerns with the firm's objectives. This benefits those adopting a value perspective since a growing number of experts in the field recognize the importance of developing

strategic approaches that incorporate both customer and competitor perspectives (Day 1984; Day and Wensley 1988; Phillips et al. 1983; Porter 1980, 1985; Thomas and Soldow 1988).

As a result of the relationship between value and competitive advantage, using "value" and what is valued by consumers to achieve competitive advantage is growing in importance to practitioners. In recent years, "value" has played an increasingly prominent role in managerial considerations as is evidenced by emerging discussions of "value chains" (Porter 1985), the concept of relative value in use (RVU) (Day 1984), value added systems (Day 1984), and Value Exchange Models (Miller, Lewis and Merenski 1985). Managers have been advised to 1) "compete on value, not price" (Black 1986, p. 14), 2) adopt value-added marketing as a key to achieving competitiveness (Berry 1987), 3) listen to consumers to "yield value-added distinctions for brands" (Karger 1987, p. 3) or 4) to find the best opportunities in the future by "creating value in industry" (Gorr 1989, p. 190). In addition, Narver and Slater (1990) determined that providing sustainable superior value has a direct impact on profitability.

While value based strategies are intuitively appealing, a more critical test of their applicability concerns implementation issues. How successful have firms been in implementing these strategies?

Implementing Value Related Strategies

Regarding the implementation of value related strategies, Kotler (1972) suggests that firms can create value for their customers in at least four ways. "(They) can try to design the social object more attractively (configuration); (they) can put an (sic) attractive terms on the social object (valuation); (they) can add symbolic significance in the social object (symbolization); and (they) can make it easier for the market to obtain the social object (facilitation)" (p. 50). Each of these activities parallels the "more conventional statements of marketing purpose such as the use of product, price, promotion and place to stimulate exchange" (p. 50). While these activities explicitly recognize the importance of "value" in a strategic sense, they are somewhat general in regards to implementation concerns.

A more detailed perspective on the importance of value in a strategic sense is captured in a value delivery system proposed by Bower and Garda (1986). These researchers' value delivery sequence is comprised of three steps: 1) choose the value, which includes activities related to customer value needs and value positioning; 2) provide the value, which includes product development, service development, pricing, sourcing, making, distributing and servicing and 3) communicate the value, which includes the sales force message, sales promotion and advertising. Companies that have adopted this perspective have "shifted from the traditional view of

their business as a series of functions to an externally oriented view of business as a matter of value delivery" (p. 1-9). According to Garda (1988), "the value delivery system exemplifies how a concept can shape the practitioner's thinking. It reminds the practitioner that a sound marketing strategy is directed first - factually, constantly, resolutely and imaginatively - to the customer and his or her needs rather than the product given to the marketer to sell." (p. 33).

As such, the system envisioned by Bower and Garda reflects a broad based customer oriented philosophy of business. While such a philosophy is laudable, its practical applicability is often limited by difficulty in implementation. There is no evidence that a comprehensive value based competitive advantage system has been successfully implemented.

The development and operationalization of value based strategies can be expedited and improved by first reviewing what has been learned about the most basic of customer oriented philosophies: the marketing concept and a market orientation. Marketers' previous experience with marketing concept issues and operationalization concerns will assist in the development and implementation of value based strategies.

The Marketing Concept and Market Orientation

The foundations for the emerging value strategies have

roots in the marketing concept's urging business to be market oriented. Kotler (1976) stated that the marketing concept is "a management orientation that holds that the key task of the organization is to determine the needs, wants and values of a target market and to adapt the organization to delivering the desired satisfactions more effectively and efficiently than its competitors" (p. 14).

Scholars have been extolling the merits of a customer orientation for years. Biggadike (1981) suggests that the marketing concept is one of the major contributions that marketing has made to strategic management. The term "has become synonymous with having a customer orientation" (Houston 1986, p. 82-83).

Perhaps one of the earliest supporters of the importance of the customer to business was Peter Drucker (1954). He stated that

> it is the customer who determines what a business is. For it is the customer, and he alone, who through being willing to pay for a good or service, converts economic resources into wealth, things into goods. What the business thinks it produces is not of first importance - especially not to the future of the business and to its success... The customer is the foundation of a business and keeps it in existence (p. 37).

Similarly, Levitt (1960) argued that "the view that an industry is a customer-satisfying process, not a goods-producing process, is vital for all businessmen to understand" (p. 55). Keith (1960) concurred by stating, "companies revolve around the customer, not the other way around... Soon

it will be true that every activity of the corporation - from finance to sales to production - is aimed at satisfying the needs and desires of the consumer." (p. 35, 38) In fact as early as 1959, Felton warned that firms that did not devote considerable effort to making the marketing concept work risked "dropping behind in the procession" (p. 65).

However, while the concept of a customer orientation has received wide spread support, its implementation has been extremely difficult. Relatively few companies have been able to make the marketing concept operational on a day-to-day basis (Barksdale and Darden 1971; Kohli and Jaworski 1990). Implementation is complex and impacts a number of stakeholders both internal and external to the firm as well as long term organizational objectives and profitability (Kohli and Jaworski 1990; Narver and Slater 1990). Despite these implementation difficulties, the desirability of adopting a market orientation is evident (Payne 1988; Peters and Waterman 1982; Narver and Slater 1990). "Because a market orientation is not easily engendered, it may be considered an additional and distinct form of sustainable competitive advantage" (Kohli and Jaworski 1990, p. 17).

A most elementary reason associated with implementation shortcomings concerns firms' ability to react to current customer needs and anticipate future wants and needs (Bennett and Cooper 1979, 1981). Because the foundation of a customer orientation requires responsiveness to customer desires, the

logical source of information regarding these desires is the customer. However, there is some question as to consumers' abilities to articulate and/ or anticipate what it is they want or need (Bennett 1990; McGee and Spiro 1988). Therein lies the problem. As a result, firms have been less than successful in implementing customer oriented strategies. It is imperative that companies overcome this difficulty if they are to enjoy the rewards that a customer orientation can bring.

As a means to that end, determining what customers value is one avenue that provides a way to identify customers' needs and wants. Success in this area and the subsequent adoption of a value related strategy becomes one method of implementing the marketing concept.

PROBLEM DEFINITION

As the central concept of a competitive advantage strategy, it is critical to understand what value is. As Drucker indicated in 1954, one of the most difficult questions a business faces is "what is value to the customer?" (p. 54). He resigns himself to that difficulty by stating, "Indeed, what the customer considers value is so complicated that it can only be answered by the customer himself. Management should not even try to guess at it - it should always go to the customer in a systematic quest for the answer". (p. 56)

As managers attempt to develop and implement a value

delivery strategy, the first step must be to identify, understand and explain 1) what it is that consumers value and 2) how consumers arrive at value perceptions through valuation processing occurring at various points in time. However, despite all the experts who recommend strategies that deliver value to consumers, major assumptions exist regarding what consumers value and how valuation processes operate. The fundamental question that remains unanswered is "WHAT DOES VALUE MEAN?"

A review of research related to value and valuation processes reveals a serious lack of understanding of these critical concepts. In fact, the study of value and valuation process as related to consumer behavior has been somewhat fragmented. For example, a cursory examination of the literature reveals that "value" has been connected to a number of phenomena. "Value" has been associated with 1) attitudes, behavior and end-states (Homer and Kahle 1988; Ravlin and Meglino 1987; Raynor and McFarlin 1986; Schwartz and Bilsky 1987), 2) abstract evaluations (Geistfeld, Sproles and Badenhop 1977; Johnson 1984), 3) products (Abraham-Frois and Berrebi 1976; Dodds and Monroe 1985; Hauser and Urban 1986; Jacobson and Aaker 1987; Malthus 1957; Sinden and Worrell 1979; Zeithaml 1988), and 4) use situations (Hirschman and Holbrook 1982; Holbrook and Corfman 1985; Holbrook, Lehmann, and O'Shaughnessy 1986; Vinson, Scott and Lamont 1977). In addition, the literature suggests several diverse notions of

the term including: 1) personal value(s) (Kahle, Beatty and Homer 1986; Kahle and Kennedy 1988; Homer and Kahle 1988; Rokeach 1973; Pitts and Woodside 1984); 2) social value (Goldsmith 1988; Kahle and Kennedy 1988); 3) family value (Bowen 1988); 4) organizational value (Bittinger 1987; Wallach 1983); 5) occupational (work) value (Ravlin and Meglino 1987; Robinson, Athanasiou and Head 1978); 6) economic value (Abraham-Frois and Berrebi 1976; Malthus 1957); 7) product value (Faulds 1987; Garvin 1988; Monroe 1979); 8) value in use (Cohen 1979; Gutman, 1982; Holbrook et al. 1986; Prentice 1987); and 9) overall value (Geistfeld, Sproles and Badenhop 1977; Johnson 1984; Sinden and Worrell 1979).

The above list reflects value related research from a wide range of disciplines including psychology, social psychology, marketing, management, and economics. Because each field has developed its own perspective on "value," a single disciplinary view of the concept is too narrowly defined to result in a comprehensive understanding of how the various aspects of the concept are related to each other and to consumer behavior. Therefore, to assist in assessing the impact of "value" on consumer judgements it is necessary to adopt a perspective that examines the concept across disciplines.

The lack of understanding of consumer value and the fragmented nature of research related to the concept and related processes creates an opportunity for future research

in an important area. The purpose of this dissertation, therefore, is to address definitional, process and measurement issues related to "value."

RESEARCH OBJECTIVES

The overall objective of this research is to advance knowledge of the meaning of value to consumers. As a means to that end, a model that 1) integrates the various notions of value and 2) identifies relationships between the value concepts was developed. From the model, several broad conceptual and empirical research objectives emerge. The conceptual objectives for this dissertation include: 1) developing an interdisciplinary view of value, 2) integrating value perspectives from the literature, and 3) extending the conceptualization of valuation processes. Empirically, this research will 1) improve the measurement of various types of value, and 2) determine the predictive and explanatory power of portions of the proposed value integration model with regard to product/ brand choice and consumption behavior.

RESEARCH QUESTIONS

The proposed research objectives pose a number of intriguing research questions. These include:

1. What do consumers value in exchange with sellers and in use of products/ services?
2. How do consumers determine what they value from sellers and during use?
3. What are the relationships between different components of value in valuation processes?

4. What is the effect of value perceptions on future behaviors?
5. What are the measurement implications of questions 1-4 for determining value and valuation?

CONTRIBUTIONS OF STUDY

"Value" is an elusive term that should not be pigeon holed into the domain of a specific discipline. A narrow, single disciplinary perspective of value may be easier to apply, but it does not promote a full understanding of the wants and needs of the customer. The proposed model that will integrate value concepts has the potential to provide significant contributions to managers and academicians by establishing an interdisciplinary approach to the study of consumer judgments of product offerings.

Implications for Managers

While the development of a value-based competitive advantage model will surely improve the effectiveness of strategy development and implementation, the viability of such a model is limited at the present time because of the lack of research related to two of its key components: the meaning of consumer value and the nature of consumer valuation processes. A more comprehensive understanding of value and valuation processes is essential to the implementation of a value-based competitive advantage model. Therefore, this study will provide the foundation for subsequent strategy research by

adding to the knowledge base of consumer behavior. By eventually focusing on an expanded, multidimensional notion of consumer value, a value-based competitive advantage model will have more utility in providing additional opportunities to attain differential advantage. Whereas a quality focused perspective tends to be associated more with product, the value orientation incorporates a number of dimensions related to customers and how products relate to their use situations.

In addition, a comprehensive understanding of value will promote not only understanding of consumer preference, but it will also enhance understanding of consumer use and post use behaviors. Examining value in this manner highlights additional opportunities for competitive advantage.

Implications for Academicians

This dissertation will provide insight into concepts that are fundamental to the definition of the marketing discipline. While the debate surrounding the definition, nature and scope of marketing seems to have subsided, at least for the time being (Bartels 1974; Enis 1973; Hunt 1976; Kotler 1972; Kotler and Levy 1969), study of more specific issues, theories, paradigms and core concepts remain. One such concept - exchange - has been recognized as providing a foundation for the discipline (Alderson 1957; Bagozzi 1975; Hunt 1976) and as the critical element of exchange, value warrants closer examination.

In addition to the previous discussion of the importance of "value" in the exchange process, consider Holbrook's (1987) view on the importance of "value" in consumer research:

> I propose a definition of consumer research based on the following key points: 1) consumer research studies consumer behavior; 2) consumer behavior entails consumption; 3) consumption involves the acquisition, usage and disposition of products; 4) products are goods, services, ideas, events, or any other entities that can be acquired, used, or disposed of in ways that provide value; 5) value is a type of experience that occurs for some living organism when a goal is achieved, a need fulfilled, or a want is satisfied; 6) such achievement, fulfillment or satisfaction attains consumption; conversely, a failure to achieve goals, fulfill needs, or satisfy wants thwarts consumption; 7) the process of consumption (including its possible breakdowns) is therefore the fundamental subject of consumer research (p. 128).

"Value" therefore plays a key role in pre-consumption, consumption, and post-consumption behaviors. However, as this study will demonstrate, it is necessary to explore the multiple functions of "value" as a state and an outcome before a full appreciation of the impact of "value" can be ascertained.

As such, this study will contribute to existing knowledge in a number of ways. First, it will demonstrate the number of diverse meanings "value" has had in the literature. Acknowledging the distinctly different notions of "value" adopted by different disciplines will help to reduce potential confusion regarding the meaning of the term. It is clear that while a number of fields study value, none alone can provide a comprehensive view of the concept as it relates to consumer

behavior. In addition, addressing the multidimensional nature of the concept helps clarify existing research in the area, providing a foundation for synthesizing and integrating knowledge of value.

Second, testing specific portions of the proposed model will provide insight into a judgment process that is likely to have an important role in buyer behavior. The identification of the relationships between the various types of value provides the basis for an examination of how value judgments impact other consumer related variables (i.e., satisfaction).

OVERVIEW OF DISSERTATION

This dissertation is divided into six chapters. This chapter provided an overview of "value" as it relates to key concepts in the discipline, e.g. the marketing concept and exchange. As such, "value" has significant implications for strategy considerations. However, an examination of the impact of "value" on strategy highlights several gaps in research related to the concept. What is lacking is a comprehensive, integrative examination of consumer behavior related aspects of value and valuation processes. Developing a model that integrates value concepts and their relationships and testing portions of that model will alleviate shortcomings in this topical area.

Chapter 2 examines literature associated with consumer behavior related value concepts. The chapter explores value

as both a state and an outcome in the consumption context. Chapter 3 presents previous research relevant for the development of valuation processes and introduces a value integration model. Chapter 4 delineates research methodologies and hypotheses. Analyses and results are included in Chapter 5, while discussion, conclusions and future research are presented in Chapter 6.

CHAPTER 2

VALUE CONCEPTS

INTRODUCTION

The literature review chapters provide the foundation and justification for the model and research hypotheses presented in this dissertation. Discussion of value meanings are included in this chapter while Chapter 3 reviews valuation processes and introduces the model that represents the culmination of the literature review effort in building a systematic understanding of relevant concepts.

THE TERM "VALUE"

"Value" has been addressed in several different ways by many different disciplines. This review is primarily confined to the value types and approaches that are associated with consumer behaviors during the exchange process.

As this chapter will demonstrate, an overwhelming amount of material has been written about "values" that are related to people (social values, personal values, human values, cultural values, role value, organizational values). However, an examination of the literature reveals that there are other types of "value" related to: 1) objects and 2) person, object, situation interactions that are also relevant to consumer behavior. The challenge of this literature review is to

present and discuss in an integrative fashion a number of value types that are in vastly different degrees of theoretical and operational advancement.

THE VALUES - VALUE DISTINCTION

Before the various types of value are examined, an important distinction must be made with regards to the meanings of value. The literature makes clear that there are differences in "values" and "value." "Values" refer to desired end states, while "value" is the result of a process of evaluation that allows people to attach valence (positive/ negative judgments) to things. (Alicke 1983; Power 1980).

> In ordinary speech, the term 'value' is used interchangeably in two senses that must be kept separate here. In one meaning, we refer to the specific evaluation of any object, as in 'industrial countries place a high value on formal education' or 'governmental regulation is worthless.' Here we are told how an object is rated or otherwise appraised, but not what standards are used to make the judgments. The second meaning of value refers to the criteria, or standards in terms of which evaluations are made, as in 'education is good because it increases economic efficiency.' (Williams 1968, p. 283)

The first meaning proposed by Williams (1968) is the "value" that results from a judgment of worth associated with an object or the interaction of object, person and situation. The second meaning refers to those "values" held by individuals and are thus person related. This chapter is organized to address 1) person related values, 2) object value and 3) person, object, situation value.

PERSON RELATED VALUES

Person related values are states of being or modes of conduct that are desirable. For example, a feeling of accomplishment, family security, raising independent children and pleasing customers are all values held by people. The literature indicates that there are at least three types of person related values: Personal Values, Organizational Values and Role Values. Each is discussed separately.

Personal Values

In a historical perspective concerning the study of human values, Clawson and Vinson (1977) traced the first interest in person related values back to the time of ancient Greeks. These authors report that several disciplines including philosophy, anthropology, sociology, and psychology have streams of research that address this type of value. According to these researchers, marketers' interest in values appears to be growing as "values may prove to be one of the more powerful explanations of, and influences on, consumer behavior. They can perhaps equal or surpass the contributions of other major constructs including attitudes, product attributes, degree of deliberation, product classifications, and life styles" (Clawson and Vinson 1977, p. 400). However, they suggested that the complexity of personal values and the state of research related to those values limited the

practical applicability of the concept. Therefore, the nature and influence of personal values, particularly as they relate to evaluation, bears closer scrutiny.

The Characteristics of Personal Values

Overview

Many marketers (Clawson and Vinson 1977; Goldsmith, White and Stith 1987; Gutman and Alden 1985; McQuarrie and Langmeyer 1985; Munson 1984; Pitts and Woodside 1984; Pitts, Canty and Tsalikis 1985; Prakash 1986; Prakash and Munson 1985; Sherrell, Hair and Bush 1984) cite the work of Milton Rokeach (1968, 1973, 1979) when discussing personal values. In fact, some argue that "no other approaches to value conceptualization...have gained the degree of application of Rokeach's paradigm" (Sherrell, Hair and Bush 1984, p. 170). Rokeach (1973) defined personal values as enduring beliefs about desirable conduct (instrumental values) and/or end states (terminal values) having both cognitive, affective and behavioral components. Each of these major elements of personal values is reviewed.

Personal Values are Beliefs

Rokeach (1973) describes values as beliefs that are "prescriptive or proscriptive ...wherein some means or end of action is judged to be desirable or undesirable" (p. 6).

These beliefs can have several sources. Some researchers propose that values have biological origins (Pugh 1977) that have been "built into the human species during the course of evolution ....[and] ultimately influence those values that are learned as a result of experience with the environment" (p. 29). It is these learned values (Rokeach 1973; Williams 1979) that are of interest in this research.

Values can occur at several levels: cultural, societal or individual. Cultural and societal values are learned by individuals and embraced as unique value systems. Rokeach (1968, 1973) has devoted considerable effort, over many studies, to identify thirty-six general, cross cultural values (18 terminal and 18 instrumental). Of course, societal and cultural values are not held the same way by all individuals, nor are they permanent over time (Kahle, Poulos and Sukhdial 1988; Kanter 1977; Williams 1979). However, differences in value appear not in the type of value held, but in the relative importance a value might have. "Societies differ on the patterning of values as is evidenced by differences in their hierarchical ordering, extensiveness of adherence to any particular value, the degree of universality of application, and in consistency" (Williams 1979, p. 18). The emphasis of this research is on the values of individuals as learned in societal and cultural contexts.

Personal Values are Enduring

The set of those desirable end states and modes of conduct that are valued by individuals in a society is relatively stable. Though one or two values in a society's collection of those that are most important may be replaced over time, the entire set has a high degree of stability (Rokeach 1973; Williams 1979). There are good reasons for this enduring nature. "First, change is slowed by the processes of conformity within the established social orders and by the numerous interdependencies within a complex value-belief system. Second, the generalized character of values permits a great amount of reinterpretation before drastic change has to occur in the legitimizing of value commitments" (Williams 1979, p. 34). In addition, values are learned as children (Rokeach 1973) and therefore, deeply ingrained early in life. Value indoctrination reflects strong social and cultural norms that are passed from generation to generation. Individuals assimilate these learned values into a unique personal value system that orders values by importance as guiding principles in a hierarchical arrangement.

Personal values are enduring, therefore, but not permanent, unchanging, or rigid. "If values were completely stable, individual and social change would be impossible. If values were completely unstable, continuity of human personality and society would be impossible. Any conception

of human values, if it is to be fruitful, must be able to account for the enduring character of values as well as for their changing character." (Rokeach 1973, p. 5-6). This lack of permanence provides a challenge for the measurement and study of values. Personal Values are related to desirable end states (terminal values) or desired behaviors (instrumental values). Instrumental values include: ambitious, broad minded, capable, cheerful, clean, courageous, forgiving, helpful, honest, imaginative, independent, intellectual, logical, loving, obedient, polite, responsible, and self-controlled. Terminal values include: a comfortable life, an exciting life, a sense of accomplishment, a world of beauty, equality, family security, freedom, happiness, inner harmony, mature love, national security, pleasure, salvation, self-respect, social recognition, true friendship, and wisdom.

Within each major grouping of values, categories can be identified. Rokeach (1973) classifies terminal values as either being personal or social. Examples of personal end states that are self centered are peace of mind and salvation while brotherhood and world peace reflect society oriented values. Instrumental values can be either moral or competence values. Moral values refer to those instrumental values "that have an interpersonal focus which, when violated, arouse pangs of conscience or feelings of guilt or wrongdoing" (p. 8). "Honesty" and being "responsible" are examples of this dimension of instrumental values. Being "imaginative" and

"intellectual" reflect competence or self-actualization values that have a personal focus. When these types of values are violated, feelings of personal inadequacy are likely. Personal Values are organized hierarchically by relative importance in value systems. Rokeach (1973) contends that

> After a value is learned it becomes integrated somehow into an organized system of values wherein each value is ordered in priority with respect to other values. Such a relative conception of values enables us to define change as a reordering of priorities and, at the same time, to see the total value system as relatively stable over time. It is stable enough to reflect the fact of sameness and continuity of a unique personality socialized within a given culture and society, yet unstable enough to permit rearrangements of value priorities as a result of changes in culture, society, and personal experience (Rokeach 1973, p. 11).

The stability of value systems has received considerable scrutiny. To study value systems, Rokeach (1973) developed the Rokeach Value Survey (RVS). He found that across individuals, value rankings exhibited a wide range of test-retest reliabilities. Test-retest reliabilities across time (three weeks to 14-16 weeks) ranged from .62 to .80 for terminal values and .53 to .72 for instrumental values (Rokeach 1973). Greater differences in ranking occurred at the individual level. While intra-individual reliabilities ranged from -.3 to high .90's (Rokeach 1973), 73% of respondent reliabilities were over .70 for terminal values (54% for instrumental values). Subjects in the Rokeach study included students ranging from 7th graders to college age. It may be that these inter- and intra- subject reliabilities were

somewhat low due to the age of the sample. Rokeach suggested that younger individuals may not have formed stable value systems. Adult samples may reflect a higher degree of stability. Other researchers (Rankin and Grube 1980) have found greater reliabilities in college students (over .90) across a six week period.

Findings of this research raised issues related to the reliability of the RVS vs the stability of individual value systems. In addition, significant, though small relationships between terminal and instrumental value system stability were found. Rokeach did not question the reliability of the RVS, but rather, proceeded to theorize about the possible factors that may influence individual differences in the stability of value systems. Rokeach determined that

> although terminal values are generally more stable than instrumental values from test to retest; those ranked as most and least important change the least from test to retest; those ranked in the middle change the most. The relationship is clearly U-shaped, suggesting that the respondents' rank values at the high and low ends of the scale with considerably more confidence than those they rank in the middle. There is no reason to suspect, however, that the U-shaped relationship is peculiar to the present research. It is probably inherent in all ranking procedures (p. 39)

Rokeach's findings suggest several interesting implications. First, it may be that ranking eighteen values, despite his arguments to the contrary, is too difficult a task for respondents to perform with any consistency. Second, respondents can easily identify and rank those values that are most and least important to them. The greatest instability

occurs in ranking those values that are neither important nor unimportant. Test-retest reliabilities are likely to be much higher for the first five and last five values. The issue then becomes, what information do the middle values provide, given their instability? By their very nature, all values are to some degree desirable. What Rokeach adds by ranking is an assessment of relative importance. The values of moderate importance lend no insight if they are not consistent from test to test.

Third, the question of hierarchical stability raises the question of the impact of situation on value systems. Rokeach requested that subjects rank order values by importance as guiding principles in their lives. Thus, he sought a hierarchy that is stable, regardless of the situation. It may be possible that the most and least important values do reflect those enduring guiding principles. Other values may be more susceptible to situational influences.

Rokeach recognized that a number of factors might affect value system stability including therapy, socialization, cultural upheaval or exposure to experimental conditions. Rokeach (1973) and Ball-Rokeach, Rokeach and Grube (1984) determined that a major motivator for reordering values relates to the concept of self (dis)satisfaction. According to these researchers, self (dis)satisfaction is the feeling that occurs as a result of individuals' assessments of their

verbal or behavioral portrayals to others, in a given situation, as competent and/ or moral. Thus, it is directly related to self-esteem. Individuals act to enhance self-esteem and, as a result, seek and attempt to maintain situations where self satisfaction is the outcome and avoid situations where self dissatisfaction is likely.

Contexts in which self esteem considerations occur can be quite specific and temporal (a particular occasion) or they can be global and lasting (across occasions and different types of situation). In addition, an individual may not be aware of the exact nature of the cause of (dis)satisfaction. If attribution is made as to cause, however, an individual may find some internal tension developing between the ordering of the current value hierarchy and self esteem considerations. For example, Rokeach (1973) conducted an experiment in which subjects were given information about inconsistencies in their value ordering and in their attitudes towards minorities. These inconsistencies led to self dissatisfaction and resulted in change in their value hierarchies to be more consistent with what they perceived to be a moral statement about the equality of minorities. This new reordering was stable over time and affected subsequent long term behavior.

Thus, value systems may be influenced by information regarding ordering inconsistency which results in an enduring change to value system stability, or certain values may take on greater relevance in a given situation causing a temporary

reordering of the hierarchy.

Values systems have underlying dimensions that form a structure. Several researchers have investigated the underlying structure of value systems (Apasu 1987; Bond 1988; Braithwaite and Law 1985; Crosby, Bitner and Gill 1990; Grunert and Scherhorn 1990; Katz and Hass 1988; Kennedy, Best and Kahle 1988; Maslovaty and Dor-Shav 1990; Prakash and Munson 1985; Schwartz and Bilsky 1987, 1990; Valette-Florence and Jolibert 1990). In general, these researchers attempted to identify value "factors" to simplify measurement, to identify more global conceptions of value for cross cultural study, and to consolidate Rokeach's thirty six separate values into dimensions that were more meaningful to their research.

For example, in a follow up study Schwartz and Bilsky (1987, 1990) were able to replicate earlier results in which the same motivation domains (self-direction, maturity, achievement, restrictive conformity, enjoyment, security, and prosocial) emerged from administration of the RVS to a cross cultural sample. Crosby, Bitner and Gill (1990) determined that Rokeach's instrumental values reflect underlying self-direction, conformity and virtuous dimensions, while terminal values captured self-actualization/ hedonism, idealism and security dimensions. Apasu (1987) found relationships between underlying value structures of sales people and perception of rewards.

The structure of values is important for this study,

because those values that are more closely held by the individual may be more likely to 1) resist change (Williams 1979) and 2) impact the ordering of other values and beliefs (Williams 1979) and subsequent behaviors (Pollay 1987; Rokeach 1973). If a certain set of values are central to consumers' behavior, they must be recognized and their influence understood. Personal values have cognitive, affect and behavioral components. William (1979) acknowledges the cognitive, affective and behavioral elements of personal values. Rokeach (1973) asserts that

> (1) A value is a cognition about the desirable...To say that a person has value is to say that cognitively he knows the correct way to behave or the correct end-state to strive for. (2) A value is affective in the sense that he can feel emotional about it, be affectively for or against it, approve of those who exhibit positive instances and disapprove of those who exhibit negative instances of it. (3) A value has a behavioral component in the sense that it is an intervening variable that leads to action when activated (p. 7).

An interesting distinction is indicated by the cognitive, affective and behavioral characteristics of personal values. The cognitive and affective (including emotional) components reflect types of processing where a value or set of values is the object of appraisal. Since the literature suggests that values drive many behaviors (a motivational characteristic), the effects of the affective and cognitive nature of personal values are likely to be carried through an entire judgment process and impact any subsequent valuations that mediate the personal values - behavior relationship.

Personal Values and Value Systems Functions

In addition to the characteristics of values, it is important for this research to identify those functions that values serve. At least three such functions have been identified: 1) Personal Values are standards; 2) Personal Values motivate; and, 3) Personal Values enhance well being.

Personal Values Are Standards

Values serve as criteria for judging behavior, attitudes, beliefs, self and social interactions (Pollay 1987; Rokeach 1973; Williams 1979). Values allow people to gauge the acceptability and desirability of their own actions, beliefs and attitudes and those of others. For example, if equality is a highly ranked terminal value, an individual would likely have strong distaste for those who support discrimination. Using values as standards therefore affects decision making and helps resolve potential conflict with the individual (Rokeach 1973).

Personal Values Motivate

Values can be motivating in two basic ways. Values can promote behavior as individuals strive to achieve desirable end states or modes of conduct. In this way values are goals and they motivate behavior in a directional sense (towards the desired goal). Personal Values also are motivating if there is an identifiable inconsistency in values and behavior. The

tension created by the inconsistency initiates action to reduce or alleviate that tension (Rokeach 1973). Personal Values help resolve conflict. Because they are hierarchically arranged, those values that are most important to the individual will guide behavior and judgment in the face of conflicting options (Pollay 1987; Rokeach 1973).

Personal Values Enhance Well Being

Values influence several intrapersonal areas. Values serve an adjustive function which helps individuals cope with social stimulus (getting along with others, politeness), an ego defensive function (cleanliness, national and family security) and a knowledge or self actualization function (wisdom, sense of accomplishment). These functions may be ordered from lower to higher (adjustive, ego-defensive, knowledge/ self-actualization), along a continuum similar to that suggested by Maslow's Need Hierarchy (Rokeach 1973).

Summary of Personal Values

It is evident from this review that personal values are complex and create a challenge with regards to assessing their impact on consumers' perceptions of value in exchange. While these values are enduring, they are not unchanging. Rather there seems to be indications that situational influences may reorder their importance, creating shifts within value systems. Despite these difficulties, it is also clear that

personal values tend to drive a number of behaviors. As such, recognizing the issues associated with personal values is a necessary first step in the study of values types and value relationships.

In addition to personal values, two other types of person related value categories are evident in the literature. Both have many of the same characteristics of personal values and serve similar functions. The main difference lies in the context in which these values types are held.

Organizational Values

Societies are composed of a number of organizations and institutions (e.g. religious, family, businesses, educational). Each organization has its own set of guiding principles or values that 1) relate to desired end states or appropriate behaviors and 2) are shared by its members, providing cohesion and identity to the group (Rokeach 1979; Schein 1987; Wiener 1988). "Institutional values are socially shared cognitive representations of institutional goals and demands" (Rokeach 1979, p. 50). In fact, "there is reasonably good consensus among sociologists that the most distinctive property or defining characteristic of a social institution is its values" (Rokeach 1979, p. 51)

Some institutions, like church and family, may have overlapping values, while others, like business and family are likely to have more distinctly different values. As a result,

some researchers (Balazs 1990; Rokeach 1979) assume 1) that organizations have similar types of values to those manifested by individuals and 2) that they are hierarchically arranged. However, other researchers (Badovick and Beatty 1987) identify values that are irrelevant for an individual (e. g., enhancing stockholder value) and therefore unique to an organizational context.

There are many types of organizations and, as a result, many types of organizational values. Two types of organizations - the family and the firm - and their related values are of interest to the study of consumer behavior.

Family Values

Research that explicitly addresses family (as an organization) values is scarce. Often family values are studied as they relate to parental or spousal roles (Bowen 1988). Rokeach (1973) includes one dimension of family value (family security defined as taking care of loved ones) in the Rokeach Value Survey. This raises an important distinction: while "family" is highly valued as an important factor in people's lives (Losh-Hesselbart 1987), the interest in family values discussed here refers to those desirable endstates or behaviors that are shared by family members.

For example, Hareven (1987) notes that "the family has turned inward assuming domesticity, intimacy and privacy as its major ideals. The privacy of the home and its separation

from the workplace have been guarded jealously as an essential feature of family life" (p. 53). In addition, family value patterns are now more equal, individualized and open such that "independence, close emotional ties with persons outside the family, individual interests, and personal desire are given high priority" (Macklin 1987, p. 341).

Bowen (1988) proposed The Value-Behavior Congruency Model of Family Satisfaction which holds that "the level of family life satisfaction is enhanced by the ability of family members to jointly realize their family related values in behavior" (p. 459). The value-behavior linkage is influenced by "(a) the level of congruity of the values among family members, (b) the relative presence or absence of personal resources (e.g., self-esteem) and relational skills (e.g., communication) necessary to act in accordance with stated values, and (c) the nature and magnitude of system-level constraints that serve as obstacles to realizing family-related values, including family related demands and stressors" (p. 459).

Like other types of value, family values are related to and influence behavior (Thornton 1989). Since many values are taught through the family (Marciano 1987) and some researchers (Moschis 1985) propose that the family and family communication processes have significant impact on various consumer behaviors over time, the impact of family values on individuals is important to recognize and explain.

Firm or Company Values

Company values can be explicitly included in a firm's mission statement or understood implicitly as a part of an organization's culture. Regardless of the manner in which they are communicated to and accepted by a firm's employees, they influence employee behavior (Badovick and Beatty 1987; Deshpande and Webster 1989; Wiener 1988). The source of these shared organizational values can be the leadership of the firm (Rokeach 1979; Schein 1987; Wiener 1988) or tradition (Badovick and Beatty 1987; Schein 1987; Weiner 1988).

Corporate values include many desirable beliefs related to: customer service, striving for excellence, entrepreneurship, service quality, technological leadership, short term profitability, outperforming competition, internal competition, innovation, teamwork, and respect for employees (Badovick and Beatty 1987, p. 20), among others. It is evident from the nature of the items on this list that values can affect many of the strategic decisions made by the firm (Hunt, Wood and Chonko 1989). Because of the potential impact of values on significant strategic decisions and resultant performance outcomes, many firms are examining values as a source of competitive advantage (Barney 1986; Beer and Walton 1990; Sherwood 1988).

For example, as competition in world markets intensifies, the values of companies that are on the leading edge of their markets are being closely scrutinized. Peters

and Waterman (1982) ascertain that

> the specific content of the dominant beliefs of the excellent companies is also narrow in scope, including just a few basic values:
>
> 1. A belief in being the 'best'
> 2. A belief in the importance of the details of execution, the nuts and bolts of doing the job well
> 3. A belief in the importance of people as individuals
> 4. A belief in superior quality and service
> 5. A belief that most members of the organization should be innovators, and its corollary, the willingness to support failure
> 6. A belief in the importance of informality to enhance communication
> 7. Explicit belief in and recognition of the importance of economic growth and profits (p. 285).

While it is acknowledged that firm values are a crucial element of corporate culture having impact on strategic decisions and performance (Conner and Becker 1979; Hunt et al. 1989; Peters and Waterman 1982; Wallach 1983), a widely accepted measure of company values has yet to be developed. Preliminary work has been done by Rokeach (1979), Wiener (1988), Badovick and Beatty (1987), Wallach (1983), and Bittinger (1987). Conner and Becker (1979) suggested that the creation of an ultimate standard value measuring device was probably not possible given the wide range of uses it would have to serve.

Company or firm values are relevant in this study as potential principles guiding behaviors related to organizational or industrial purchasing. The behavior of industrial buyers is therefore not only influenced by personal values, but by the values espoused by the organization in

which he/ she works.

Summary of Organizational Values

There is an important interaction that occurs between personal values and organizational values and their influence on individuals. While organizational and personal values may overlap, they are not one and the same. Individuals hold values not held by the organization in which they are members. Organizations may hold values not held by each and every member. Therefore, there is potential for conflict regarding which value type is the driving force in an given context. The most closely held (most highly ranked) value, whether personal or organizational would theoretically have the greatest impact on individual behaviors. Further complicating motivational influences is the notion that a certain position within the organization is likely to arouse a set of values that is distinctly different from the person and organizational sets. These values are termed "Role Values." Whereas Organizational Values have more of the characteristics of desired end states, the nature of Role Values is more similar to that of instrumental values.

Role Values

Within an organization, individuals are called upon to assume various roles. Associated with these roles are values that a person holds regarding the desired end states or

behaviors that are appropriate for a given position within an organization. Badovick and Beatty (1987) suggest that role values are specific to a particular domain in that they are acquired "through experiences in specific situations or domains of activities" (Vinson, Scott, and Lamont 1977, p. 45). Role values thus include the impact of situationally relevant personal values and organizational values and like personal values and organizational values, role values are also hierarchically arranged in order of importance.

Certain types of role values are likely to span organizations (e.g., those most heavily affected by personal values), while other types of role values are likely to be specific to an organization (e.g. those that are heavily influenced by organizational values - Badovick and Beatty 1987). For example, a bank teller may be advised that employees that hold that position should be courteous to customers (organizational value). If the teller also holds that value as a personal value, then being courteous will be a role value for that individual in many organizational situations. However, if a bank advises a teller that, in the interest of efficiency, each transaction should take less than one minute, the employee that holds being courteous in high regard may act more brusquely as long as he/she works for that bank. That brusqueness would not necessarily be transferred as a role value if the individual went to work at another bank.

Two organizations were considered as having a potentially significant impact on consumer behaviors - the family and the corporation. Therefore, roles values related to those organizations - parental value and work (or occupational) value - are discussed.

Parental Values

Parental values are often included in discussions of family values (Macklin 1987; Moschis 1985). For this study, parental values are examined as separate and distinct and related to desirable goals and behaviors associated with the role of parent.

Parental values refer to a number of endstates and behaviors of both children and parents including: 1) desired parenting practices and behaviors that help instill values in children (Johnson and Martin 1985; Luster, Rhoades and Haas 1989; Schaefer and Edgerton 1985; Simons, Whitbeck, Conger, and Melby 1990) and 2) desired children's behaviors and endstates (Kohn 1969; Kohn and Schooler 1983; Segal 1985). Parents behave in a manner that is consistent with their perceptions of how to best communicate values to their children (Luster, et al. 1989). For example, parents might value spending time with their children as a way to convey the nature of desired end states.

In addition to guiding the behavior of parents, parental values also include those behaviors parents "would

like most to see embodied in their children's behavior" (Kohn and Schooler 1983, p. 8). In other words, "the characteristic they [parents] consider most desirable to inculcate in their children" (Kohn 1969, p. 18) including happiness, scholastic achievement, cleanliness and neatness (Kohn 1969). Additional values include elements related to competition, obedience, cooperation, process goals and ethical values (Segal 1985).

Given the far reaching impact that parental values have on the behaviors of children and themselves, the potential impact on behavior in a consumer context needs to be more fully explored. The Moschis study (1985) suggested that parents have significant influence on the development of lasting consumer behavior patterns. For these reasons, the impact of role values that encompass parental values is included in this research.

Work or Occupational Values

In a corporate setting, different type of values emerge: those affiliated with an individual's job. Work values refer to desirable behaviors towards subordinates and coworkers and epitomize what an individual "wants, needs, or expects from a job" (Katzell 1979, p. 36). These values are reflected in such statements as: "The main satisfaction a person can get out of work is helping other people" (Kilpatrick, Cummings and Jennings 1964, p. 151) and "Getting recognition for my own work is important to me" (Kilpatrick et al. 1964, p. 143).

Work values have been associated with decision making behavior (Ravlin and Meglino 1987), satisfaction with work and life in general (Blood 1969) and worker motivation (Katzell and Thompson 1990). Thus, the study of industrial buying situations must include the impact of work values.

Summary of Person Related Values

An examination of person related values reveals that these types of values can play important roles in consumer behaviors. Person related values act as standards, motivators and well being enhancers. As such, they affect decision making.

The context in which the value is held also plays a part in decision making. Across situations, an individual holds a set of personal values. However, individuals are also subject to the values held by organizations. Two organizations relevant to consumer behavior are family and firm. The individual in an organization also adopts values consistent with his/her role in the organization. Parental Values are related to the role of parent within the family organization. Work Values are related to the role of employee within the company or firm. The values associated with an organization or a role within an organization can result in those values gaining or losing relevance in a given situation. Therefore, organizational and role values emerge to impact the relationship between values and behaviors. The review of this literature results in the following proposition:

P1. Three types of person related values are relevant to the study of consumer valuation processes: personal values, organizational values and role values.

Identifying and understanding the complexity of person related values will help enhance the delineation and development of valuation processes. However, those processes are also impacted by the concept of "value."

VALUE

The previous discussion focused on person related "values" as desired endstates and modes of conduct. The next section of this chapter examines "value" terms that are associated with judgments of an object's worth and evaluations based on the interaction of object, person and use situation.

Evaluation of Objects

In addition to person related values, there also is value that is related to the evaluation of an object being considered. In the study of consumer behavior that object is typically a product or service[1]. Evaluation by consumers focuses on the features or characteristics of the product itself. Economic theory suggests that consumer's demand is based on underlying product characteristics (attributes) rather than on brands or products themselves (Ratchford 1975). Evaluation of products is therefore dependent on "different

[1]The term "product" used throughout this dissertation refers to any aspect of the seller's offering that a consumer might evaluate (e.g., product, brand, service, store, etc.).

packages of attributes" (Ratchford 1975, p.63). Sellers tend to focus on this type of "value" as it relates to the product and product attributes, since these product characteristics are largely under the sellers' control (Myers and Shocker 1981).

Often, product value is based on consumers' perceptions of quality vs cost tradeoffs (Curry 1985; Dodds and Monroe 1985; Garvin 1988; Jacobson and Aaker 1987; Monroe 1979; Takeuchi and Quelch 1983; Zeithaml 1988) or the excess of quality over price (Faulds 1987). These quality/ cost assessments tend to be consistent across use situations.

Quality and cost are both multi-dimensional concepts. Quality is related to performance, features, reliability, conformance, endurance, how a product feels, sounds, tastes or smells, among other elements (Garvin 1987). Quality assessments include reactions to both a product's intrinsic cues related to physical composition (e.g., color, taste) and extrinsic cues related to product but not part of the physical product (e.g., brand name, price) (Zeithaml 1988). Costs can include both price and non-price related sacrifices (Zeithaml 1988). Non-price related costs can include items such as ease of use and intensity of search.

The product characteristics, upon which product value is based, tend to be in the cognitive realm and include both physical characteristics and pseudo-physical characteristics (Myers and Shocker 1981). Physical characteristics are "the

most objective types of product descriptors, in the sense that they are measurable on some sort of physical scale; e.g., temperature, color intensity or hue, sweetness, thickness, dollars, acidity, saltiness, strength of fragrance, contains vitamins, etc." (Myers and Shocker 1981, p. 213).

Pseudo-physical characteristics are "also objective in nature but are not as measurable on a physical scale. However, they reflect physical properties that are generally understood by both producers and consumers; e.g., spiciness, smoky taste, greasiness, creaminess, shininess, etc." (Myers and Shocker 1981, p. 213). Because these characteristics define what a product is, "they partially determine a product's functional or utilitarian values" (Myers and Shocker 1981, p. 219). Thus, product characteristics that provide the basis for product value span use situations.

Therefore, the following is proposed with regards to the evaluations of objects:

P2. Consumers evaluate products based on the quality of product characteristics relative to cost. This type of evaluation is termed "Product Value."

Values that Reflect the Interaction of Person, Object and Situation

Evaluations based on the interaction of person, object and situation are related to both Means End Chain Theory (Gutman 1982) and multi-attribute attitude models. Means End Chain Theory suggests that product features or attributes are important to consumers because of the benefits (or

consequences) that occur during use. Consequences are important because they help or hinder individuals' ability to achieve personal values or to act in a manner that is consistent with their personal values. Consequence evaluations reflect a cost benefit ratio. At this level in the means end hierarchy, benefits are derived from use, while costs may be any non price sacrifice that results from use (Zeithaml 1988). A positive valuation occurs if benefits are greater than costs. A negative evaluation occurs if costs exceed benefits. Thus, the costs, benefits and judgments related to consequences incorporate the impact of person, product and use situation.

Multi-attribute models have been used in many marketing contexts (Mazis, Ahtola and Klippel 1975; Sheppard, Harwick and Warshaw 1988; Vinson, Scott and Lamont 1977; Wilkie and Pessemier 1973). Some of the most popular in marketing include Rosenberg's Expectancy Value Model (1956), Fishbein and Ajzen's model (1975), an Adequacy - Importance Model (Cohen, Fishbein and Ahtola 1972) and Bagozzi's model related to purposeful behavior (1986).

While these models take many forms, the basic components are similar. Each contains 1) an element related to beliefs (expectancy, valence, instrumentality) that an attribute is found in the object or behavior being evaluated and 2) an element related to importance or evaluation of that attribute (Wilkie and Pessemier 1973). The components of these models

and the fact that they are multiplied and summed to reflect an overall attitude incorporate concepts that reflect the person, object (product), situation interaction.

For example, beliefs (expectancy, valence, instrumentality) capture the effects of person by including "perceptions," and the impact of product by acknowledging the object of evaluation. Situation is implicitly included by 1) the reference to possible attainment or blockage of goal achievement (Expectancy Value theory); 2) reference to potential consequences/ outcomes (Fishbein and Ajzen's 1975 purposeful behavior notion) and 3) importance of attributes (Adequacy-Importance model). Therefore, while situational influences are suggested by these models, they are not explicitly addressed. However, the influence of situation on consumer behavior is widely recognized (Belk 1975; Cote 1985; Kakkar and Lutz 1981; Mattson and Dubinsky 1987). Lutz (1980) developed a model that explicitly associated the interdependencies of psychological and object components with several types of situation. More recently, Funder and Colvin (1991) investigated the psychological properties of situations. The inclusion of situation in the current discussion is clearly justified.

As such, a perspective that includes the combined impact of situation, product and person is recognized as essential to understanding consumer behavior. It is now appropriate to turn to that literature that has specifically addressed

"value" and "valuation" as related to the person, product, situation interaction.

Value and the Product, Person, Situation Interaction

Holbrook and Corfman (1985) report on a definition of value that incorporates the person and product interaction with situation. "Value [is defined] as an interactive relativistic preference experience - or, more formally, as a relativistic (comparative, personal, situational) preference characterizing a subject's experience with some object. The object may be any thing or event" (p. 40). This conceptualization of value

> emphasizes four key points. First, value involves preference - broadly interpreted as favorable disposition, liking, positive affect, tendency to approach, pro attitude, and so on. Second, value is neither wholly subjective nor entirely objective, but rather entails a subject-object interaction. Third, value is relativistic in at least three senses: (1) it is comparative in that it depends on a rating or ranking of one object against another; (2) it is personal in that it differs among individuals; and (3) it is situational in that it hinges on the context within which an evaluative judgment occurs. Fourth, value is an experience and resides not in acquisition of the object but rather in its consumption (its usage or appreciation) (Holbrook and Corfman 1985, p. 40).

Expanding on this definition, these researchers developed a typology of value based on three dimensions. The first dimension refers to extrinsic/ intrinsic value. "Extrinsic value characterizes those judgments that regard some thing or event as a means useful in bringing about some further end or purpose. Extrinsic value is therefore instrumental,

utilitarian, and practical (Holbrook and Corfman 1985, p. 41). By comparison, intrinsic value is nonutilitarian and "characterizes the appreciation of some experience for its own sake, apart from any other consequences that may result therefrom. (Holbrook and Corfman 1985, p. 41).

The second dimension is related to self oriented/ other oriented value. This dimension of value reflects the distinction in perspective between self and "one's place in the social or cosmic order" (Holbrook and Corfman 1985, p. 41).

The third dimension is identified as active/ passive value. Active value "occurs when valuing results from an active manipulation of the object by the subject. By contrast, the latter occurs when the subject simply apprehends and appreciates an object, responding to it without necessarily acting upon it in any other way" (Holbrook and Corfman, p. 41). For example, an active value may be manifested in using a lawn mower to cut grass, while admiration for a painting reflects passive value.

These dimensions of value suggest that two distinct types of valuation may occur at the person, object, situation interaction level. The first is based on functional nature of products in use situation. The second is derived from the symbolic nature of products in use situations. Holbrook and Corfman's (1985) extrinsic and active poles of dimensions one and three relate to value based of the functional character of

products, while dimension two (self/ other oriented) and the intrinsic and passive poles of dimensions one and three help define the judgments based on the symbolic characteristics of products. Figure 2-1 depicts how the typology developed by Holbrook and Corfman (1985) relates to the symbolic and functional nature of value in a person, product, and situation interaction. The symbolic and functional nature of these types of value is subjective and evaluations formed are primarily affective in nature (Myers and Shocker 1981).

Evaluations Based on the Functional Nature of Product in Use Situation

Judgments based on the functional nature of products in use situations are founded in the concept of utility from the field of economics. Utility is defined as "the satisfaction derived from using a product or service. It is implied that satisfaction is derived from the physical product performing its functions" (Sheth, Newman and Gross 1991, p. 34). Thus, utility is derived from the individual's (person) consumption (use situation) of the product.

Economists propose that consumers attempt to maximize utility subject to income constraints (Maurice, Phillips and Ferguson 1982). The product's functional characteristics are used by the consumer to create satisfaction. In fact, economic theory suggests that people are often producers of activities that are parallel to that of a business firm. Thus, "a consumer combines goods with his own labor (time) to

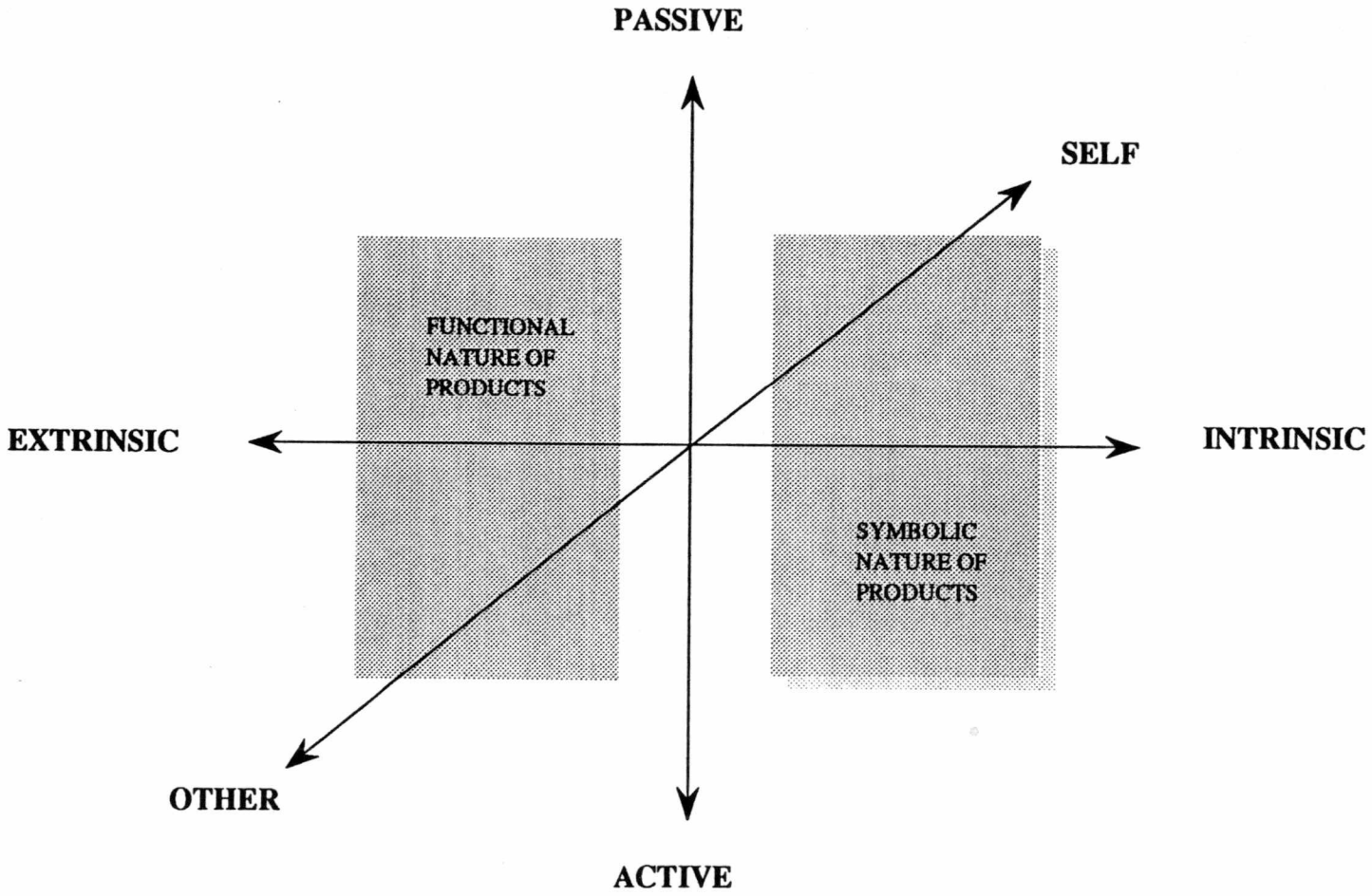


Figure 2-1: Product Dimensions: Person, Product and Use Situation Interactions

produce his own satisfaction" (Ratchford 1975, p. 65).

Additionally, the notion of value originating in the functional capabilities of product experience is adopted from a perspective introduced by Karl Marx (Abraham-Fois and Berrebi 1976). Marx espoused the economists' distinction between the use-value and exchange value of objects (Abraham-Fois and Berrebi 1976; Malthus 1957). Use-value referred to the worth of a product based on its usefulness in satisfying needs. This type of value was associated with the material quality of objects. In this study, the economic meaning of the concept is expanded and clarified.

One element of consumers' evaluations of products is based on actual use of the product to achieve some other purpose. The focus of the evaluation is centered around product characteristics' ability to perform (Sheth, Newman and Gross 1991). These characteristics (product attributes or their immediate consequences) provide some benefit during use (Myers and Shocker 1981).

The evaluative belief and perceived instrumentality components of Fishbein and Ajzen (1975) and Rosenberg (1956) address the essence of use value (Cohen 1979). Often in research using expectancy value models, the achievement of a desired goal or a product's ability to satisfy is tied to product (or product attribute) functionality (Mazis, Ahtola and Klippel 1975; Sheth and Talarzyk 1972).

Several researchers recognize the functional elements of

product on which evaluations can be made (Belk, Mayer and Driscoll 1984; Hirschman and La Barbera 1990; McCracken 1986; Prentice 1987). For example, Sheth, Newman and Gross (1991) suggest that value is determined by how well the product performs on important physical attributes. Scott and Lundstrom (1990) identify factors related to product meaning, one of which (what possessions can do/ what possessions cannot do) is captured by the use value concept. The following proposition is therefore offered:

P3. Consumers evaluate products based on the functional benefits achieved by consumers in use situations. That evaluation is termed "Value in Use."

Perhaps because the notion of valuing a product based on functional use is so intuitive, some investigators have turned to examining the symbolic nature of products.

Evaluations Based on the Symbolic Nature of Product in Use Situation

As early as 1959, Levy recognized the importance of understanding the symbolic nature of products. "Sellers of goods are engaged, whether willfully or not, in selling symbols, as well as practical merchandise" (p. 117). In fact, he acknowledged that "people buy things not only for what they can do, but also for what they mean" (p. 118). A symbol indicates that "an object, action, word, picture, or complex behavior is understood to mean not only itself but also some other ideas or feelings" (p. 119).

Valuation of this type is based on the expressive nature

of products and is therefore subjective. The basis for evaluation is related to how the product in the use situation "represent[s] the user to other people; e.g., would be used by a gourmet cook, gives me a sexy look, the kind of car an athlete (or banker or rock star) would drive... Normally, images need to be suggested by promotion or by users themselves; they are not intrinsic to the product itself" (Myers and Shocker 1981, p. 213). Not only do individual products have a symbolic nature, but groups of products (product constellations) also have a symbolic nature (Solomon 1988).

As a result of a product's imagery, "consumer goods have a significance that goes beyond their utilitarian character and commercial value" (McCracken 1986, p. 71). Products help individuals define themselves through "the systematic appropriation of the meaningful properties of goods" (McCracken 1986, p. 80). Consumers in western societies "enjoy a wide range of choice in the meaning they may draw from goods" (McCracken 1986, p. 80).

Recognition of the symbolic nature of products begins in children (Belk, Mayer, and Driscoll 1984; Prentice 1987). In fact, children were shown to make attributions about others who used certain products (Belk, Mayer, and Driscoll 1984). Myers 1985 noted that "the importance of special emotional significance and their meaning to individuals has long been popularly recognized... It is clear that such attachments

occur at all ages, and with all different types of possessions, from cowboy hats to convertibles..." (p. 560). Through a phenomenological study, Myers also determined that "well-functioning adults do indeed report attachment to a wide variety of special possessions at all ages" (p. 561).

Interest in the symbolic nature of products and how it relates to individuals (Holbrook 1986; Mick 1986) seems to be growing in popularity. Hirschman and La Barbera (1990), using qualitative methods, identified two dimensions of possession importance. These researchers were able to "reconstruct the ways in which the consumer uses the product to give meaning to his/ her life" (p. 215). Data were collected by asking subjects to write an essay about important possessions and why they were valued. The first dimension referred to the sacred/ secular nature of possessions. The sacred nature of possessions included "those spiritual and emotional aspects of possessions which transcended the self and connected people to living things past, present or future, and to entities which they believed to be deified" (p. 219). Product considerations based on secular aspects are defined as "referring to possessions that served to create identity through the exercise of personal skills, that enabled the consumer to conduct daily affairs, served as objects of aesthetic contemplation, or symbolized personal accomplishments" (p. 219). The second dimension addressed the subjective/ objective nature of possessions. Objective referred to

"possessions which exist outside of the consumer and are tangible to one or more of the senses...By subjective, we refer to those possessions which emanate from or are embedded within the consumer" (p. 218). It is interesting to note that subjects often included non-product "possessions" (i.e. family, friends, sense of humor, intelligence) as among those that were most important.

The two dimensions identified by Hirschman and La Barbera (1990) resulted in the formation of a classification composed of four broad types of possession importance. Each quadrant included several defining criteria. Most of the criteria in all of the quadrants referred to characteristics consistent with the symbolic nature of products. Only one of the items included in the objective/ secular quadrant ("Objects which allow us to conduct daily affairs") might be considered as representative of the functional nature of products (Value in Use).

Scott and Lundstrom (1990) also examined the meaning that consumers' place on material possessions and the accumulation of those possessions. This study identified five factors related to the meaning placed on material possessions. Two factors (public image and success equals possessions) clearly reflect the existence of a symbolic type of value. Two factors ("what possessions can do" and "what possessions cannot do") are loosely representative of "Value in Use." The other factor ("more is better") captures the meaning to

consumers of the accumulation of goods. As a result of their findings, these researchers proposed that satisfaction with possessions is likely to be "a multi-dimensional construct and not directly tied to either money or objects. Satisfactions are related to such dimensions as external status, success, possessiveness as an end-state, and what possessions can and can not do for the individual" (Scott and Lundstrom 1990, p. 103).

Prentice (1987) determined that the people primarily evaluate possessions on the symbolic dimension rather than the instrumental dimension. "This distinction was characterized by possessions that represent events, relationships, thoughts, and feelings at the symbolic pole, and possessions that provide direct benefits at the instrumental pole" (p. 1001). While the author proposed that this symbolic/ instrumental distinction would hold for attitudes (mental objects) and that people who held self expressive vs instrumental values would favor possessions or attitudes with similar characteristics, results indicated that the preference held only for the possessions, attitudes and values on the symbolic dimension. In other words, those who favor symbolic vs instrumental possessions "differ systematically in their attitudes and values, with strong evidence for a self-expressive orientation of the symbolic group" (Prentice 1987, p. 1001). These findings indicate that the evaluation process for determining perceptions of product symbolism vs Value in Use may be quite

different and provide support for identifying these two types of evaluations of products in use situations as separate and distinct constructs rather than two ends of a continuum.

As a result of her study, Prentice concluded that "physical objects derive psychological value from their symbolic and instrumental functions. Young children appreciate only the instrumental properties of possessions, but as they get older, they come to value symbolic objects as well. Adults vary in the types of objects they value; some people favor instrumental objects that provide enjoyment or improved functioning in the environment, and others favor symbolic objects that facilitate self-expression or represent the past. Thus, possessions serve two major functions for individuals throughout their lifetimes: they enable people both to manipulate their environments and to understand and express themselves" (Prentice 1987, p. 994).

Belk (1988) summarizes the importance of possession value by stating

> It seems an inescapable fact of modern life that we learn, define, and remind ourselves of who we are by our possessions. Developmental evidence suggests that this identification with our things begins quite early in life as the infant learns to distinguish self from environment and then from others who may envy our possessions. Emphasis on material possessions tends to decrease with age, but remains high throughout life as we seek to express ourselves through possessions and use material possessions to seek happiness, remind ourselves of experiences accomplishments, and other people in our lives, and even create a sense of mortality after death. Our accumulation of possessions provides a sense of past and tells us who we are, where we have come from, and perhaps where we are going (p. 160).

In addition to judgments of product worth based on the ability to serve some utilitarian function, an additional type of value emerges. Thus,

P4. Consumers evaluate products based on the product's contribution to self enhancement. That valuation is termed "Possession Value."

Summary of "Possession Value" and "Value in Use"

Possession Value and Value in Use capture the interaction of Product Value, person related values and the influence of situation. Despite the fact that Possession Value and Value in Use judgments have a similar basis (person, product and situation), they have been shown to have differential effects on summary judgments of products during use. (Prentice 1987; Myers and Shocker 1981).

Summary Assessments of Product, Person, Situation Interactions

Overall Value

Often studies include a variable that is an overall assessment of an object (Myers and Shocker 1981). For example "vague references to 'preference,' 'tastes,' 'wants,' or needs are made in describing an existing set of values" (Power 1980, p. 85). Value in this more global sense, refers to capacity to provide benefit (Power 1980). "Thus, value is not a fixed, inherent property. Rather, it is a variable property whose magnitude depends not only on the nature of the thing itself

but also on who evaluates it and the environment in which it is assessed" (Sinden and Worrell 1979, p. 4). Therefore, a summary judgment of a product suggests:

P5. Consumers form global reactions to the functional and self enhancing consequences of product use. That valuation is termed "Overall Value."

Overall assessments of the value of products in use situations are a function of capacity to satisfy (Sinden and Worrell 1979). In this review, the concept of (dis) satisfaction has been linked to personal values (Ball-Rokeach, Rokeach and Grube 1984) and product value in use situations through the concept of utility (Hauser and Urban 1986; Sheth, Newman and Gross 1991). Satisfaction has also been tied to evaluation through Expectancy Value models. For example, Rosenberg 1956 referred to value importance of an item in terms of a "source of satisfaction" (p. 368). In fact, consumers attempt to maximize utility or satisfaction by using products (Maurice, Phillips and Ferguson 1982). Therefore, a more detailed examination of (dis)satisfaction as an outcome of person, product, situation evaluations is warranted.

(Dis)Satisfaction

In addition to the previously cited literature, recent research (Woodruff, Schumann and Gardial 1993) indicates that a strong relationship exists between value and satisfaction. For example, some respondents in exploratory studies of

consumers' experiences with a health club[2] suggested that:

> the value of my ...membership gives me alot of satisfaction. (Study 2, Subject 19, p. 48)
>
> people have at least a perception that Japanese cars are good cars so that's kind of a known value. So you really start to thinking this is a good car. If it proves itself to be a good car then -- then you would consider that a good value and you're going to be satisfied with it. (Study 2, Subject 8, p. 61.)

Responses from several subjects indicated that at least two types of satisfaction reactions occurred as a result of the use experience. These distinct types of satisfaction stem from two different sources: 1) consequences of product use and 2) self as user/ owner of product. This dichotomy is consistent with previous research related to the product dimensions on which consumers evaluate products (Holbrook and Corfman 1985; Prentice 1987; Scott and Lundstrom 1990). These dimensions relate to two broad functions that products serve. One refers to an instrumental function that helps people cope with their surroundings, while the other serves a self expressive purpose (Prentice 1987). It is the former that has been the focus of much satisfaction research. An investigation of the latter reveals insight into the possibility of a different type of product use evaluation. Each is briefly discussed.

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[2] These studies are part of an ongoing research program at the University of Tennessee - Knoxville designed to investigate satisfaction and value. The Value and Satisfaction Research Team is located in the Marketing, Logistics and Transportation Department in the College of Business Administration.

Evaluation of the Functional Nature of Products and Satisfaction

Typically, consumer (dis)satisfaction research investigates postpurchase evaluations based on product performance (e.g., Churchill and Suprenant 1982; Oliver 1989; Tse and Wilton 1988; Westbrook and Oliver 1991). "The satisfaction judgment is generally agreed to originate in a comparison of the level of product or service performance, quality, or other outcomes perceived by the consumer with an evaluative standard. The evaluative standard most often assumed is the consumer's prepurchase expectation set, which, when compared to the level of perceived product performance, yields disconfirmation beliefs" (Westbrook and Oliver 1991, p. 85). Generally, emphasis is on product and the functional aspects of product usage (the product did/did not perform).

This type of satisfaction is derived from the consequences and benefits associated with using the product. The University of Tennessee Value and Satisfaction Research Team study of health club members provides a good example. In response to a question concerning satisfaction with a fitness center membership, respondents indicated:

> Umm, I think we're getting our money's worth. Out of our membership. You know, if we were not using it, you know, I would not be very happy with -- with spending the money that we're spending on a membership... (Study 2, Subject 12, p. 45)

> Oh, I feel like I'm getting what I expected to get out of it. You know. I'm getting the -- they offer greater aerobics classes which is the main reason I joined. (Study 2, Subject 20, p. 44)

Implicit in this study and the other literature cited, is the notion that these satisfactions are related to the product function. The implication is that evaluations are being made based on the consequences of product performance and suggest the following proposition:

P6. Consumers form general reactions to the performance of the product in the use situation that can be termed "Consequence (Dis) Satisfaction."

Evaluation of the Symbolic Nature of Products and Satisfaction

From The University of Tennessee Value and Satisfaction Research Team studies, an additional evaluative reaction emerged that was quite distinct from "Consequence Satisfaction." Subjects explicitly and implicitly referred to how satisfied they were with themselves during and after product use. For example, when asked what words he/she would use to describe the total health club experience, one subject replied, "Satisfied...Uh, feel good about yourself. Uh, pride. I've got enough pride in myself to do it." In another interview, a respondent used the term "personal satisfaction" and defined it as "I'm doing what I set out to do." When asked about how he/she felt after a workout, another subject said, "I exercised today. You know, that kind of thing. You know, you feel a little smug." Additional comments included:

> I feel -- I feel good about myself and I feel, uh, I don't know if I should say I feel better than other people that have not done that... (Study 2, Subject 12, p. 34)

> I just feel like I did something really good for myself (Study 2, Subject 20, p. 34)

Based on these depth interviews, it was apparent that this set of consumers acknowledged that a self satisfaction evaluation was a possible outcome of a product use experience. A literature review provided additional insight into the concept of self (dis)satisfaction.

An examination of relevant literature indicated that self satisfaction has not been widely studied. Ball-Rokeach, Rokeach and Grube (1984) described self-satisfaction as a result of individuals' assessments of how competent and/or morale they are portrayed to others in a given situation. Self satisfaction is then directly related to self esteem and results in individuals seeking situations where self satisfaction is an outcome and avoiding situations where self dissatisfaction is likely to occur. As is evidenced by the Health Club Study, product use experiences are one type of situation where a self satisfaction response is possible. Intuitively, one could speculate that product use experiences, in general, can result in self satisfaction outcomes.

In a consumer behavior context, several researchers have examined how products relate to self image (e.g., Belk 1988; Hirschman and La Barbera 1990; Levy 1959; Solomon 1983). Kehret-Ward and Yalch (1984) proposed that "one way of getting individuals to think positive thoughts about the product is to get them to think about aspects of themselves that can be reflected positively in product purchase" (p.415). In fact,

Scott and Lundstrom (1990) found that public image and success are dimensions of possession satisfaction. A (dis) satisfaction reaction based on self image in a product use situation is likely to vary in intensity depending upon 1) the product under consideration, 2) the situation in which the product is being used and 3) the personality characteristics of the individuals making the assessment.

Previous research therefore suggests that, if products help individuals define themselves, there is likely to be a satisfaction reaction associated with what the product says about the owner or user of a product. That reaction is related to, but distinct from, an assessment of product performance. As a result, the following is proposed:

P7. Consumers form general reactions to themselves as a result of the use situation that can be termed "Self (Dis) Satisfaction."

SUMMARY OF VALUE(S) CONCEPTS

This chapter has presented a number of meanings of "value" from across several disciplines. Some of the conceptualizations of value have strong similarities, while others are distinctly different. Table 2-1 was prepared to facilitate the comparison of value types across a several relevant dimensions. Each dimension is briefly discussed.

All value types incorporate a positive and/ or negative assessment or evaluation. By their definition the person-related values tend to be always positively evaluated.

Table 2-1: Comparison of Value Types

	Personal Values	Organiztnl Values	Role Values	Product Value	Value in Use	Possession Value	Overall Value	Consequence Satisfaction	Self Satisfaction
Dimension									
Evaluation: Cognitive	X	X	X	X	X	X	X	X	X
Evaluation: Affective	X	X	X	X	X	X	X	X	X
Evaluation: + and -	X	X	X	X	X	X	X	X	X
Benefit/ Costs				X	X	X	X	X	X
Shared		X							
Behavioral Influence	X	X	X	X	X	X	X	X	X
Impact of Situation	*	X	X		X	X	X	X	X
Outcome of Disconfirm-ation								X	X
Basis of Evaluation: Functional					X		X		
Basis of Evaluation: Symbolic						X	X		

* Only for Evoked Personal Values

The person related values are goals or desired end states that are held in high regard across individuals and often serve as standards. The other Value types refer to judgments of products or product experiences and can therefore include both positive and negative evaluations.

Differences in the object of assessment can also occur. Cognitive (good/ bad), affective (like/ dislike) and emotional (delighted/ terrible, among others) appraisals of the personal related values are made by individuals. These components are then manifested in subsequent evaluations of product experiences. Products and use situations are therefore also subject to cognitive, emotional and affective evaluations. Since "Overall Value" is a summation of judgment across all value types, it includes all the dimensions, to greater or lesser degrees, of the other value types. However, "Overall Value" does not include the impact of disconfirmation. Only the satisfaction concepts incorporate disconfirmation effects.

Any "value" that includes the influence of product involves a cost/ benefit tradeoff. For Product Value, the tradeoff is made on the attribute or first level consequence level, while with Value in Use and Possession Value it reflects higher level consequence/ sacrifice comparisons.

Only organizational values are shared. Situational elements can affect several of the identified value types. The person related values are the only *sources* of behavioral

influence. However, Value in Use and Possession Value judgments mediate the relationship between person related values and behavior.

To summarize, the table highlights similarities and differences in the value types. Certain dimensions focus on "person" (e.g. behavioral influence), while others are more "product" oriented (benefit/ cost tradeoff). Some accentuate the impact of situation. By identifying underlying value dimensions and synthesizing these value aspects into the seven value terms, the table provides a basis for overcoming a significant shortcoming in current research: a lack of understanding of the variety of value conceptualizations held by consumers. As such the foundation is laid for meeting the first object of this dissertation: to determine what consumer's value.

It is clear from the previous examination of the literature that further research in this topical area will be limited until value concepts are separated, clarified and defined in a manner to facilitate subsequent research. Propositions presented earlier in this chapter introduced a number of value types. Of critical importance to this research is to move beyond a typology and assess the unique contribution that each form of value makes to consumers' valuation processes. As a means to that end the following proposition is offered:

P8. Each of the nine <u>distinct</u> meanings of value (Personal Values, Organizational Values, Role

Values, Product Value, Value in Use, Possession Value, Overall Value, Consequence Satisfaction and Self Satisfaction) uniquely contributes to consumer valuation processes.

CHAPTER 3

VALUATION PROCESSES, OUTCOMES AND MODEL DEVELOPMENT

INTRODUCTION

The previous review of value related literature reveals a number of distinct meanings of the term "value." These different value types prompt additional questions related to 1) how consumers reach each kind of value judgment, 2) how consumers combine value judgments to determine general affective outcomes and 3) how these outcomes affect consumers behavioral intentions and actual behaviors. These questions address the second major objective of this research: to enhance the understanding of valuation processes. The purpose of this chapter, therefore, is 1) to review literature that may provide insight into valuation processes and related value outcomes and 2) to present a model that integrates the value types to reflect valuation processes.

As a means to that end, the following issues will be addressed:

- how individual value judgments are formed
- how valuation processes begin with person related values and Product Value assessments
- how "Possession Value" and "Value in Use" are intermediate value judgments between person/ product value(s) and general evaluative outcomes
- how Overall Value judgments and satisfaction are outcomes of evaluation processes
- how these outcomes are linked to behavioral intention and actual behavior

VALUATION PROCESSES AND OUTCOMES

Overview

This research assumes that two types of valuation processes occur during postpurchase use evaluations. The first process is related to the development of **individual** value judgments (i.e., how Product Value judgments are formed, how Value in Use judgments are formed). The attitude literature provides a basis for understanding and explaining this process since evaluation is the essence of attitude (Pratkanis 1989).

The second valuation process is concerned with how these individual value judgments are combined into an **overall** valuation process assessing the use experience. The attitude literature provides a foundation to begin understanding the relationships between value types that is supplemented by Means-End Theory, (Dis) Satisfaction research, consumer information processing, motivation research, and studies related to situational impact.

Formation of Individual Value Judgments

How do consumers reach value judgments associated with each of the individual value types (product value, possession value, value in use, overall value)? Insight into the characteristics of value judgments can be found in multiattribute attitude model research.

Multiattribute models of attitude formation related to the study of consumer behavior were introduced in the previous chapter to help understand differences in value meanings. These models are also relevant in this chapter for the contribution they can make in understanding the development of valuation processes.

The multiattribute models provide a useful theoretical foundation for three reasons. First, the models focus on attitude development and therefore are relevant for examining value judgments since, "the essential characteristic of an attitude is its evaluations component - a simple evaluative cue or summary statistic ... (p. 90, Pratkanis 1989). Second, the models have been extensively studied and a number of variations have been found meaningful (Fishbein and Ajzen 1975; Mazis, Ahtola and Klippel 1975; Sheppard, Hartwick and Warshaw 1988). Third, the models relate evaluation to behavior (Ajzen and Fishbein 1977; Bagozzi 1981,1982; Bonfield 1974; Fishbein 1967; Fishbein and Ajzen 1975).

The multiattribute models used in this research fall into the general category of expectancy value models. The models differ slightly in the conceptualization of basic attitude components (importance, evaluation, valence, instrumentality, probability) and in the object under consideration. (In some instances the focus of the attitude is an act, in others it is some type of object.) While these differences affect the delineation of value meanings (and were discussed in Chapter

2), they are less important in understanding valuation processes. Rather, the features that multiattribute models share are used as a basis for understanding the formation of individual value judgments. These commonalities relate to the way attitudes develop and to how attitude formation has been conceptualized. In all the multiattribute models, each feature of the object being assessed is evaluated in a multiplicative way, the product of that multiplication is summed in a compensatory fashion to create an overall impression or attitude. This process is applicable to value judgment formation. A sample of multiattribute theories and models - Expectancy Value Theory (Rosenberg 1956), Adequacy Importance Theory (Cohen, Fishbein and Ahtola 1972), Fishbein's Extended Model (1967), and Approach Avoidance Theory (Bagozzi 1986) - is now presented in support of the use of the underlying attitude formation process in the development of individual value judgments.

Rosenberg's Model is stated as follows (from Mazis, Ahtola and Klippel 1975):

$$A_o = \sum_{i=1}^{n} I_i V_i \qquad (3.1)$$

where:

A_o = the attitude towards the object in terms of like or dislike

I_i = an individual's perceived instrumentality of the kth object toward attaining or blocking the jth goal or value

V_i = value importance (importance as a source of satisfaction to an individual i of the jth goal or value)
n = number of valued states

The Rosenberg Model Expectancy Value Model is founded on the premise that attitude develops as subjects seek the means to achieve desired ends. Broad interpretations of this model have justified its use in the study of consumer behavior (Mazis, Ahtola and Klippel 1975).

Similarly, Cohen, Fishbein and Ahtola (1972) proposed a multiattribute model often used in consumer behavior research termed the "adequacy importance model" (Mazis, Ahtola and Klippel 1975). This model focuses on the evaluation and importance of product dimensions.

$$A_o = \sum_{i=1}^{n} P_i D_i \qquad (3.2)$$

A_o is attitude towards the object; P_i is the importance of a dimension i; D_i reflects the evaluation of the product in regards to the dimension i; and n represents the number of dimensions.

These two models address attitude formation towards an object. In consumer research, that object is often a product/ service that is being assessed. In addition to product assessment, there are multiattribute models that describe how attitude towards an act (purchase or choice) relates to the consequences of product use, thus implicitly linking product

to a type of consumer behavior. For example, Fishbein and Ajzen's model includes the following concepts (Fishbein and Ajzen 1975):

$$A_{act} = \sum_{i=1}^{n} b_i e_i \qquad (3.3)$$

where:

A_{act}	=	attitude related to performing the act
b_i	=	belief regarding the probability that the behavior under consideration will result in outcome *i*
e_i	=	evaluation of outcome *i*
n	=	number of beliefs

The processes underlying Fishbein's A_{act} are similar to those that result in Fishbein's (1967) conceptualization of the formation of an attitude towards an object (Mazis, Ahtola and Klippel 1975).

Bagozzi (1986) presents an approach/avoidance model that suggests that attitudes form as a result of an individual's assessment of the likelihood of a resultant consequence of an act.

$$A_{act} = \sum_{i=1}^{n} b_i P_{act/bi} \qquad (3.4)$$

Where A_{act} is attitude towards the act and $P_{act/bi}$ is the "subjective probability or likelihood that a person would perform the act, given that he or she believes that such a performance will lead to consequence *i*" (p. 98).

What do these models say about product value judgments? These models suggest that valuation can take place on many levels. Valuation can be related to a variety of product characteristics (both concrete and abstract) and/or valuations can occur relative to consumption behaviors. The models specifically present how those judgments are formed (elements are multiplied, then summed).

Across models, there are differences in how beliefs/ evaluations are measured (e.g., as importance, instrumentality, valence or some combination) and the nature of what is under consideration (e.g, behavior, object, goal, etc.). However, all models share a common underlying process: the interaction between the basic components depicts a multiplicative relationship for each relevant object characteristic. The results of each multiplicative outcome are summed in a compensatory fashion and reflect the formation of attitude or propensity to act. It is this process rather than the differences in how model components are defined, that is applicable to valuation process development.

Several types of value result in evaluative judgments: product value, possession value, value in use and overall value. Implicit in the formation of a judgment is the idea that a consumer can and does identify features with a product (beliefs, instrumentality). Associated with those considerations are valenced reactions (evaluations). Because "value" is involved, some level of salience or importance is

assumed. Therefore, individual value judgments are subject to the same processes found in multiattribute attitude models.

Two issues are raised by the structure of multiattribute attitude models: summation and compensatory processing. Fishbein and Ajzen (1975) make a strong case for summing vs averaging the product of the belief/ evaluation interaction. In fact, Wilkie and Pessimier (1973) acknowledge that most marketing studies have used a summation approach. Due the strong support in the literature, summing the results of a belief/evaluation interaction is deemed acceptable for this study.

A major assumption of the Expectancy Value model is that subjects are engaging in compensatory processing. That is, high performance on one characteristic (product feature) will overcome poor performance on another. The very nature of these models precludes noncompensatory processing. Often, non compensatory processing occurs when there are an overwhelming number of options and the subject uses different types of noncompensatory processing as a heuristic to reduce effort (Bettman 1979; Wright 1975). This type of decision strategy is often likely to be used in comparing attributes across brands, while a compensatory strategy is more likely in assessing attributes for a particular brand. (Lilien, Kotler and Moorthy 1992) The probability of non compensatory processing also increases in low involvement situations (Lilien, Kotler and Moorthy 1992). Therefore,

noncompensatory processing is likely in situations where there are many options being considered, attributes comparisons will be made across brands and product involvement levels are low. These situations are not relevant for this study. Therefore, noncompensatory processing is not appropriate here.

Therefore, while there may be critics of the general form of multiattribute attitude models (see issues raised by Wilkie and Pessimier 1973), the compensatory summation of beliefs and evaluations to depict attitudes seems to have widespread support (Fishbein and Ajzen 1975) and there is "strong overall evidence for the predictive utility of the model" (Sheppard, Hartwick and Warshaw 1988, p. 325). As a result, the fundamental process described in multiattribute attitude models is applicable to the formation of judgments of value for each of the value types and leads to the following proposition:

P9. The formation of each value judgment includes a multiplicative assessment of value importance and expectancies of product success in achieving desired outcomes across relevant product characteristics.

Ordering of Value Concepts

After examining how the individual value judgments of Product Value, Possession Value, Value in Use and Overall Value are formed, it is necessary to determine how the individual value types relate to one another. The following sections present literature that supports the proposed sequence of judgments reflecting assessment of a product use

experience.

Evaluation Process: Originating Variables

Fishbein's extended model of behavioral intentions (1967) provides insight into identifying which of the value types might start the valuation process. The basic model is depicted as:

$$B \approx I = [A_{act}]\, w_0 + [(NB)(Mc)]\, w_1 \qquad (3.5)$$

Where B refers to behavior; I is behavioral intentions; A_{act} is attitude towards the act; (NB)(Mc) are normative beliefs and motivation to comply with those beliefs, respectively (as originally conceptualized by Fishbein in 1967, these beliefs and motivations can be indicative of both *personal* and *social* norms); and w_0 and w_1 are beta weights that reflect the impact of the variable on outcomes. Examining 1) the components that drive the model (A_{act}) and (NB)(Mc) and 2) the relationships across the model help sort out the ordering of the value concepts into a overall valuation process.

In the extended Fishbein model, the possibility of behavioral activity is initially influenced by A_{act} and (NB)(Mc). Valuation processes are likewise triggered by concepts that parallel A_{act} and (NB)(Mc): Product Value and Person Related Values, respectively.

A_{act} and Product Value

The formation of Fishbein's A_{act} is identical to Fishbein's (1967) conceptualization of the formation of an attitude towards an object. The only difference is the focus of the attitude (object vs behavior). Since this research is most interested in how values and value judgments related to objects affect subsequent consumer behaviors, the challenge is to find support that explicitly links evaluations of an object to behavior. Expectancy Value Models provide that link.

Rosenberg's model (1956) describes how judgments about goals as sources of satisfaction are connected to the likelihood that certain behaviors will result in attaining or blocking those goals. More recently, Means End Chain theory expands on Expectancy Value theory in a marketing context connecting the assessment of product features to behavior (Gutman 1982; Zeithaml 1988).

"A means-end chain is a model that seeks to explain how a product or service selection facilitates the achievement of desired end states" (Gutman 1982). While this theory is based on the expectancy value notion, it does not focus on underlying value importance, but instead, ties product attributes to any one of the person related values in a hierarchy that may be relevant. Thus, this model links product attributes to the consequences of product use and then to person related values.

Of all the types of value presented in the previous

chapter, "Product Value" represents an evaluation based on the most fundamental characteristics of the product. Recall that Product Value reflects an assessment based on lower level product features (attributes and/ or first level consequences). Therefore, Product Value "starts" the means end evaluation process suggesting that

P10. One point of origin in the overall valuation process is Product Value.

(NB)(Mc) and Person Related Values

According to Fishbein's extended model, the (NB)(Mc) component refers to both personal and social norms. In the context of this dissertation, personal norms are related to personal values and social norms can be compared to organizational and role values presented in the previous chapter.

Personal values are learned and internalized by individuals, thus becoming personal standards about desirable end states and modes of behavior (Rokeach 1973). This internalization of personal values makes them similar if not equivalent to personal norms.

As is the case with personal norms, personal values motivate behavior (Rokeach 1973). That association has been often studied. Williams (1979) cites several studies that have linked values to various types of behaviors including: occupational choices and occupations followed, speed in recognizing words, political behavior and attitudes,

anti-Semitism, cheating on exams, juvenile delinquency, choice of friends, religious participation, civil rights activities, and interracial behavior (p. 23).

Marketers also recognize the impact of values on consumer behavior and valuation processes (Clawson and Vinson 1977; McQuarrie and Langmeyer 1985; Pitts and Woodside 1984; Pitts, Canty and Tsalikis 1985; Prakash 1984; Prakash and Munson 1985). Vinson, Scott and Lamont (1977) suggest that "the role of personal values as a standard or criterion for influencing evaluations or choices regarding persons, objects, and ideas suggest the relationship of values to behavior...Values, then, are responsible for the selection and maintenance of the ends or goals toward which human beings strive and, at the same time, regulate the methods and manner in which this striving takes place" (p. 45).

Organizational and role values have characteristics that are similar to personal values in that they are learned, and represent desired end states or modes of conduct. However, these two types of values are manifested in situations that are much more social in nature. Therefore, the motivational role that these value types play in affecting behavior and behavioral intentions is comparable to the role of social norms in Fishbein's model.

As a result, the following is suggested:

P11. Another point of origin in the valuation process is person related values.

The valuation process therefore begins with person

related values and Product Value. Where do the other value types (Possession Value, Value in Use and Overall Value) fit into this process? The answer to this question is found by returning to Means End Chain theory research.

Evaluation Process: Means End Chain Theory and Intermediate Value Judgments

Means End Chain models describes valuation processing as occurring when individuals assess the linkages between 1) values and consequences and 2) consequences and attributes. As suggested by Rokeach (1973), personal values are the sources of positive/ negative consequence valence. To realize the desired consequences (and subsequently, the desired values), an individual must be able to evaluate the relationship between product attributes and consequences to determine if a particular attribute will lead to the consequence of interest. In addition to the acknowledging the importance of the attribute - consequence - value (ACV) linkage, Means End Chain theory recognizes that the use situation can impact ACV connections.

The value types presented in Chapter 2 can be mapped onto concepts in the Means End Chain theory. For example, Product Value is attribute based, Value in Use and Possession Value are types of consequences (and include the impact of situation) and person related values are considered equivalent to the means end "value" term. Thus, the following proposition is offered:

P12. The seven value terms can be integrated into a valuation process by linking attribute related values (Product Value) to valued consequences (Value in Use and Possession Value) to the desired end states of personal, organizational and role values.

It should be noted that while several studies have used Means End theory (Gutman 1990; Gutman and Alden 1985; Myers and Shocker 1981; Perkins and Reynolds 1988; Reynolds and Jamieson 1985), emphasis is placed on identifying product preference through means end linkages. No attempt is made to identify relative importance of a product attribute or consequence to an entire personal value system. The connection is made to any relevant value with no indication of how closely an individual holds that value.

In addition, Means End Chain theory does not depict causality between the levels of value judgments (attribute, consequence, person related values) as they relate to attitude formation and behavior. Previous discussion has demonstrated how product value (attribute) and person related values trigger attitude formation and subsequent behavioral intentions/ behaviors. Where then do the consequence level value judgments of "Value in Use" and "Possession Value" fit in the process? To address this issue, additional literature is examined.

Several researchers have examined casual relationships between value types. Personal values have been studied as they relate to behavior directly (Clawson and Vinson 1977; Henry 1976; McQuarrie and Langmeyer 1985; Pitts and Woodside

1984; Prakash and Munson 1985) or indirectly through attitudes (Homer and Kahle 1988). Pitts and Woodside (1983) determined that while value structures were linked to choice criteria, they were not related to preferences and intentions regarding product class and brand. This suggests that while a person related value --> behavior or person related value --> attitude --> behavior link may exist, the strength of the relationship may be reduced as function of psychological distance between variables.

Similarly, Product Value has been associated with behavior (e.g., Dodds and Monroe 1985; Zeithaml 1988). However, that relationship is also likely to be moderated due to the psychological distance between value judgments based on attributes and value judgments based on consequences or benefits that seem to be psychologically "closer" to actual choice considerations. For example, in investigating the relationship between a hierarchy of product characteristics and choice, Geistfeld, Sproles and Badenhop (1977) found that the most important product characteristics related to choice were higher level consequences (not attributes).

In addition, while Chang and Wildt (1990) found a connection between product value and behavior, they suggested that relationship is affected by situational influences. In the previous chapter, situation was an important part of the definition of "Possession Value" and "Value in Use," since both refer to judgments occurring as a result of a use

experience. Situation also plays a role in the formation of valuation process sequences. A brief examination of the impact of situation is therefore relevant in developing valuation processes.

Fishbein's (1967) extended model "recognizes the importance of situational variables" (p. 490). In fact, Fishbein's behavioral intention referred to "performance of a given act in a given situation" (Fishbein and Ajzen 1975, p. 301). Many of the multiattribute attitude models acknowledge the possible effects of situation. For example, in Rosenberg's Expectancy Value model, situation is implicitly included by the reference to possible attainment or blockage of goal achievement. The Approach/ Avoidance Model (Bagozzi 1986) also suggests that consequences in a given situation affect behavior.

In a qualitative study, Zeithaml (1988) determined that several elements affected perceived value, which, in turn, influenced purchase. These factors included product value characteristics, person related values and benefits that accrued in a given situation. Myers (1985) proposed that "it is not the possession per se which is necessarily important, but the unique importance that it has for the individual at a given time in his or her development and experience" (p. 565).

Similarly, some researchers (Hauser and Urban 1986) conceptualize value as utility per dollar. This notion of utility as benefit to the user connotes situational

influences. The very nature of consequences assumes that benefits are being accrued in a use situation. In fact, consumer decisions are often based on consequence level evaluations, especially in a high involvement context (Reynolds and Gutman 1988). Situation can therefore be identified as a factor that moderates the product --> action linkage.

Therefore, while there is evidence of a causal relationship between product value/ person related values and attitude formation/ behavior, there are also indications that consequence levels of evaluations and situation moderate the relationship. Since "Value in Use" and "Possession Value" incorporate situation and reflect consequence level evaluations, they are likely to have direct influence on the outcomes of valuation processes. Therefore, the following is suggested:

P13. Person related values and Product Value influence Overall Value, Consequence (Dis)satisfaction, Self (Dis)satisfaction and behavior indirectly through evaluations related to Value in Use and Possession Value.

Evaluation Process: Summary Value Judgments

The multiattribute models presented above describe how the multiplicative interaction of beliefs and evaluations results in "attitude." Several individual value types result in "like/dislike" perceptions (e.g., Product Value, Value in Use, and Possession Value). In turn, these value types,

interact to reflect more general opinions or outcomes of valuations processes that affect behavior (Cronin and Taylor 1992; Oliver 1980). Three outcomes are suggested: Overall Value, Consequence (Dis)satisfaction and Self (Dis)satisfaction.

Overall Value

As the general nature of value judgment formation suggests, at an individual value judgment level, there is a summation process. It follows that there is also an additive effect across the individual value types. The product of that summation is termed "Overall Value," a concept discussed in Chapter 2. Research shows that consumers compare products at abstract levels relative to overall worth or value (Corfman 1991) indicating that evaluation processes result in more general perceptions of worth. Therefore, the following is suggested:

P14. Value in Use and Possession Value judgments of specific object benefits are summed and result in general perceptions (outcomes) of Overall Value.

Consequence (Dis)Satisfaction

Several studies indicate that satisfaction is an outcome of valuation processes (e.g., McQuarrie and Langmeyer 1985; Rosenberg 1956; Westbrook and Reilly 1983). In fact, Campbell (1981) suggests that "satisfaction implies an act of judgment" (p. 23). Olshavsky and Miller (1972) examined the

impact of perceived product quality on satisfaction, while Tse and Wilton examined the effect of product performance on satisfaction (1988). Implicit in performance and consumer perceptions is the idea that some type of value judgment is being formed.

Most satisfaction research has been associated with product as the object of evaluation. Postpurchase product evaluations are the results of confirmation/ disconfirmation processing in which consumers make comparison between standards and product use experiences (Churchill and Suprenant 1982; Cadotte, Woodruff and Jenkins 1987; Day 1983; Oliver 1980; Westbrook 1987). Standards of comparison can include a wide range of phenomena including expectations, equity, experienced based norms, desires, values, promises and ideals (Woodruff, Clemons, Schumann, Gardial and Burns 1991). Use of standards in product assessment implies that judgments of worth are occurring in the process.

Evaluations related to satisfaction processes occur at many levels: overall product performance (e.g., Westbrook and Oliver 1991), product benefit expectations (e.g., Tse and Wilton 1988; Westbrook 1987), service quality (e.g., Cronin and Taylor 1992) and product attribute considerations (e.g., Olshavsky and Miller 1972; Tse and Wilton 1988). Thus, many types of value judgments (product value, value in use and possession value) affect satisfaction.

Previous research also highlights the importance of use

situation in valuation and satisfaction processes. For example, Woodruff, Cadotte and Jenkins (1983) suggest that product performance evaluation is a function of performance in a given use situation. In fact, situation impacts the evaluation standard used (Cadotte, Woodruff and Jenkins 1987).

Thus, while the focus of satisfaction research has been on product, evaluations are based on the performance of the product in a use situation. Assessment of satisfaction is therefore made based on the *consequences* of product experiences (Scott and Lundstrom 1990).

The previous discussion of consequence (dis)satisfaction has focused on the notion that there is, in fact, a connection between valuation and satisfaction. However, the question remains as to whether the processes underlying valuation and satisfaction are similar.

Westbrook and Reilly (1983) examined the relationship between expectations, disconfirmation, value-percept disparity and satisfaction. Results indicated that while disconfirmation was correlated with value-percept disparity, expectations, disconfirmation and value-percept disparity, each independently influenced satisfaction. These investigators concluded that there may be different processing streams underlying each variable tested.

Therefore, one could speculate that product satisfaction may be a result of both valuation process and disconfirmation processes. It does not necessarily follow that

disconfirmation processes are indicated in the development of valuation judgments. Rather, valuation processes may result in valenced (positive/ negative) reactions that subsequently impact satisfaction. It is possible that valuation may give satisfaction outcomes direction (good/ bad, delighted/ terrible, etc.) while disconfirmation may provide satisfaction outcomes with intensity depending on the level of discrepancy between experience with the product and the standards used as comparison. As such, disconfirmation and valuation may be distinctly different processes that result in an outcome of (dis)satisfaction with the benefits provided by a product.

Studies also have investigated the association between satisfaction and value judgments, satisfaction has also been studied in relation to personal values. Prakash and Munson (1985) conducted research to test associations between personal values, marketing systems, product performance expectation and consumer satisfaction. They found empirical support for a process whereby personal values impact consumer satisfaction through marketing systems assessments and product performance judgments.

The purpose of this discussion is to provide support for the idea that consequence (dis)satisfaction is one outcome of valuation processes. The literature clearly supports this connection. This study extends current understanding of the two constructs by 1) examining consequence satisfaction as a result of a specific valuation process and 2) exploring the

relationship between consequence satisfaction and four different types of personal value and value judgments. As a result, the following is proposed:

P15. Person related values and Product Value, Value in Use and Possession Value judgments contribute to general perceptions (outcome) of consequence (dis)satisfaction.

Self (Dis)Satisfaction

In addition to being related to satisfaction with product consequences, valuation has also been related to self (dis)satisfaction (Ball-Rokeach, Rokeach and Grube 1984). Self (dis)satisfaction valuation is associated with personal values and value judgments of product benefits. As indicated in the last chapter, Self (Dis)satisfaction is a reaction to self in use situation. The process related to the formation of self satisfaction reactions has not received much attention in the literature. However, previous research has examined how satisfaction has been related to an overall assessment of well being. Factors that contribute to overall well being and life satisfaction were examined as a means to help understand how specific use situation self satisfaction reactions occur.

Eisert and Kahle (1983) determined that personal values "are part of the self-definition and appear to affect those areas where a person elects to focus intellectual and emotional resources. The strong and consistent relationship between values and subjective satisfaction implies that value choices lead to degrees of well-being and are thus more or

less adaptive" (p. 225). They found that 1) values were significantly related to well-being and 2) people who held different values had different degrees of well being.

The association of satisfaction and well being in the literature reflects an overall assessment of contentment with life in general. Omodei and Wearing (1990) link well being to the realization of desired end states associated with need satisfaction. The vehicles to achieve well being can take many forms. One manner of attaining the desired level of need satisfaction involves a person, product, situation interaction. This interaction is manifested in standard of living and the resultant accumulation of possessions (Campbell 1981). Standard of living is one domain that affects life satisfaction, which in turn, contributes to an overall sense of well being. Income as related to purchasing power has also been associated with subjective well being (Diener 1984). Well being and life satisfaction are global indicators of an individual's contentment with his/her existence. Possession of objects is but one indicator of overall well being or life satisfaction.

In this dissertation, the relationship between the value of objects and self (dis) satisfaction is examined in a slightly different context. Rather than investigating how possessions may affect overall well being, this research adopts a more micro view of how value judgments of possessions contribute to a specific sense of (dis)satisfaction with self

as a result of a particular product experience.

The research cited above suggests that both personal values and value judgments of objects is associated with self (dis)satisfaction. This study clarifies the nature of that relationship by investigating 1) self (dis)satisfaction as the outcome of a specific use situation and 2) the linkage between self (dis)satisfaction and variety of values and value judgments. The following proposition is presented:

P16. Personal related values and Product Value, Value in Use and Possession Value judgments contribute to general perceptions (outcome) of Self (Dis)satisfaction.

Evaluation Process: Overall Value, Consequence and Self Satisfaction Outcomes and Behaviors

The final step in forming a valuation process relates these affective outcomes to behavioral intentions and behavior. Generally, the attitude literature previously presented supports the direct relationship between affective outcomes and behavioral intentions and behaviors (e.g., Bagozzi 1982; Fishbein 1967; Rosenberg 1956). People behave in a manner consistent with their attitudes (Ajzen 1989). The specific outcomes (Overall Value, Self Satisfaction, Consequence Satisfaction) presented in this research have also been connected with behaviors and behavioral intentions (Cronin and Taylor 1992; Oliver 1980). Therefore,

P17. Outcomes of value judgments (Overall Value, Consequence Satisfaction and Self Satisfaction) directly impact behavior.

W_0 ... W_n and Value Conflict

Fishbein's extended model also contains elements that address the issue of possible conflict between elements of value. As the model suggests, each variable has a differential impact on outcomes and behaviors. These differential impacts, captured by the weighting terms $W_0 \ldots W_n$, explain how potential conflicts between variables are resolved.

Person Related Values are subject to potential conflict. What theories address person related value conflict? By not considering the potential effects of end value importance, means end chains do not adequately address potential value conflict. However, Rokeach (1973) suggested that when two values conflict, behavior will be driven by the most important or closely held value. The notion of value conflict raises an additional research proposition.

P18. When two or more personal values conflict, the most important value in the value system will dominate and drive behavior.

This proposition assumes that there is value stability across situations and that a value that is an important guiding principle in an individual's life will be heavily weighted as a behavioral influence. However, researchers (Gutman 1990; Rokeach 1973; Williams 1979) also note that situational influences may reorder the importance of a value in a given context. Both situation and product interact to affect individual's perceptions and alter behavior (Belk

1975). In fact, several types of situations (purchase, intended consumption, communication, consumption) can impact consumption and purchase behavior (Lutz 1980). As such, there are likely to be situationally salient values that drive behavior (Gutman 1990). Therefore,

P19. Situational influences may affect value importance thus producing a temporary reordering of values in the value system.

In addition to the possibility of value conflict within an individual's personal value system, it is also possible that conflict can occur within the constellation of person related values (personal, organizational and role). In such a situation, a weighting of each type of value importance will likely occur within the given context.

P20. Conflict between organizational, role and personal values will be resolved by a weighting of the value importance of each in the context in which the conflict arose.

Importance weighting also explain how different judgments of product related assessments are affective outcomes. As was indicated by the formulations of multiattribute attitude models, each component has a specific weighting that impacts subsequent outcomes. The higher the weighting, the stronger the impact of that component on outcomes. The use of weightings associated with elements in the attitude models can easily be translated to the use of weightings in valuation process. Therefore,

P21. In addition to weightings placed on person related value importance, judgments of the expectancy of all relevant product characteristics to achieve

desired end states will have differential weightings that impact behavior and attitude formation.

Hirschman and LaBarbera's (1990) research regarding the importance of possessions also has implications for the weighting issue in resolving value conflict. This study suggested that there are potential differences in the intensity of consumers' reactions to "Possession Value" and "Value in Use." There are indications that "Possession Value" may have a stronger effect on outcomes.

The significance of "Possession Value" may be derived from the strong influence personal values have on this concept. Often, an object's importance is related directly to a desired end state of enduring personal values, (e.g. security, sense of belonging), a particular role (mother, husband) or organization (family). Myers (1985) noted that there is considerable variation in the intensity of emotion attached to a product and in the level of importance that an individual places on product as it relates to personal development and experience. Those products that consumers consider to be highly involving are likely to illicit stronger responses in terms of preference and reaction intensity (especially during a break down) since these products reflect more strongly on the consumer (Sorensen and Strahle 1990). Therefore, while a product may elicit "Value in Use" and "Possession Value," research indicates that a product on which a consumer is making strong "Possession Value" judgments may have a greater impact on subsequent outcomes and behaviors

than "Value in Use" since "Possession Value" is directly associated with a consumer' sense of self (Belk 1988; Schouten 1991).

All of the research related to "Possession Value" and self image has been conducted on consumers (or end users). The effect of Possession Value in organizational buying situations is unknown. One might propose however, that if a Possession Value judgment was formed in an industrial setting, it too would have a strong impact on overall judgments and behaviors. As a result, the following is suggested:

P22. When "Possession Value" judgments are made in a use situation, they are likely to have a greater influence on outcome variables than "Value in Use" judgments.

Additional Issues Related to Overall Valuation Processes

Earlier discussion of valuation processes focused on the formation of individual value judgments and how those judgments combined to depict an overall valuation process that affects behavior. Implicit in valuation processes is the idea that valuation processes motivate consumer behaviors and that consumers are engaging in information processing activities to assess products. Are the proposed relationships between value types consistent with existing motivation and information processing theory? The propositions included in this chapter are compatible with a number of theories of motivation and information processing.

Motivation Theories and Valuation Processing

Earlier sections of this dissertation reported research that supported the notion that personal values motivate behavior (Feather 1982; Rokeach 1973). For this study it was important to understand how personal values interact with product benefits to affect behavior. This phenomenon is explained by the broad category of expectancy value theories that includes the influence of means end processing and goal attainment.

Van Raaij and Wandwossen (1978) provide a review of various motivational theories as they relate to consumer behavior. These authors suggest that motives are in fact beliefs related to means end processing. Products are assessed relative to their contribution to the realization of goals. Means End theory has been used throughout this research to help define values and as a basis for depicting the relationships between values. "Goals" in this research have been defined as person related values, with expectancy value theory and Means End Chain theory (discussed at length earlier in this chapter) explaining how product benefits are tied to the attainment of person related values.

Additional support for the conceptualization of proposed valuation processes is found in Locke's (1967) position on the motivational effects of goals. Locke suggested that satisfaction with task outcomes was determined by what people wanted or valued. In this study, satisfaction is also tied

with affect associated with several types of value.

Van Raaij and Wandwossen (1978) report that means end processing is manifested in the satisfaction of functional, aesthetic-emotional, social, situational and curiosity motives. Functional motives are related to Product Value and Value in Use. Aesthetic-emotional motives are associated with Value in Use, whereas social motives are affiliated with possession value. Value in Use and Possession Value relate to situational motives. Curiosity motives are tangentially related to a subset of personal related values.

Van Raaij and Wandwossen (1978) acknowledge that "motivational models are especially useful for the generic choice (among product classes) and are less useful for the specific choice (within product classes). For the latter case, multi-attribute attitude and preference models may hold better predictions for brand choice within the product class" (p. 593). Since this research focuses on postpurchase use evaluations, the level of analysis is at the brand level. Therefore, it is appropriate that the basis for depicting processes has been multi-attribute attitude models.

Information Processing Theory and Valuation Processes

Fishbein and Ajzen (1975) postulate that many expectancy value theories are based in information processing. "A person is viewed as processing the information he has about an object in arriving at his evaluation of the object" (p.222). Bagozzi

(1982) concurs and concludes that "expectancy-value models are designed to represent how people actually integrate multiple pieces of information to arrive at an overall judgment" (p. 563). Therefore, attitude formation relies on an information integration process with beliefs being the unit of information assessed.

The process depicted by many Expectancy Value models is assumed to be compensatory (Ryan and Bonfield 1975). Given the potential for a vast number of attributes on which a consumer must form an evaluation, some have argued that non compensatory strategies serve to reduce information complexity (Bettman 1979; Ryan and Bonfield 1975; Wright 1975) and therefore better reflect actual information processing related to choice decisions. An argument has been made for using compensatory processing to depict the formation of individual value judgments. Many of those same arguments hold for assuming compensatory processing also occurs across all value judgments in the depiction of general valuation processes.

The issue as to whether valuation processes are compensatory or non compensatory is difficult to determine a priori since there is no evidence that choice information processing is the same as postpurchase evaluation processing. However, given some of the conditions under which compensatory vs non compensatory processing is more likely, a supposition as to which is more appropriate for postpurchase valuation can be made.

Generally, noncompensatory processing occurs in comparing brands across attributes (Lilien, Kotler and Moorthy 1992), while compensatory processing occurs for evaluation at the brand level. It is assumed that postpurchase evaluation is more likely to occur at the brand level, since the actual product choice has been made. Bettman (1979) suggests simplifying heuristics (noncompensatory) are more likely when there are a large number of alternatives under consideration and when many attributes are being assessed. Again, in post use evaluation, the number of alternatives under consideration is one - that which was purchased. Similarly, after product use, a consumer may have a much better idea as to what the most important characteristics of the product are on which evaluation is based. In other words, important evaluative characteristics are distinct and consolidated in the consumers mind. Therefore, there is likely to be a reduced set of attributes on which judgments are being made and these attributes are the most salient. Fishbein and Ajzen (1975) suggest that while the general compensatory expectancy value model "is applicable to any set of beliefs, whether they are salient or nonsalient...a person's salient beliefs *determine* his attitude" (p. 222). Because this study assumes that in post use judgments 1) evaluation is likely to be at the brand level, 2) a limited number of alternatives are being considered and 3) that there are a manageable number of salient attributes, compensatory processing will not overload

the consumer, and is therefore appropriate for the processes being examined in this study.

Summary of Valuation Processes and Outcomes

A review of the value literature indicates that multi-attribute attitude models suggest how individual value judgments are formed. Fishbein's Extended Model (1967) provides general insight into how overall product valuation processes develop and Means End theory addresses integration and linkages between value considerations (attributes, consequences and person related values). A number of issues related to valuation processes emerged that highlight gaps in existing knowledge. First, there is no specific indication of how each of the seven identified value types might be integrated to form a valuation process. Second, the nature of causality between value types is unclear. Third, current process literature does not address how value conflict is resolved. Fourth, differential weighting effects of value types on valuation process is not well understood. Fifth, current research on valuation tends to focus on behavior and attitude in general while ignoring other potentially significant specific behaviors that affect the exchange between customer and firm (e.g., Word of Mouth activity, commitment to product use, (dis)satisfaction, etc.). Finally, much of the theory cited in this review (the exception being satisfaction research) has focused on preferences and

evaluations of products related to **choice** decisions and strategies. As a result, there are innumerable opportunities to enrich knowledge of postpurchase processes. Each of these issues initiated a number of research propositions that serve to meet the objectives of this dissertation.

Table 3-1 provides a summary of the theories used to build the relationships between value types. As the propositions suggest, the current study contributes to existing models by proposing that the value types are linked in the following manner:

$$B \approx I = f(w_1 OV + w_2 SS + w_3 CS) = f(w_4 PoV + w_5 VIU) = f(w_6 PV + w_7 Person) \quad (3.6)$$

Where:

$B \approx I$	indicates that actual behavior (B) is approximated by behavioral intentions (I).
$I = f\ (w_1OV + w_2SS + w_3CS)$	indicates that intentions (I) are a function of Overall Value (OV) and Self (Dis)Satisfaction (SS) and Consequence (Dis)Satisfaction (CS).
$(w_1OV + w_2SS + w_3CS) = f\ (w_4PoV + w_5VIU)$	indicates that OV, SS and CS are a function of Possession Value (PoV) and value in Use (VIU).
$(w_4PoV + w_5VIU) = f\ (w_6PV + w_7Person)$	indicates that PoV and VIU are function of Product Value (PV) and person related values (Person).
$w_1 \ldots w_7$	indicates weightings associated with each variable.

Table 3-1: Summary of Theories Used to Build Valuation Processes

	THEORY					
	MultiAttribute Attitude	Fishbein's Extended Model	Means End	Information Processing	Motivation	Disconfirmation
Valuation Process						
Individual Value Judgment	X					
Overall Valuation Process						
Values/ Value Relationship			X			
Ordering/ Causality of Value Types		X	X		X	
Value(s) Relationship To Behavior	X	X			X	
Situational Effects on Values/ Value	X	X	X			X
Combining Reactions Across Value Types	X	X		X		
Choice vs Post Purchase Evaluations	X	X				X
Conflict Resolution	X	X				

SUMMARY OF LITERATURE REVIEW CHAPTERS

The two literature review chapters have provided an examination of literature related to value concepts and valuation processes. Chapter 2 reviewed literature related to the meaning of value. The chapter provided justification for several definitions of value judgments and reviewed existing research on person related values.

Chapter 3 examined literature relevant to the development of valuation processes. Existing research laid the foundation for 1) understanding the formation of individual value judgments and 2) identifying the exact nature of the relationships between value types.

In each literature review chapter several gaps and shortcomings have been identified that provide opportunities for future research. Propositions were developed with the intention of reducing these gaps and minimizing shortcomings. In the next section of this chapter, a model and conceptual definitions are presented to further enhance understanding of value meanings and valuation processes.

THE VALUE INTEGRATION MODEL

The remainder of this chapter focuses on the introduction and development of the proposed Value Integration Model (VIM) (see Figure 3-1). This model builds on the foundation provided by the value concept and processes literature. However, it expands on existing research by integrating

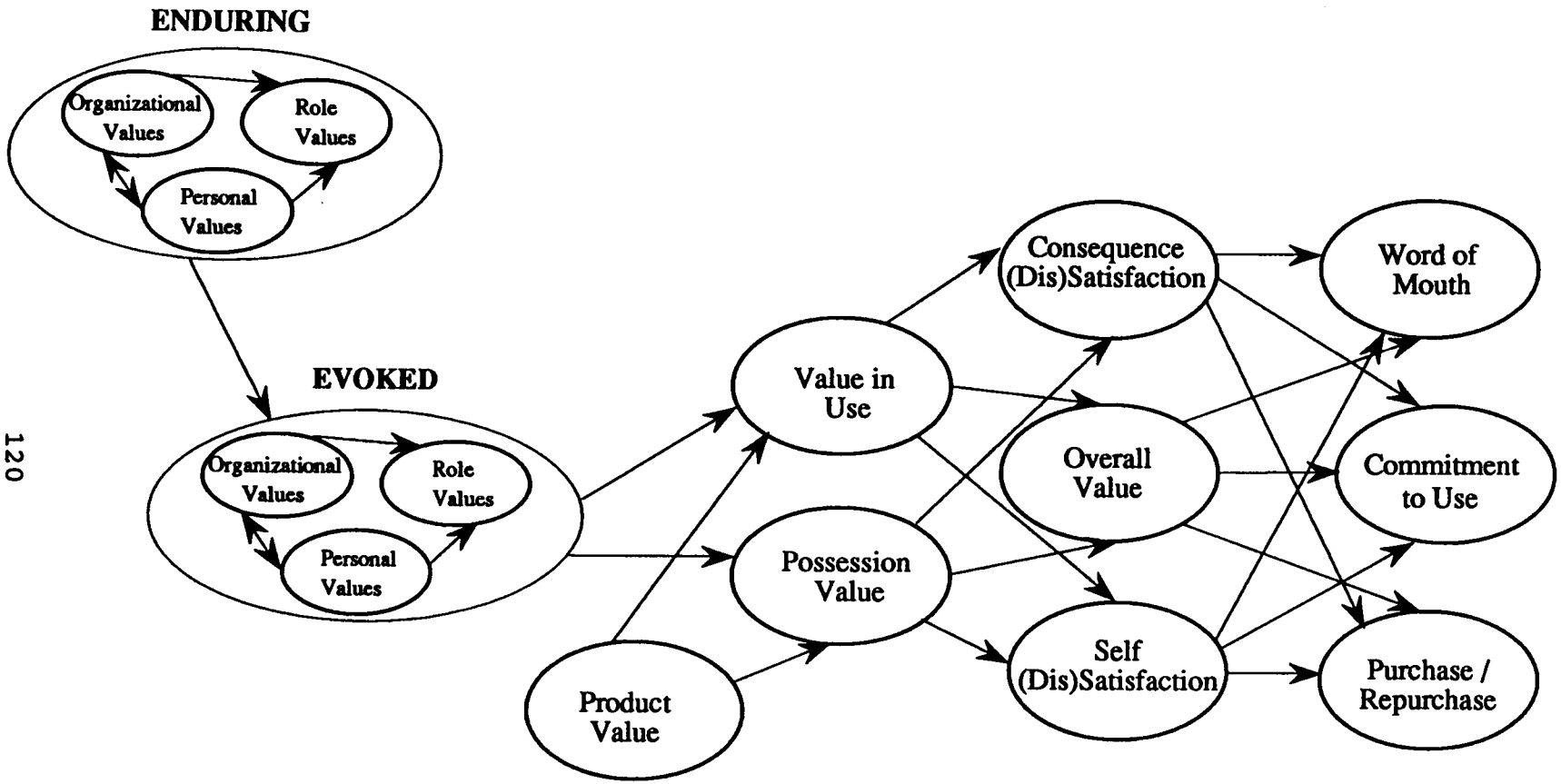


Figure 3-1: Value Integration Model (VIM)

various meanings of value to reflect processes that impact important consumer behaviors.

Conceptual Definitions and Model Construction

The previous literature review highlights the gaps in existing knowledge and identifies opportunities for expanding the base of knowledge related to what consumers value and how consumer valuation processes occur. It is clear that two major deficiencies in current research exist. First, conceptual development of value related constructs is fragmented. There is a need to develop clear, concise and distinct definitions of value concepts from across the literature. Improving value definitions will facilitate the development of reliable value measures.

The second gap in research stems from the lack of integration and organization of the various value types that can be used for understanding consumer valuation processes. This gap provides an opportunity to create a model that identifies and explores the relationships between "value(s)" to reflect valuation process.

Value Concepts

The Value Integration Model, as it is currently conceptualized, includes 1) the person related values (personal, organizational and role) in both enduring and evoked contexts, 2) six "value" variables (Product Value,

Value in Use, Possession Value, Overall Value and the two satisfaction variables) and 3) three behavioral variables. The "Overall Value" variable and the two satisfaction variables are considered general affective outcomes of the valuation process. The behavioral variables represent a selected subset of all possible consumer behaviors that might be affected by the proposed valuation process. Each of the model's constructs is now defined and briefly explained:

Personal Values are beliefs held by an individual about desirable end states and/ or proper behaviors that are hierarchically organized by relative importance.

Organizational Values are beliefs about desirable end states or appropriate behaviors held by a collective group and are hierarchically organized by relative importance.

Role Values are beliefs about proper behavior or desirable end states for a person occupying a given position in a collective group and are hierarchically organized by relative importance.

It is expected that the value structure of an individual (the hierarchical organization of values by relative importance) may be reordered in a given use situation (Gutman 1990; Rokeach 1973). Thus, an individual may have a relatively stable and enduring value structure that guides his/ her behaviors or evaluations in general. However, in a given situation, some values with a high degree of enduring importance may not be relevant and those lower in the enduring value hierarchy may take on situational importance. Thus, there are a set of enduring person related values that may be temporarily reordered in a set of evoked person related values.

Examining the relationships between the enduring value structure and situationally evoked values will contribute to understanding the impact values have on subsequent valuation process. This processing results in several possible judgments, each of which is defined.

Product Value is a consumer's evaluation of product worth, independent of use, based on assessment of quality/ cost tradeoffs.

Possession Value is a consumer's evaluation of a product's potential or realized ability in a given situation to reflect or project a consumer's self image in either an enhancing or detracting capacity.

Value in Use is a consumer's evaluation of a product's potential or realized ability to serve some functional purpose in the context of a situation.

Overall Value is the weighted combination of "Possession Value" and "Value in Use."

Self (Dis)Satisfaction is the combined evaluative and emotional reaction to self as a result of engaging in the use experience.

Consequence (Dis)Satisfaction is the combined evaluative and emotional reaction to any aspect of the product experience.

It is clear from these conceptual definitions that several variables have a number of shared elements as well as some important differences. As a result of their similarities, some amount of correlation between them is likely. However, one of the contributions of this research is the development of meanings and measures that will separate, organize, and clarify the dimensions underlying value related concepts to facilitate subsequent research in this area.

The model also suggests that the proposed valuation

process will impact selected consumer behaviors. In this study, three types of behavioral intentions (likelihood of purchase/repeat purchase, Word of Mouth recommendations, and Commitment to Use) will be used as surrogates for actual behaviors. Behavioral intentions have been shown to be reasonably good indicators of actual behaviors (Fishbein and Ajzen 1975; Sheppard, Hartwick and Warshaw 1988). These specific behaviors were chosen as being representative of many of the possible behaviors in which consumers engage. In addition, these behaviors are particularly relevant for practitioners. Each is briefly discussed.

Behavioral Intention Concepts

Purchase/ Repurchase

This variable is defined as 1) the likelihood that a seller's offering will be chosen by the consumer in a subsequent choice opportunity or 2) the likelihood of a repeat purchase after use. Both first time product user and experienced users are affected by valuation processing. Obviously, one of the primary goals of a provider is to entice consumers to use his/ her product. However, the importance of building a loyal customer base is increasingly being recognized. "Companies can boost profits by almost 100% by retaining just 5% more of their customers" (Reichheld and Sasser 1990, p. 105). The impact of valuation processes on

new and existing customers is therefore reflected in the model.

Word of Mouth Activity

In this study, Word of Mouth (WOM) activity is defined as private, informal actions taken by consumers in which recommendations are made to others regarding a product or service (Singh 1988; Westbrook 1987). WOM intentions have been shown to be statistically significantly related to behavior (Singh 1988) and can result from either positive or negative use experiences (Westbrook 1987). Besides the potential damaging effects of losing a customer through poor performance, WOM complaining activities can have devastating effects on sales of a company's product. Consider the following:

- 96 percent of unhappy customers never complain about rude or discourteous treatment, but
- 90 percent or more who are dissatisfied with the service they receive will not buy again or come back. Worse still,
- Each of those unhappy customers will tell his or her story to at least nine other people, and
- 13 percent of those unhappy former customers will tell their stories to more than twenty people. (Desatnick 1988, p. 4)

Commitment to Use

This variable captures 1) the likelihood of increasing/ decreasing use of the product, or 2) increasing/ decreasing use of related products. As such, it reflects tangential actions related to the use experience. For example, McQuarrie and Langmeyer (1985) examined subjects' "intentions to maintain or increase involvement with computers" (p. 245) by

asking about likelihood of learning more about computers, learning new applications, joining a group of individuals involved with computers, etc. Differences in future intentions regarding related purchases (software or hardware) were determined to exist depending upon level of commitment to use. In short, this variable encompasses the potential increase/ decrease in involvement with the product and/ or use situation. This variable may have implications for identifying additional market opportunities for practitioners.

Valuation Processes

In addition to presenting several distinct value related concepts, the VIM depicts relationships between variables that describe consumer valuation processes. These relationships and the resultant process integrate multiattribute attitude theory and Means End Chain theories to explain how consumers might arrive at positive and/ or negative judgments concerning their experience with products in use situations.

The VIM proposes that consumer valuation can be understood by addressing the links that consumers make between product attributes, consequences and values (as desired end states). The model explicitly recognizes the differential impact of those person related variables that are important as guiding principles in life, transcending situation (enduring personal values), and those person

related values that achieve situational importance depending upon the product use context (evoked personal values).

In addition, the model depicts the assessment of sellers' product and service offerings, based on quality/ cost tradeoffs and independent of a particular purpose, resulting in "Product Value" judgments. Features built into the product/ service are expected to help consumers achieve, organizational, role and/ or personal values through means end processing. The interaction of Product Value and person related values results in perceptions of Possession Value and/ or Value in Use. Possession Value and Value in Use combine to determine the outcome variables of Overall Value, Self Satisfaction and Consequence Satisfaction. These outcome variables, in turn, influence subsequent consumer behaviors.

However, the causal relationships between value and satisfaction is not always clear in consumers' minds according to The University of Tennessee Value and Satisfaction Team interviews with health club members. For example, when asked about the relationship between satisfaction and value, one respondent replied:

> "I'd say they're comparable." (Study 2, Subject 12, p. 51)

Another subject indicated that the two were "not necessarily" related (Study 2, Subject 20, p. 51).

Therefore, while the VIM recognizes that these different satisfaction types exist and are related to Overall Value, no attempt is made to depict causality. Until subsequent

exploratory and empirical study provides insight into the relationships between these outcome variables, Overall Value, Self Satisfaction and Consequence Satisfaction are currently shown as unrelated concepts.

Summary of the Value Integration Model

Existing literature provided insights into how different types of value might be related to portray valuation processes of interest to academicians and practitioners. The model clearly indicates that consumers make judgments on several levels of product features. Benefits received incorporate the impact of use situation and result in general affective outcomes that lead to behaviors.

The value types and the valuation process depicted by the model have a number of important implications. For academicians, the model 1) ties together a number of diverse theoretical areas related to attitude, 2) acknowledges valuation is a multi faceted processes, and 3) suggests a relationship between valuation and satisfaction as distinct valuation outcomes.

For practitioners, the model provides insight into a number of areas that affect businesses' abilities to meet consumer needs. First, the model suggests that practitioners must recognize that their products are being evaluated on several levels. Second, the consequences or benefits occurring during use have a potentially stronger impact on

overall evaluation than product attribute assessments across situations. Third, the complexity of evaluations can occur at several occasions in the consumption process: choice, use, post use activities.

The implications of the model raise a number of interesting research questions. The methodology to test the viability of the model and to answer some of the more intriguing research questions is found in the next chapter.

CHAPTER 4

RESEARCH METHODOLOGY

INTRODUCTION

The purpose of this chapter is to present the methodology for studying the value constructs and valuation processes presented in the previous chapters. After a brief review of conceptual definitions and model development, the remainder of the chapter is organized around the overall methodology plan depicted in Figure 4-1.

CONCEPTUAL DEFINITIONS AND MODEL DEVELOPMENT

The previous chapters defined and critically evaluated the various types of value(s) to be examined in this study and, through the development of the Value Integration Model (VIM), described how those value types are related to each other and to relevant outcomes and behaviors. While the (VIM) provides a comprehensive conceptual basis for understanding value and valuation processes, testing the entire model is beyond the scope of this dissertation. Because of its complexity and the lack of accepted measurement approaches for most of the variables, it was not feasible to deal with all conceptual and measurement issues in one study. Rather, this study can be viewed as one step towards an eventual test of the complete model. Current effort was

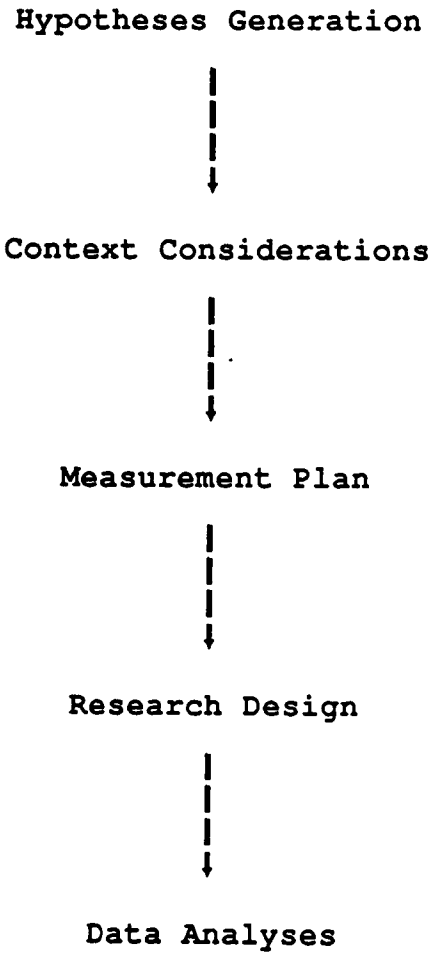


Figure 4-1: Overall Methodology Plan

devoted to creating reliable and valid measures of the core value concepts comprising valuation. Thus, a methodology plan has been developed to test only selected parts of the model.

Figure 4-2 presents those constructs and relationships within the VIM that were examined as a part of this research. The entire person-related value constellation (Personal Values, Organizational Values and Role Values) was reduced for this study. The "Personal Values" construct was selected to represent the impact of person related values on subsequent valuation processes. Of critical concern to this research was the nature of the relationship between enduring and evoked values. To capture that relationship, a new construct was created: Personal Values Congruency. This construct was designed to reflect the similarity in importance ratings for values as guiding principles in life (Enduring Personal Values) to those values that take on situational importance (Evoked Personal Values). The more similar or congruent the profile of enduring values is to evoked values, the more important the use situation is to the individual. Thus,

> Personal Values Congruency is the similarity of the Enduring Personal Value profile to the Evoked Personal Values profile. This similarity reflects the relative importance of the use situation to the individual.

Therefore, after simplifying the person related values constellation, this research focused on testing a reduced VIM. The study examined 1) the influence of Personal Values Congruency and Product Value on Value in Use and Possession Value; 2) Value in Use and Possession Value linkages to

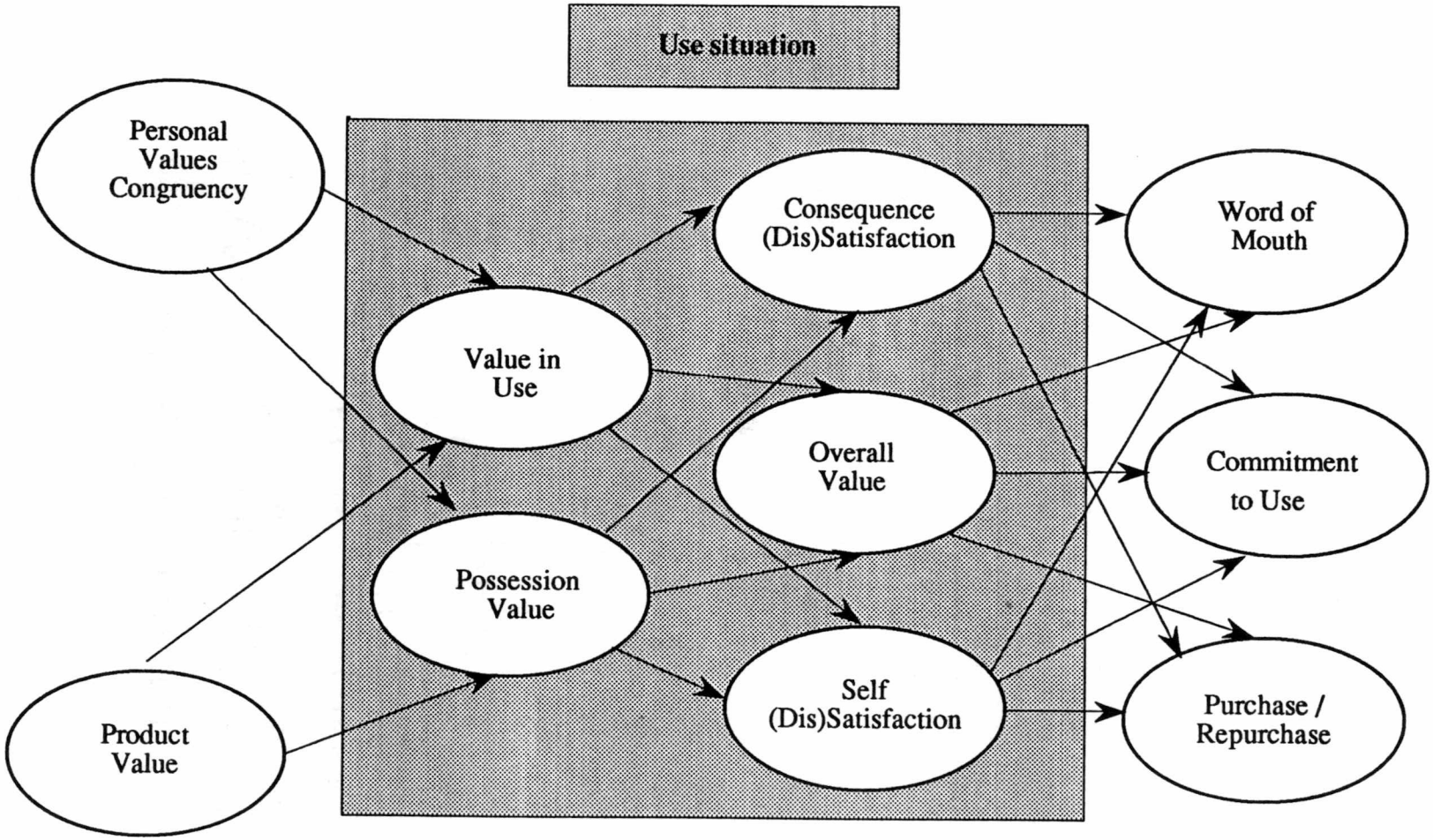


Figure 4-2
Modified VIM to be Tested

general reactions to the product experience in a use situation (Overall Value, Self (Dis)Satisfaction, Consequence (Dis)Satisfaction) and 3) the impact of these outcome variables on specific consumer behavioral intentions related to Purchase/ Repurchase, Word of Mouth actions and Commitment to Use.

GENERATION OF RESEARCH HYPOTHESES

A review of the literature and preliminary exploratory studies led to the identification of two broad research areas: value meanings and valuation process. Therefore, specific hypotheses were designed to investigate each of these areas.

Value Meanings Hypothesis

The first research topic addresses the distinctiveness of the meanings of the model's variables. That is, each construct involves a type of value judgment. Appraisal can be directed at the product, the product experience, or the importance of a particular personal value in the use situation. As a result, the following hypothesis is proposed:

H1. There are seven distinct types of judgments that relate to consumers' intentions to Purchase/Repurchase, engage in WOM activity, and Commitment to Use:
- **Personal Values Congruency**
- **Product Value**
- **Value in Use**
- **Possession Value**
- **Overall Value**
- **Self (Dis) Satisfaction**
- **Consequence (Dis)Satisfaction**

Valuation Process Hypotheses

A second group of research questions suggested by the VIM is centered around the connections between constructs. Therefore, individual hypotheses were developed to test the various relationships modeled between value types. Each is briefly explained.

There is potential for highly rated enduring personal values (general guiding principles of life) to be less salient in a particular use situation. As a result, in a given situation the relative importance of personal values may temporarily change. The variable "Personal Values Congruency" captures the relationship between Evoked and Enduring Values' importance ratings and is expected to influence other variables in the model. Acknowledging that Personal Values are motivators resulted in Hypothesis 2.

H2. The magnitude of Value in Use and Possession Value will directly vary with Personal Value Congruency.

It should be noted that the proposed relationships between Personal Values Congruency and other variables in the model is expected to be negative. A strong similarity between Enduring and Evoked Personal Values reflects the fact that the consumer has placed considerable importance on the use situation. This importance is likely to translate into higher evaluations, all else being equal. Therefore, the smaller the differences between the Enduring and Evoked Personal Values profiles, the higher the expected evaluation.

Three additional hypothesis reflect relationships that address the Attribute - Consequences - Value linkages for means-end processing.

H3. The magnitude of Value in Use and Possession Value will directly vary with the magnitude of Product Value.

H4. Possession Value and Value in Use will be positively related to Overall Value, Self (Dis)Satisfaction, Consequence (Dis)Satisfaction.

H5. Overall Value, Self (Dis)Satisfaction, Consequence (Dis)Satisfaction will be positively related to Purchase/ Repurchase, WOM and Commitment to Use.

The remaining four hypotheses address differences in the weightings of the paths between the model's variables. It is expected that any judgment that has strong emphasis on self or self image (Personal Values Congruency, Possession Value) will have a differential impact on outcome variables that focus on the individual (Self Satisfaction) than on those valuations that are driven by product functionality (Product Value and Value in Use). Product Value and Value in Use will be more closely associated with outcomes that are more indicative of the entire product experience (Overall Value and Consequence (Dis)Satisfaction).

H6. The strength of the relationship between Personal Value Congruency and Possession Value will be greater than the relationship between Product Value and Possession Value.

H7. The strength of relationship between Product Value and Value in Use will be greater than the relationship between Personal Values Congruency and and Value in Use.

H8. The strength of the relationship between Value in Use and Consequence (Dis)Satisfaction will be greater than the relationship between Possession Value and Consequence (Dis)Satisfaction.

H9. The strength of the relationship between Value in Use and Overall Value will be greater than the relationship between Possession Value and Overall Value.

H10. The strength of the relationship between Possession Value and Self (Dis)Satisfaction will be greater than the relationship Value in Use and Self (Dis)Satisfaction.

Originally, this research included another hypothesis related to linkages between variables. That hypothesis became meaningless when final context decisions were made.

CONTEXT CONSIDERATIONS

Given the hypothesized impact of situational effects on valuation, specific measures of constructs could not be developed until a decision regarding a context in which to test the model was made. Some of the considerations regarding context selection are briefly reviewed.

The VIM is likely to be applicable to a variety of product use situations. For this study, a consumer product context was chosen as the basis for studying value concepts. Once the decision to use consumers was made, several criteria related to the use situation had to be met. First, the use situation had to have the potential for all types of value meanings to have an impact on evaluation. Second, individual differences in the similarity of enduring and evoked personal

had to possible (i.e., some respondents would find the situation closely tied to personal values and others would not). Third, to reduce potential response bias, socially sensitive judgments regarding Possession Value (e. g., "only snobs use that product") had to be minimized. It was also desirable to use a context where strong Possession Value and Value in Use judgments were likely. In short, these criteria indicated that a high involvement situation was necessary.

Several possibilities were identified and evaluated against these criteria. A proposal was submitted to a national company that produces furniture. That company was interested in learning more about its end users and agreed to fund the project.

Eight depth interviews were then conducted to provide insight into consumers' furniture use and evaluation. The interviews served two purposes. First, the interviews helped define a specific situation related to furniture use. The contribution of the interviews to specific context selection is discussed in this section. Second, the interviews were used to identify what it was that consumers value. This second contribution of the depth interviews is related to the measurement plan that is presented in the next section of the chapter.

The subjects who participated in the depth interviews were a convenience sample of individuals who met a single criterion: they indicated that they would be willing to spend

at least $750 on a sofa. This criterion was established because the sponsor requested that research subjects be in the same potential set of end users that the sponsor targets. Interviews were one to two hours in length. Appendix 1 provides a list of the general questions used.

The depth interviews were essential in determining the specific use context in which to study the VIM. The first few subjects were asked about several types of furniture in several use situations. From the variety of responses to general questions about furniture and its use, it became clear that greater specificity in type of furniture and use was necessary. For example, discussion about living room furniture vs bedroom furniture vs dining room furniture elicited very different responses. Subsequent interviews were used to identify and explore an appropriate type of furniture in an appropriate use situation. The last few interviews focused specifically on consumer reactions to one type of furniture (dining room) in one type of use situation (entertaining guests). This was the context selected for testing the research hypotheses.

MEASUREMENT PLAN

The overall measurement plan followed procedures recommended by Churchill (1979) and updated by Gerbing and Anderson (1988). Generally, each construct was defined as the result of the literature review and as a result of exploratory

work conducted by the Value and Satisfaction Research Team at The University of Tennessee. Items to measure constructs were initially generated from the depth interviews, analysis of transcripts from the sponsor's focus groups and the literature review. Focus groups and personal interviews helped purify measures. Pretests were conducted to evaluate and modify questionnaire design. Figure 4-3 provides a detailed flowchart of the activities involved in the development of the final questionnaire (Appendix 2).

The literature reviewed in Chapter 2 suggested that there is a distinction between values (desired end states held by people) and value (evaluative judgments formed by people). Values are represented by Personal Values Congruency, while value includes Product Value, Value in Use, Possession Value, Consequence (Dis)Satisfaction, Overall Value and Self (Dis) Satisfaction. The development of measurements for values vs value was distinctly different. Each is therefore discussed separately.

Personal Values Congruency

The measure of Evoked Personal Value Importance relied upon two existing measures: the Rokeach Value Survey and the "D" Statistic.

Rokeach Value Survey

The Rokeach Value Survey (RVS) is widely used as a

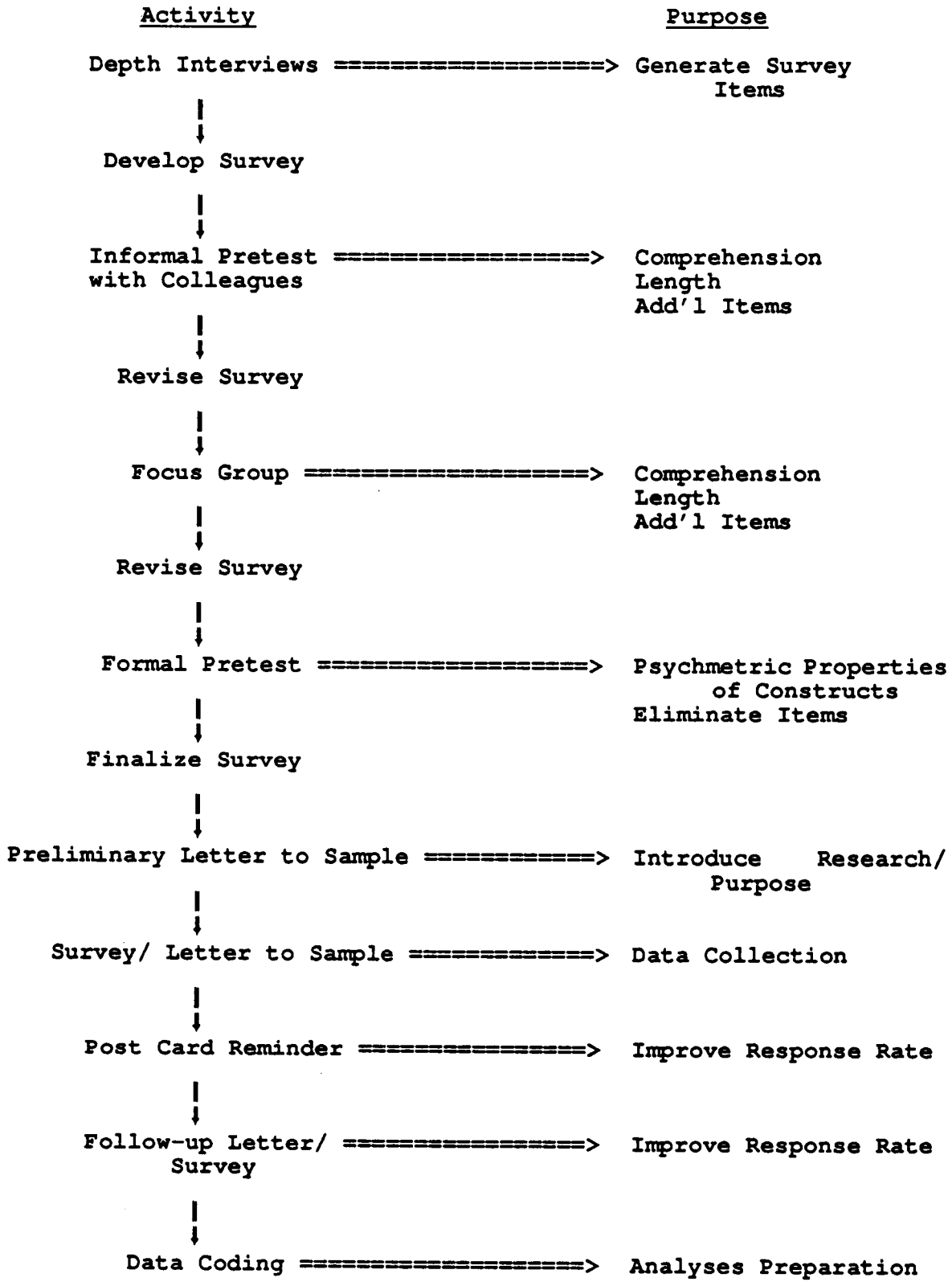


Figure 4-3: Final Questionnaire Activities Flowchart

measure of personal values (Munson 1984; Rankin and Grube 1980). Several marketing researchers have administered the scale to relate personal values to consumer behavior (for example, McQuarrie and Langmeyer 1985; Pitts and Woodside 1984; Prakash 1984; Prakash and Munson 1985) This instrument has been tested thoroughly and found to have met criteria for reliability and validity (Rokeach 1973). The RVS was therefore used in this study as a basis to develop the Personal Values Congruency construct.

Although the RVS was selected for use in this study, some suggest that the survey has limitations that bear closer examination. First, it has been argued that Rokeach's list of eighteen terminal and eighteen instrumental values is not comprehensive (Clawson and Vinson 1977). Rokeach's values were distilled from much larger lists obtained from a number of sources (literature from across cultures, students, other individuals, etc.). Several hundred value terms were examined and reduced to eighteen terminal and eighteen instrumental values based on such criteria as eliminating synonyms, eliminating values that were not cross cultural, eliminating values that were too specific, including those that were minimally intercorrelated, etc. Eighteen terms of each type (end state or mode of behavior) were selected. It was determined that these eighteen included most of the important values without sacrificing a subject's ability to reasonably rank order the set of values. Thus, while there are likely to

be other values held by individuals, Rokeach's thirty-six capture a significant number of global values while not taxing respondents' capabilities of providing meaningful responses.

Two additional issues emerged from the literature that need to be addressed regarding Rokeach's survey. The first involves an assessment of an alternative measure of personal values (List of Values, Kahle 1983). The second issue concerns procedures related to the administration of the RVS: the ranking vs rating debate.

List of Values

Kahle (1983) presents an alternate measure of personal values - the List of Values (LOV). The values included in LOV were taken from the "Rokeach's list of eighteen terminal values, Maslow's hierarchy of values and various other contemporaries in value research" (Kahle and Kennedy 1988, p. 50). The LOV was developed as a potential improvement on the RVS because 1) it includes values that are more relevant to people's day to day lives, 2) it is shorter to administer since it includes only nine items, and 3) it is based on interval rating scales so that it is more conducive to parametric statistical analysis. Each of these points is addressed.

First, while the LOV has been shown to be more relevant to people's daily lives, it is not overwhelmingly so (Beatty, Kahle, Homer and Misra 1985). In addition, it is not the

purpose of this research to focus on day-to-day values. Rather, the objective of this research is to assess the impact of the more enduring values that are guiding principles in people' lives and how the importance of those values may be reordered in a given situation. Second, while the instrument contains fewer items, it is likely that nine items do not reflect a complete list of relevant values. In addition, it typically takes a respondent only 10-20 minutes to complete the RVS (Rokeach 1973, p. 30) which is not a prohibitive amount of time. The third criticism of RVS is discussed at length in the next section of this chapter.

Ranking vs Ratings

Rokeach (1973) recommended that a ranking procedure be used when administering the RVS. He determined that the most reliable results were achieved when subjects rank ordered the importance of values using removable gummed labels. Each label contained a value and a phrase that briefly noted the meaning of the value term. This rank ordering procedure has received some criticism from several researchers.

Ranking has proven to be somewhat problematic (Clawson and Vinson 1977; Munson 1984). The information gleaned from this procedure assumes that there are equal differences in levels of importance between values. For example, the psychological difference between the most important item and the second most important item is assumed to be the same as

the difference between the second most important and the third, the third and the fourth, etc. The ranking procedure used in the RVS forces subjects to differentiate level of importance when, in fact, two or more values may be of equal importance. By its nature, the RVS ranking results are ipsative (non-independent within individuals) which limits comparisons across individuals. In short, ranking precludes the use of certain statistical tests that are widely used in the social sciences.

As a result of these limitations, several researchers have investigated the plausibility of rating responses. Munson and McIntyre (1979) determined that rating was "an appropriate replacement for the original procedure of Rokeach" (p. 50). Reynolds and Jolly (1980) disagreed with these findings and concluded from their research that ratings were less reliable than ranking in test-retest procedures.

However, Rankin and Grube (1980) responded to the Reynolds and Jolly concerns by suggesting that ranking is higher than rating on test-retest reliability due to the ipsative nature of the procedure. They further concluded that both procedures had similar construct, convergent and discriminant validity and reliability. These researchers found that rating was a better predictor of attitudes than ranking. Others (Alwin and Krosnick 1985) have found differences in the latent structure of results when comparing the two methods.

A rating procedure has one serious drawback when used to measure values. There is a distinct possibility of end loading on the high end of importance scales. Intuitively, it is understandable that the very nature of values as ideals might promote end loading. While some researchers have found no indication of end loading (Munson and McIntyre 1979), others have taken steps to minimize the possibility of its occurrence including: 1) asymmetrical scales (Braithwaite and Law 1985), 2) expanded 100 point scales (Rankin and Grube 1980), and 3) anchored rating (instructions ask respondents to rate lowest value as 1 and most important as 7, others are rated in between (Munson and McIntyre 1979).

It is evident that either a ranking or rating approach may be appropriate depending on the theoretical objective of the research to be conducted, as long as the limitations associated with each method are acknowledged and understood. Given the objectives of this study, rating procedures were considered to be an acceptable technique for measuring values. Pretests indicated that end loading would not compromise results.

Pretests also indicated, however, a need to reduce the total number of value items. Respondents in pretests suggested that some items were so irrelevant to the use of furniture (e.g., a world at peace, mature love, national security) that respondents wondered if there was some ulterior motive for the survey. Rather than risk compromising

subjects' trust in the researcher, a reduced set of the Rokeach terminal values was used. Those values eliminated were ones that had received lower ratings on the evoked personal value scale. Therefore, a subset of ten Rokeach Value Survey items was used to assess Enduring and Evoked Personal Values with no evidence in pretesting that the goals of this study would be sacrificed. On the survey, subjects were asked to rate on a scale of 1 to 7 how important each of the ten values was as a guiding principle in their lives. Subjects were also asked to rate each of the same values as a guiding principle affecting their use/ evaluation of their dining room furniture. The scores on each value were then compared and summed using the formula for the "D" statistic.

"D" Statistic

The Rokeach Value Survey alone could not reflect Personal Values Congruency. Using a rating procedure with the RVS provided an indication of the magnitude of importance for each type of value. Some mechanism to compare the differences in value importance in general and in the use situation was needed. The "D" statistic provided that mechanism.

The "D" statistic assesses the similarity of two profiles (Cronbach and Gleser 1953) and its use is recommended by Nunnally (1978) in profile analysis. Osgood, Suci and Tannenbaum (1978) acknowledged that the "D" can be used to "index the distance between (and hence similarity among)

concepts as judged by an individual ..." (p. 92) and it is used in that manner in this study.

For each subject, the enduring value rating was compared to the evoked value rating. Differences between ratings were than squared and summed to come up with a single indicator for "Personal Values Congruency." Small "D" values indicated a high degree of congruency between values, while larger "D's" indicate relatively lower value congruence. Given the nature of enduring values and as confirmed by pretest data, enduring values almost always received ratings as being highly important to the individual. Therefore, a small "D" value not only indicated a high degree of value congruency, but it also reflected the fact that situationally evoked values were important. Thus, a small "D" indicates high "Personal Values Congruency."

Value Judgment Measurement

As proposed in the previous chapter, the formation of value judgments is similar to that proposed by multiattribute attitude models and results from a multiplicative process of importance and evaluations summed across product feature dimensions. Several studies have reviewed measurement issues in the use of multi-attribute models (Jaccard, Brinberg and Ackerman 1986; Mazis, Ahtola and Klippel 1975; Wilkie and Pessimer 1973). Guidance from this previous research provided the basis for developing measures of value judgments (Product

Value, Value in Use, Possession Value and Overall Value).

Typically, research in this area addressed at least two components related to products. The first is some general recognition that beliefs about product features must be incorporated in measures. The second concerns the fact that belief importance is also addressed in the measure.

Difficulties in measuring importance (Jaccard et al. 1986; Wilkie and Pessimier 1973) affect the outcome of research. In fact, Jaccard et al. (1986) suggested that no method for measuring importance is superior to another. Wilkie and Pessimier (1973) report that using a rating scale to assess beliefs may confound importance and belief ratings. Given these difficulties, this research makes no attempt to separate beliefs (or evaluations) and importance. Rather, importance will be examined 1) indirectly through analysis of the weightings each construct has on outcomes of interest and 2) through the inclusion of only **salient** beliefs.

Identifying salient beliefs is critical for appropriate levels of understanding and prediction (Mazis et al. 1975). As is common practice in marketing (Wilkie and Pessimier 1973), product features included in this study were chosen from those that were often mentioned by subjects in focus groups and in depth interviews and were therefore considered to be among the most salient for consumers in this use situation.

Due to the specific nature of the product in use, each of

the value judgment constructs required the generation of unique measurement items. A general discussion of the overall development of new measures is now presented, followed by an examination of measures for each of the individual value judgments.

Development of New Measures

The identification of items that the consumer considered to be salient was crucial to the development of good measures. To generate these items, qualitative techniques were used to obtain the desired insights related to subjects' perceptions of value judgments.

Often, qualitative methodologies are used to determine relevant product attributes and consequences. This research sought not only information on attributes and consequences for a particular product context, but was designed to determine 1) the impact of important elements of the use situation and 2) the effect of situationally evoked values on consumer valuation judgments and selected behaviors. As such, the range of relevant items to be identified was quite broad and included both 1) personal, product and use situation dimensions of value and 2) relevant attributes and consequences that were likely to impact the evaluation of the use experience. There are indications in the literature (Reynolds and Gutman 1988; Zeithaml 1988) that qualitative techniques can reveal the multifaceted nature of consumers'

perceptions of value.

In this study, eight depth interviews were the primary vehicle to accomplish this task. Eight depth interviews were conducted to facilitate the development of new measures. The concepts underlying "Laddering" techniques (Reynolds and Gutman 1984, 1988; Reynolds and Jamieson 1985), in conjunction with other probes (e.g., tell me more about that) were used to explore the means end chain concepts identified by Gutman (1982) and Gutman and Alden (1985) as a way of tying personal value to product attributes and consumption consequences.

While laddering techniques often are used to build means end chains, identifying and exploring specific linkages between specific attributes, consequence and values was not the purpose of this particular study. Rather, laddering was utilized to determined relevant attributes and consequences to be included in the measurement items.

As consistency in types of salient attributes and consequences across the eight subjects became evident, specific measurement items were formulated. Feedback regarding these items and the initial survey format was solicited from a "convenience sample" (e.g., friends, colleagues, family) who also had characteristics similar to the target sample. Two focus groups were then used to further assess the appropriateness of items and to ensure that there was no uncertainty regarding the clarity of item meanings. In addition, the depth interviews, informal discussions and focus

groups were used to evaluate the possibility of social desirability effects biasing responses to certain variables (especially Possession Value).

In face to face situations (depth interviews, one on one informal interviews), there were indications that there was slight discomfort on the part of some subjects to talk about products projecting self image. However, projective techniques ("what do you think others think this product says about them?") produced items for questionnaire development and testing. It was not necessary to use projection on any items in the final survey administered to subjects. Once in written form with assurances of confidentiality, there were no indications in pretests that subjects were reluctant to respond to Possession Value items.

The process outlined above was used to develop measures of each of the VIM constructs. The resulting measures are briefly discussed.

Product Value

There are no currently existing measures of Product Value across situations. Therefore, specific items were developed and tested for this study. These items are consistent with the general nature of previous Product Value items in the literature (e.g., Curry 1985; Garvin 1987; Mattsson 1990; Monroe 1979).

Conceptually, Product Value reflects judgments of worth

based on quality/ cost tradeoffs at the attribute level or at lower levels of product consequences. The sponsor provided access to previously conducted focus group transcripts. These transcripts and the depth interviews designed for this study provided a set of quality related attributes/ lower level consequences that were frequently mentioned as important in selection and judgment of dining room furniture. "Price" represented the cost component of the quality/cost ratio. Thus, evaluations of each dimension of quality were asked relative to the price paid for the furniture. Examples of Product Value items included in the survey are: high quality materials, solid construction, durable, fine finish, comfortable, functional, and style that will last.

Value in Use

The literature search did not reveal an existing Value in Use instrument. Therefore, Value in Use items were developed from the depth interviews following the general form of other measures in the literature that address constructs similar to those of interest in this study (e.g., Geistfeld, Sproles and Bradenhop 1977; Holbrook, Lehmann and O'Shaughnessy 1986; Mattsson 1990). The Value in Use items reflect judgments of product worth based on consequence level considerations. Whereas the Product Value items indicate salient characteristics across situation and occasions, Value in Use considerations are consequences of product attributes that are

tied to specific use situations. Therefore, the consequences selected to be included in this survey indicate relevant dimensions of benefits derived from use during the context specified (when entertaining guests). Examples include: creates a feeling of warmth in my home, provides a comfortable setting, fits in with my other furniture, and creates a feeling of beauty.

Possession Value

No existing instrument was found to measure this concept. Possession Value judgments also reside at the consequence level of the means end hierarchy. General insight for measure development of this concept was found in the literature (e.g., Belk 1987; Belk, Mayer and Driscoll 1984; Hirschman and LaBarbera 1990; Prentice 1987; Scott and Lundstrom 1990). For example, Belk, Meyer and Driscoll (1984) asked children to rate the owner of a particular brand/ product on several traits including, friendliness, popularity, happiness, admirability, intelligence, wealth, attractiveness, and innovativeness. Scott and Lundstrom's research (1990) included 1) items relating wealth to happiness and 2) a factor that suggested that people rate other people by the value of their possessions.

In this study qualitative approaches were used to generate items to capture judgments of use based on what the furniture said about the owner. Examples include: indicates

that I have good taste, indicates that I am successful, indicates that I enjoy being around others, indicates that I am sophisticated, and indicates that I enjoy gracious living.

Overall Value

Overall Value reflects a summary judgment of the values in the given use situation. Therefore items were tailored for this specific use context from the depth interviews that paralleled instances in the literature where overall evaluations were assessed. For example, Prentice (1987) asked respondents to indicate overall favorable/ unfavorable reactions towards possessions. Rosenberg (1956) examined overall affect towards behaviors. In general, items previously used in the literature to assess overall reactions were very broad attitudinal measures. This research adopted a similar perspective for Overall Value. In this study, overall evaluations included items such as, my dining room furniture is important to me, I am satisfied with my dining room furniture, and my dining room furniture has good value.

Other Measures

In addition to measures of Personal Values Congruency and the several types of value judgments (Product Value, Value in Use, Possession Value and Overall Value), it was necessary to measure other outcomes and behaviors. Generally these measures were modifications to those found in previous

research.

Self (Dis)Satisfaction/ Consequence (Dis)Satisfaction

Satisfaction has been measured in several different ways (Hausknecht 1990). In this study, satisfaction was viewed as an outcome of an evaluation process based on judgments of how well the product performed (Consequence Satisfaction) and how the product in the use situation made individuals feel about him/herself (Self Satisfaction). Semantic differentials were used 1) because there is support in the literature for their use in measuring these concepts (Hausknecht 1990) and 2) because they represented a format that differed from the rest of the survey, they improved visual and psychological interest in responding.

The cognitive vs emotional nature of satisfaction was considered (Oliver 1980; Westbrook 1987; Westbrook and Oliver 1991). Given research performed by Westbrook and Oliver (1991) several emotion items were used (e.g., happy/ unhappy, contented/ discontented, pleasantly surprised/ unpleasantly surprised), as well as measures that included affective response without emotion intensity (e.g., negative/positive, good/ bad).

Previous research revealed that consumers may use many standards to derive satisfactions outcomes (Woodruff, Clemons, Schumann, Gardial and Burns 1991). In this study respondents were directed to make satisfaction judgments based on what the

individual wanted as the standard.

Behavioral Intentions

Behavioral Intentions scales have been used by a number of investigators (e.g., Bonfield 1974; Lutz 1977). Often bi-polar anchors have been used on seven or nine point scales. Examples include: "Willing/ Unwilling," "Highly likely/ No chance at All," "Will Try/ or Will Not Try," or "Intend/ Not Intend." Numerical anchors of behavioral intentions have also been included in research by requesting respondents to estimate the "chances out of 10" that an event will occur (Bagozzi 1982).

Preliminary examinations of possible measures (focus groups, one on one interviews) suggested that assessing the probability of engaging in an activity on a scale of 0 to 10 captured the behavioral intentions being investigated in this study. The 0 to 10 format put the probabilities in a common frame of reference (ten points often being used in everyday situations calling for probability assessments). In addition, respondents had no difficult in understanding the scale. Therefore, all items were measured on a 0 to 10 basis ("What are the chances...").

The specific behavioral items were generated from depth interviews and with guidance from existing literature in the area. Previous WOM research used indicators such as frequency of discussion with others about product, number of people and

topics involved (Westbrook 1987). These indicators were adapted for use in this study in measures of Word of Mouth intentions.

Preliminary interviews and focus group discussions suggested that dining room furniture is not a product that is typically replaced. Therefore Purchase/ Repurchase measures examined only Repurchase intentions (i.e. "If you had it to do over, would you...), a concept supported by Hunt (1976) as a way to assess (dis) satisfaction.

Commitment to Use intentions presented a different set of challenges. This concept was designed to measure instances were the consumer would increase usage of the product being examined or increase usage/ involvement with related products. Therefore measures were developed to assess increased usage involvement of the product (i.e., what are the chances you will increase your usage of your dining room furniture? What are the chances you will find additional uses for your dining room furniture?) and a different set of indicators designed to measure increased usage/involvement with related products (What are the chances you will buy new flooring for the dining room? What are the chances you will change the wall covering in the dining room?). These items were generated from the depth interviews.

Questionnaire Construction and Refinement

The data for this study was collected through a self-

administered mail survey. The mail survey was considered the best method to obtain data 1) due to the types of questions being asked, 2) as a means to reduce social desirability effects, 3) as a means to reduce costs and personnel requirements, and 4) as an effective way to reach the target sample (Dillman 1978).

Initial Pretests

Once items were identified to measure each of the value constructs, it was necessary to incorporate those items into an acceptable questionnaire format. The questionnaire was constructed in several stages. Initially, <u>all</u> items identified in the focus groups, depth interviews and the literature were included. Various versions of the questionnaire were then pretested 1) informally using a convenience sample of friends, colleagues and family and formally in two focus groups (eight individuals in each group). In all cases, pretest subjects were dining room furniture users. In the second focus group, subjects had a demographic profile that was expected to be similar to those to be included in the final testing. Both the focus groups and informal interviews provided feedback about the appropriateness of survey items, the readability of the survey, how easily the questions/ items were to understand and the length of the survey. The original survey went through several iterations based on the focus groups and the one on

one interviews before a "formal" pretest was administered.

The Formal Pretest

In order to perform preliminary statistical analysis on the reliability and validity of the survey, the survey was administered to 33 individuals who owned dining room furniture that was at or above the sponsor's price point. Descriptive statistics (means, frequencies, standard deviations and distributions) were examined. Preliminary analysis suggested that the data were skewed for several items. While end loading is often a problem in postpurchase evaluations (Peterson and Wilson 1992), it was decided that the final analysis of data would not be compromised by skewness. Correlations between items were examined and some items were eliminated because they were so highly related to others that it appeared they were measuring the same thing. Factor analysis and coefficient alphas were calculated on the reduced set of items associated with each value concepts.

At each step in the pretest process, feedback from respondents indicated that the survey was too long. As a result, the survey was reduced from 230 to 125 items without compromising the objectives of this research. The reduced set of questions met parameters established by Dillman (1978) as being acceptable to achieve reasonable response rates.

RESEARCH DESIGN

Sampling Design

Once the use situation was defined, sample selection considerations were assessed. The sample had to be large enough to support the planned data analysis (250-300 subjects) and reflect a cross section of demographic characteristics (e.g, age, sex, marital status and income level). The sponsor preferred that the characteristics of the sample were similar to those of its own customers. Given funding constraints, a national sample was not feasible. A regional sample provided the necessary geographic variety.

The sponsor was instrumental in providing access to an appropriate set of consumers. Customer lists from three large furniture stores in three different cities in the central United States were obtained (Indianapolis, Nashville and Knoxville). The lists were generated from the stores' customer data bases to include those individuals who had made purchases in the dining room furniture department in the last 12 months and whose purchases were of brands at or above the price point of the sponsor's furniture. Approximately 150 subjects were selected from the Knoxville store, 350 from the Nashville store and 575 from the Indianapolis store. Neither the sponsor nor the retailer was identified as being associated with this research in correspondence with subjects.

Since dining room furniture is a big ticket item,

choosing an appropriate set is likely to be a joint family decision in households of more than one individual. To overcome difficulties in measuring joint decisions, this research targeted the individual in the family who had the most input into the selection process. Both the preliminary letters to respondents and the letters accompanying the survey requested that the questionnaire be completed by the individual who had the most impact on the decision to purchase the furniture.

Survey Administration

Before the survey was mailed to the sample of respondents selected to participate in this research, a preliminary letter was sent that introduced the nature of the research and informed the recipient that they had been chosen to take part in the study. Given the length of the survey and feedback received from the pretests, there was some concern about response rate. The early notification letter was intended to improve response (Kanuk and Berenson 1975).

Following procedures outlined by Dillman (1978) for implementing mail surveys, the survey was sent a few days later. The questionnaire was accompanied by a cover letter, a dollar bill as incentive and a return postage paid envelope. A week after the survey was mailed, a reminder post card was sent. Two weeks after the postcard, a followup letter, survey and postage paid return envelop was mailed to those who had

not responded.

Of the 1024 contacts attempted, responses of some sort were received from 613 subjects. 77 responded but did not complete the survey for a number of reasons (e.g, not interested, no time, no dining room furniture). 536 sent back surveys with some portion completed.

DATA ANALYSIS

After editing and coding the data, analysis began. Data analysis includes data production, descriptive statistics on the sample and variables, model testing and hypothesis analysis.

Data Production

The data was collected over approximately twelve weeks. Surveys were entered into the database if any section of the survey had been completed. The disposition of "missing data" is discussed in the next chapter.

Descriptive Statistics

Descriptive statistics (frequencies, means, standard deviations, correlation matrix, skewness, etc.) of sample and variable characteristics were examined. These statistics 1) helped the researcher become familiar with general characteristics of the data and 2) flagged any potential problems with the distribution and nature of responses.

Unidimensionality tests were conducted. To test the hypotheses, the data was then examined through the analysis of Linear Structural Relationships (LISREL).

Model Testing and Hypothesis Analysis

The values under investigation are latent variables (unobservable) and cannot be measured directly. Therefore, it was necessary to measure them indirectly by assessing their impact on observable variables (in this case, responses to survey questions). Since the primary objective of this research is to measure both concept differences and concept relationships, the Value Integration Model was tested as a Covariance Structure Model through the use of LISREL.

LISREL

Analysis of LISREL models often occurs in a two step process (Bollen 1989; Long 1983). First, the measurement model is examined through confirmatory factor analysis. Subsequently, the structural equation model is tested to determine the nature of variable relationships before the two are merged to create the entire covariance structure model. Thus, developing and testing the measurement model helped determine value concept distinctiveness and measurement validity, while developing and testing the structural equations model assessed the reasonableness of the proposed relationships between the value constructs. In addition, the

flexibility of LISREL facilitated the exploration of additional concepts and measurement issues as well as the respecification of relationships between variables.

The Measurement Model

LISREL uses confirmatory factor analysis, as part of the entire covariance structure model testing, to assess concept distinction and measurement clarity. Multi-item indicators of each latent variable are necessary. Confirmatory factor analysis is acceptable to use if there are "substantially motivated constraints" (Long 1983, p. 12) the researcher can place on which items should load on which factors. In this study, the constraints on factor loading were determined by the literature review and qualitative methods used to generate survey items. "Statistical tests can be performed to determine if the sample data are consistent with the imposed constraints or, in other words, whether the data confirm the substantively generated model. It is in this sense that the model is thought of as confirmatory" (Long 1983 p. 12). Therefore, LISREL uses confirmatory factor analysis to assess the uniqueness of concepts and tests whether the measures used in the survey are acceptable indicators of those constructs.

The Structural Equation Model

By developing a structural equation model, this research tested the viability of proposed relationships between the VIM

variables. At this phase of analysis, the determination of exogenous variables (dependent on variables outside the model) and endogenous variables (dependent on exogenous variables) was made. Causal processes and the hypothesized relationships between the latent variables were then examined.

Covariance Structure Model

The measurement model and the structural equation model were merged into a complete covariance structure model. The complete model overcomes the deficiencies of each of the two previous models. The measurement model "estimates latent variables from observed variables without regard for the structural relations among the latent variables." (Long 1983, p. 55). The structural equation model assesses the relationships between variables but does so by assuming that all of the variables "are measured without error" (Long 1983 p. 56). The covariance structure model, therefore, "overcomes the complementary weaknesses and combines the complementary strengths of the factor analytic and the structural equation model by merging them into a single model that simultaneously estimates latent variables from observed variables and estimates the structural relations among the latent variables" (Long 1983, p. 56). Thus, this combined model addresses the major objectives of this research: to assess value concepts and value process. Figure 4-4 presents the VIM model to be tested with LISREL notation. (To simplify the depiction of

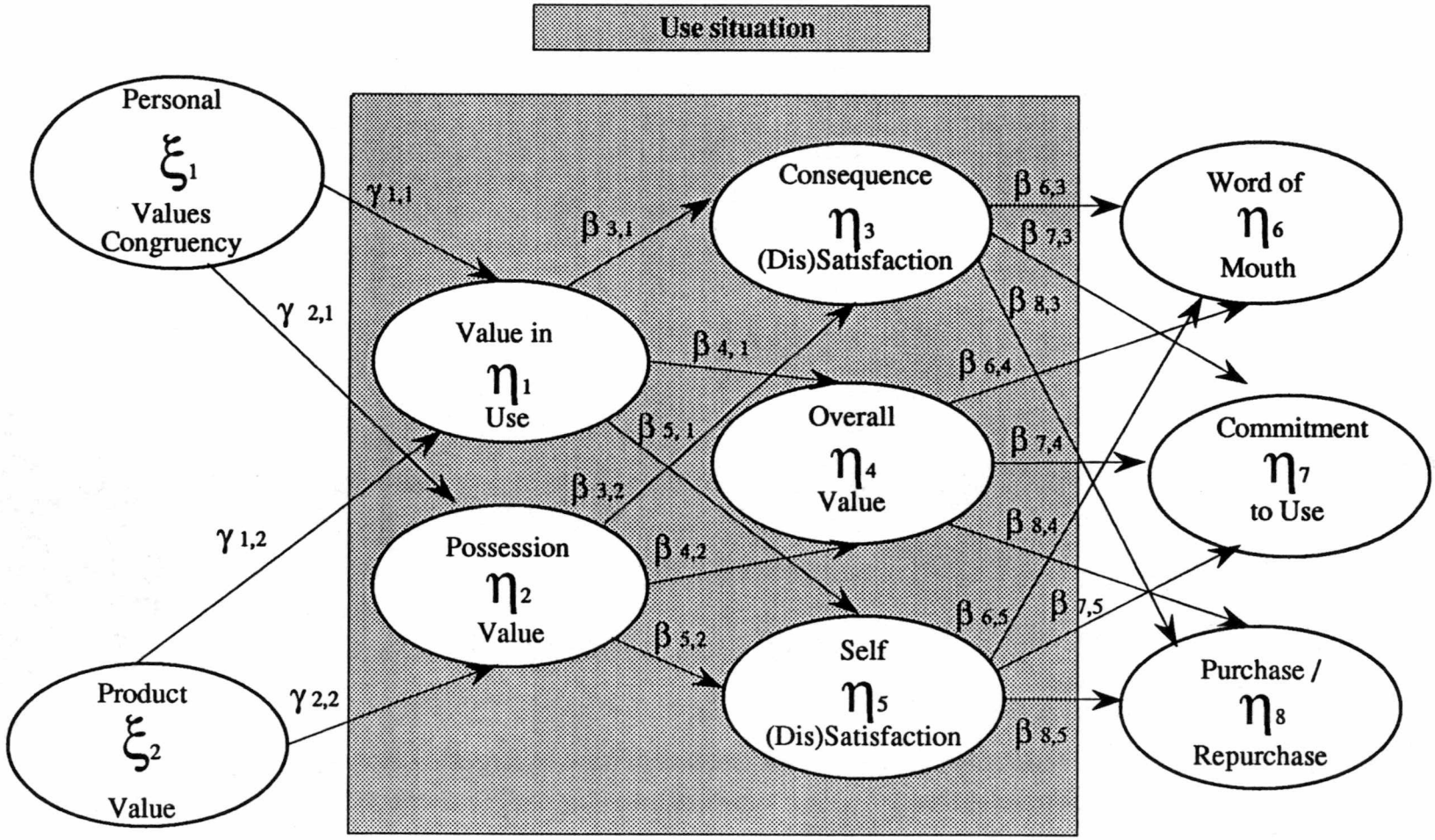


Figure 4-4: LISREL Depiction of VIM

the model, the lambda and theta notation is not shown.)

LISREL modelling and analysis was applied to all of the research hypotheses. These hypotheses address 1) the ability of the measurement instruments to load on the selected variables (H1) as indicated by Lambda X and Lambda Y, 2) the nature of the relationships between endogenous and exogenous variables (H2, H3, H4, H5) as measured by Beta and Gamma weights 3) the comparative weightings of path values (H6, H7, H8, H9, H10) and 4) the overall fit of the model.

SUMMARY OF METHODOLOGY

To meet the objectives of this research existing measures were modified and a number of new measures were developed. A cross sectional survey that incorporated these measures was administered to a sample of dining room furniture users. Data from the survey was then used to test research hypotheses. Figure 4-5 lists the LISREL analysis performed to test each of the hypothesis. As such, the Figure reflects the culmination of a series of methodological approaches and considerations that provides insight into consumer values and valuation process. Results of the analysis are provided in the next chapter.

H1. There are seven distinct types of judgments that relate to consumers' intentions to Purchase/Repurchase, engage in WOM activity, and Commitment to Use:
- Evoked Personal Values Importance
- Product Value
- Value in Use
- Possession Value
- Overall Value
- Self (Dis) Satisfaction
- Consequence (Dis)Satisfaction

LISREL Depiction: $\xi_1 \neq \xi_2 \neq \eta_1 \neq \eta_2 \neq \eta_3 \neq \eta_4 \neq \eta_5 \neq \eta_6 \neq \eta_7 \neq \eta_8$.

.....

H2. The magnitude of Value in Use and Possession Value will directly vary with Personal Values Congruency.

LISREL Depiction: $\gamma_{1,1}$ *and* $\gamma_{2,1}$ *are negative and significant.*

.....

H3. The magnitude of Value in Use and Possession Value will directly vary with the magnitude of Product Value.

LISREL Depiction: $\gamma_{1,2}$ *and* $\gamma_{2,2}$ *are positive and significant.*

.....

H4. Possession Value and Value in Use will be positively related to Overall Value, Self (Dis)Satisfaction, Consequence (Dis)Satisfaction.

LISREL Depiction: $\beta_{3,1}$, $\beta_{4,1}$, $\beta_{5,1}$, $\beta_{3,2}$, $\beta_{4,2}$ *and* $\beta_{5,2}$ *are positive and significant.*

.....

H5. Overall Value, Self (Dis)Satisfaction, Consequence (Dis)Satisfaction will be positively related to Purchase/ Repurchase, WOM and Commitment to Use.

LISREL Depiction: $\beta_{6,3}$, $\beta_{7,3}$, $\beta_{8,3}$, $\beta_{6,4}$, $\beta_{7,4}$, $\beta_{8,4}$ $\beta_{6,5}$, $\beta_{7,5}$, *and* $\beta_{8,5}$ *are positive and significant.*

.....

Figure 4-5. LISREL Analysis Related to Hypotheses

H6. The strength of the relationship between Personal Values Congruency and Possession Value will be greater than the relationship between Product Value and Possession Value.

LISREL Depiction: $\gamma_{2,1} > \gamma_{2,2}$

.....

H7. The strength of relationship between Product Value and Value in Use will be greater than the relationship between Personal Values Congruency and Value in Use.

LISREL Depiction: $\gamma_{1,2} > \gamma_{1,1}$

.....

H8. The strength of the relationship between Value in Use and Consequence (Dis)satisfaction will be stronger than the relationship between Possession Value and Consequence (Dis)Satisfaction.

LISREL Depiction: $\beta_{3,1} > \beta_{3,2}$

.....

H9. The strength of the relationship between Value in Use and Overall Value will be stronger than the relationship between Possession Value and Overall Value.

LISREL Depiction: $\beta_{4,1} > \beta_{4,2}$

.....

H10. The strength of the relationship between Possession Value and Self (Dis)Satisfaction will be stronger than the relationship Value in Use and Self (Dis)satisfaction.

LISREL Depiction: $\beta_{5,2} > \beta_{5,1}$

.....

Figure 4-5 (continued).

CHAPTER 5

DATA ANALYSES AND RESULTS

INTRODUCTION

This chapter describes data analyses activities and presents research results. The first section discusses data production issues and descriptive statistics. The latter parts of the chapter address hypotheses testing related to the two primary objectives of the study: understanding value meaning and investigating value processes. Hypotheses were tested through the development and examination of LISREL measurement and structural models. A discussion of each area of analysis and the related results follows.

DATA PREPARATION AND PRODUCTION

As noted in Chapter 4, not all the surveys that were returned were usable. Information from 536 surveys in varying degrees of completion was entered into the database. 164 of these surveys had some missing data.

One of the first decisions in the analyses process was to determine if it would be acceptable to "plug" the missing data with relevant means. Given the fact that responses were generally skewed towards the high end of each scale, use of a mean score for missing data would tend to accentuate end

loading. As a result, a more conservative approach was adopted and only those fully completed surveys were used in analysis. This raised the question as to whether the reduced set of respondents to be used (372) statistically differed from those entered into the data base (536) data on any key variable.

To address this issue, responses from subjects who completed all items were compared to those to be eliminated due missing data. A General Linear Models (GLM) procedure was used to compare the groups on an item by item basis. Table 5-1 reports items on which the two groups significantly differed.

In addition, the complete set of respondents (n=536) was compared to the subset of respondents (n=372) who had answered all items to determine if the groups were statistically different on any survey items. Again using a GLM procedure, a comparison of the groups on each item revealed that there were no significant differences. Therefore, it was deemed acceptable to use the reduced set of respondents for subsequent analyses.

Using 372 subjects reflected an acceptable usable response rate of 40.7%. This response rate was calculated after reducing the original number of surveys mailed (1024) by those that did not have dining room furniture (42) and those returned due to bad addresses (68) (e.g., 372/914 = 40.7%).

Table 5-1: Items on Which Included and Eliminated Subjects Differed

Variable	Mean: Included in Study (N)	Mean: Excluded from Study (N)
Year Table Bought	77.7 (360)	71.7 (154)
Year Chairs Bought	78.0 (352)	72.3 (151)
Will be an Heirloom	4.3 (372)	4.8 (152)
Happy/Unhappy with Furniture	6.0 (372)	5.7 (122)
Upset/not Upset with Furniture	5.9 (372)	5.4 (124)
Negative WOM about Brands	8.6 (372)	8.1 (147)
Schooling	4.7 (371)	4.3 (164)
Sex	.7 (370)	.8 (160)
Age	42.6 (363)	45.5 (160)

DESCRIPTIVE STATISTICS

A number of descriptive statistics were calculated on the data. Detailed results (frequencies, means, standard deviations, etc.) are presented in Appendix 3. Distributions of variables are included in Appendix 4.

The descriptive statistics and distributions indicate that end loading occurred on many variables. Skewness values confirmed this. In addition, there was evidence that several variables had kurtotic distributions. Implications of these properties of the data are addressed in the section of data analysis dealing with the measurement model.

Table 5-2 presents the demographic characteristics of the sample. Subjects tended to be married women with college degrees living in households that earned an average income between $60,000 and $75,000 in 1991. The demographics of this sample are similar to those respondents participating in earlier research conducted by the sponsor. Appendix 5 provides the sample's demographic distributions.

HYPOTHESES TESTS

As discussed in the Methodology chapter, Linear Structural Relationship (LISREL) analyses was determined to be appropriate for testing the hypotheses. Development and assessment of the measurement model met research objectives related to determining the meaning(s) of value while development and assessment of the structural model met

Table 5-2: Characteristics of Sample

Item	Characteristic
Age	42.6 average
Adults in Household	2.1 average
Children	.8 average
Education	Most Frequent Category: College Graduate
Sex	261 women 109 men
Married	320 married 49 not married
Income	Average Income Category: $60,001-$75,000
Influenced Purchase	203 self 121 spouse 45 other
Influenced Evaluation	229 self 84 spouse 35 other

research objectives related to the formation of valuation processes. Hypotheses testing was therefore tied to an evaluation of how well the proposed models (measurement and structural) fit the data.

Overview of Analyses Process

LISREL provides a number of unique opportunities to evaluate models in the theory testing process. The program has the flexibility to allow a researcher to test original conceptions of models related to proposed theory and, if necessary, permits testing improved, respecified models consistent with that same proposed theory. In this study, the original Value Integration Model (VIM) was built to test the theory that 1) there are a number of types of value that are important to consumers in postpurchase evaluations and 2) those value types are interrelated to reflect a process that takes into account person, product, and person X product X situation interactions.

A systematic approach was used to test the original VIM using procedures that followed guidelines established by experts in the field (e.g., Bollen 1989). First, the measurement model was evaluated. Hypothesis 1 was tested. Second, the original structural model was examined. Due to a high correlation between two variables (Consequence Satisfaction and Overall Value), interpretation of the original Value Integration Model was problematic (discussed in

depth in later sections). Therefore, the remaining hypotheses were tested on the VIM with one variable (Overall Value) omitted.

Often, the "initial model does not fit the data well" (Bollen 1989, p. 296) and a respecification of the original model is indicated. Such was the case in this study. Generally, 1) "t" values associated with parameters and path weights, 2) modification indices, and 3) comparative fit indices provided direction in the development of a series of revisions to the original VIM. However, all changes were guided by, and consistent with, theoretical considerations.

Thus analyses was an iterative process. The initial VIM was used as a basis to test hypotheses. Incremental revisions were then made to create an improved, yet theoretically feasible, model. Figure 5-1 depicts a flowchart of the analytical process. Activities focused on three major areas: 1) development and testing of the Measurement Model (to assess distinctness of variables); 2) development and testing of the Structural Model (to assess proposed variable relationships) and 3) revisions to original structural model (to assess alternate relationships between variables). Each is discussed in depth in the following sections of this chapter.

The Measurement Model and Value Meanings Hypothesis Test

Models were run on the appropriate covariance matrix using maximum likelihood rotation to isolate factors. To

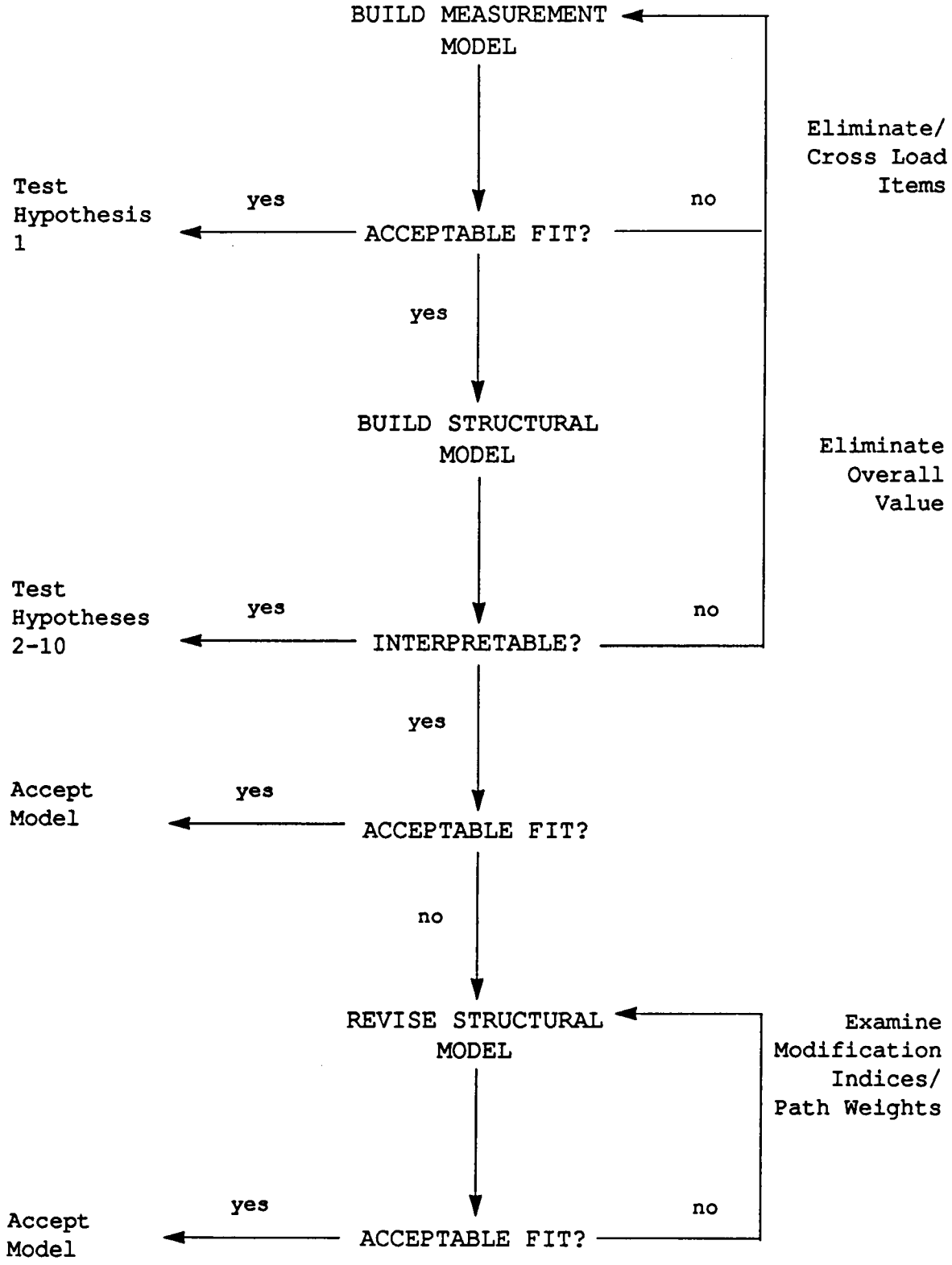


Figure 5-1: Flowchart of Analyses Process

determine how well value meanings were assessed in this study, an examination of relevant survey items was performed. (The relationship between survey items and variable labels is included in Appendix 6). The purpose of this examination was to determine 1) if the items loaded where expected on the ten proposed variables and 2) if the inclusion of all of the original 66 items was warranted. For a number of reasons, several items were deleted from consideration.

Elimination of Survey Items

First, a review of PUR4 ("Would you buy higher quality and pay more?") and PUR5 ("Would you buy lower quality and pay less?") suggested that a "little chance" response would be difficult to interpret, given that the construct associated with these items was designed to capture "buyer's remorse." For example, if there was a small chance that a subject would buy higher quality furniture, does that mean that the subject would buy the same quality furniture as he/she already owns or does it mean he/she would buy lower quality and pay less? The inconsistency of these items was manifested in an initial examination of Cronbach alphas. These two items did not display high correlations with other Repurchase items (PUR4 = .40; PUR5 = .17). Due to interpretation confusion, poor alpha values and the ability of PUR1, PUR2 and PUR3 to capture the original intent of this variable (Intention to Repurchase), PUR4 and PUR5 were eliminated.

Second, a review of returns indicated that many respondents bought their furniture several years ago. (Recall that the targeted sample were those that had purchased furniture in the past year). The fact that subjects had purchased furniture more than one year earlier had a significant impact on the Commitment to Use variable. One aspect of Commitment to Use was associated with a commitment to use related products. Initially, it was expected that a new furniture purchase would trigger the purchase of other products (e.g. new flooring, accessories, and wall covering). Additional opportunities for expansion into related product lines would be identified for the sponsor. Since the timing of the purchase trigger was inconsistent across respondents, the survey items regarding buying new flooring, accessories, and wall covering (COM5-COM7) lost some relevance. Therefore, these items were not included in LISREL analysis.

Third, an examination of the univariate statistics revealed that several items had excessive kurtosis (> 3) (Bollen 1989). Excessive kurtosis exists when distributions have thinner or fatter tails than those of a normal distribution. Extreme kurtosis "usually eliminates asymptotic efficiency and makes the estimated asymptotic covariance matrix and the chi-square estimator potentially inaccurate" (p. 418, Bollen 1989). As such, statistical tests of significance can be affected (Bollen 1989). Excluding items with excessive kurtosis (PRODA1-PRODA5, PRODC1, PRODC2,

PRODC4, VIU2, VIU5, OVER1, WOM2, WOM4) still left multiple indicators of the latent variables. However, by eliminating the kurtotic items, the "Product Value" construct no longer reflected attribute level evaluations. Rather, the remaining "Product Value" items are at the lower consequences level.

An initial examination of "Word of Mouth" suggested that this construct was composed of two distinct dimensions: one positive and one negative. Factor analysis supported this supposition. An examination of Cronbach alpha revealed that alpha for all Word of Mouth items was .79. For only positive items, alpha was .86. For the negative items, alpha was also .86. Since 2 of the 3 negative WOM were eliminated from analysis due to excessive kurtosis, the remaining negative WOM item was also eliminated. Thus, the Word of Mouth variable in the model actually reflects only positive recommendations.

Fourth, modification indices provided guidance in identifying items that were cross loading on other than the designated latent variable. For example, OVER3 (Overall Value: "My dining room furniture has good value") was also an indicator of "Product Value" and "Value in Use." In an attempt to "purify" construct measures, items that cross loaded were eliminated wherever possible. The exception was the PRODOVER item. The exception for PRODOVER was allowed because following the established decision rules for excluding cross loading items resulted in only two items representing "Overall Value." Since 1) PRODOVER was a significant

indicator of "Overall Value" and "Product Value" and 2) in order to have a reasonable number of indicators of "Overall Value," PRODOVER was added back into the measurement model as an indicator of both "Product Value" and "Overall Value."

As a result of this analysis, 41 of the original 66 survey items were retained. A review of Cronbach alphas demonstrated that the internal consistency of items loading on the ten proposed latent variables met or exceeded the established criteria of .70 (Nunnally 1978). Table 5-3 reports Cronbach alpha values. The first column of alphas represents all 66 items and is included for comparison with alphas of the final reduced set of items (second column).

Evaluation of Fit

The elimination and cross loading of items took place in several steps. Accompanying each change was an assessment of model fit. Although a series of modifications were considered, evaluation of fit is reported for two principal models (Table 5-4). The first line reflects a model with all 66 items loading on ten latent variables. The second model is based on 41 items loading on ten variables.

The second model has improved fit over the first as determined by a number of indicators included in the Table and explained more fully in subsequent paragraphs. Based on "t" values, each path weight was statistically significant. Path weights with "t" values over 2 were considered to be

Table 5-3: Cronbach's Alpha

	All Survey Items (Initial Measurement Model)	Reduced Set (Revision 1 (Measurement Model)
1. Product Value	.92	*
- only attributes	.93	*
- only consequences	.87	.87
2. Value in Use	.83	.73
3. Possession Value	.90	.88
4. Consequence Satisfaction	.92	.92
5. Overall Value	.83	.72
6. Self Satisfaction	.94	.91
7. WOM	.79	*
- positive	.86	.86
- negative	.86	*
8. Commitment to Use	.78	*
- involvement	.85	.85
- related products	.70	*
9. Purchase/repurchase	.82	.82

Note: Column one reports alphas for all items. Column two reports alphas for the reduced set of items retained for final analyses.

* Eliminated from Analysis

Table 5-4: Measurement Model Specifications

Model Version	χ^2	df	χ^2/df	CFI	RMSR
Original Model (All Items - Ten Variables)	6727.7	1980	3.398	.729	.397
Baseline Model*	19570.3	2080			
Revision 1 (41 Items - Ten Variables)	1709.6	744	2.298	.906	.263
Baseline Model*	11132.0	820			
HYPOTHESIS 1 TESTED					
Revision 2 (Overall Value Eliminated)	1507.0	639	2.358	.910	.253
Baseline Model*	10358.7	703			

* Baseline (Null) Model reflect statistics from a model assuming no underlying factors.

significant (Jöreskog and Sörbom 1989).

A Comparative Fit index (Bentler 1990) was used to compare the measurement model to a baseline model. A commonly used baseline model assumes that there are no factors underlying the observed variables (Bollen 1989). Thus, statistics from the proposed VIM (based on confirmatory factor analysis) were examined relative to statistics from a "null" model. The Comparative Fit Index formula is:

$$CFI = 1 - \frac{(\chi^2 - df)_{measurement}}{(\chi^2 - df)_{baseline}} \qquad (5.1)$$

A CFI over .90 is considered acceptable (Bentler and Bonnett 1980). A χ^2/df ratio that approached 1 (as an expected value) was also desirable. Although Root Mean Square Residuals (RMSR) are best interpreted when observed variables are standardized (which is not the case in this study), RMSRs can be used as a relative basis for comparing models (Jöreskog and Sörbom 1989). For that reason, RMSR values are reported in the Table.

Additional analysis examined the correlations between the ten latent variables (see Table 5-5). An extremely high correlation (.90) between "Consequence Satisfaction" and "Overall Value" was discovered. The implications of this correlation are presented in the next section and in the description of the development of the Structural Model.

Table 5-5: Correlations between Latent Variables from Measurement Model - Revision 1

	VALUE CONGRUENCE	PRODUCT VALUE	VALUE IN USE	POSSESSION VALUE	CONSEQUENCE SATISFACTION	OVERALL VALUE
CONGRUE	1.0000					
PRODUCT	-0.3310	1.0000				
VIU	-0.2862	0.7855	1.0000			
POSSESS	-0.4118	0.7665	0.7863	1.0000		
CONSQNCE	-0.2212	0.6815	0.7642	0.6524	1.0000	
OVERALL	-0.1468	0.6877	0.7698	0.5817	0.9018	1.0000
SELF	-0.2953	0.6270	0.6574	0.6620	0.7758	0.7530
WOM	-0.4004	0.4923	0.5406	0.5408	0.5039	0.5127
COMMIT	-0.4084	0.2688	0.2565	0.3333	0.2754	0.2180
PURCHASE	-0.2169	0.7168	0.7204	0.6044	0.7825	0.7960

Table 5-5 (CONT.)

	SELF SATISFACTION	WOM	COMMITMENT TO USE	PURCHASE/ REPURCHASE
SELF	1.0000			
OVERALL	0.4594	1.0000		
COMMIT	0.2733	0.5155	1.0000	
PURCHASE	0.5971	0.5810	0.3074	1.0000

Discussion of Results - Measurement Model

As is indicated in Table 5-4, the initial model with all items did not meet criteria that reflect adequate goodness of fit. Contributing to poor fit were many of the "product value" items that displayed highly kurtotic distributions. In depth interviews with subjects during pretesting, these items were mentioned most consistently as affecting evaluation, so, in retrospect, it is not surprising that they would receive consistently high ratings in the survey. However, this consistency limits the contribution these items can make to explaining variance in responses to subsequent model variables.

The second model presented in Table 5-4 (Revision 1) had an acceptable fit. Based on the evaluation of this Measurement Model, Hypothesis 1 is partially supported. Several unique types of value were identified. However, it is difficult to justify a distinction between "Overall Value" and "Consequence Satisfaction." From a measurement point of view, the high correlation between Overall Value and Consequence Satisfaction suggests that two were not distinguishable in this study.

A review of items loading on the two variables suggests that greater success was achieved in assessing Consequence Satisfaction than in isolating Overall Value. Seven unique items (CONSAT1 - CONSAT7) were identified that captured the essence of Consequence Satisfaction. Only three variables

were used to reflect Overall Value, and one of those cross loaded on Product Value (PRODOVER). Thus the better candidate for elimination was Overall Value. Revision 2 in Table 5-4 reports the fit of a model without "Overall Value."

Does this research suggest that "Overall Value" does not exist? That is certainly one possibility. However, given support in the literature (e.g., Sinden and Worrell 1979), this seems unlikely. Rather, one can speculate that "Overall Value" is separate and distinct from the other types of evaluations and that this research did not identify those items that uniquely captured the meaning of the construct.

Thus, this study was able to isolate six of the seven types of value originally proposed: Personal Values Congruency; Product Value, Value in Use; Possession Value; Consequence Satisfaction; and, Self Satisfaction. Although "Overall Value" was distinct from five of the value constructs, it was not distinguishable from Consequence Satisfaction and was therefore eliminated.

The Covariance Structure Model and Valuation Processes Hypotheses Testing

Once a measurement model was accepted, it was appropriate to test the general structural equations model to assess the validity of the remaining hypotheses. The structural model integrates the previous test of the associations between latent variables and observed variables with an examination of how the latent variables influence one another (Bollen 1989).

Using techniques recommended by Lance, Cornwell and Mulaik (1988), limited information parameter estimates were used to develop the structural model. Parameter estimates from the measurement model for the lambda's and theta's were fixed for developing and testing the structural model. Limited information parameter estimation has been found to be preferable to "full information techniques for (a) testing specific causal hypotheses and (b) locating specific structural model misspecifications" (Lance et al. 1988, p. 171). Thus, using this procedure was deemed appropriate for this research.

The relationships proposed by the original ten variable VIM (Table 5-4, Revision 1 - Measurement Model) were tested with problematic results. It appears that the high correlation between Overall Value and Consequence Satisfaction creates difficulty in interpreting that model. Many variable relationships were negative that, theoretically, should have been positive (in fact, covariance values between these variables were positive). In addition, a number of paths were non significant. (See Figure 5-2 for a depiction of the relationships in the ten variable model.) These results can be explained by examining the implications of suppressor relationships.

Suppressor relationships occur when there is some problem in model specification. As a result, the path weights of some relationships are suppressed or underestimated (Bollen 1989).

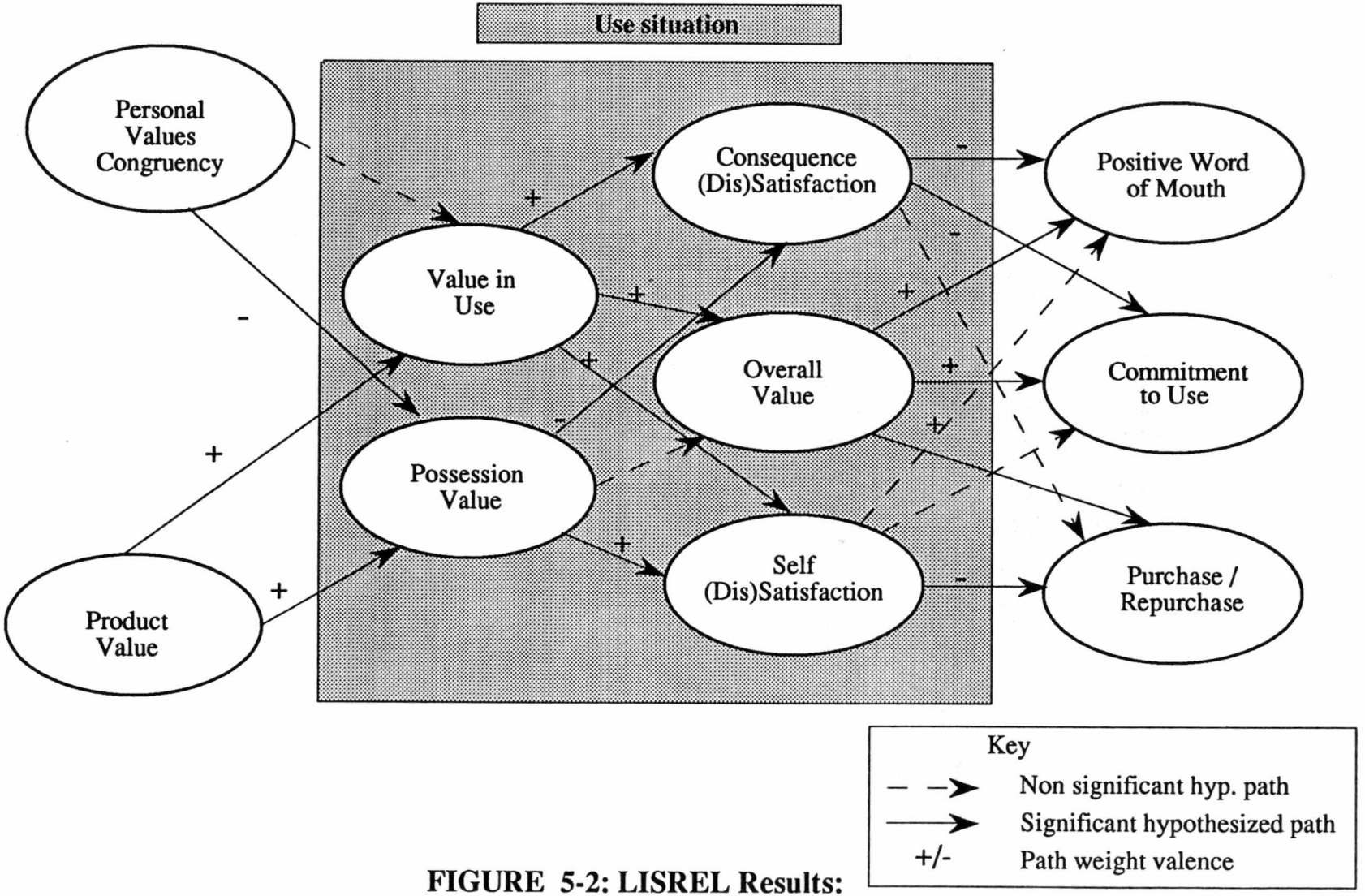


FIGURE 5-2: LISREL Results: Path Valences - Ten Variable VIM

In the Value Integration Model that includes both Overall Value and Consequence Satisfaction, so much of the variance is accounted for by these two variables that other path weights in the model are underestimated or, in some instances, negative to compensate for high path weights associated with Overall Value and Consequence Satisfaction. Therefore, in the interest of proceeding with meaningful analysis, Overall Value was omitted from subsequent analysis and the VIM, with one less variable, was used to test the remaining hypotheses.

Table 5-6 shows the new correlations between the nine latent factors. The nine variable structural VIM was based on a measurement model with 38 items (the three Overall Value indicators are eliminated). The evaluation of that measurement model is provided in Table 5-4 - Revision 2. New limited information parameter estimates for the lambda's and theta's were used. A comparison of lambda and theta values for the ten vs the nine variable models (Table 5-7) demonstrates that the path loadings on latent variables did not change substantially.

Structural Analyses with Overall Value Omitted

A series of structural models was developed and tested. Table 5-8 presents an evaluation of each model's fit. The first evaluation is based on the nine variable Value Integration Model with the original envisioned relationships. Hypotheses 2 through 10 were tested on this model.

Table 5-6: Correlations between Latent Variables from Measurement Model-Revision 2

	VALUE CONGRUENCE	PRODUCT VALUE	VALUE IN USE	POSSESSION VALUE	CONSEQUENCE SATSFCTN	SELF SATSFCTN
CONGRUE	1.0000					
PRODUCT	-0.3312	1.0000				
VIU	-0.2861	0.7838	1.0000			
POSSESS	-0.4121	0.7653	0.7855	1.0000		
CONSQNCE	-0.2215	0.6787	0.7617	0.6506	1.0000	
SELF	-0.2954	0.6240	0.6540	0.6600	0.7730	1.0000
WOM	-0.4004	0.4903	0.5386	0.5395	0.5011	0.4562
COMMIT	-0.4079	0.2679	0.2549	0.3324	0.2742	0.2720
PURCHASE	-0.2167	0.7145	0.7182	0.6021	0.7803	0.5934

Table 5-6: (Cont.)

	WOM	COMMITMENT TO USE	PURCHASE/ REPURCHASE
WOM	1.0000		
COMMIT	0.5147	1.0000	
PURCHASE	0.5798	0.3066	1.0000

Table 5-7: Comparison of Original VIM (Ten Variable Model) to Model Without Overall Value (Nine Variables): Lambda Path Weights

	Ten Variables	Nine Variables
CONGRUE	3.73	3.73
PRODC3	1.43	1.43
PRODC5	1.56	1.56
PRODC6	1.50	1.50
PRODC7	1.79	1.77
PRODOVER	0.47	----
VIU1	0.96	0.94
VIU4	1.08	1.08
VIUOVER	0.85	0.85
POS1	1.14	1.13
POS2	1.25	1.24
POS3	0.92	0.92
POS4	1.21	1.21
POS5	0.97	0.97
POS6	0.98	0.98
POS7	1.34	1.33
POS8	0.77	0.76
CONSAT1	1.11	1.11
CONSAT2	1.09	1.09
CONSAT3	1.14	1.13
CONSAT4	1.11	1.10
CONSAT5	0.77	0.76
CONSAT6	1.07	1.06
CONSAT7	1.21	1.20
OVER2	1.41	----
OVER6	1.00	----
PRODOVER	0.62	----
SLFSAT1	1.06	1.05
SLFSAT2	1.12	1.11
SLFSAT3	1.14	1.13
SLFSAT5	0.73	0.73
SLFSAT7	0.99	0.98
WOM1	2.30	2.30
WOM3	2.49	2.49
WOM5	2.56	2.54
COM1	2.33	2.32
COM2	2.72	2.71
COM3	2.27	2.27
COM4	2.17	2.16
PUR1	2.70	2.68
PUR2	2.48	2.48
PUR3	1.83	1.83

Table 5-8: Structural Model Specifications

Model Version	χ^2	df	χ^2/df	CFI*	RMSR
Original VIM Model 1 (Figure 5-3)	1786.7	682	2.62	.893	.448
HYPOTHESES 2-10 TESTED					
Revision 1: Eliminate nonsignificant paths	1789.5	686	2.61	.886	.454
Revision 2: Add Self --> Consequence	1722.7	685	2.51	.893	.451
Revision 3: Delete Self--> WOM (NS)	1724.9	686	2.51	.892	.453
Revision 4: Add Commit--> WOM	1671.0	685	2.44	.898	.378
Revision 5: Add VIU--> Possession	1644.6	684	2.40	.901	.378
Revision 6; Add WOM--> Purchase	1622.6	683	2.38	.903	.336

* To calculate CFI, baseline model used was one associated with Revision 2 of the Measurement Model.

Table 5-8: (Cont.)

Model Version	χ^2	df	χ^2/df	CFI*	RMSR
Revision 7: Add Congrue--> Commit	1574.8	682	2.31	.908	.239
Revision 8: Add Product--> Purchase	1550.4	681	2.28	.910	.229
Revision 9: Possession--> WOM	1531.9	680	2.25	.912	.198

* To calculate CFI, baseline model used was one associated with Revision 2 of the Measurement Model.

Discussion of Results

Overview

Analyses of structural model fit revealed unexpected results. Several proposed relationships between latent variables were found to be non-significant. Table 5-9 provides "t" values associated with hypothesized path weights. These "t" values are the basis for testing hypotheses 2-10.

Non Significant Relationships between Variables

Paths between 1) Congruency and Value in Use, 2) Possession Value and Consequence Satisfaction, and 3) Self Satisfaction and Commitment to Use and Purchase/Repurchase were nonsignificant. When examining this phenomena it appears that a pattern developed where the constructs more closely associated with "self" (Congruency, Possession Value, and Self Satisfactions) have fewer direct relationships with other product evaluation variables than the product related variables (Product Value, Value in Use and Consequence Satisfaction) had with other variables. Figure 5-3 depicts the results of testing the proposed relationships. Table 5-10 summarizes the outcomes hypotheses tests.

The number of paths that were found to be nonsignificant affected several of the hypotheses. Hypothesis 2 stated that there would be a significant relationship between Personal Values Congruency and Value in Use and

Table 5-9: "t" Values of Path Weights
Nine Variable Value Integration Model

	Value in Use	Possession Value	Consqnce Satisfctn	Self Satisfctn	WOM	Commitment to Use	Purchase/ Repurchase
VIU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Possess	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consqnce	12.2213	0.7318	0.0000	0.0000	0.0000	0.0000	0.0000
Self	9.7499	3.2303	0.0000	0.0000	0.0000	0.0000	0.0000
WOM	0.0000	0.0000	5.8832	2.0242	0.0000	0.0000	0.0000
Commit	0.0000	0.0000	2.4549	1.6420	0.0000	0.0000	0.0000
Purchase	0.0000	0.0000	14.2587	-0.3467	0.0000	0.0000	0.0000

Table 5-9: (Cont.)_

	Value Congruence	Product Value
VIU	-0.3395	15.7714
Possess	-4.2166	17.0439
Consqnce	0.0000	0.0000
Self	0.0000	0.0000
WOM	0.0000	0.0000
Commit	0.0000	0.0000
Purchase	0.0000	0.0000

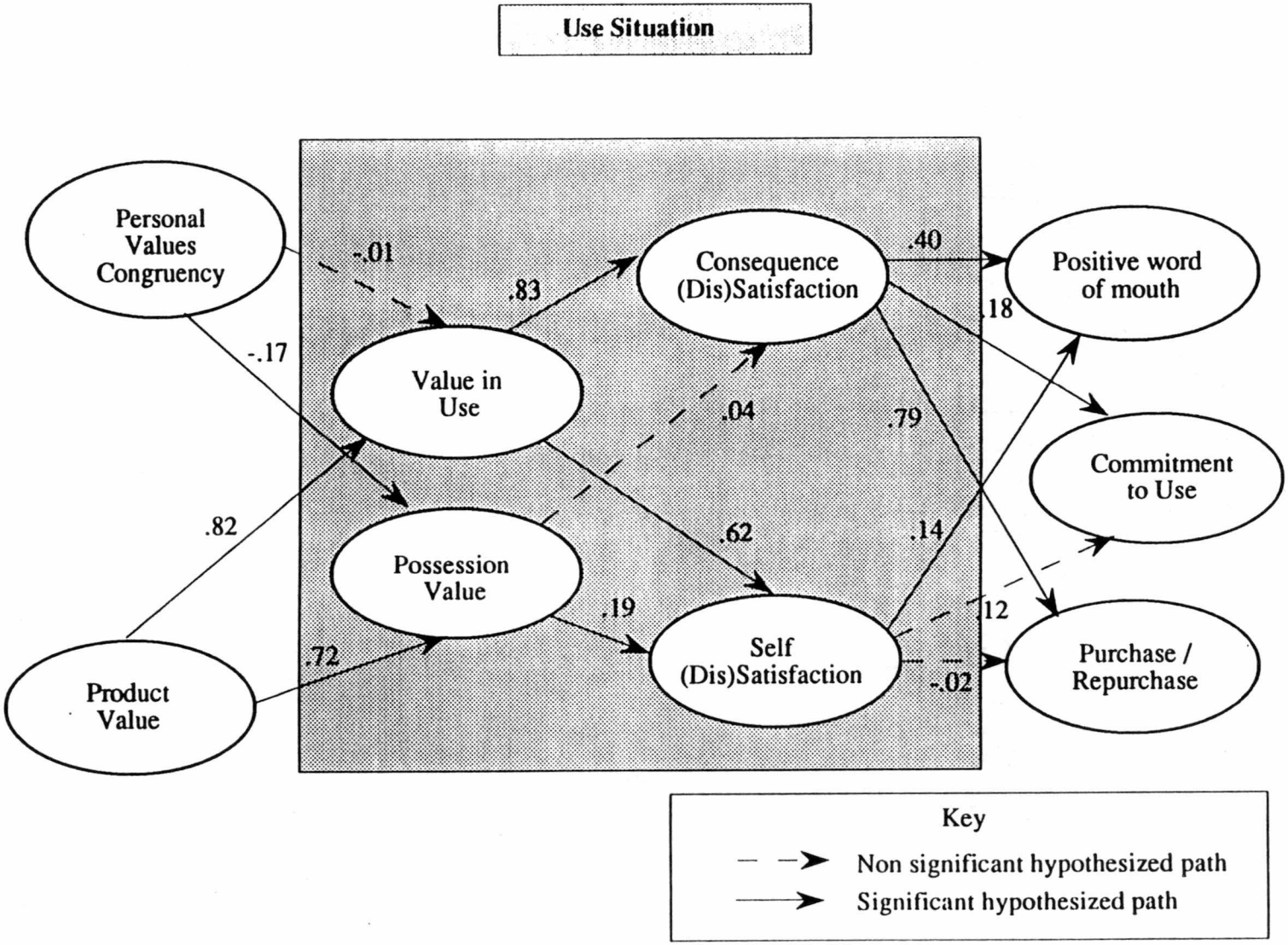


Figure 5-3: LISREL Results: Nine Variable VIM

Table 5-10: Summary of Hypotheses Tests

Hypothesis	Outcome	Explanation
1. Seven Distinct Types of Value	Partially Supported	Exception Overall Value
2. Congrue--> VIU and Possession Value	Partially Supported	Congrue--> VIU not significant
3. Product Value --> VIU and Possession Value	Supported	Path weights significant and positive
4. Possession and VIU --> Consequence Self Satisfaction and Overall Value	Partially Supported	VIU -->Self/Consqnce; Possession--> Self
5. Overall, Self and Consequence-->WOM, Commit, Purchase	Partially Supported	Conseqnce--> WOM, Commit, Purchase Self --> WOM*
6. Congrue-->Possess greater than Product-->Possess	Not Supported	Congrue-->Possess: path = -.17 Product-->Possess: path = .72
7. Product-->VIU greater than Congrue-->VIU	Supported	Product-->VIU: path = .82 Congrue-->VIU: not significant
8. VIU-->Consqnce greater than Possess-->Consqnce	Supported	VIU/Consqnce: path = .83 Possess/Consqnce: not significant
9. VIU-->Overall greater than Possess-->Overall	Not Tested	Overall Value eliminated from analysis
10. Possess-->Self greater than VIU-->Self	Not Supported	Possess/Self: path = .19 VIU/ Self: path = .62

* After revision, Self Satisfaction --> WOM path - no longer significant.

Personal Values Congruency and Possession Value. This Hypothesis was partially supported. The Congruency --> Possession Value relationship held while the Congruency --> Value in Use association did not. Recall that the relationship between Personal Values Congruency and the other variables was expected to be negative. This inverse relationship is a result of the supposition that the smaller the distance between Enduring and Evoked Personal Value ratings, the higher an evaluation of other value types.

Hypothesis 3 was supported. Both the paths between 1) Product Value and Value in Use and 2) Product Value and Possession Value were positive and significant.

The fourth hypothesis was partially supported. The associations between 1) Value in Use and Self Satisfaction and 2) Value in Use and Consequence Satisfaction was positive and significant. However, while the relationship between Possession Value and Self Satisfaction was as expected, the path between Possession Value and Consequence Satisfaction was not significant.

Hypothesis 5 was partially supported. The only relationships that were positive and significant between the outcome variables (Consequence Value, Overall Value and Self Satisfaction) and the behaviors, were the relationships between 1) Consequence Satisfaction and WOM, Commitment to Use and Purchase/ Repurchase and 2) Self Satisfaction and WOM.

Hypothesis 6 stated that the relationship between

Personal Values Congruency and Possession Value would be stronger than the relationship between Product and Possession Value. This was not the case. The Congruency --> Possession Value path was -.17, while the Product Value --> Possession Value path was .72.

Hypothesis 7 was supported. The Product Value --> Value in Use path weight was .82, while the Congruency --> Value in Use path was not significant.

Hypothesis 8 was supported. The relationship between Value in Use and Consequence Satisfaction (.83) was greater than the Possession Value--> Consequence Satisfaction path (non-significant).

Hypothesis 9 could not be tested since Overall Value was eliminated from analysis.

The final hypothesis was not supported. The relationship between Possession Value and Self Satisfaction (.19) was not greater than the relationship between Value in Use and Self Satisfaction (.62).

While the non-significance of certain relationships suggests that the valuation process associated with product is more strongly affected by variables that emphasize product features and functions, it appears that the <u>inter</u>relationships between valuation concepts is more complex as is evidenced by the additional relationships between the value constructs that emerged during revisions to the structural model. Respecifications of the structural model was indicated as a

result of reviewing the modification indices supplied by the LISREL program. These indices provide insight into identifying additional relationships between variables. In this research, revisions to the relationships depicted in the original conceptualization of the model were influenced by modification indices and guided by theoretical concerns.

Revisions to the Structural Model

Overview

As is indicated by table 5-8, the original VIM (Model 1) did not have acceptable fit indicators (high χ^2/df, low CFI, high RMSR). Therefore, exploration of different relationships between latent variables was undertaken.

The first revision was the result of eliminating all non-significant paths (based on "t" values). While fit improved, it was still below the .90 CFI cutoff. Subsequent respecifications were based on an examination of modification indices in conjunction with feasible theoretical justification for change. Table 5-8 reports the sequential improvements in fit as the model was respecified. It should be noted that one hypothesized relationship (between Self Satisfaction and WOM) that held during the initial model testing was not significant in subsequent revisions to the structural model.

The best fitting, theoretically sound, revised model is depicted in Figure 5-4. Standard solutions of paths weights

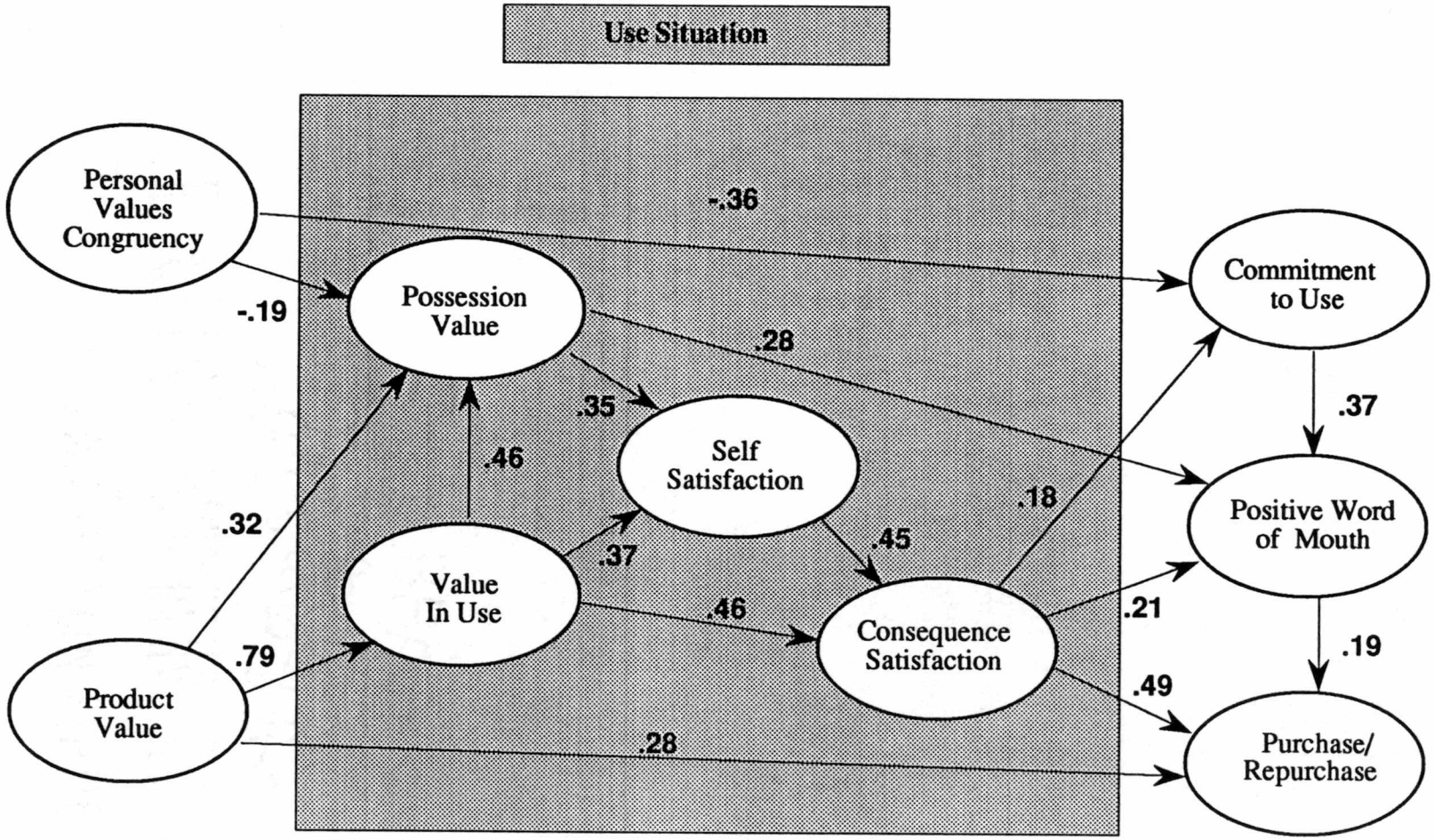


Figure 5-4: LISREL Results Respecified VIM

are presented in Table 5-11 and Table 5-12 with "t" values of those paths included in Table 5-13. The correlation matrix of the Exogenous and Endogenous variables is presented in Table 5-14.

Additional Relationships

Modification indices suggested additional relationships were likely between the following variables: 1) Congruency and Commitment to Use; 2) Product Value and Purchase; 3) Value in Use and Possession Value; 4) Self Satisfaction and Consequence Satisfaction; 5) Commitment to Use and Word of Mouth; and 6) Word of Mouth and Purchase/Repurchase. These relationships were included in the revision to the model because there was theoretical support for their existence.

The relationship between Congruency and Commitment to Use has support in the literature. Recall that the final set of items used to measure Commitment to Use captured the "involvement" dimension of Commitment to Use. Arora (1982) explored the association between enduring involvement as it relates to the hierarchical arrangement of an individual's value system. "Enduring involvement is high with a product related to centrally held values" (Arora 1982, p. 506). The construct of "Personal Values Congruency" in this study was designed to reflect the degree to which the use situation evoked values that were closely held. Consistent with the work of Arora (1982), Personal Values Congruency was expected

Table 5-11: Path Weights - Standardized Solution Endogenous Variables

	Value in Use	Possession Value	Consqnce Satisfctn	Self Satisfctn	WOM	Commitment to Use	Purchase/ Repurchase
VIU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Possess	0.4576	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consqnce	0.4651	0.0000	0.0000	0.4521	0.0000	0.0000	0.0000
Self	0.3689	0.3537	0.0000	0.0000	0.0000	0.0000	0.0000
WOM	0.0000	0.2779	0.2090	0.0000	0.0000	0.3676	0.0000
Commit	0.0000	0.0000	0.1786	0.0000	0.0000	0.0000	0.0000
Purchase	0.0000	0.0000	0.4907	0.0000	0.1916	0.0000	0.0000

Table 5-12: Path Weights between Exogenous and Endogenous Variables - Standardized Solution

	Value Congruence	Product Value
Value in Use	0.0000	0.7861
Possession Value	-0.1882	0.3250
Conseqnce Satisfctn	0.0000	0.0000
Self Satisfctn	0.0000	0.0000
Word of Mouth	0.0000	0.0000
Commitment to Use	-0.3648	0.0000
Purchase/ Repurchase	0.0000	0.2825

Table 5-13: "t" Values of Path Weights - Respecified Model

	Value in Use	Possession Value	Consqnce Satisfctn	Self Satisfctn	WOM	Commitment to Use	Purchase/ Repurchase
VIU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Possess	5.2055	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consqnce	8.4607	0.0000	0.0000	9.1470	0.0000	0.0000	0.0000
Self	4.2599	4.3802	0.0000	0.0000	0.0000	0.0000	0.0000
WOM	0.0000	4.3132	3.2889	0.0000	0.0000	7.2349	0.0000
Commit	0.0000	0.0000	3.3554	0.0000	0.0000	0.0000	0.0000
Purchase	0.0000	0.0000	8.8371	0.0000	3.9280	0.0000	0.0000

Table 5-13: (Cont.)

	Value Congruence	Product Value
VIU	0.0000	15.8917
Possess	-4.8880	3.8595
Consqnce	0.0000	0.0000
Self	0.0000	0.0000
WOM	0.0000	0.0000
Commit	-7.0358	0.0000
Purchase	0.0000	5.1206

Table 5-14: Correlation Matrix of Endogenous and Exogenous Variables

	Value in Use	Possession Value	Conseqnce Satisfctn	Self Satisfctn	WOM	Commitment To Use
VIU	1.0000					
Possession	0.7584	1.0000				
Consqnce	0.7532	0.6391	1.0000			
Self	0.6372	0.6335	0.7485	1.0000		
WOM	0.4500	0.5069	0.4813	0.4125	1.0000	
Commit	0.2225	0.2595	0.2575	0.2176	0.4935	1.0000
Purchase	0.6778	0.6204	0.7568	0.6024	0.5454	0.2836
Congrue	-0.2413	-0.3983	-0.2162	-0.2299	-0.3042	-0.4034
Product	0.7861	0.7424	0.6154	0.5526	0.4166	0.2219

Table 5-14 (Cont.)

	Purchase/ Repurchase	Value Congrunce	Product Value
Purchase	1.0000		
Congrue	-0.2510	1.0000	
Product	0.6643	-0.3069	1.0000

to be related to the involvement dimension of "Commitment to Use." While this dissertation research acknowledged this connection, the supposition was that the relationship would be indirect. However, as the revised model indicates, Personal Values Congruency has both a direct and indirect effect on Commitment to Use.

An unmediated connection between Product Value and purchase also is supported in the literature (Curry 1985; Dodds and Monroe 1985; Garvin 1987; Takeuchi and Quelch 1883). Again, the VIM recognized the importance of Product Value in the valuation process, but the assumption was that the relationship between evaluation of product and behavior would be more indirect. As the respecified model shows, the effect of Product Value on Purchase is both direct and indirect.

To simplify the original VIM, no relationships between behaviors were depicted. However, the data suggested that certain relationships between behaviors should be specified to improve the fit of the model. Commitment to Use led to positive Word of Mouth which, in turn, was related to the likelihood of Repurchase. It is logical that high involvement would trigger recommendations to others. Once this public commitment is made, these positive recommendations would then feasibly be associated with a subject reporting a high probability that (s)he would buy the same brands, style and pieces of furniture if (s)he had it to do over again.

Perhaps some of the most interesting relationships that

are suggested by this study occurred between the VIM's mediating variables (Value in Use, Possession Value, Consequence Satisfaction and Self Satisfaction). Intriguing patterns of relationships emerged. The data indicated that there was an association between Value in Use and Possession Value. It appears that the degree to which a product in a use situation serves it's function (Value in Use) says something about the user in that consumption situation (Possession Value). In turn, Possession Value contributes to a user feeling good about him/herself (Self Satisfaction). This Self Satisfaction reaction then has a significant impact on a general satisfaction judgment of the product in use (Consequence Satisfaction). It is only through the Consequence Satisfaction judgment that subsequent behaviors are affected.

The final unexpected connection among variables occurred between Possession Value and positive Word of Mouth activity. It appears that subjects' perceptions that a product indicates the user is successful, sophisticated, sentimental, etc., affects the user's propensity to tell others about the product.

CONCLUSIONS

Both the hypotheses and the respecified VIM depicted in Figure 5-4 indicate that the objectives of the study have been met. Insight into value meanings and valuation processes has

been enhanced.

This research suggests that consumers consider a number of different types of value when evaluating experiences in use situations. The relationships between value types reflect a process that impacts relevant consumer behaviors. While certain relationships that emerged from this research were not originally projected, the respecification of associations between variables results in a logical, alternate valuation process that is consistent with the theoretical foundations of the original VIM but warrants further consideration.

The revised valuation process suggests that product characteristic evaluations are instrumental in determining judgments of a consumption experience and are especially important in studying purchase/ repurchase intentions. Table 5-15 and Table 5-16 show total effects (direct and indirect) of the latent variables on each other based on the revised VIM. As Tables 5-15 and 5-16 demonstrate, the paths weights between product related value types (Product Value, Value in Use, Consequence Value) and other variables in model are substantial and numerous.

The variables more closely associated with self (Personal Values Congruency, Possession Value and Self Satisfaction) also play an important role in valuation. The revised model specifies that there are several direct and indirect relationships between the "self" value variables and other valuations and behaviors. Results indicate that, for the

Table 5-15: TOTAL DIRECT AND INDIRECT EFFECTS of Exogenous Variables on Endogenous Variables

	Value Congruence	Product Value
Value in Use	0.0000	0.7327
Possession Value	-0.1784	0.6491
Consqnce Satisfctn	-0.0285	0.5744
Self Satisfctn	-0.0637	0.5096
WOM	-0.1882	0.3450
Commitment to Use	-0.3557	0.1040
Purchase	-0.0501	0.6241

Table 5-16: TOTAL DIRECT AND INDIRECT EFFECTS of Endogenous Variables on Each Other (Based on LISREL Estimates - Maximum Likelihood

	Value in Use	Possession Value	Conseqnce Satisfctn	Self Satisfctn	WOM	Commitment to Use	Purchase/ Repurchase
VIU	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Possesion	0.4655	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consqnce	0.7168	0.1598	0.0000	0.4474	0.0000	0.0000	0.0000
Self	0.5453	0.3572	0.0000	0.0000	0.0000	0.0000	0.0000
WOM	0.3329	0.3283	0.2803	0.1254	0.0000	0.3699	0.0000
Commit	0.1298	0.0290	0.1811	0.0810	0.0000	0.0000	0.0000
Purchase	0.4208	0.1423	0.5520	0.2470	0.1907	0.0705	0.0000

situation and product examined in this study, the evaluation of self in the use situation is not as strong or as direct as the valuations related to product when examining purchase/ repurchase intentions. However, the self image related values are extremely important in understanding WOM recommendations and Commitment to Use.

The results of this study provide the foundation for several streams of value related research. An overview of future research possibilities is presented in the next chapter.

CHAPTER 6

CONCLUSIONS AND FUTURE RESEARCH

INTRODUCTION

This dissertation had two objectives; 1) to increase knowledge related to the meaning of value and 2) to enhance the understanding of valuation processes. Results of the data analysis suggest that these objectives were met. There are indeed several distinct types of value that affect postpurchase judgments and behaviors. These value types appear to be linked together in a process that incorporates both product performance and self perception considerations. In addition, the study 1) highlighted the importance of use situation in valuation processes and 2) examined a phenomenon that has not received much attention in the study of consumer behavior: postpurchase evaluation. The remainder of this chapter 1) identifies limitations of the study, 2) summarizes the conclusions and implications and 3) outlines a future research program.

LIMITATIONS OF STUDY

As with most research, the results of this investigation must be interpreted in light of the study's limitations. While these limitations do not diminish the contributions of this research, they cause the findings to be tentative and

create a need for future research.

This dissertation examined one type of product (dining room furniture) in one situation (entertaining guests). The ability to generalize results to other products and contexts is therefore limited.

While one of the strengths of using LISREL is the flexibility to test theoretically sound revisions to a proposed model, those revisions are based on the data collected from the original research sample. To a certain extent, therefore, changes and enhancements to the model have been "driven" by the data. In other words, revisions to the model may be peculiar to this unique data set. Replication in a variety situations with different products is necessary to strengthen current results and increase confidence in the respecification of the modified Value Integration Model.

Respondents were deleted from analysis if they failed to answer any item that was an indicator of a value type. In an item by item comparison of the eliminated respondents and the final set of subjects used for LISREL analysis, there were a few differences in the nature of responses. Infrequent differences occurred on individual indicators of some of the value types. The impact of these differences on the final outcome is likely to be minimal because 1) differences were so few in number and 2) there were other indicators of each value type on which no differences occurred. Disparity on three demographic characteristics also arose. While these were

statistically significant, they are not likely to have meaningfully affected results. For example, the average age of those included in analysis was 42.6, while the average age of those not included was 45.5. Therefore, while age was mathematically different, practically, one could argue that both those eliminated and included were both in the same age group (in their mid forties).

The respondents in this study were generally very pleased with their furniture. While an endloading problem is pervasive in (dis)satisfaction research (Peterson and Wilson 1992), the impact of endloading on this study's results is not known. Identifying a product use situation where there is a greater distribution of evaluative reactions and testing the revised model in this context might lead to different results.

Similarly, this research focused on a "high" involvement use situation. Future research might reveal differences in a "low" involvement context.

Additionally, efforts related to the measurement of some constructs met with mixed results. As was reported, a number of survey items were justifiably eliminated. As a result, the impact of one value type, "Overall Value," could not be determined. Other VIM variables, the behavioral outcomes of Commitment to Use and Word of Mouth Activity had dimensions of their meanings that were not addressed. Subsequent studies should examine 1) both the "involvement" and "commitment to use other related products" dimensions of Commitment to Use

and 2) both the positive and negative dimensions of Word of Mouth activities.

Several product features received consistently high ratings across subjects. Due to problems analyzing kurtotic data with LISREL, those items were not included in the current study. One might theorize that these product features received high ratings because consumers view them as necessary but not sufficient for positive evaluations of the product in use. Since their direct impact on valuation was not examined in this study, future investigation of alternate methodological procedures is necessary to shed light on the nature and effect of these necessary product features.

Finally, it is possible that social desirability effects occurred. Perhaps respondents attempted to provide "appropriate" rather than accurate answers. Since no attempt was made to test the occurrence of these effects, their presence or absence and related impact are unknown. However, the survey was administered by mail and anonymity was guaranteed. Therefore, it was hoped that the propensity/ motivation for subjects to respond in a socially desirable manner was minimized.

Despite these limitations, this study has made significant contributions to marketers' knowledge of consumer value/ values and valuation processes in postpurchase use situations. Indeed, the shortcomings identified above provide opportunities for some of the future research activities

outlined later in the chapter.

IMPLICATIONS AND CONTRIBUTIONS OF STUDY

This study has added to marketers' understanding of value and valuation processes by developing and testing the Value Integration Model. Survey results suggested that the conceptual foundation for the original model were consistent with the data. For example, consumer value appears not to be a simple concept, but a constellation of related concepts. Further, value concepts are linked together in a postpurchase evaluation process that incorporates the impact of person, product and the interaction of person, product and situation.

At the same time, post-hoc analysis has helped clarify the nature of valuation processes and indicates that improvements to the model are possible. The primary differences between the original and revised model are 1) a reduction in value types from seven to six, 2) more limited effects related to the user's perception of self in the consumption experience and purchase/ repurchase than was anticipated, 3) more interrelationships between intermediate value variables and, 4) more direct relationships between some value types and behaviors than was expected. The revised model therefore advances knowledge in the area of "Value" research. The theoretical significance of this research can be divided into three broad areas: conceptual, measurement and application oriented.

Conceptual Implications and Contributions

Findings highlight the importance and complexity of valuation in use situations. While product judgments have an impact on subsequent behaviors, greater understanding is achieved by examining the product, person and use situation interaction. This study expanded knowledge of this topical area by looking beyond the influence of product on behaviors and incorporating the effects of situation.

In addition, this study examined how several value types operate in a postpurchase use situations. Given the limited scope of postpurchase research (see Gardial, Clemons, Woodruff, Schumann, and Burns, forthcoming), the postpurchase perspective adopted by this work is an important contribution.

Based on the revised Value Integration Model, postpurchase valuation judgments appear to result from processing that incorporates the impact of both product related values and self image related values. In general, findings indicate that, while the importance of product performance can not be underestimated, the contribution of self perception in postpurchase evaluations should not be overlooked.

In depth interviews with subjects during pretesting, product features were identified that were expected to significantly affect evaluation. However, there were indications that, while these product features are likely to provide the foundation or basis on which to judge product use

experiences, they are not good discriminators between value types. For example, "high quality materials," "solid construction," "durability," "quality craftsmanship," etc. were necessary for positive evaluations. If they were missing, favorable judgments are not likely to have been possible on any level. In this sense, it appears that there are non-compensatory features of products related to evaluations similar to the "hygiene" factors identified by Herzberg et al. (1959). However, there is evidence that compensatory features also exist and help differentiate preference and judgment related to less fundamental product functioning considerations. As a result, there are indications that certain product features may be necessary but not sufficient for positive evaluations, while other features contribute to incremental changes in the intensity of reaction. Therefore, while these fundamental (hygiene) features are important and, in fact, may dominate the ability to predict positive vs negative value judgments, to enhance understanding and provide additional explanations of evaluations, more discriminating product features must be included in analysis.

This research also uses value as an underlying concept to integrate issues related to information processing, attitude formation, Means End theories and (dis)satisfaction study. While results are consistent with previous research related to each of these areas, this research advances existing theories

using "value" as a central concept to relate and extend the impact of these theories on postpurchase evaluations. In other words, this study is consistent with, yet expands, marketing's nomological net.

Many of the theories used to formulate the initial conceptualization of valuation processes focus on choice or preference, but not evaluation. For example, Means End theory provides insight into how preferences form: product features provide desired benefits which are consistent with personal values. However, this research has demonstrated that overall evaluations are more closely tied to lower level considerations in the means-end hierarchy. The Value Integration Model is consistent with Means End theory in that it recognizes the role of attributes, consequences and values in judgments of product use. The importance of means end hierarchies is clearly demonstrated by the Product Value/ Value in Use path. The VIM extends Means End Chain theory by proposing causal relationships between attributes, consequences, values and relevant behaviors. The VIM proposes that product consequences (Value in Use and Possession Value) result from the interaction of product attributes (Product Value) and personal values (Personal Values Congruency). Consequences (Value in Use and Possession Value) are the sources of subsequent judgments and behaviors. Means End Chains are hierarchical in nature and only suggest that personal values motivate choice and preference. The subtle

differences between causal relationships and hierarchical relationships raises issues related to how well theories developed to explain product choice translate to post use judgement formation. As a result, questions remain as to the extent to which existing theory explains postpurchase phenomena or whether new postpurchase theory is needed (Gardial et al., forthcoming).

Measurement Implications and Contributions

This dissertation used a combination of techniques to assess the various types of value. Qualitative methods (depth interviews, focus groups) were used to generate survey items. The remarkable consistency between items identified in the qualitative techniques used in this research and previous focus groups conducted by the sponsor confirms the importance of certain product attributes to users of the product. In this sense, the traditional process that translates qualitative findings to items relevant for quantitative analysis was successfully replicated.

Six of seven value types were isolated and measured. In terms of developing scales to assess each of the value types, moderate success was achieved with Possession Value, Consequence Satisfaction and Self Satisfaction. A sufficient number of items were identified that capture the essence of these constructs with high predictive validity and acceptable Cronbach alphas. Items related to Product Value and Value in

Use were unique to this study. It is likely that in subsequent studies, items for these two value types will have to be generated for each product/ product use situation investigated.

Using structural equation modeling allowed the assessment of the relationships of an entire set variables. Rather than examining a few direct associations, LISREL analysis allowed the entire valuation system to be examined. Thus an extensive look at multiple direct and indirect associations to appraise comprehensive valuation processes was achieved.

In general, the measurement aspects of this research advanced the field of valuation assessment. As such, the study provides the start of the development of a measurement system for postpurchase evaluations.

Application Implications and Contributions

Since the mid 1950's (e.g., Drucker 1954), the importance of meeting customers needs has been recognized as necessary for a business to be competitive. Understanding what consumers' value and how their valuation processes operate is a critical component of a firm's market orientation. Knowledge of what is important to consumers is fundamental to the success of business. However, companies often have difficulty implementing the philosophy espoused by the marketing concept due to lack of actionable recommendations. This study remedies some of the vagueness associated with

implementing the marketing concept by identifying a topology of factors that are important to consumers in a use situation and providing a first step in understanding how those factors interact.

Specifically, this research has demonstrated that focussing on the product, infusing it with high quality features that provide users with many benefits related to specific use situations, is critical to promoting desired consumer behaviors. There is no substitute for giving the consumer the product features (s)he thinks are important.

However, this research also indicates the importance of self perception in a product use situation. Consumers' are judging products not only on how well they perform but on factors related to what they say about the user. In this study, the self image value constructs (Personal Values Congruency, Possession Value, Self Satisfaction) significantly affected 1) evaluation of the use experience (Consequence Satisfaction) and 2) subsequent behaviors (WOM and Commitment to Use). While the self in use perceptions were significant, they were not as dominant as the more product oriented valuations (Product Value, Value in Use and Possession Value) in 1) explaining many of the intervariable relationships and 2) in the assessing purchase/ repurchase intentions. However, as more competitors reach parity on product features, differential advantage may still be possible by enhancing self in use valuations. Firms must be aware of the potential of

using these types of self related values to achieve or sustain differential advantage. For the practitioner this creates opportunities to use promotion techniques to create or enhance the self dimensions of product use. To a certain extent, practitioners already use advertising to convey that their products enhance self image. For example, the Mercedes ads that focus on safety convey an image of users who spare no expense to protect themselves and their families. The ads extend the perception of the Mercedes user beyond successful and wealthy. The challenge for practitioners is to communicate the appropriate self image for users of the company's brand.

This study also demonstrated the need to understand the affect of many different types of postpurchase behavior. While choice and brand loyalty are often the goals of sellers, there are a whole host of postpurchase behaviors that affect purchase. This study incorporated two: Word of Mouth recommendations and Commitment to Use the product. It is interesting to note that while purchase was driven by product performance, the other behaviors were strongly affected by the self perception related variables (note the relationships between Commitment to Use/ Value Congruence and Possession Value/ Word of Mouth). Therefore, in addition to product situation considerations that affect choice and postpurchase evaluation, managers must also investigate the impact of other types of postpurchase behaviors. Such analysis will assist in

the management of the entire postpurchase behavior process.

Strategy considerations receive considerable attention from both academicians and practitioners. Successful planning, implementation and control is vital for the long term viability of business. However, what is often overlooked in the study of strategy is a comprehensive examination of consumer behavior and how consumer behavior concerns must be completely integrated into strategy decisions. This study provides a foundation for an integrative perspective that extends practitioners' capabilities beyond mere prediction to enhanced understanding. It is through a comprehensive view of the consumption experience - one that incorporates attempts at understanding consumer value, rather than merely predicting behavior - that insights into proactive actions will emerge to increase the success of a market orientation and foster the development of competitive advantage opportunities.

FUTURE RESEARCH

While the results of this study are intriguing and insightful, perhaps the greatest contribution of this dissertation is the foundation it provides for future research. Subsequent investigation and future research objectives comprise a research program and that can be divided into three areas: conceptual, measurement and application. While there are many research opportunities suggested by this

study, it is necessary to prioritize them so that a logical progression of knowledge enhancement occurs. Figure 6-1 lists those areas which are of immediate concern in this research program.

Future Conceptual and Theoretical Study

Additional analysis of the dissertation data, will provide an understanding of issues not specifically addressed in the current study. For example, do personal characteristics impact value judgments? Specifically, are valuation processes and/ or value judgments different for men vs women, high vs low income, high vs low education levels, etc.? What are some of the effects of use on value ratings and processes? For example, do subjects who report high involvement across situations have different processes than those for whom dining room furniture is less important? Are there differences in how frequent vs infrequent users value products? Does length of ownership affect value judgments? In general, an examination of the effects of individual demographic and use differences should prove interesting.

Given the difficulty in identifying the role of Overall Value in the postpurchase evaluation process, further investigations might examine Overall Value as a second order factor that encompasses both Consequence and Self Satisfaction. This would require testing a different specification of the Value Integration Model. At the very

Conceptual Development and Measurement

1. Clarify meaning and measurement of Overall Value
2. Clarify meaning and measurement of Commitment to Use
3. Investigate the use of additional qualitative approaches to distinguish between important and discriminating product value attributes
4. Continue examination of the differences and relationships between value and satisfaction
5. Explore the role of emotion and cognition in value meanings and valuation processes

Theory Expansion

1. Replicate study to test interaction of two process routes (product and self)
2. Test two stage processing of product attributes (non-compensatory and compensatory)
3. Compare theoretical foundations of choice with post purchase evaluative outcomes
4. Explore impact of value types and processes on long term market relationships

Value Application to Strategy Decisions

1. Investigate issues related to design and implementation of value measurement systems
2. Examine the development of market orientation values among managers
3. Relate marketing mix decisions to value data (e.g., new product development, pricing, channel partnerships, promotion)
4. Integrate consumer perspective on value in exchange with practitioner perspective of a value delivery process

Figure 6-1: Value in Exchange
Future Research Program Research Priorities

least, future study should focus on the differences and relationships between satisfaction and value. This research examined value meanings (including satisfaction) and valuation processes. Subsequent work should integrate value and satisfaction meanings with valuation and satisfaction processes.

Further study of some of the value meanings is indicated. For example, there may be multiple dimensions of the situation related value types. Value in Use may be composed of aesthetic and functional factors. Possession Value may include both public and private components (i.e, What does the product say about me to others versus to myself?). Based on the product and situation examined in this research, the relationship between Value in Use and Possession Value suggests that further examination of common underlying dimensions would be rewarding. There were also indications that negative and positive Word of Mouth recommendations were separate factors. In short, fine tuning value meanings should continue.

Focus on the cognitive vs emotion structures underlying values would also help understand value meanings. Therefore, the role of emotion in the valuation process should be explored. It is likely that emotion is more strongly associated with the self perception value types (Possession Value and Self Satisfaction) and that the valuations of product (Product Value, Value in Use, Consequence

Satisfaction) are more cognitive in nature.

The relationship between Enduring Personal Values and Evoked Personal Values was assessed by examining the differences between the two sets of values for each individual. The congruency between Evoked and Enduring Personal Values was expected to reflect the situational importance of the product to the individual. Additional study should compare how this value congruency relates to situational involvement. Are they the same construct? Does value congruence motivate situational involvement? Are both necessary in the study of postpurchase evaluations?

One of the contributions this dissertation has made is in the area of postpurchase processing. A worthwhile extension of this work would be a comparison of these postpurchase findings to prepurchase judgement. Additional investigation in this area would help determine if prepurchase theories are adequate to explain postpurchase phenomena or if new theory development is indicated. Specifically, are the valuation processes the same in both pre and postpurchase? Are the product features important during choice decision making the same as those in postpurchase evaluations? Are all the value types equally important in choice and post use evaluations?

The research included three different types of consumer behaviors: Word of Mouth recommendations, Commitment to Use, and Repurchase. Additional work needs to examine how these types of postpurchase behaviors affect subsequent purchases

and evaluations. In other words, a cycle of choice, use, evaluation, choice, use, etc. is suggested. Longitudinal analysis is needed to determine how value and valuation processes are manifested across the span of purchase/ repurchase activity.

Finally, this research needs to be replicated across products and use situations. The strength of the study's findings will increase dramatically if results can generalize to other products and situations. In addition to testing the model on specific products, the model is likely to be applicable to a host of important broad based behaviors of interest to marketers. For example, how well do the value types and valuation processes reflect consumers' propensity to recycle, to buy green products, to act in an environmentally friendly manner? Can new insight into buying patterns and consumption trends be achieved (i.e., "Buy American") through an examination of valuation processes?

This research investigated valuation processes of end users. The model can be used to develop further understanding of the valuations of specific market segments and cross cultural users. The application of the Value Integration Model can also be extended to examine business to business relationships and the valuation processes of interorganizational customers. One of the most intriguing uses of the model will be in the examination of valuation processes in long term relationships (i.e., business to

business). For example, are channel partners more stable if certain types of value receive high ratings?

Many of the extensions to the conceptual side of this research will be possible only if commensurate development is made to value measurement. Necessary measurement advancements are proposed in the next section.

Future Measurement Study

Fundamentally, some of the measures of certain value types need to refined. Identification of additional Overall Value items is necessary to delineate that construct. The continued development of and revisions to scales to assess each of the value types is critical.

The role of certain product attributes as "hygiene" factors bears closer scrutiny. In this study, "high quality materials," "a fine finish," "solid construction," etc. were important indicators of product value. The role of these necessary but not sufficient (for evaluation discrimination) attributes was not included in the model depicting valuations processes. Two basic questions need to be answered. First, can researchers develop methods to consistently identify these types of product features across products and situations? Second, does the nature of these features suggest a two stage evaluation process is occurring? Each question will be discussed further.

Methods for Identifying Product Features

Qualitative methods (depth interviews and focus groups) were used to identify items to measure the different value types. From a measurement perspective, the issue remains as to whether these two techniques are sufficient for adequately identifying the dimensions for each value concept. The qualitative methods used in this study served the purpose for which they were designed: to identify items important to users when evaluating their furniture. However, since most consumers surveyed had positive evaluations of their product, substantial endloading occurred on certain value constructs. Thus, there was some difficulty in finding discriminating items across value types. The issue of isolating important items for discriminating items in postpurchase value research suggests a need to improve the process for identifying consumer value items.

One possible solution is to employ a combination of qualitative techniques to identify 1) important attributes and 2) dimensions that discriminate between value types. For example, one might observe the consumer in the use situation, then conduct an interview to expand on/ clarify observations. Depth interview questions might need to take different perspectives to cull important attributes. In short, consumers difficulty in "moving up" the Means-End chain is often acknowledged. However, it is up to the researcher to devise ways to help subjects overcome difficulty in

identifying features and relating features to desired benefits.

Two Stage Valuation Processing

The possibility that certain product features or attributes may act as "hygiene" factors in determining evaluation suggests that a two stage valuation process is occurring. In the first stage, consumers evaluate whether or not a product has a necessary attribute or set of attributes. Without these features, positive evaluation is not possible. Therefore, a non compensatory process occurs. If the product has the desired attributes, the consumer continues to evaluate the product on other Product Value dimensions as well as on Value in Use and Possession Value. This second stage reflects compensatory processing (i.e., one feature may compensate for the lack of another). Thus, the hygiene factors (generally product value items) are necessary but not sufficient for positive evaluation, while more abstract product benefits may affect the intensity or magnitude of valuation judgments.

The LISREL analysis was not able to address the possibility of two stage processing. Additional methods and/or multiple methods may be necessary to explore this phenomenon. Further investigation of this two stage valuation processing will add significantly to understanding valuation processes.

Future Application Study

Value Meanings and Processes

The complexity of value meanings and processes demonstrated by this research provides both a challenge and considerable opportunity for businesses.

> What has apparently happened is that many businesses, and even whole industries, have suffered a substantial, sometimes fatal, impairment of their ability to respond to ... [the basic forces driving business and product life cycles]. In many companies, the most serious weaknesses have been a loss of customer and market orientation and a basic inability to offer competitively priced products that are responsive to customers' current needs and preferences" (Webster 1988, p. 30).

The current study and subsequent research will help businesses understand and better provide customers with what the customers value.

Future research must examine how marketing mix variables might impact value judgment ratings and valuation processes. Each of the four "P's" plays an integral role in determining value judgments of product use experiences. Additional research is needed to determine the specific impact of pricing, product, promotion and place decisions on the magnitude of value judgments and subsequent effects on overall valuations processes. For example, can promotional campaigns be used to enhance Possession Value perceptions? How will pricing decisions affect Product Value? Will distribution considerations impact Value in Use?

The relationship between valuation processes and services

needs to be examined. Are consumers' valuation processes the same for service related products as they are for judgments related to tangible products. Does service with tangible products enhance value judgments?

The issue of the effects of emotion vs cognition on value and valuation was introduced in a previous section as an important theoretical issue that bears further study. This issue also has implication for practitioners. Recently, researchers (Kline 1993) have implored businesses to look at emotion as the dominant buying motive.

> Customer satisfaction is dead. Emerging in its place is a new sophistication to which business leaders who crave success are clinging. It goes beyond mere customer satisfaction. It's more than a partnership. It's not just a relationship. It incorporates delight and ecstasy, and a passion for achieving them.....Are you ready to get emotional? If you're not, you may not be ready to play in the emerging satisfaction arenas (Schlossberg 1993, p. 1).

For practitioners to fully understand the role of value in consumers' use and evaluation of products, the impact of emotion on valuation processes must be more fully explored.

While future research related to value meanings and processes will help practitioners meet end user needs, these aspects of a customer orientation are part of a larger strategic issue. That issue concerns the planning, implementation and control of Value Delivery Systems.

Value Delivery Systems

There is growing recognition on the part of practitioners

of the importance of delivering value to end users and channel partners. This research provides the foundation for a value delivery system by answering the fundamental question: What do consumers value? Armed with this information, organizations stand a better chance of developing systems that best meet customers needs.

Future research delineating a multi step value delivery system is necessary for sustaining and achieving competitive advantage. The first issue related to value deliver systems is basic: What will a Value Delivery System look like? To answer that question, future studies must identify the steps of a Value Delivery System and determine how that system relates to the end user's valuation processes. Burns and Woodruff (1992) provide an initial conceptualization of a value delivery system that depicts the interaction between consumer valuation processes and the steps a firm must undertake to deliver value to its users. Those steps include: identify the value, choose the value, provide the value, communicate the value, and assess the delivered value. The delineation of these specific steps 1) will help in the design and implementation of value measurement systems, 2) will help foster the development of market orientation values among managers and 3) will facilitate the use of consumer value data in specific decision making areas (e.g., new product development, pricing, promotion, formation of channel partnership).

A major advance in achieving a market orientation is the development of a system that fully integrates consumer behavior considerations with strategic activities. Future research related to this area might specifically address questions like: On what aspects of a firm's offering are users making value judgments? How would consumer valuation processes affect each step in a value delivery process? Where do opportunities to achieve and sustain competitive advantage emerge? How can a Value Delivery System capture the dynamic nature of consumer valuation?

CONCLUSIONS

This dissertation examined a topic of high priority in the development of a market orientation: the consumers' perspective of value in the exchange that take place between user and provider. In this study, several different types of value were identified and measured. The relationships between value types were explored by testing the viability of the Value Integration Model. Results of the study suggest that postpurchase valuation processes are strongly affected by product performance and that evaluation in a given use situation is significantly supplemented by self image considerations. Therefore, person, product, and situational related value(s) must be included in a comprehensive examination of consumers' behaviors and valuation processes. A sampling of exciting research opportunities triggered by the

results of the current investigation have been outlined.

The goal of this research was to provide a foundation on which to build subsequent knowledge related to the phenomenon of value. As a result of this work, the foundation has now been laid to facilitate future exploration and discovery.

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APPENDICES

APPENDIX 1

Questions for Dissertation Depth Interviews

Introduction

I am studying consumers' experiences with products. Today, I'd like to spend a few minutes talking to you about your fine furniture. I'm particularly interested in your use and evaluation of your furniture. Definition of fine furniture.

Questions

1. When you bought your furniture, what were some important factors that affected your purchase?

2. Now I'd like to know what its like when you use your furniture. Can you describe for me a typical situation in which you use your furniture?
   What's it like?
   Are others present?
   Is there a difference between your thoughts and feelings about furniture when others are around compared to when you are using it alone?
   Does your spouse affect your evaluation?
   Your children?
   Friends?
   Relatives?

   Can you identify other use situations? How are they similar/ different?

2a. Explore consequences.
   Use laddering. OR
   Start with use situation. When your using your furniture, what do you want to feel good about? WHY? Idea of stored value?
   Are there things that might happen or happened in that situation that you don't feel good about?

3. Now that you've had your furniture for a while, are there any differences in what's important to you now in your evaluation as compared to when you first purchased your furniture?

4. I'm interested in what value means to consumers like yourself. The next set of questions address value considerations.

   Can you tell me what factors might impact your evaluation of your furniture based on a quality price tradeoff?
   How do you know when something is of good quality?
   Other costs?

   Can your tell me what kind of benefits you receive from using/ owning your furniture?
   Why are these important?

   Do you think your furniture says anything about you to others? [projective if nothing develops]

   Can you think of any type of benefits that you <u>anticipate</u> receiving from using your furniture. (stored value)

   If I was to ask you about the overall value of your furniture, what would you say? What factors affect that evaluation/ judgment?

Depth Interviews Questions (Continued)

Are your satisfied with your furniture? What does that mean?

Are you satisfied with yourself after buying/ using your furniture? What does that mean?

Thank you for your time. This interview will help me with some research I am conducting to meet my degree requirements. Explain purpose of research (understanding value and satisfaction.) Do you have any questions?

APPENDIX 2

CONSUMER EVALUATION SURVEY

This survey is intended to learn about how consumers evaluate products. For the purposes of this project, FINE DINING ROOM furniture has been selected as the topic of study. FINE DINING ROOM furniture is defined as quality wood or upholstered furniture.

There are several sections to this survey. Instructions for each section appear at the top of each section.

It is important that you answer each question. There are no "right" or "wrong" answers. If you wish to comment on any questions or qualify your answers, please feel free to use the space in the margins. Your comments will be read and taken into account.

All answers will be confidential.

Thank you for your cooperation!

Please return this survey to:

Mary Jane Burns
Department of Marketing, Logistics and Transportation
College of Business Administration
The University of Tennessee
302A Stokely Management Center
Knoxville, TN 37996-0530

PART I. GENERAL QUESTIONS ABOUT DINING ROOM FURNITURE

A. How often do you use your dining room to: (Please circle the best response.)

	Almost Never	Rarely (Less than Monthly)	Occasionally (Monthly)	Often (Weekly)	Very Frequently (Daily)
1. Dine with immediate family members.....	1	2	3	4	5
2. Dine with guests.....	1	2	3	4	5

B. How important is your dining room furniture to you when you: (Please circle the best response.)

	Not at All Important						Extremely Important
1. Dine with immediate family members.....	1	2	3	4	5	6	7
2. Dine with guests.....	1	2	3	4	5	6	7

C. As best you can recall, please indicate the brand(s) of dining room furniture you own and the year purchased. Feel free to look for a brand name on each item in your dining room, if you can't recall.

	BRAND	YEAR PURCHASED
Table	_____	_____
Chairs	_____	_____
Buffet	_____	_____
China Cabinet	_____	_____
Other (Please Indicate)		
_____	_____	_____
_____	_____	_____
_____	_____	_____

PART II. USING AND JUDGING DINING ROOM FURNITURE

A. General Judgment of Dining Room Furniture

To what extent do you agree with the following statements about your dining room furniture. (Please circle one response per item.)

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Uncertain	Slightly Agree	Moderately Agree	Strongly Agree
"Relative to the price I paid, my dining room furniture....."							
is made of high quality materials.....	1	2	3	4	5	6	7
is solidly constructed	1	2	3	4	5	6	7
has a fine finish	1	2	3	4	5	6	7
is durable	1	2	3	4	5	6	7
reflects quality craftsmanship.....	1	2	3	4	5	6	7

"In general, my dining room furniture....."	Strongly Disagree	Moderately Disagree	Slightly Disagree	Uncertain	Slightly Agree	Moderately Agree	Strongly Agree
has a style that will last	1	2	3	4	5	6	7
is comfortable	1	2	3	4	5	6	7
is like a piece of art work	1	2	3	4	5	6	7
is functional	1	2	3	4	5	6	7
is an investment	1	2	3	4	5	6	7
is unique	1	2	3	4	5	6	7
will be an heirloom	1	2	3	4	5	6	7
Considering everything, my dining room furniture is of high quality for the price I paid	1	2	3	4	5	6	7

B. Judging Dining Room Furniture when Entertaining Guests

1. To what extent do you agree with the following statements about your dining room furniture when you are entertaining guests. (Please circle one response per item.)

"WHEN ENTERTAINING GUESTS, my dining room furniture....."	Strongly Disagree	Moderately Disagree	Slightly Disagree	Uncertain	Slightly Agree	Moderately Agree	Strongly Agree
creates a feeling of warmth in my home	1	2	3	4	5	6	7
provides a comfortable setting	1	2	3	4	5	6	7
creates a feeling of beauty	1	2	3	4	5	6	7
can accommodate both large and small numbers of guests	1	2	3	4	5	6	7
fits in with my other furniture	1	2	3	4	5	6	7
provides the topic for an interesting story	1	2	3	4	5	6	7
Considering everything when I am entertaining, my dining room furniture provides many benefits during use	1	2	3	4	5	6	7

2. To what extent do you agree with the following statements about your dining room furniture when you are entertaining guests. (Please circle one response per item.)

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Uncertain	Slightly Agree	Moderately Agree	Strongly Agree
"**WHEN ENTERTAINING GUESTS**, my dining room furniture....."							
indicates that I have good taste.....	1	2	3	4	5	6	7
indicates that I am successful.....	1	2	3	4	5	6	7
indicates that I enjoy being around others.....	1	2	3	4	5	6	7
indicates that I am sophisticated.....	1	2	3	4	5	6	7
indicates that I am sentimental.....	1	2	3	4	5	6	7
indicates that I care about my home.....	1	2	3	4	5	6	7
indicates that I enjoy gracious living.....	1	2	3	4	5	6	7
indicates that I am family oriented.....	1	2	3	4	5	6	7
Considering everything when I am entertaining, my dining room furniture is a statement of who I am	1	2	3	4	5	6	7

PART III. OVERALL JUDGMENTS OF DINING ROOM FURNITURE WHEN ENTERTAINING GUESTS

A. Compared to what you wanted, how do you feel about **your dining room furniture** when you are entertaining guests? For each pair of words, please place an "X" in the space that best represents how strongly you feel.

	Extremely	Quite	Slightly	Neutral	Slightly	Quite	Extremely	
satisfied with my furniture	____:	____:	____:	____:	____:	____:	____	dissatisfied with my furniture
negative about my furniture	____:	____:	____:	____:	____:	____:	____	positive about my furniture
unhappy with my furniture	____:	____:	____:	____:	____:	____:	____	happy with my furniture
good about my furniture	____:	____:	____:	____:	____:	____:	____	bad about my furniture
pleasantly surprised with my furniture	____:	____:	____:	____:	____:	____:	____	unpleasantly surprised with my furniture
upset with my furniture	____:	____:	____:	____:	____:	____:	____	not upset with my furniture
contented with my furniture	____:	____:	____:	____:	____:	____:	____	discontented with my furniture

B. Below are general, overall statements about dining room furniture. Please circle the response that best indicates your opinion about each item **when entertaining guests**.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Uncertain	Slightly Agree	Moderately Agree	Strongly Agree
OVERALL, WHEN ENTERTAINING GUESTS.....							
I am satisfied with my dining room furniture.....	1	2	3	4	5	6	7
I am less satisfied with my dining room now than when I first bought it.....	1	2	3	4	5	6	7
my dining room furniture has good value.....	1	2	3	4	5	6	7
my dining room furniture is important to me.....	1	2	3	4	5	6	7
I generally believe my dining room furniture was not worth the price I paid.....	1	2	3	4	5	6	7
I generally believe my dining room furniture was worth the time and effort it took to acquire it.....	1	2	3	4	5	6	7

C. **Compared to what you wanted**, how does your furniture make you feel about <u>yourself</u> when you are <u>entertaining guests</u>? For <u>each</u> pair of words, please place an "X" in the space that best represents how strongly you feel.

	Extremely	Quite	Slightly	Neutral	Slightly	Quite	Extremely	
satisfied with myself	____	____	____	____	____	____	____	dissatisfied with myself
negative about myself	____	____	____	____	____	____	____	positive about myself
unhappy with myself	____	____	____	____	____	____	____	happy with myself
good about myself	____	____	____	____	____	____	____	bad about myself
pleasantly surprised with myself	____	____	____	____	____	____	____	unpleasantly surprised with myself
upset with myself	____	____	____	____	____	____	____	not upset with myself
contented with myself	____	____	____	____	____	____	____	discontented with myself

PART IV. FUTURE ACTIVITIES

Please circle the best response for each of the following items regarding the chances of performing the activities listed.
(0 = No chance you will do it, 10 = You are certain you will do it)

	No Chance										I am Certain I will
A. After buying new dining room furniture, what are the chances											
you will make **positive** comments about this style of dining room furniture to your friends and relatives	0	1	2	3	4	5	6	7	8	9	10
you will make **negative** comments about this style of dining room furniture to your friends and relatives	0	1	2	3	4	5	6	7	8	9	10
you will make **positive** comments about the brand(s) you own now to your friends/relatives	0	1	2	3	4	5	6	7	8	9	10
you will make **negative** comments about the brand(s) you own now to your friends/relatives	0	1	2	3	4	5	6	7	8	9	10
you will make **positive** comments to your family/ friends about the quality of your furniture for the price you paid	0	1	2	3	4	5	6	7	8	9	10
you will make **negative** comments to your family/ friends about the quality of your furniture for the price you paid	0	1	2	3	4	5	6	7	8	9	10
you will increase your usage of your dining room furniture	0	1	2	3	4	5	6	7	8	9	10
your dining room furniture will become more important to you	0	1	2	3	4	5	6	7	8	9	10
you will find additional uses for your dining room furniture	0	1	2	3	4	5	6	7	8	9	10
your evaluation of your dining room furniture will improve	0	1	2	3	4	5	6	7	8	9	10
B. After buying new dining room furniture, what are the chances ..... (assume you are financially able)											
you will buy new flooring for the dining room	0	1	2	3	4	5	6	7	8	9	10
you will buy new accessories for the dining room	0	1	2	3	4	5	6	7	8	9	10
you will change the wall covering in the dining room	0	1	2	3	4	5	6	7	8	9	10
C. IF YOU HAD IT TO DO OVER, what are the chances											
you would buy exactly the same brand(s) of dining room furniture that you own now	0	1	2	3	4	5	6	7	8	9	10
you would buy exactly the same style of dining room furniture that you own now	0	1	2	3	4	5	6	7	8	9	10
you would buy exactly the same pieces of dining room furniture that you own now	0	1	2	3	4	5	6	7	8	9	10
you would buy higher quality dining room furniture and pay more	0	1	2	3	4	5	6	7	8	9	10
you would buy lower quality dining room furniture and pay less	0	1	2	3	4	5	6	7	8	9	10

Part V of the Survey is Sponsor Proprietary

PART VI. PERSONAL VALUES

Listed in alphabetical order below are 10 values that affect some people's lives. For each value listed on the left, circle the number in column A that best represents how important these values are to you as **a guiding principle in your life**. In column B, circle the number that best represents how important each value is as a **guiding principle affecting your use and evaluation of your dining room furniture**.

	A Life in general							B Use/evaluation of Dining Room Furniture						
	Not at All Important						Extremely Important	Not at All Important						Extremely Important
Values														
A comfortable life (a prosperous life)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
An exciting life (a stimulating, active life)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
A sense of accomplishment (lasting contribution)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
A world of beauty (beauty of nature and the arts)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Family security (taking care of loved ones)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Freedom (independence, free choice)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Happiness (contentedness)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Pleasure (an enjoyable, leisurely life)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Self-respect (self-esteem)	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Social recognition (respect, admiration)	1	2	3	4	5	6	7	1	2	3	4	5	6	7

PART VII. GENERAL INFORMATION

Your answers to the following questions will never be identified with you, but will be combined with those of the others in the study to describe in summary fashion the kinds of people who participated in this research.

1. How many adults (over 18) live in your household (include yourself in this number):____
2. How many children (18 and under) live in your household? _____
3. What was the last grade that you completed in school? (Check the appropriate category):

   _____ Less than four years of high school
   _____ High school graduate
   _____ Technical or trade school
   _____ Some college
   _____ College graduate
   _____ Post-college graduate schooling

4. Your sex is: _____ male _____ female

5. Your marital status is: _____ not married _____ married

6. Your age is: _____ years

7. Please indicate the person that had (has) the greatest influence on:

	Your purchase of dining room furniture (Check one category)	Your evaluation when using your dining room furniture (Check one category)
Myself	_____	_____
Spouse	_____	_____
Child	_____	_____
Friend	_____	_____
Relative	_____	_____
Other	_____	_____
(Please Indicate who it was)	_____	_____

8. Which of the following categories includes your total household income for 1991? (check one)

_____ Less than $15,000
_____ $15,001 to 30,000
_____ $30,001 to 45,000
_____ $45,001 to 60,000
_____ $60,001 to 75,000
_____ $75,001 to 90,000
_____ $90,001 to 105,000
_____ More than $105,000

9. Is there anything else you would like to tell me about using/ evaluating your dining room furniture?

THANK YOU!

APPENDIX 3

UNIVARIATE SUMMARY STATISTICS FOR CONTINUOUS VARIABLES: SAMPLE SIZE = 372

VARIABLE	MEAN	ST. DEV.	SKEWNESS	KURTOSIS	MINIMUM	FREQ. of MIN.	MAX.	FREQ. of MAX.
PRODA1	6.196	1.122	-2.133	5.464	1.00	3	7.00	184
PRODA2	6.245	1.126	-2.120	5.082	1.00	3	7.00	201
PRODA3	6.059	1.264	-1.843	3.676	1.00	5	7.00	178
PRODA4	6.124	1.111	-1.786	3.933	1.00	2	7.00	171
PRODA5	6.099	1.245	-1.958	4.019	1.00	4	7.00	179
PRODC1	6.272	1.142	-2.197	5.229	1.00	1	7.00	211
PRODC2	6.207	1.008	-2.091	6.475	1.00	3	7.00	172
PRODC3	5.086	1.680	-0.764	-0.254	1.00	15	7.00	86
PRODC4	6.328	0.890	-1.915	5.784	1.00	1	7.00	194
PRODC5	5.172	1.833	-0.739	-0.542	1.00	19	7.00	127
PRODC6	4.597	1.820	-0.396	-0.773	1.00	30	7.00	70
PRODC7	4.317	2.034	-0.264	-1.099	1.00	56	7.00	73
PRODOVER	5.981	1.230	-1.609	2.874	1.00	4	7.00	157
VIU1	5.970	1.143	-1.456	2.566	1.00	2	7.00	144
VIU2	6.172	0.956	-1.635	3.848	2.00	4	7.00	160
VIU3	5.960	1.281	-1.473	2.128	1.00	4	7.00	167
VIU4	5.594	1.692	-1.245	0.518	1.00	12	7.00	149
VIU5	6.202	1.151	-2.179	5.676	1.00	4	7.00	192
VIU6	3.780	2.064	0.122	-1.200	1.00	77	7.00	57
VIUOVER	5.772	1.172	-1.174	1.712	1.00	1	7.00	114
POS1	5.780	1.255	-1.183	1.523	1.00	3	7.00	131
POS2	4.941	1.544	-0.642	0.022	1.00	14	7.00	65
POS3	5.199	1.377	-0.480	-0.118	1.00	4	7.00	80
POS4	4.454	1.570	-0.254	-0.343	1.00	18	7.00	46
POS5	4.269	1.718	-0.256	-0.662	1.00	34	7.00	39
POS6	5.984	1.118	-1.387	2.522	1.00	1	7.00	149
POS7	5.403	1.515	-0.873	0.222	1.00	7	7.00	113
POS8	5.261	1.479	-0.757	0.274	1.00	9	7.00	93
POSOVER	5.089	1.580	-0.893	0.450	1.00	20	7.00	75
CONSAT1	5.874	1.379	-1.702	2.357	1.00	4	7.00	136
CONSAT2	5.944	1.156	-1.300	1.431	1.00	1	7.00	138
CONSAT3	5.976	1.192	-1.424	1.781	1.00	1	7.00	149
CONSAT4	5.887	1.273	-1.489	1.867	1.00	1	7.00	136
CONSAT5	4.989	1.295	-0.040	-0.428	1.00	3	7.00	59
CONSAT6	5.938	1.273	-1.151	0.597	1.00	2	7.00	167
CONSAT7	6.000	1.291	-1.566	1.895	1.00	1	7.00	167
OVER1	6.030	1.279	-1.821	3.307	1.00	3	7.00	169
OVER2	5.441	1.862	-0.928	-0.429	1.00	15	7.00	168
OVER3	5.750	1.352	-1.230	1.287	1.00	5	7.00	135
OVER4	5.667	1.345	-1.242	1.600	1.00	6	7.00	120
OVER5	5.720	1.587	-1.338	0.920	1.00	8	7.00	158
OVER6	5.898	1.305	-1.506	2.230	1.00	4	7.00	152
SLFSAT1	5.806	1.184	-1.227	1.518	1.00	2	7.00	114
SLFSAT2	5.860	1.092	-0.905	0.386	1.00	1	7.00	119
SLFSAT3	5.828	1.107	-0.805	0.099	1.00	1	7.00	119
SLFSAT4	5.796	1.214	-1.140	1.166	1.00	2	7.00	121
SLFSAT5	5.003	1.234	0.254	-0.794	1.00	2	7.00	59
SLFSAT6	5.804	1.245	-0.661	-0.741	1.00	1	7.00	148
SLFSAT7	5.788	1.255	-1.140	1.261	1.00	4	7.00	129
WOM1	7.527	2.715	-1.189	0.686	0.00	13	10.00	118
WOM2	8.728	1.872	-1.947	4.032	0.00	2	10.00	184
WOM3	7.159	2.961	-1.115	0.308	0.00	24	10.00	98
WOM4	8.613	2.086	-1.926	3.528	0.00	4	10.00	184
WOM5	7.105	2.901	-1.006	0.019	0.00	16	10.00	85
WOM6	8.519	2.187	-1.740	2.440	0.00	2	10.00	181
COM1	6.153	2.779	-0.373	-0.565	0.00	15	10.00	60
COM2	5.675	2.975	-0.315	-0.815	0.00	28	10.00	45
COM3	5.043	3.069	-0.066	-0.977	0.00	40	10.00	37
COM4	5.487	2.977	-0.355	-0.747	0.00	38	10.00	35
COM5	3.599	3.697	0.549	-1.209	0.00	128	10.00	45
COM6	6.296	3.437	-0.611	-0.916	0.00	45	10.00	92
COM7	4.849	3.762	-0.022	-1.504	0.00	86	10.00	63
PUR1	7.202	2.960	-0.951	-0.154	0.00	16	10.00	111
PUR2	7.212	3.006	-0.943	-0.217	0.00	15	10.00	121
PUR3	7.484	2.790	-0.951	-0.177	0.00	7	10.00	133

APPENDIX 4

DISTRIBUTION OF SURVEY ITEMS

PRODA1

		Freq	Cum. Freq	Percent	Cum. Percent
1	*	3	3	0.81	0.81
2	*	5	8	1.34	2.15
3	**	8	16	2.15	4.30
4	**	9	25	2.42	6.72
5	*******	34	59	9.14	15.86
6	**************************	129	188	34.68	50.54
7	*************************************	184	372	49.46	100.00

20 40 60 80 100 120 140 160 180

Frequency

PRODA2

		Freq	Cum. Freq	Percent	Cum. Percent
1		3	3	0.81	0.81
2		2	5	0.54	1.34
3	**	14	19	3.76	5.11
4	*	7	26	1.88	6.99
5	****	31	57	8.33	15.32
6	***************	114	171	30.65	45.97
7	*****************************	201	372	54.03	100.00

30 60 90 120 150 180

Frequency

PRODA3

		Freq	Cum. Freq	Percent	Cum. Percent
1	*	5	5	1.34	1.34
2	*	6	11	1.61	2.96
3	**	11	22	2.96	5.91
4	**	11	33	2.96	8.87
5	**********	52	85	13.98	22.85
6	**********************	109	194	29.30	52.15
7	************************************	178	372	47.85	100.00

20 40 60 80 100 120 140 160 180

Frequency

PROD4

		Freq	Cum. Freq	Percent	Cum. Percent
1	|	2	2	0.54	0.54
2	|*	5	7	1.34	1.88
3	|*	6	13	1.61	3.49
4	|***	16	29	4.30	7.80
5	|*********	45	74	12.10	19.89
6	|************************	127	201	34.14	54.03
7	|**********************************	171	372	45.97	100.00

```
    |
----+---+---+---+---+---+---+---+--
    20  40  60  80 100 120 140 160
```

Frequency

PRODA5

		Freq	Cum. Freq	Percent	Cum. Percent
1	|*	4	4	1.08	1.08
2	|*	7	11	1.88	2.96
3	|***	13	24	3.49	6.45
4	|**	8	32	2.15	8.60
5	|********	39	71	10.48	19.09
6	|************************	122	193	32.80	51.88
7	|************************************	179	372	48.12	100.00

```
    |
----+---+---+---+---+---+---+---+---+---+
    20  40  60  80 100 120 140 160 180
```

Frequency

PRODC1

		Freq	Cum. Freq	Percent	Cum. Percent
1	|	1	1	0.27	0.27
2	|*	11	12	2.96	3.23
3	|	2	14	0.54	3.76
4	|**	13	27	3.49	7.26
5	|****	29	56	7.80	15.05
6	|***************	105	161	28.23	43.28
7	|*****************************	211	372	56.72	100.00

```
    |
----+---+---+---+---+---+---+---+
    30  60  90 120 150 180 210
```

Frequency

PRODC2

		Freq	Cum. Freq	Percent	Cum. Percent
1	*	3	3	0.81	0.81
2		1	4	0.27	1.08
3	**	8	12	2.15	3.23
4	*	3	15	0.81	4.03
5	*********	46	61	12.37	16.40
6	*****************************	139	200	37.37	53.76
7	**********************************	172	372	46.24	100.00

20 40 60 80 100 120 140 160

Frequency

PRODC3

		Freq	Cum. Freq	Percent	Cum. Percent
1	******	15	15	4.03	4.03
2	*********	22	37	5.91	9.95
3	************	31	68	8.33	18.28
4	********************	48	116	12.90	31.18
5	******************************	74	190	19.89	51.08
6	************************************	96	286	25.81	76.88
7	**********************************	86	372	23.12	100.00

10 20 30 40 50 60 70 80 90

Frequency

PRODC4

		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2		1	2	0.27	0.54
3	*	5	7	1.34	1.88
4	*	3	10	0.81	2.69
5	********	42	52	11.29	13.98
6	************************	126	178	33.87	47.85
7	************************************	194	372	52.15	100.00

20 40 60 80 100 120 140 160 180

Frequency

PRODC5

		Freq	Cum. Freq	Percent	Cum. Percent
1	****	19	19	5.11	5.11
2	****	21	40	5.65	10.75
3	*******	36	76	9.68	20.43
4	*********	46	122	12.37	32.80
5	**********	56	178	15.05	47.85
6	**********	67	245	18.01	65.86
7	*************************	127	372	34.14	100.00

20 40 60 80 100 120

Frequency

PRODC6

		Freq	Cum. Freq	Percent	Cum. Percent
1	**********	30	30	8.06	8.06
2	**********	24	54	6.45	14.52
3	**********	48	102	12.90	27.42
4	**********	62	164	16.67	44.09
5	**********	78	242	20.97	65.05
6	**********	60	302	16.13	81.18
7	**********	70	372	18.82	100.00

10 20 30 40 50 60 70

Frequency

PRODC7

		Freq	Cum. Freq	Percent	Cum. Percent
1	**********	56	56	15.05	15.05
2	**********	31	87	8.33	23.39
3	**********	27	114	7.26	30.65
4	**********	81	195	21.77	52.42
5	**********	52	247	13.98	66.40
6	**********	52	299	13.98	80.38
7	**********	73	372	19.62	100.00

10 20 30 40 50 60 70 80

Frequency

PRODOVER		Freq	Cum. Freq	Percent	Cum. Percent
1	*	4	4	1.08	1.08
2	*	4	8	1.08	2.15
3	**	12	20	3.23	5.38
4	****	20	40	5.38	10.75
5	**********	52	92	13.98	24.73
6	*************************	123	215	33.06	57.80
7	********************************	157	372	42.20	100.00

20 40 60 80 100 120 140

Frequency

VIU1		Freq	Cum. Freq	Percent	Cum. Percent
1		2	2	0.54	0.54
2	*	4	6	1.08	1.61
3	**	10	16	2.69	4.30
4	****	19	35	5.11	9.41
5	**********	61	96	16.40	25.81
6	*************************	132	228	35.48	61.29
7	******************************	144	372	38.71	100.00

20 40 60 80 100 120 140

Frequency

VIU2		Freq	Cum. Freq	Percent	Cum. Percent
2	*	4	4	1.08	1.08
3	*	6	10	1.61	2.69
4	*	5	15	1.34	4.03
5	**********	52	67	13.98	18.01
6	******************************	145	212	38.98	56.99
7	********************************	160	372	43.01	100.00

20 40 60 80 100 120 140 160

Frequency

VIU3		Freq	Cum. Freq	Percent	Cum. Percent
1	*	4	4	1.08	1.08
2	*	4	8	1.08	2.15
3	***	14	22	3.76	5.91
4	*****	24	46	6.45	12.37
5	**********	56	102	15.05	27.42
6	**********	103	205	27.69	55.11
7	**********	167	372	44.89	100.00

20 40 60 80 100 120 140 160

Frequency

VIU4		Freq	Cum. Freq	Percent	Cum. Percent
1	**	12	12	3.23	3.23
2	****	19	31	5.11	8.33
3	******	32	63	8.60	16.94
4	*	7	70	1.88	18.82
5	**********	54	124	14.52	33.33
6	**********	99	223	26.61	59.95
7	**********	149	372	40.05	100.00

20 40 60 80 100 120 140

Frequency

VIU5		Freq	Cum. Freq	Percent	Cum. Percent
1	*	4	4	1.08	1.08
2	*	5	9	1.34	2.42
3	**	8	17	2.15	4.57
4	*	5	22	1.34	5.91
5	*********	43	65	11.56	17.47
6	**********	115	180	30.91	48.39
7	**********	192	372	51.61	100.00

20 40 60 80 100 120 140 160 180

Frequency

VIU6		Freq	Cum. Freq	Percent	Cum. Percent
1	**********	77	77	20.70	20.70
2	**********	44	121	11.83	32.53
3	**********	46	167	12.37	44.89
4	**********	65	232	17.47	62.37
5	**********	54	286	14.52	76.88
6	**********	29	315	7.80	84.68
7	**********	57	372	15.32	100.00

10 20 30 40 50 60 70

Frequency

VIUOVER		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2	**	9	10	2.42	2.69
3	*	7	17	1.88	4.57
4	*****	23	40	6.18	10.75
5	**********	91	131	24.46	35.22
6	**********	127	258	34.14	69.35
7	**********	114	372	30.65	100.00

20 40 60 80 100 120

Frequency

POS1		Freq	Cum. Freq	Percent	Cum. Percent
1	*	3	3	0.81	0.81
2	*	7	10	1.88	2.69
3	**	8	18	2.15	4.84
4	*******	33	51	8.87	13.71
5	**********	80	131	21.51	35.22
6	**********	110	241	29.57	64.78
7	**********	131	372	35.22	100.00

20 40 60 80 100 120

Frequency

POS2

		Freq	Cum. Freq	Percent	Cum. Percent
1	******	14	14	3.76	3.76
2	*******	17	31	4.57	8.33
3	**********	25	56	6.72	15.05
4	*****************************	72	128	19.35	34.41
5	**	102	230	27.42	61.83
6	*******************************	77	307	20.70	82.53
7	**************************	65	372	17.47	100.00

10 20 30 40 50 60 70 80 90 100

Frequency

POS3

		Freq	Cum. Freq	Percent	Cum. Percent
1	**	4	4	1.08	1.08
2	****	11	15	2.96	4.03
3	******	15	30	4.03	8.06
4	************************************	91	121	24.46	32.53
5	**********************************	87	208	23.39	55.91
6	**********************************	84	292	22.58	78.49
7	*********************************	80	372	21.51	100.00

10 20 30 40 50 60 70 80 90

Frequency

POS4

		Freq	Cum. Freq	Percent	Cum. Percent
1	*******	18	18	4.84	4.84
2	**********	28	46	7.53	12.37
3	**********	40	86	10.75	23.12
4	**	100	186	26.88	50.00
5	**	99	285	26.61	76.61
6	**********	41	326	11.02	87.63
7	**********	46	372	12.37	100.00

10 20 30 40 50 60 70 80 90 100

Frequency

POS5

		Freq	Cum. Freq	Percent	Cum. Percent
1	*******	34	34	9.14	9.14
2	******	29	63	7.80	16.94
3	********	42	105	11.29	28.23
4	**********************	104	209	27.96	56.18
5	************	63	272	16.94	73.12
6	************	61	333	16.40	89.52
7	********	39	372	10.48	100.00

20 40 60 80 100

Frequency

POS6

		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2	*	7	8	1.88	2.15
3	*	4	12	1.08	3.23
4	***	16	28	4.30	7.53
5	*****************	78	106	20.97	28.49
6	************************	117	223	31.45	59.95
7	********************************	149	372	40.05	100.00

20 40 60 80 100 120 140

Frequency

POS7

		Freq	Cum. Freq	Percent	Cum. Percent
1	*	7	7	1.88	1.88
2	***	16	23	4.30	6.18
3	***	15	38	4.03	10.22
4	***********	57	95	15.32	25.54
5	****************	77	172	20.70	46.24
6	******************	87	259	23.39	69.62
7	************************	113	372	30.38	100.00

20 40 60 80 100

Frequency

POS8

		Freq	Cum. Freq	Percent	Cum. Percent
1	****	9	9	2.42	2.42
2	*****	12	21	3.23	5.65
3	******	15	36	4.03	9.68
4	*****************************	70	106	18.82	28.49
5	************************************	90	196	24.19	52.69
6	*********************************	83	279	22.31	75.00
7	************************************	93	372	25.00	100.00

10 20 30 40 50 60 70 80 90

Frequency

POSOVER

		Freq	Cum. Freq	Percent	Cum. Percent
1	****	20	20	5.38	5.38
2	**	8	28	2.15	7.53
3	*****	24	52	6.45	13.98
4	**********	53	105	14.25	28.23
5	********************	104	209	27.96	56.18
6	******************	88	297	23.66	79.84
7	**************	75	372	20.16	100.00

20 40 60 80 100

Frequency

CONSAT1

		Freq	Cum. Freq	Percent	Cum. Percent
1	*	4	4	1.08	1.08
2	***	14	18	3.76	4.84
3	****	19	37	5.11	9.95
4	***	15	52	4.03	13.98
5	****	20	72	5.38	19.35
6	**********************************	164	236	44.09	63.44
7	**************************	136	372	36.56	100.00

20 40 60 80 100 120 140 160

Frequency

CONSAT2

		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2		2	3	0.54	0.81
3	***	16	19	4.30	5.11
4	******	30	49	8.06	13.17
5	********	38	87	10.22	23.39
6	******************************	147	234	39.52	62.90
7	*****************************	138	372	37.10	100.00

20 40 60 80 100 120 140

Frequency

CONSAT3

		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2	*	5	6	1.34	1.61
3	***	13	19	3.49	5.11
4	******	31	50	8.33	13.44
5	******	32	82	8.60	22.04
6	*****************************	141	223	37.90	59.95
7	*******************************	149	372	40.05	100.00

20 40 60 80 100 120 140

Frequency

CONSAT4

		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2	**	11	12	2.96	3.23
3	***	16	28	4.30	7.53
4	****	22	50	5.91	13.44
5	*******	37	87	9.95	23.39
6	******************************	149	236	40.05	63.44
7	****************************	136	372	36.56	100.00

20 40 60 80 100 120 140

Frequency

CONSAT5

		Freq	Cum. Freq	Percent	Cum. Percent
1	*	3	3	0.81	0.81
2	*	7	10	1.88	2.69
3	**	9	19	2.42	5.11
4	**********	155	174	41.67	46.77
5	**********	55	229	14.78	61.56
6	**********	84	313	22.58	84.14
7	**********	59	372	15.86	100.00

20 40 60 80 100 120 140

Frequency

CONSAT6

		Freq	Cum. Freq	Percent	Cum. Percent
1		2	2	0.54	0.54
2		1	3	0.27	0.81
3	***	14	17	3.76	4.57
4	**********	55	72	14.78	19.35
5	*****	24	96	6.45	25.81
6	**********	109	205	29.30	55.11
7	**********	167	372	44.89	100.00

20 40 60 80 100 120 140 160

Frequency

CONSAT7

		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2	**	9	10	2.42	2.69
3	****	19	29	5.11	7.80
4	****	21	50	5.65	13.44
5	*****	27	77	7.26	20.70
6	**********	128	205	34.41	55.11
7	**********	167	372	44.89	100.00

20 40 60 80 100 120 140 160

Frequency

OVER1

		Freq	Cum. Freq	Percent	Cum. Percent
1	*	3	3	0.81	0.81
2	**	11	14	2.96	3.76
3	***	13	27	3.49	7.26
4	*	5	32	1.34	8.60
5	**********	50	82	13.44	22.04
6	************************	121	203	32.53	54.57
7	**********************************	169	372	45.43	100.00

20 40 60 80 100 120 140 160

Frequency

OVER2

		Freq	Cum. Freq	Percent	Cum. Percent
1	***	15	15	4.03	4.03
2	****	21	36	5.65	9.68
3	********	41	77	11.02	20.70
4	******	30	107	8.06	28.76
5	*******	34	141	9.14	37.90
6	************	63	204	16.94	54.84
7	**********************************	168	372	45.16	100.00

20 40 60 80 100 120 140 160

Frequency

OVER3

		Freq	Cum. Freq	Percent	Cum. Percent
1	*	5	5	1.34	1.34
2	*	6	11	1.61	2.96
3	***	14	25	3.76	6.72
4	********	41	66	11.02	17.74
5	**********	55	121	14.78	32.53
6	**********************	116	237	31.18	63.71
7	*****************************	135	372	36.29	100.00

20 40 60 80 100 120

Frequency

OVER4		Freq	Cum. Freq	Percent	Cum. Percent
1	*	6	6	1.61	1.61
2	*	7	13	1.88	3.49
3	***	17	30	4.57	8.06
4	****	21	51	5.65	13.71
5	********************	93	144	25.00	38.71
6	**********************	108	252	29.03	67.74
7	************************	120	372	32.26	100.00

20 40 60 80 100 120

Frequency

OVER5		Freq	Cum. Freq	Percent	Cum. Percent
1	**	8	8	2.15	2.15
2	****	18	26	4.84	6.99
3	****	20	46	5.38	12.37
4	*****	24	70	6.45	18.82
5	********	42	112	11.29	30.11
6	********************	102	214	27.42	57.53
7	*********************************	158	372	42.47	100.00

20 40 60 80 100 120 140 160

Frequency

OVER6		Freq	Cum. Freq	Percent	Cum. Percent
1	*	4	4	1.08	1.08
2	**	8	12	2.15	3.23
3	***	13	25	3.49	6.72
4	****	20	45	5.38	12.10
5	**********	59	104	15.86	27.96
6	**********************	116	220	31.18	59.14
7	*******************************	152	372	40.86	100.00

20 40 60 80 100 120 140

Frequency

SLFSAT1		Freq	Cum. Freq	Percent	Cum. Percent
1		2	2	0.54	0.54
2	*	4	6	1.08	1.61
3	**	11	17	2.96	4.57
4	********	40	57	10.75	15.32
5	*********	47	104	12.63	27.96
6	*********************************	154	258	41.40	69.35
7	**********************	114	372	30.65	100.00

20 40 60 80 100 120 140

Frequency

SLFSAT2		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
3	*	5	6	1.34	1.61
4	**********	55	61	14.78	16.40
5	********	41	102	11.02	27.42
6	*******************************	151	253	40.59	68.01
7	************************	119	372	31.99	100.00

20 40 60 80 100 120 140

Frequency

SLFSAT3		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
3	*	4	5	1.08	1.34
4	************	60	65	16.13	17.47
5	*********	46	111	12.37	29.84
6	******************************	142	253	38.17	68.01
7	************************	119	372	31.99	100.00

20 40 60 80 100 120 140

Frequency

SELFSAT4		Freq	Cum. Freq	Percent	Cum. Percent
1		2	2	0.54	0.54
2	*	5	7	1.34	1.88
3	*	7	14	1.88	3.76
4	**********	51	65	13.71	17.47
5	*********	44	109	11.83	29.30
6	*****************************	142	251	38.17	67.47
7	************************	121	372	32.53	100.00

20 40 60 80 100 120 140

Frequency

SLFSAT5		Freq	Cum. Freq	Percent	Cum. Percent
1		2	2	0.54	0.54
2		1	3	0.27	0.81
3	*	5	8	1.34	2.15
4	************************************	182	190	48.92	51.08
5	*******	37	227	9.95	61.02
6	******************	86	313	23.12	84.14
7	************	59	372	15.86	100.00

20 40 60 80 100 120 140 160 180

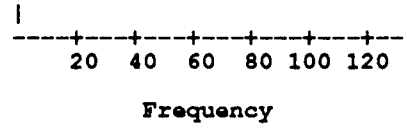
Frequency

SLFSAT6		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
3	*	3	4	0.81	1.08
4	******************	91	95	24.46	25.54
5	*****	25	120	6.72	32.26
6	**********************	104	224	27.96	60.22
7	*******************************	148	372	39.78	100.00

20 40 60 80 100 120 140

Frequency

SLFSAT7		Freq	Cum. Freq	Percent	Cum. Percent
1	*	4	4	1.08	1.08
2	*	3	7	0.81	1.88
3	*	4	11	1.08	2.96
4	**********	62	73	16.67	19.62
5	********	40	113	10.75	30.38
6	**************************	130	243	34.95	65.32
7	**************************	129	372	34.68	100.00



WOM1		Freq	Cum. Freq	Percent	Cum. Percent
0	***	13	13	3.49	3.49
1	**	8	21	2.15	5.65
2	*	6	27	1.61	7.26
3	**	10	37	2.69	9.95
4	**	9	46	2.42	12.37
5	*******	35	81	9.41	21.77
6	*****	25	106	6.72	28.49
7	*******	36	142	9.68	38.17
8	**********	51	193	13.71	51.88
9	**********	61	254	16.40	68.28
10	************************	118	372	31.72	100.00

20 40 60 80 100 120

Frequency

WOM2		Freq	Cum. Freq	Percent	Cum. Percent
0		2	2	0.54	0.54
1		2	4	0.54	1.08
2		1	5	0.27	1.34
3	*	3	8	0.81	2.15
4	*	4	12	1.08	3.23
5	*****	23	35	6.18	9.41
6	**	10	45	2.69	12.10
7	*****	27	72	7.26	19.35
8	******	30	102	8.06	27.42
9	**********	86	188	23.12	50.54
10	************************************	184	372	49.46	100.00

20 40 60 80 100 120 140 160 180

Frequency

WOM3		Freq	Cum. Freq	Percent	Cum. Percent
0	**********	24	24	6.45	6.45
1	****	9	33	2.42	8.87
2	****	10	43	2.69	11.56
3	***	7	50	1.88	13.44
4	**	6	56	1.61	15.05
5	**********	33	89	8.87	23.92
6	**********	31	120	8.33	32.26
7	**********	35	155	9.41	41.67
8	**********	58	213	15.59	57.26
9	**********	61	274	16.40	73.66
10	**********	98	372	26.34	100.00

10 20 30 40 50 60 70 80 90

Frequency

WOM4		Freq	Cum. Freq	Percent	Cum. Percent
0	*	4	4	1.08	1.08
1		1	5	0.27	1.34
2	*	4	9	1.08	2.42
3	*	4	13	1.08	3.49
4	*	6	19	1.61	5.11
5	*****	27	46	7.26	12.37
6	**	8	54	2.15	14.52
7	***	17	71	4.57	19.09
8	*******	36	107	9.68	28.76
9	**********	81	188	21.77	50.54
10	**********	184	372	49.46	100.00

20 40 60 80 100 120 140 160 180

Frequency

WOM5		Freq	Cum. Freq	Percent	Cum. Percent
0	******	16	16	4.30	4.30
1	******	14	30	3.76	8.06
2	****	10	40	2.69	10.75
3	****	10	50	2.69	13.44
4	****	10	60	2.69	16.13
5	******************	46	106	12.37	28.49
6	********	21	127	5.65	34.14
7	**********	25	152	6.72	40.86
8	**********************	57	209	15.32	56.18
9	*******************************	78	287	20.97	77.15
10	**********************************	85	372	22.85	100.00

10 20 30 40 50 60 70 80

Frequency

WOM6		Freq	Cum. Freq	Percent	Cum. Percent
0		2	2	0.54	0.54
1	*	4	6	1.08	1.61
2	*	6	12	1.61	3.23
3	*	3	15	0.81	4.03
4	*	5	20	1.34	5.38
5	*******	36	56	9.68	15.05
6	**	8	64	2.15	17.20
7	***	15	79	4.03	21.24
8	*****	27	106	7.26	28.49
9	******************	85	191	22.85	51.34
10	**********************************	181	372	48.66	100.00

20 40 60 80 100 120 140 160 180

Frequency

COM1		Freq	Cum. Freq	Percent	Cum. Percent
0	******	15	15	4.03	4.03
1	****	11	26	2.96	6.99
2	*********	23	49	6.18	13.17
3	******	14	63	3.76	16.94
4	****	10	73	2.69	19.62
5	**************************************	93	166	25.00	44.62
6	**********	40	206	10.75	55.38
7	**********	31	237	8.33	63.71
8	**********	47	284	12.63	76.34
9	**********	28	312	7.53	83.87
10	**********	60	372	16.13	100.00

10 20 30 40 50 60 70 80 90

Frequency

COM2		Freq	Cum. Freq	Percent	Cum. Percent
0	**********	28	28	7.53	7.53
1	********	15	43	4.03	11.56
2	**********	28	71	7.53	19.09
3	********	16	87	4.30	23.39
4	********	15	102	4.03	27.42
5	**************************************	82	184	22.04	49.46
6	**********	38	222	10.22	59.68
7	**********	23	245	6.18	65.86
8	**********	55	300	14.78	80.65
9	**********	27	327	7.26	87.90
10	**********	45	372	12.10	100.00

10 20 30 40 50 60 70 80

Frequency

COM3		Freq	Cum. Freq	Percent	Cum. Percent
0	**********	40	40	10.75	10.75
1	**********	24	64	6.45	17.20
2	**********	27	91	7.26	24.46
3	**********	27	118	7.26	31.72
4	**********	20	138	5.38	37.10
5	**********	80	218	21.51	58.60
6	**********	30	248	8.06	66.67
7	**********	32	280	8.60	75.27
8	**********	32	312	8.60	83.87
9	**********	23	335	6.18	90.05
10	**********	37	372	9.95	100.00

10 20 30 40 50 60 70 80

Frequency

COM4		Freq	Cum. Freq	Percent	Cum. Percent
0	**********	38	38	10.22	10.22
1	**********	16	54	4.30	14.52
2	**********	18	72	4.84	19.35
3	**********	16	88	4.30	23.66
4	**********	13	101	3.49	27.15
5	**********	94	195	25.27	52.42
6	**********	29	224	7.80	60.22
7	**********	37	261	9.95	70.16
8	**********	48	309	12.90	83.06
9	**********	28	337	7.53	90.59
10	**********	35	372	9.41	100.00

10 20 30 40 50 60 70 80 90

Frequency

COM5		Freq	Cum. Freq	Percent	Cum. Percent
0	**********	128	128	34.41	34.41
1	********	41	169	11.02	45.43
2	*****	25	194	6.72	52.15
3	***	16	210	4.30	56.45
4	**	10	220	2.69	59.14
5	********	38	258	10.22	69.35
6	***	13	271	3.49	72.85
7	*****	23	294	6.18	79.03
8	***	16	310	4.30	83.33
9	***	17	327	4.57	87.90
10	*********	45	372	12.10	100.00

20 40 60 80 100 120

Frequency

COM6		Freq	Cum. Freq	Percent	Cum. Percent
0	**********	45	45	12.10	12.10
1	******	14	59	3.76	15.86
2	***	8	67	2.15	18.01
3	*******	18	85	4.84	22.85
4	*******	17	102	4.57	27.42
5	**********	40	142	10.75	38.17
6	********	21	163	5.65	43.82
7	**********	34	197	9.14	52.96
8	**********	41	238	11.02	63.98
9	**********	42	280	11.29	75.27
10	**********	92	372	24.73	100.00

10 20 30 40 50 60 70 80 90

Frequency

COM7

		Freq	Cum. Freq	Percent	Cum. Percent
0	**********	86	86	23.12	23.12
1	**********	27	113	7.26	30.38
2	**********	26	139	6.99	37.37
3	*****	12	151	3.23	40.59
4	***	8	159	2.15	42.74
5	**********	41	200	11.02	53.76
6	********	19	219	5.11	58.87
7	**********	33	252	8.87	67.74
8	**********	36	288	9.68	77.42
9	********	21	309	5.65	83.06
10	**********	63	372	16.94	100.00

10 20 30 40 50 60 70 80

Frequency

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PUR1

		Freq	Cum. Freq	Percent	Cum. Percent
0	***	16	16	4.30	4.30
1	**	8	24	2.15	6.45
2	***	17	41	4.57	11.02
3	**	11	52	2.96	13.98
4	**	9	61	2.42	16.40
5	**********	48	109	12.90	29.30
6	****	18	127	4.84	34.14
7	*****	27	154	7.26	41.40
8	********	42	196	11.29	52.69
9	**********	65	261	17.47	70.16
10	**********	111	372	29.84	100.00

20 40 60 80 100

Frequency

PUR2		Freq	Cum. Freq	Percent	Cum. Percent
0	***	15	15	4.03	4.03
1	**	12	27	3.23	7.26
2	***	15	42	4.03	11.29
3	***	13	55	3.49	14.78
4	**	11	66	2.96	17.74
5	*******	37	103	9.95	27.69
6	*****	23	126	6.18	33.87
7	******	30	156	8.06	41.94
8	********	40	196	10.75	52.69
9	**********	55	251	14.78	67.47
10	*************************	121	372	32.53	100.00

20 40 60 80 100 120

Frequency

PUR3		Freq	Cum. Freq	Percent	Cum. Percent
0	*	7	7	1.88	1.88
1	*	6	13	1.61	3.49
2	***	16	29	4.30	7.80
3	***	16	45	4.30	12.10
4	***	16	61	4.30	16.40
5	*******	35	96	9.41	25.81
6	****	20	116	5.38	31.18
7	******	30	146	8.06	39.25
8	********	38	184	10.22	49.46
9	**********	55	239	14.78	64.25
10	**************************	133	372	35.75	100.00

20 40 60 80 100 120

Frequency

PUR4		Freq	Cum. Freq	Percent	Cum. Percent
0	**********	34	34	9.14	9.14
1	**********	26	60	6.99	16.13
2	**********	32	92	8.60	24.73
3	********	21	113	5.65	30.38
4	********	21	134	5.65	36.02
5	**********	47	181	12.63	48.66
6	********	21	202	5.65	54.30
7	*******	18	220	4.84	59.14
8	**********	30	250	8.06	67.20
9	**********	29	279	7.80	75.00
10	**********	93	372	25.00	100.00

10 20 30 40 50 60 70 80 90

Frequency

PUR5		Freq	Cum. Freq	Percent	Cum. Percent
0	*	4	4	1.08	1.08
1		1	5	0.27	1.35
2		3	8	0.81	2.16
3	*	5	13	1.35	3.50
4		3	16	0.81	4.31
5	***	21	37	5.66	9.97
6	*	10	47	2.70	12.67
7	***	20	67	5.39	18.06
8	***	25	92	6.74	24.80
9	******	47	139	12.67	37.47
10	**********	232	371	62.53	100.00

30 60 90 120 150 180 210

Frequency

CONGRUE		Cum.	Cum.

		Freq	Freq	Percent	Percent
0.0000000000	**************************	26	26	6.99	6.99
1.0000000000	********	8	34	2.15	9.14
1.4142135624	******	6	40	1.61	10.75
1.7320508076	*****	5	45	1.34	12.10
2.0000000000	******	6	51	1.61	13.71
2.2360679775	*********	9	60	2.42	16.13
2.4494897428	********	8	68	2.15	18.28
2.6457513111	******	6	74	1.61	19.89
2.8284271247	******	6	80	1.61	21.51
3.0000000000	*****************	17	97	4.57	26.08
3.1622776602	**********	10	107	2.69	28.76
3.3166247904	*	1	108	0.27	29.03
3.4641016151	*****	5	113	1.34	30.38
3.6055512755	**********	11	124	2.96	33.33
3.7416573868	*********	9	133	2.42	35.75
3.8729833462	******	6	139	1.61	37.37
4.0000000000	******	6	145	1.61	38.98
4.1231056256	******	6	151	1.61	40.59
4.2426406871	*******	7	158	1.88	42.47
4.3588989435	***	3	161	0.81	43.28
4.4721359550	*******	7	168	1.88	45.16
4.5825756950	*******	7	175	1.88	47.04
4.6904157598	*****	5	180	1.34	48.39
4.7958315233	*****	5	185	1.34	49.73
4.8989794856	********	8	193	2.15	51.88
5.0000000000	*	1	194	0.27	52.15
5.0990195136	*	1	195	0.27	52.42
5.1961524227	******	6	201	1.61	54.03
5.2915026221	****	4	205	1.08	55.11
5.3851648071	**	2	207	0.54	55.65
5.4772255751	*****	5	212	1.34	56.99
5.5677643628	***	3	215	0.81	57.80
5.6568542495	***	3	218	0.81	58.60
5.7445626465	*****	5	223	1.34	59.95
5.9160797831	******	6	229	1.61	61.56
6.0000000000	*****	5	234	1.34	62.90
6.0827625303	****	4	238	1.08	63.98
6.1644140030	*****	5	243	1.34	65.32
6.3245553203	*	1	244	0.27	65.59
6.4807406984	*	1	245	0.27	65.86
6.5574385243	**	2	247	0.54	66.40
6.6332495807	*	1	248	0.27	66.67
6.7082039325	*****	5	253	1.34	68.01
6.7823299831	*	1	254	0.27	68.28
6.8556546004	*****	5	259	1.34	69.62
6.9282032303	**	2	261	0.54	70.16
7.0000000000	*******	7	268	1.88	72.04
7.0710678119	****	4	272	1.08	73.12
7.1414284285	*	1	273	0.27	73.39
7.2111025509	**	2	275	0.54	73.92
7.2801098893	***	3	278	0.81	74.73
7.3484692283	***	3	281	0.81	75.54
7.4161984871	*****	5	286	1.34	76.88
7.4833147735	**	2	288	0.54	77.42
7.5498344353	***	3	291	0.81	78.23
7.6811457479	**	2	293	0.54	78.76
7.7459666924	*	1	294	0.27	79.03
7.8102496759	**	2	296	0.54	79.57
8.0000000000	*	1	297	0.27	79.84
8.0622577483	*	1	298	0.27	80.11
8.1853527719	*	1	299	0.27	80.38
8.3066238629	**	2	301	0.54	80.91
8.3666002653	**	2	303	0.54	81.45
8.4261497732	*	1	304	0.27	81.72
8.4852813742	**	2	306	0.54	82.26
8.6023252670	*	1	307	0.27	82.53

CONGRUE (Continued)

		Freq	Freq	Percent	Percent
8.7749643874	**	2	309	0.54	83.06
8.8317608663	*	1	310	0.27	83.33
8.8881944173	*	1	311	0.27	83.60
9.0000000000	**	2	313	0.54	84.14
9.2195444573	***	3	316	0.81	84.95
9.4339811321	**	2	318	0.54	85.48
9.4868329805	*	1	319	0.27	85.75
9.5393920142	**	2	321	0.54	86.29
9.7979589711	*	1	322	0.27	86.56
9.8488578018	**	2	324	0.54	87.10
10.0498756211	**	2	326	0.54	87.63
10.0995049384	*	1	327	0.27	87.90
10.3440804328	**	2	329	0.54	88.44
10.4403065089	*	1	330	0.27	88.71
10.4880884817	**	2	332	0.54	89.25
10.5830052443	*	1	333	0.27	89.52
10.7238052948	*	1	334	0.27	89.78
10.9544511501	*	1	335	0.27	90.05
11.0000000000	*	1	336	0.27	90.32
11.0905365064	*	1	337	0.27	90.59
11.2249721603	*	1	338	0.27	90.86
11.5758369028	*	1	339	0.27	91.13
11.6619037897	*	1	340	0.27	91.40
11.7046999107	*	1	341	0.27	91.67
11.8321595662	*	1	342	0.27	91.94
11.9582607431	*	1	343	0.27	92.20
12.0000000000	*	1	344	0.27	92.47
12.0830459736	*	1	345	0.27	92.74
12.2882057274	*	1	346	0.27	93.01
12.3693168769	**	2	348	0.54	93.55
12.4498995980	*	1	349	0.27	93.82
12.7671453348	**	2	351	0.54	94.35
12.8452325787	*	1	352	0.27	94.62
13.0000000000	*	1	353	0.27	94.89
13.0766968306	*	1	354	0.27	95.16
13.1909059583	*	1	355	0.27	95.43
13.3790881603	*	1	356	0.27	95.70
13.5646599663	*	1	357	0.27	95.97
13.6381816970	*	1	358	0.27	96.24
13.9283882772	*	1	359	0.27	96.51
13.9642400438	*	1	360	0.27	96.77
14.2478068488	*	1	361	0.27	97.04
14.4222051019	*	1	362	0.27	97.31
14.5945195193	*	1	363	0.27	97.58
14.6287388383	*	1	364	0.27	97.85
15.5884572681	*	1	365	0.27	98.12
15.8113883008	*	1	366	0.27	98.39
16.0312195419	*	1	367	0.27	98.66
17.3205080757	*	1	368	0.27	98.92
17.4928556845	*	1	369	0.27	99.19
17.5214154679	*	1	370	0.27	99.46
18.0000000000	*	1	371	0.27	99.73
18.4390889146	*	1	372	0.27	100.00

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                |
----------+----+----+----+----+-
          5    10   15   20   25

Frequency
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GENVAL1		Freq	Cum. Freq	Percent	Cum. Percent
1		2	2	0.54	0.54
2		1	3	0.27	0.81
3	**	11	14	2.96	3.76
4	********	42	56	11.29	15.05
5	******************	89	145	23.92	38.98
6	************************	115	260	30.91	69.89
7	************************	112	372	30.11	100.00

20 40 60 80 100

Frequency

GENVAL2		Freq	Cum. Freq	Percent	Cum. Percent
1		2	2	0.54	0.54
2	*	5	7	1.34	1.88
3	***	15	22	4.03	5.91
4	************	58	80	15.59	21.51
5	******************	93	173	25.00	46.51
6	************************	120	293	32.26	78.76
7	**********	79	372	21.24	100.00

20 40 60 80 100 120

Frequency

GENVAL3		Freq	Cum. Freq	Percent	Cum. Percent
1		2	2	0.54	0.54
2		2	4	0.54	1.08
3	*	5	9	1.34	2.42
4	****	22	31	5.91	8.33
5	**********	73	104	19.62	27.96
6	************************	126	230	33.87	61.83
7	****************************	142	372	38.17	100.00

20 40 60 80 100 120 140

Frequency

GENVAL4		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2	*	7	8	1.88	2.15
3	**	11	19	2.96	5.11
4	**********	53	72	14.25	19.35
5	**********	105	177	28.23	47.58
6	**********	108	285	29.03	76.61
7	**********	87	372	23.39	100.00

20 40 60 80 100

Frequency

GENVAL5		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2		1	2	0.27	0.54
3		2	4	0.54	1.08
4	*	8	12	2.15	3.23
5	***	25	37	6.72	9.95
6	*********	66	103	17.74	27.69
7	**********	269	372	72.31	100.00

30 60 90 120 150 180 210 240 270

Frequency

GENVAL6		Freq	Cum. Freq	Percent	Cum. Percent
1		3	3	0.81	0.81
2		1	4	0.27	1.08
3	*	4	8	1.08	2.15
4	***	21	29	5.65	7.80
5	*****	39	68	10.48	18.28
6	**********	83	151	22.31	40.59
7	**********	221	372	59.41	100.00

30 60 90 120 150 180 210

Frequency

GENVAL7

		Freq	Cum. Freq	Percent	Cum. Percent
3		1	1	0.27	0.27
4	*	11	12	2.96	3.23
5	***	26	38	6.99	10.22
6	**********	86	124	23.12	33.33
7	**********	248	372	66.67	100.00

30 60 90 120 150 180 210 240

Frequency

GENVAL8

		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
2		1	2	0.27	0.54
3	**	11	13	2.96	3.49
4	*****	23	36	6.18	9.68
5	**********	74	110	19.89	29.57
6	**********	115	225	30.91	60.48
7	**********	147	372	39.52	100.00

20 40 60 80 100 120 140

Frequency

GENVAL9

		Freq	Cum. Freq	Percent	Cum. Percent
1		1	1	0.27	0.27
3		3	4	0.81	1.08
4	*	7	11	1.88	2.96
5	***	19	30	5.11	8.06
6	**********	88	118	23.66	31.72
7	**********	254	372	68.28	100.00

30 60 90 120 150 180 210 240

Frequency

GENVAL10

		Freq	Cum. Freq	Percent	Cum. Percent
1	***	15	15	4.03	4.03
2	*	5	20	1.34	5.38
3	******	29	49	7.80	13.17
4	**********	69	118	18.55	31.72
5	**********	101	219	27.15	58.87
6	**********	80	299	21.51	80.38
7	**********	73	372	19.62	100.00

20 40 60 80 100

Frequency

SITVAL1

		Freq	Cum. Freq	Percent	Cum. Percent
1	***	15	15	4.03	4.03
2	**	12	27	3.23	7.26
3	*****	27	54	7.26	14.52
4	**********	96	150	25.81	40.32
5	**********	99	249	26.61	66.94
6	**********	82	331	22.04	88.98
7	********	41	372	11.02	100.00

20 40 60 80 100

Frequency

SITVAL2

		Freq	Cum. Freq	Percent	Cum. Percent
1	********	40	40	10.75	10.75
2	*******	34	74	9.14	19.89
3	********	42	116	11.29	31.18
4	**********	112	228	30.11	61.29
5	**********	72	300	19.35	80.65
6	**********	48	348	12.90	93.55
7	*****	24	372	6.45	100.00

20 40 60 80 100

Frequency

SITVAL3		Freq	Cum. Freq	Percent	Cum. Percent
1	**********	33	33	8.87	8.87
2	**********	30	63	8.06	16.94
3	**********	29	92	7.80	24.73
4	**********	79	171	21.24	45.97
5	**********	92	263	24.73	70.70
6	**********	65	328	17.47	88.17
7	**********	44	372	11.83	100.00

10 20 30 40 50 60 70 80 90

Frequency

SITVAL4		Freq	Cum. Freq	Percent	Cum. Percent
1	******	14	14	3.76	3.76
2	****	10	24	2.69	6.45
3	**********	32	56	8.60	15.05
4	**********	68	124	18.28	33.33
5	**********	95	219	25.54	58.87
6	**********	85	304	22.85	81.72
7	**********	68	372	18.28	100.00

10 20 30 40 50 60 70 80 90

Frequency

SITVAL5		Freq	Cum. Freq	Percent	Cum. Percent
1	**********	34	34	9.14	9.14
2	******	15	49	4.03	13.17
3	**********	36	85	9.68	22.85
4	**********	76	161	20.43	43.28
5	**********	82	243	22.04	65.32
6	**********	65	308	17.47	82.80
7	**********	64	372	17.20	100.00

10 20 30 40 50 60 70 80

Frequency

SITVAL6

		Freq	Cum. Freq	Percent	Cum. Percent
1	**********	34	34	9.14	9.14
2	**********	24	58	6.45	15.59
3	**********	24	82	6.45	22.04
4	**********	78	160	20.97	43.01
5	**********	75	235	20.16	63.17
6	**********	77	312	20.70	83.87
7	**********	60	372	16.13	100.00

10 20 30 40 50 60 70

Frequency

SITVAL7

		Freq	Cum. Freq	Percent	Cum. Percent
1	*******	18	18	4.84	4.84
2	********	20	38	5.38	10.22
3	**********	26	64	6.99	17.20
4	**********	66	130	17.74	34.95
5	**********	83	213	22.31	57.26
6	**********	91	304	24.46	81.72
7	**********	68	372	18.28	100.00

10 20 30 40 50 60 70 80 90

Frequency

SITVAL8

		Freq	Cum. Freq	Percent	Cum. Percent
1	*******	17	17	4.57	4.57
2	******	16	33	4.30	8.87
3	*********	22	55	5.91	14.78
4	**********	80	135	21.51	36.29
5	**********	88	223	23.66	59.95
6	**********	86	309	23.12	83.06
7	**********	63	372	16.94	100.00

10 20 30 40 50 60 70 80

Frequency

SITVAL9

		Freq	Cum. Freq	Percent	Cum. Percent
1	**********	31	31	8.33	8.33
2	******	16	47	4.30	12.63
3	********	21	68	5.65	18.28
4	******************************	77	145	20.70	38.98
5	************************************	91	236	24.46	63.44
6	*****************************	75	311	20.16	83.60
7	************************	61	372	16.40	100.00

10 20 30 40 50 60 70 80 90

Frequency

SITVAL10

		Freq	Cum. Freq	Percent	Cum. Percent
1	**********	48	48	12.90	12.90
2	****	22	70	5.91	18.82
3	******	30	100	8.06	26.88
4	******************	94	194	25.27	52.15
5	*****************	85	279	22.85	75.00
6	**********	58	337	15.59	90.59
7	*******	35	372	9.41	100.00

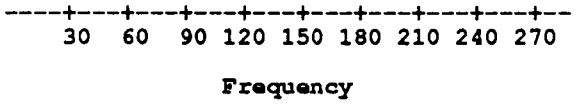
20 40 60 80

Frequency

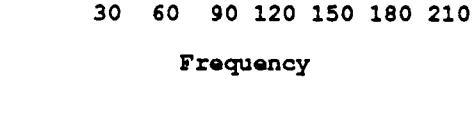
APPENDIX 5

Characteristics of Sample

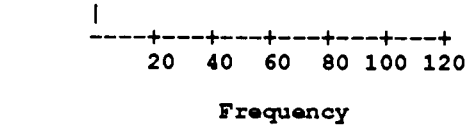
Number of Adults in Household	Freq	Cum. Freq	Percent	Cum. Percent
1	34	34	9.19	9.19
2	287	321	77.57	86.76
3	34	355	9.19	95.95
4	14	369	3.78	99.73
8	1	370	0.27	100.00



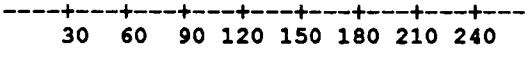
Number of Children in Household	Freq	Cum. Freq	Percent	Cum. Percent
0	207	207	55.95	55.95
1	54	261	14.59	70.54
2	80	341	21.62	92.16
3	26	367	7.03	99.19
4	3	370	0.81	100.00



Education	Freq	Cum. Freq	Percent	Cum. Percent
< 4 years High School	3	3	0.81	0.81
High School Grad	43	46	11.59	12.40
Tech or Trade School	9	55	2.43	14.82
Some College	81	136	21.83	36.66
College Grad	121	257	32.61	69.27
Post Coll/Grad School	114	371	30.73	100.00



Sex	Freq	Cum. Freq	Percent	Cum. Percent
Male	109	109	29.46	29.46
Female	261	370	70.54	100.00



Marital Status	Freq	Cum. Freq	Percent	Cum. Percent
Not Married	49	49	13.28	13.28
Married	320	369	86.72	100.00



Person with Greatest Influence on Purchase

	Freq	Cum. Freq	Percent	Cum. Percent
Self	203	203	55.01	55.01
Spouse	121	324	32.79	87.80
Child	1	325	0.27	88.08
Friend	1	326	0.27	88.35
Relative	16	342	4.34	92.68
Other	3	345	0.81	93.50
Joint	24	369	6.50	100.00



Person who has Greatest Influence on Evaluation

	Freq	Cum. Freq	Percent	Cum. Percent
Self	229	229	65.80	65.80
Spouse	84	313	24.14	89.94
Child	8	321	2.30	92.24
Friend	13	334	3.74	95.98
Relative	1	335	0.29	96.26
Joint	13	348	3.74	100.00



Income		Freq	Cum. Freq	Percent	Cum. Percent
Less than $15,000		1	1	0.29	0.29
$15,001 - $30,000	*******	17	18	4.91	5.20
$30,001 - $45,000	**********	43	61	12.43	17.63
$45,001 - $60,000	**********	81	142	23.41	41.04
$60,001 - $75,000	**********	44	186	12.72	53.76
$75,001 - $90,000	**********	48	234	13.87	67.63
$90,001 - $105,000	**********	38	272	10.98	78.61
More than $105,000	**********	74	346	21.39	100.00

10 20 30 40 50 60 70 80

Frequency

APPENDIX 6

Survey Items Association with Constructs

Evoked Personal Values Importance

CONGRUE — Calculated: square root of the sum of the differences between Enduring Personal Values and Situationally Evoked Values (reduced set from Rokeach Value Survey)

Scale — For calculations:
1 - 7: Not at All Important/ Extremely Important

Single item indicator of latent variable
Based on: A Comfortable Life
An Exciting Life
A Sense of Accomplishment
A World of Beauty
Family Security
Freedom
Happiness
Pleasure
Self-respect
Social Recognition

Initial Variable Loading

CONGRUE

Final Variable Loading

CONGRUE

Product Value

Attribute Level	PRODA1	high quality materials
	PRODA2	solidly constructed
	PRODA3	fine finish
	PRODA4	durable
	PRODA5	quality craftsmanship
First Level Consequence	PRODC1	style that will last
	PRODC2	comfortable
	PRODC3	like piece of art work
	PRODC4	functional
	PRODC5	investment
	PRODC6	unique
	PRODC7	will be heirloom
	PRODOVER	high quality for price paid

Scale 1 - 7: Strongly Disagree/ Strongly Agree

Initial Loading

PRODA1
PRODA2
PRODA3
PRODA4
PRODA5
PRODC1
PRODC2
PRODC3
PRODC4
PRODC5
PRODC6
PRODC7
PRODOVER

Final Loading

PRODC3
PRODC5
PRODC6
PRODC7

Value in Use

VIU1	feeling of warmth
VIU2	comfortable setting
VIU3	feeling of beauty
VIU4	accomodates variable number of guests
VIU5	fit in with other furniture
VIU6	topic of interesting story
VIUOVER	many benefits during use

Scale 1 - 7: Strongly Disagree/ Strongly Agree

Initial Loading

VIU1
VIU2
VIU3
VIU4
VIU5
VIU6
VIUOVER

Final Loading

VIU1
VIU4
VIUOVER

Possession Value

POS1	have good taste
POS2	successful
POS3	enjoy being around others
POS4	sophisticated
POS5	sentimental
POS6	care about home
POS7	enjoy gracious living
POS8	family oriented
POSOVER	statement of who I am

Scale 1 - 7: Strongly Disagree/ Strongly Agree

Initial Loading

POS1
POS2
POS3
POS4
POS5
POS6
POS7
POS8
POSOVER

Final Loading

POS1
POS2
POS3
POS4
POS5
POS6
POS7
POS8

Consequence Satisfaction (satisfaction with with furniture)

CONSAT1	satisfied/ disatisfied with
CONSAT2	positive/negative
CONSAT3	happy/unhappy
CONSAT4	good/bad
CONSAT5	pleasantly/unpleasnatly surprised
CONSAT6	upset/not upset
CONSAT7	content/discontent

Scale 7 point semantic differential

Initial Loading

CONSAT1
CONSAT2
CONSAT3
CONSAT4
CONSAT5
CONSAT6
CONSAT7

Final Loading

CONSAT1
CONSAT2
CONSAT3
CONSAT4
CONSAT5
CONSAT6
CONSAT7

Overall Value

OVER1	satisfied
OVER2	less satisfied now
OVER3	good value
OVER4	important to me
OVER5	worth price paid
OVER6	worth time and effort

Scale 1 - 7: Strongly Disagree/ Strongly Agree

Initial Loading

OVER1
OVER2
OVER3
OVER4
OVER5
OVER6

Final Loading

OVER2
OVER6

Self Satisfaction	(satisfaction with self)	
	SLFSAT1	satisfied/ disatisfied with
	SLFSAT2	positive/negative
	SLFSAT3	happy/unhappy
	SLFSAT4	good/bad
	SLFSAT5	pleasantly/unpleasnatly surprised
	SLFSAT6	upset/not upset
	SLFSAT7	content/discontent
Scale	7 point semantic differential	

Initial Loading

SLFSAT1
SLFSAT2
SLFSAT3
SLFSAT4
SLFSAT5
SLFSAT6
SLFSAT7

Final Loading

SLFSAT1
SLFSAT2
SLFSAT3
SLFSAT5
SLFSAT7

Future Behavior

Word of Mouth style	WOM1	positive comments about	
	WOM2	negative " "	"
	WOM3	positive comments about	
brand			
	WOM4	negative "	"
"			
	WOM5	positive comments about quality/price	
	WOM6	negative comments about quality/price	
Scale	What are the chances you would		0-10

Initial Loading

WOM1
WOM2
WOM3
WOM4
WOM5
WOM6

Final Loading

WOM1
WOM3
WOM5

Commitment to Use	COM1	will increase usage
	COM2	will become more important
	COM3	will find additional uses
	COM4	evaluation will improve
	COM5	will buy new flooring
	COM6	will buy new accessories
	COM7	will change wall covering

Scale	What are the chances you	0-10

Initial Loading

COM1
COM2
COM3
COM4
COM5
COM6
COM7

Final Loading

COM1
COM2
COM3
COM4

		Would buy exactly same
Purchase/ Repurchase	PUR1	brands
	PUR2	style
	PUR3	pieces
	PUR4	would buy higher quality/ pay more
	PUR5	would buy lower quality/ pay less
Scale	What are the chances you ... 0-10	

Initial Loading

PUR1
PUR2
PUR3
PUR4
PUR5

Final Loading

PUR1
PUR2
PUR3

VITA

Mary Jane Burns was born in Waterbury, Connecticut on March 12, 1954. She attended elementary and high school in Cheshire, Connecticut, graduating in 1972. In September of that year, she entered Drew University in Madison, N.J., where she earned a B.A. degree in Political Science with a Minor in Sociology in 1976.

Following graduation, she worked at Drew in computer operations before accepting a position at Westinghouse Electric Corp. (Budget and Financial Planning) in an Oak Ridge, TN location. She subsequently worked in budgeting and fuel procurement for Dominion Resources Inc., Richmond, VA.

In 1985, she returned to graduate school and earned an M.B.A. degree from The University of Tennessee - Knoxville, with a dual concentration in New Venture Analysis and Controllership. She continued her graduate studies in the Marketing, Logistics and Transportation doctoral program at the University of Tennessee - Knoxville.

The author is currently a member of the Marketing and Business Environment faculty at Florida International University in Miami, FL.