VICARIOUS EXPLORATION AND CATALOG SHOPPING:

AN EMPIRICAL INVESTIGATION

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CHAPTER I

INTRODUCTION

An emerging perspective in consumer behavior, the "experiential view," suggests that consumers often engage in consumption behaviors for leisure, sensory pleasures, daydreams, aesthetic enjoyment and emotional response, rather than merely to solve purchase problems (Holbrook and Hirschman 1982). This perspective is not an entirely new one.

More than a decade ago, Tauber (1972) highlighted a number of shopping motivations that were not related to problem solving. He hypothesized that sometimes an individual's motives for shopping may be "unrelated to the actual buying of products" (Tauber, 1972, p. 46). For example, individuals may shop for diversion or recreation to alleviate boredom or depression, to learn more about the latest styles, to interact with friends, or for sensory stimulation and physical activity. More recently, Westbrook and Black (1985) extended Tauber's earlier work by developing a classification of seven shopping motivations. Three of the seven motivations are closely related to consumption behaviors that are not problem solving oriented and do not necessitate actual product purchases, such as, (a) interacting with individuals in the marketplace (i.e. affiliation), (b) seeking novel and interesting stimuli from the retail environment (i.e. stimulation) and (c) being served by retail personnel (i.e. power and authority). Two of the motivations are closely associated with information search activities (i.e. role

enactment and negotiation) and they may not include actual purchase behavior. The two remaining motivations are directly related to actual product acquisition (i.e. anticipated utility and choice optimization).

Other scholars have also found that individuals enjoy the act of shopping itself, without specific purchase intentions. Bellenger and Korgaonkar (1980) distinguished recreational from convenience shoppers, recreational shoppers consider shopping as an enjoyable way to spend their leisure time. Sixty nine percent of their respondents were classified as recreational shoppers. The recreational shopper spent more time shopping, was more likely to engage in unplanned purchases and in greater amounts of information seeking, and attached greater importance to the shopping experience (i.e. store decor) than the convenience or economic shopper.

A similar perspective, consumer browsing behavior, has also recently been examined. This behavior was defined as "the examination of a store's merchandise for recreational or informational purposes without a current intent to buy" (Bloch and Richins, 1983a, p.389). According to Bloch and Richins (1983a), browsing behavior appears to be product or store specific and may be stimulated by the consumer's degree of involvement or interest in the product class or by store and/or product characteristics. Results provided strong support for the relationship of browsing behavior to product interest (i.e. products included automobiles and clothing), information search in the product class, product knowledge, and word-of-mouth communication concerning the product class.

It is this author's contention that in-home (i.e. catalog) shopping behavior is primarily a form of exploratory rather than epistemic (problem solving) behavior; that is, catalogs are often used for

browsing and gathering information, rather than for solving specific consumption problems. Two trends, (a) a growing interest in exploratory consumer behavior and (b) an increased use of in-home shopping, provide a variety of interesting questions that have not been previously addressed in the marketing literature. One such question is whether individual characteristics are related to vicarious exploratory behavior and in-home shopping?

Research Questions

The study examined vicarious exploratory behavior with catalogs and contributed to the growing body of knowledge in exploratory consumer behavior and in-home shopping. Specifically, the study answered the following questions. First, is the strength of the relationship between curiosity and vicarious exploratory behavior stronger than the relationship between optimal stimulation level and vicarious exploration? Second, is there a strong relationship between other individual difference variables (i.e. clothing involvement, perceived risk, perceived novelty, and past catalog usage) and vicarious exploration with catalogs?

Justification

There are three primary reasons why this study was considered to be an important and useful undertaking. First, there appears to be a general consensus that experiential consumption is an important area within the marketing discipline that may provide additional insights for consumer behavior and marketing strategies. Second, little attention has been given to vicarious exploration, although it may be potentially important to both consumer researchers and marketing practitioners.

Previous exploratory behavior studies have primarily examined the relationship between one individual characteristic (i.e. optimal stimulation level) and results indicated a weak relationship. As a result, scholars have indicated that curiosity may be more closely related to vicarious exploration. Although the examination of relationships between vicarious exploration and curiosity have been proposed, they have not been empirically verified. Third, in-home shopping is growing and direct marketing activities are receiving considerable attention from marketing scholars which further highlights the significance and timeliness of the study. Each of these considerations is discussed below.

Exploratory Consumer Behavior

The majority of research in consumer behavior has focused on behaviors related to the purchase of products, such as prepurchase search, consumption, and postpurchase satisfaction, yet consumers often engage in exploratory behaviors even though they are not faced with a purchase problem or goal. They may utilize or purchase specialty magazines and catalogs, talk to friends, or window shop without any intention to purchase these goods or services. However, these behaviors should not be ignored as they may have important implications for marketing communications.

There has been some attempt to acknowledge and explore consumer behaviors that are not directed specifically by purchase goals. Recently, exploratory consumer behaviors have been categorized into three groups: (a) exploratory purchase behavior, (b) use innovativeness, and (c) vicarious exploration (Price and Ridgway 1982).

Both exploratory purchase and use innovativeness involve actual purchasing behavior. That is, exploratory purchase behavior includes

activities such as brand switching or innovating (i.e. buying an untried or "new" product). Use innovativeness involves changing the original use of the product to fit the consumers needs. Saving margarine containers for storing paper clips, or leftover food would be an example of use innovativeness. In contrast, vicarious exploration is one type of exploratory behavior that does not include actual product purchases (as compared to brand switching and use innovativeness). Vicarious exploration includes behaviors such as reading, talking, or shopping for new products all of which may influence future purchases. However, attempting to directly link vicarious exploration to actual purchasing behavior is likely to be unsuccessful. Extensive amounts of time may occur between these two events and other factors may become more critical to the actual purchase decision.

Individual Difference Variables (OSL/Curiosity)

Differences in individual optimal stimulation levels (OSL) have been used to explain the consumer's propensity toward exploratory behavior. The theory of optimal stimulation level (OSL) suggests that individuals have different levels of need for stimulation. In an attempt to maintain an optimal level of stimulation, individuals will seek new, novel, or complex stimuli when stimulation falls below their optimal level. Conversely, individuals will avoid new, novel, or complex stimuli when stimulation is above their optimal level (e.g. Berlyne 1960; Fiske and Maddi 1961). The type of stimulation sought in a consumer behavior context has been related to exploratory behaviors. Marketing scholars have used OSL to help explain exploratory behaviors such as: the acceptance of new products and retail stores, brand switching, media attention, creativity in the use of products, and vacation preferences.

Individuals with high optimal stimulation levels may seek information just to explore the unfamiliar, rather than to solve consumption problems (Raju 1980). To gain a better understanding of the relationship between OSL and exploratory behavior, Raju (1980) organized his exploratory behavior scale into seven different categories and then correlated each of the category totals with OSL. The seven different categories included: (1) repetitive behavior proneness, (2) innovativeness, (3) risk taking, (4) brand switching, (5) interpersonal communication, (6) information seeking, and (7) exploration through shopping. Statistically significant correlations between OSL and each of the seven groups of exploratory behaviors were found in Raju's (1980, p. 279) study for a student sample:

(1) risk taking (.62), innovation (.51)
(2) brand switching (.39), repetitive behavior proneness (.36)
(3) exploration through shopping (.22), interpersonal communication (.26), information seeking (.22)

From these results he proposed three basic motivations underlying each group of these exploratory responses: risk, variety seeking, and curiosity. Risk appeared to be associated with (1) risk taking and innovation; variety seeking was related to (2) brand switching and repetitive behavior proneness; and curiosity with (3) exploration through shopping, interpersonal communication, and information seeking. According to Hoyer and Ridgway (1984) "certain people are simply more curious of new stimuli than others" (p. 116). Individuals with a higher level of curiosity would, therefore, be more likely to try out new brands and products in a choice context (Hoyer and Ridgway 1984).

Raju's (1980) proposed association between the three exploratory behaviors and curiosity (i.e. exploration through shopping, interpersonal communication, and information seeking) have together been

labeled as vicarious exploratory behavior by Price and Ridgway (1982). These authors contend that individuals engage in vicarious exploration primarily to shop for, talk about, and read about new and unfamiliar products. Price and Ridgway (1982) investigated the relationship between the individual's optimal stimulation level and vicarious exploratory behavior. Vicarious exploratory behavior was significantly ($p < .01$) correlated with optimal stimulation; however, the relationship between vicarious exploration and OSL (.33) was weaker than the relationships for exploratory purchase behavior and OSL (.61) and use innovativeness and OSL (.50). While the internal reliability of the scale was acceptable (.52), the weak correlations between OSL and vicarious exploration suggest that other individual difference variables may be more closely related to an individual's propensity to engage in vicarious exploration.

Since both Raju (1980) and Price and Ridgway (1982) found weak correlations between vicarious exploratory behaviors and OSL, individuals with a high OSL probably do not perceive shopping, interpersonal communication or information seeking as a means toward increasing or satisfying their stimulation needs for risk or variety. Rather, what motivates individuals toward these types of exploratory behaviors may be a desire to satisfy their curiosity. Vicarious exploration, therefore, may be more closely related to curiosity and may be thought of as a low risk form of behavior. Although researchers have indicated that curiosity may be related to certain types of exploratory behaviors, the use of curiosity measures in exploratory consumer behavior studies has not occurred. This study used an existing curiosity measure to examine the strength of association between curiosity and vicarious exploratory behavior with catalogs.

Joachimsthaler and Lastovika (1984) indicated that optimal stimulation level should not preclude the use of other trait variables since it does not act as a mediating variable as previously indicated by Raju (1980). This finding was generated by examining the relationship between two trait variables (i.e. locus of control and social character) and two aspects of exploratory behavior (i.e. information seeking-a dimension of vicarious exploration and innovativeness). Therefore, four additional individual characteristics were selected for this study based on past literature and research findings: (a) perceived risk; (b) perceived novelty; (c) clothing involvement; and (d) past catalog usage. These four variables had not been previously investigated in relation to vicarious exploration through catalogs.

In-Home Shopping. The increased pace of technology continues to offer the consumer many alternative modes of obtaining product information and purchasing products. For example, consumers may gather product information in-the-store, that is, from traditional stores (i.e. department, specialty, and discount stores) or at-home through catalogs and electronically via their computers. A number of scholars (Doody and Davidson 1967; Lumpkin and Hawes 1985; McNair and May 1978; Rosenberg and Hirschman 1980) have predicted that consumers will do some or all of their shopping at-home and that a trend away from more traditional modes of shopping will occur.

The recent growth of the mail-order market (a subset of in-home shopping) has been substantial. Estimates suggest that 47% of American adults purchased through the mail and mail-order sales have increased about 10 percent annually (Schwartz 1986). The growth of mail order is often attributed to computers, toll-free phone numbers, delivery services (e.g. United Parcel Service), and credit cards. These current

technologies (e.g. computer systems, credit, telephone, etc.) and changing American lifestyles, suggest that in-home shopping should continue to be a significant mode of shopping behavior.

Researchers have attempted to identify the underlying motivations of in-home shoppers. Some studies, for example, have found that individuals engage in catalog shopping for better product assortments (e.g. Gillett 1970) and convenience (e.g. Cox and Rich 1964; Gillett 1970; Riecken, Yavas, and Samli 1980). In contrast, a recent survey found that 43 percent of American households are not in favor of catalog shopping (Fortune 1986). Research has also indicated that individuals may avoid shopping via mail or telephone because of perceived risk (e.g. Cox and Rich 1964; Spence, Engel, and Blackwell 1970). The motivations underlying the consumer's use or avoidance of in-home shopping methods are not well understood.

Past marketing research has predominately focused upon individual's actual purchases via catalogs and has examined individual differences such as perceived risk, demographic and psychographic variables. Yet past research has not examined catalog shopping as a type of exploratory behavior. Therefore, individual differences in OSL, curiosity, perceived novelty, and product involvement have not been examined in relation to catalog shopping.

With the increase in mail order shopping, a large amount of consumer exploration is likely to occur in the consumer's home. Exploratory consumer behavior research has examined individual needs for stimulation and shopping in downtown areas or shopping malls but not shopping via catalogs. This study extended the existing knowledge of vicarious exploratory behavior and in-home shopping by examining the

relationship between individual differences and vicarious exploratory behavior associated with a clothing catalog.

Limitations

There are five limitations associated with this study that will be discussed: subject attrition, generalizability, variable selection, theoretical modeling and prediction.

First, there was a high subject attrition rate. Due to the data collection process used in this study, there was a large attrition rate with the subject pool. Most importantly, the subjects only responded to the vicarious exploration measure if they remembered receiving the J. Crew catalog in the mail. This procedure was necessary because the questions included in the vicarious exploration measure specifically pertained to catalog shopping behaviors. As a result, a large number of subjects were deleted from the final analysis. Potentially valuable information may have been eliminated by deleting these individuals, perhaps through selective perception, who did not remember receiving the catalog. It may be equally important to know why individuals didn't remember receiving the catalog. These individuals (similar to the issue of non-respondents) may be quite different from those who remembered receiving the catalog. It should be noted that the reliability of the mail service was not assessed. Failure to remember receiving the catalog could have been a result of not actually receiving the catalog, rather than issues of selective exposure to the stimuli

Second, the study examined vicarious exploration with catalog shopping. Vicarious exploration may occur in other situations such as in-store shopping and other forms of in-home shopping. The results of

this study may only be generalizable to vicarious exploration with catalogs, specifically fashion catalogs.

Third, the principle variables of interest included in this study were individual trait variables. Past research has often found weak relationships between individual difference variables and consumer behaviors. Use of state measures has been suggested as a partial remedy for such problems. Ideally, a state measure of curiosity would need to be taken during the shopping experience rather than during administration of the questionnaire. Respondents could be asked to recall the arousal state they experienced while exploring through the catalog; however, the accuracy of recalling arousal or mood states would be suspect. Since the study measured individual differences before and after the catalog had been administered, it was not equipped to take measures during the catalog shopping experience and hence a state measure of curiosity and shopping arousal was not possible.

Other variables may also be related to the extent of vicarious exploration in which individuals engage, such as demographic factors or situational factors (i.e. physical and social surroundings, time perceptions, or mood states). These variables will need to be assessed in future research.

Jacoby (1978) has criticized consumer behavior studies for not employing theories to select important variables and integrate findings. Although the criticism against using a shotgun approach is justified, no theoretical model exists for explaining vicarious exploration. Therefore, the individual trait variables were selected based on previous exploratory behavior research findings.

This study was exploratory in nature and examined relationships between individual trait variables and vicarious exploration. There was

no intent or attempt to use individual trait variables to predict vicarious exploration with catalogs. Future research will need to assess the predictive ability of individual trait variables, demographic factors and situational influences on vicarious exploration.

Organization Plan

The pertinent literature is reviewed in Chapter II. The primary focus is on exploratory consumer behavior. Conceptualizations and research findings pertaining to different types of exploratory consumer behavior are presented. The study examines vicarious exploratory consumer behaviors within a catalog shopping scenario; therefore, past research on in-home shopping is also reviewed. Chapter III presents the research methodology: sample selection, research stimulus, hypotheses, selection of measures, pretest results, data collection process, and the analysis selected for evaluating vicarious exploratory behavior with catalog shopping. Chapter IV presents the results of the study. Chapter V summarizes and interprets major findings, examines contributions, and suggests future research directions for vicarious exploration.

CHAPTER II

LITERATURE REVIEW

The primary focus of the literature review is on exploratory consumer behavior. The different types of exploratory consumer behavior and individual differences affecting exploratory behavior are presented. Since the study examines vicarious exploration within a catalog shopping scenario, previous in-home shopping research is also reviewed with special attention being paid to catalog shopping. Individual difference variables found to influence catalog shopping are also examined and discussed.

Exploratory Behavior

Exploratory behaviors have been extensively researched in psychology (e.g. Berlyne 1960; Fiske and Maddi 1961; Hebb 1955; Leuba 1955). An inverted-U relationship between stimulation and preference is generally posited and can be used to help explain why individuals sometimes manifest responses to increase or decrease stimulation. The general consensus is that every organism prefers a certain degree of stimulation referred to as "optimal stimulation." Each individual possesses a different optimal stimulation level (OSL), therefore, the OSL varies from individual to individual. Simply stated, when the individual's level of stimulation is below optimum, s/he tries to increase stimulation, and when the actual level of stimulation is above

optimum, s/he attempts to reduce stimulation. The degree of environmental stimulation may be determined by properties such as novelty, incongruity, complexity, uncertainty, surprise, change, etc. Berlyne (1960) refers to these properties as "collative properties" that can influence arousal, a physiological state. To adjust stimulation from the environment individuals may engage in exploratory behaviors.

There are at least ten terms that are very closely related to the conceptualization of optimal stimulation level. They include: activity seeking, information seeking, sensation-seeking, exploratory drive, spontaneous alternation, stimulus variation, incongruity seeking, exploratory urge, venturesomeness, role accumulation (Faison 1977; Hirschman and Wallendorf 1979). Four other frameworks relevant to consumer exploratory behavior which are based on optimal stimulation include: (1) novelty seeking, (2) variety seeking, (3) Hunt's (1963) Incongruity Concept, and (4) the General Incongruity Adaptation Level Hypothesis (Raju 1981; Raju and Venkatesan 1980). The first two theories consider the motivation leading to exploratory behavior as being innate. The latter two frameworks view exploratory behavior as cognitive in nature and more intrinsically motivated than physiologically driven. Although there exist variations among each of these perspectives, they all provide explanations of how environmental stimulation impacts exploratory behavior.

Conceptualization of Exploratory Consumer Behavior

"Exploratory behavior, in simple terms, refers to so-called 'nonpurposeful' behavior(s) with no easily discernable motives" (Raju 1981, p. 223). To date, no consensus has formed regarding which

behaviors constitute exploratory behavior. A number of marketing studies that have examined various exploratory consumer behaviors are identified in Table I, Appendix B.

Raju (1980) specified seven different exploratory consumer behaviors (i.e. repetitive behavior, innovativeness, risk taking, exploration through shopping, interpersonal communication, brand switching, information seeking) and developed a measure for these behaviors. A 39-item scale that included these seven different exploratory behaviors was constructed. Possible motivations associated with these behaviors were suggested by Raju (1980) as a result of his research. For example, risk taking was associated with repetitive behavior proneness and innovativeness. Variety seeking was related to risk taking and brand switching. Last, curiosity may motivate interpersonal communication, information seeking, and exploration through shopping.

A more recent classification of these exploratory behaviors into three specific types of exploratory consumer behavior was developed by Price and Ridgway (1982): (1) vicarious exploratory behavior, (2) exploratory purchase behavior, and (3) use innovativeness. Each of these forms of exploratory consumer behavior is discussed below.

Vicarious Exploratory Behavior

An introduction to this first type of exploratory consumer behavior appeared in the marketing literature by Hirschman (1980). She referred to this behavior as vicarious innovativeness and defined it as "the acquisition of information about new products and consumption situations" (Hirschman 1980, p.286). According to Hirschman, actualized innovativeness includes (a) vicarious innovativeness and (b) adoptive innovativeness both of which result from actualized novelty seeking

(i.e. "the actual behavior by the individual to acquire novel stimuli," p. 284). Individuals who engage in vicarious innovativeness can adopt the product concept without the expense and risk inherent in adopting the actual product.

Although conceptually very similar to vicarious innovativeness, Price and Ridgway (1982) labeled this behavior as, vicarious exploratory behavior. Vicarious exploratory behavior includes "behaviors such as reading about, talking to others about, or shopping for new or unfamiliar products" (Price and Ridgway 1982, p. 56). Price and Ridgway (1982) used twenty-one items from Raju's (1980) exploratory behavior scale to represent vicarious exploratory behavior. The major difference between vicarious exploratory behavior and exploratory purchase behavior is that it need not involve any actual purchase behavior. For example, individuals often enjoy the act of shopping, without specific intent to purchase (e.g. Bellenger and Korgaonkar 1980; Bloch and Richins 1983a, 1986; Tauber 1972).

Epistemic/Sensory Vicarious Exploration. Vicarious exploratory behavior has also been discussed as being epistemic and sensory (Venkatraman and MacInnis 1985). For example, epistemic vicarious exploratory behavior includes verbal information search and search for factual product information. Whereas, sensory vicarious exploration includes information gathered through the senses. Two measures were developed for these exploratory search behaviors: (a) verbal information search and (b) sensory information search. Six to seven items were used to represent each type of search behavior. Cronbach alpha reliability coefficients for these each measure were .64 and .61, respectively.

Ongoing Search. Recently, Bloch, Sherrell, and Ridgway (1986) delineated two types of search behavior: prepurchase search and ongoing search. Prepurchase search involves information seeking aimed at problem solving. Ongoing search is conceptualized as "...search activities which are independent of specific purchase needs or decisions" (Bloch, Sherrell, and Ridgway, 1986, p. 120). Two primary motivations associated with ongoing search include: gathering information for pleasure to satisfy intrinsic motivations, such as curiosity or recreation and information to build a bank of product information for future use. That is, ongoing search "...represents a leisure pursuit performed as an end in itself" (Bloch, Sherrell, and Ridgway, 1986, p. 121). Ongoing search describes behaviors that occur as a result of extensive involvement or interest in a particular product classification. Subscribing to specialty magazines for pleasure or enjoyment without a specific purchase goal is an example of ongoing search. Product-specific multi-item measures were developed to measure the extent of ongoing search for computers and clothing. According to Bloch, Sherrell, and Ridgway (1986), individuals engaging in ongoing search may make more efficient future purchase decisions. The likelihood for impulse purchasing may also be greater for the ongoing searcher since they spend a great deal of time in the store or with printed media. Conceptually, ongoing search closely resembles vicarious exploration (or vice versa) since both behaviors occur without the presence of a specific or immediate purchase problem.

Exploratory Purchase Behavior

Exploratory purchase behavior (i.e. innovating and brand switching) has been examined as a form of variety seeking in consumer behavior (e.g. Handelsman 1983; McAlister 1982; McAlister and Pessemier 1982;

Price and Ridgway 1982). For example, "a consumer may innovate--that is, buy a "new" product or buy a product category new to the individual consumer" (Price and Ridgway, 1982, p. 56). Whereas, brand switching involves buying a previously untried brand or alternating between familiar brands to change the routine (Price and Ridgway 1982). Price and Ridgway (1982) classified 18 of the 39 items from Raju's (1980) exploratory behavior scale to represent exploratory purchase behavior.

Epistemic/Sensory Purchase Exploration. Venkatraman and MacInnis (1985) have examined epistemic and sensory dimensions of exploratory purchase behavior. Epistemic exploratory purchase behavior includes variety seeking and innovativeness with functional products. Whereas, sensory exploratory purchase behavior includes variety seeking and innovation with aesthetic products. Four measures were developed for the different types of purchase exploration: (a) variety seeking with functional products, (b) variety seeking with aesthetic products, (c) innovativeness with functional products, and (d) innovativeness with aesthetic products. Three to six items were included in each of these measures. The Cronbach alpha reliability coefficients for these measures were .55, .43, .52, and .62, respectively.

Use Innovativeness

Use innovativeness was formally introduced by Hirschman (1980). It was used to describe two types of behavior. First, consumers may use a previously purchased product in a single unique way. Second, consumers may use a previously known product in several different ways. Use innovativeness involves consumption behavior; therefore, it differs from vicarious exploration and exploratory purchase that involve prepurchase and/or purchase behavior. Use innovativeness has been examined as a form of exploratory consumer behavior by Price and Ridgway (1982). A

five-item scale was developed by these authors to measure use innovativeness. The average item-total correlation for the scale was .42 and the it had a Spearman-Brown reliability coefficient of .74. No significant correlations between use innovativeness and vicarious exploration (.11) or exploratory purchase behavior (.20) were found. As a result, they considered use innovativeness to be a separate construct.

These authors further expanded their use innovativeness scale and used it to examine use innovativeness with hand calculators (Price and Ridgway 1983). The final 44-item scale included five dimensions: creativity/curiosity, risk preferences, voluntary simplicity, creative re-use, and multiple use potential. Internal reliability for the 44-item scale was .91. Coefficient alphas ranged from .56 to .86 for the five subscales. Specific behaviors regarding calculator usage were examined to assess the criterion validity of the scale. Subjects responded to the scale items and were classified into upper, middle, and lower use innovativeness groups. Results indicated that the individuals who scored highest on the use innovativeness scale engaged in significantly more innovative behaviors with the hand calculator than the other groups.

Individual Differences and Exploratory Consumer Behavior

The individual difference variable most commonly examined in exploratory consumer behavior studies has been optimal stimulation level (OSL). The majority of studies have examined the relationship between OSL and exploratory consumer behaviors. Other studies have included individual difference variables such as, cognitive and hedonic orientations (Venkatraman and MacInnis 1985), lifestyle stimulation

(Wahlers and Etzel (1985a, 1985b), and personality traits (Joachimsthaler and Lastovika 1984).

Optimal Stimulation Level (OSL)

According to Raju and Venkatesan (1980), optimal stimulation level is helpful in studying four different aspects of consumer behavior: (1) effects of stimulus repetition, (2) individual's response to stimulus characteristics, (3) consumer's information search behavior, and (4) exploratory consumer behaviors.

First, the effects of stimulus repetition in consumer behavior are most relevant to advertising and brand switching. Repeated exposures create greater familiarity of the stimulus and may effect its' arousal potential (Sawyer 1977). Second, individual's response to stimulus characteristics such as novelty, ambiguity and incongruity may influence the amount of attention given to a stimulus (i.e. Goodwin 1979, Morrison and Dainoff 1972). Third, consumers may engage in information search to find something new and exciting without any purchase intention. Distinctions have been made concerning different types of information search: (a) "diversive exploration," which involves search for brand or product information (Howard and Sheth 1969); (b) "specific exploration," which involves search for interesting stimuli (Howard and Sheth 1969); and (c) epistemic behavior, which involves acquiring information for future use (Berlyne 1960). Last, differences in exploratory consumer behavior may vary according to an individual's stimulation needs. Individual differences in OSL and exploratory behaviors such as the acceptance of recycled retail facilities (Grossbart, Mittelstaedt, and DeVere 1976), the adoption of new retail facilities and new products (Grossbart, Mittelstaedt, and DeVere 1976; Mittelstaedt, Grossbart, Curtis, and DeVere 1976), use innovativeness (Price and Ridgway 1983),

preferences for different types of vacations (Wahlers and Etzel 1985) have been examined.

The relationship between OSL and general consumer exploratory tendencies (repetitive behavior, innovativeness, risk taking, exploration through shopping, interpersonal communication, brand switching, information seeking) have also been examined (Raju 1980). These general exploratory consumer behaviors were more likely to be manifest by individuals with a high OSL (Raju 1980). Those behaviors that were most likely to be manifest were risk taking and innovativeness. Behaviors least likely to be manifest included shopping activities, interpersonal communications, and information seeking. According to Raju (1980) individuals with a low OSL may seek information to reduce risk; whereas, individuals with a high OSL may seek information to explore something unfamiliar. Significant correlations between OSL and exploratory behavior suggest the following profile for a person with a high OSL:

> one who is not afraid of taking risks or trying new or unusual products/services, is eager to find out about new products/services and takes the initiative in trying them, seeks variety or change in repetitive purchases, and likes introducing new products and brands to others [Raju, 1980, p.277].

Individuals with higher OSL's also were found to be relatively younger, educated, and employed (Raju 1980).

Wahlers, Dunn and Etzel (1986) measured optimal stimulation and exploratory behavior proneness. They evaluated five alternative OSL scales. These included the (1) Sensation Seeking Scale (Zuckerman, Kolin, Price and Zoob 1964), (2) Stimulus Screening Scale (Mehrabian 1976); (3) Desire for Novelty Scale (Pearson and Maddi 1966); (4) Arousal Seeking Tendency Scale I (Mehrabian and Russell 1974); and (5)

Arousal Seeking Tendency Scale II (Mehrabian and Russell 1978). Reliability coefficients were calculated for each of the five scales.

Results indicated good internal reliability (greater than 0.7) for all five scales. Correlations were also calculated to determine the strength of association between the five scales. Both of the Arousal Seeking Tendency scales were highly intercorrelated (.96), as expected, since these instruments share many of the same items. In general, the results indicated that the first four scales have common dimensions of OSL while the stimulus screening scale represents an inverse measure of OSL. However, only four of the ten between-scale correlations were statistically significant. Therefore, despite commonalities, these scales may be measuring different aspects of OSL.

Next these five OSL scores were correlated with the scores for each of the seven exploratory behavior dimensions from Raju's (1980) scale. Both Arousal Seeking Tendency scales were significantly correlated with the exploratory behaviors, except for interpersonal communication. However, the correlations between the other OSL measures and these exploratory behaviors were not satisfactory. In addition, the five OSL measures appear to capture only one common element of OSL, which is the "repetitive behavior" dimension identified by Raju (1980). Therefore, Wahlers, Dunn and Etzel (1986) support the use of the Arousal Seeking Tendency scales as the most representative of exploratory consumer behavior.

Wahlers, Dunn and Etzel (1986) also factor analyzed Raju's (1980) exploratory behavior scale. Thirteen of the 39 items failed to load on any factor and were excluded from further analysis. Four factors were identical to those defined by Raju (1980): exploration via shopping, risk taking, innovativeness, and information seeking. Three new factors

were also found: brand sensitivity, new product interest, and diversive exploration. The OSL scores were correlated with these redefined catagories of exploratory behavior. Results indicated significant correlations between Arousal Seeking Tendency I and II and exploration via shopping, risk taking, and innovativeness. Correlations between sensation seeking and risk taking were statistically significant. Stimulus screening was correlated with exploration via shopping and brand sensitivity. Again, the most representative scales of consumer exploratory behavior appear to be the Arousal Seeking Tendency scales.

OSL and Vicarious Exploratory Behavior. The relationship between OSL and vicarious exploratory behavior has been studied by Price and Ridgway (1982). This study classified items from Raju's (1980) exploratory behavior scale to represent vicarious exploration and also exploratory purchase behavior (discussed below). These items were correlated with OSL. Statistically significant correlations were found between OSL and vicarious exploration (.33) and for OSL and exploratory purchase behavior (.61). These two types of exploratory behavior were also significantly correlated with one another (.58).

OSL and Exploratory Purchase Behavior. A few studies have specifically examined the relationship between OSL and exploratory shopping behavior (Grossbart, Mittelstaedt, Curtis and Rogers 1975; Grossbart, Mittelstaedt and DeVere 1976; Lesser and Jain 1985; Lesser and Marine 1984; Mittelstaedt, Grossbart, Curtis and DeVere 1976). The results corresponding to these studies are discussed in the "exploratory shopping behavior" section of the paper.

Venkatraman and MacInnis (1985) examined whether differences in an individual's orientation (i.e. cognitive versus hedonic individuals) influenced their mode of exploratory purchase behavior (i.e. epistemic

versus sensory) across consumption situations. The Cognition Seeking Scale (Swanson 1978) was used to measure the subjects' cognitive orientation. The Zuckerman Sensation Seeking Scale (Zuckerman 1979) was used to measure their hedonic orientation; therefore, the hedonic orientation represents differences in individual OSL's.

Venkatraman and MacInnis (1985) hypothesized that exploratory behaviors would differ according to individual hedonic and cognitive orientations. Epistemic exploratory purchase behavior included variety seeking and innovativeness with functional products. Whereas, sensory exploratory purchase behavior included variety seeking and innovation with aesthetic products. Results indicated that cognitive individuals were more search oriented (both epistemic and sensory) than hedonic consumers. When hedonic consumers did engage in search it was primarily for sensory information. They also found differences between individual orientations with respect to innovativeness with functional and aesthetic products. Cognitive individuals innovated for cognitive reasons associated with the innovations, rather than innovating with functional or cognitive products. The same was true for hedonic consumers. That is, hedonic individuals innovated for sensory reasons, but not with aesthetic products. Therefore, "the a priori classification of products as aesthetic or functional may not be appropriate" (Venkatraman and MacInnis, 1985, p. 106).

Recently, Hoyer and Ridgway (1984) developed a theoretical framework for exploratory purchase behavior. Their conceptualization included individual difference variables such as personality traits (e.g. dogmatism, extroversion, creativity) and motivational factors (e.g. need for change, curiosity, need for risk). These variables may influence the individual's variety drive and lead to purchase

exploration. Product characteristics (e.g. interpurchase frequency, involvement, brand loyalty) may also influence an individual's variety drive and their exploratory purchase behavior. Their model included motives other than OSL or need for variety that may explain exploratory purchase behavior. These included (a) decision strategies (buy cheapest, buy on sale, buy with coupons), (b) situational and normative factors (out of stock, social influence), (c) dissatisfaction with the current brand and/or product, and (d) problem solving strategies. When individuals are driven by these alternative motivations they are no longer interested in exploratory purchase behavior for the sole purpose of variety or novelty seeking. Therefore, optimal stimulation level is less likely to be useful in explaining exploratory behavior when these alternative motivations are operative. Hoyer and Ridgway (1984) did not empirically examine this framework.

OSL and Use Innovativeness. As previously discussed, OSL has been correlated with vicarious exploration and exploratory purchase behavior. OSL has also been significantly correlated with use innovativeness (.50) (Price and Ridgway 1982). However, use innovativeness was not significantly correlated with vicarious exploration or exploratory purchase behavior; therefore, it was considered to be a separate construct.

Lifestyle Stimulation

As previously mentioned, individuals attempt to increase or decrease stimulation to bring it to an optimal level. Rather than examining optimal stimulation as an absolute value, Wahlers and Etzel (1985) attempted to determine the individual's present state of arousal to determine if there was a need to increase or decrease stimulation. Theoretically, if an individual's OSL is greater than actual arousal an

individual should seek stimulation to reduce boredom. However, if their OSL is lower than the actual arousal they are receiving, they should decrease or avoid stimulation. They used OSL measures and the individual's actual arousal (measured by their lifestyle scale) to determine their preference for an active or passive vacation. It was hypothesized that individuals whose OSL exceeded their lifestyle stimulation (actual arousal) would want more active consumption alternatives. Individuals whose OSL's were less than their lifestyle stimulation levels would want a more passive consumption alternative. Ideal vacation attributes included: (a) new/different, (b) cerebral, (c) change of pace, (d) rejuvenation, and (e) traditional. Results indicated that vacation preferences were influenced by the relationship between an individual's optimal stimulation and lifestyle stimulation. Individuals who experienced less stimulation in their lives selected more active vacations; whereas, individuals who selected more passive vacations were experiencing greater levels of lifestyle stimulation than their desired levels.

Personality Traits

Raju (1980) considered OSL to mediate the relationship between personality traits (i.e. intolerance of ambiguity, rigidity, dogmatism) and exploratory consumer behaviors; however, he did not investigate these relationships simultaneously. Instead, he examined the relationship between OSL and personality traits. Results indicated that individuals with a higher OSL respond better to ambiguities in the environment. Yet, the perception of ambiguities in stimuli was similar for both a low and a high OSL. In addition, individuals with a high OSL are more likely to seek change or variety but they are not any more open minded than those with a low OSL. Last, individuals with a low OSL are

less receptive to new stimuli perhaps because of reasons such as risk avoidance.

Raju's (1980) perspective has been challenged by Joachimsthaler and Lastovika (1984). They simultaneously collected personality (i.e. locus of control and social character), OSL, and exploratory consumer behavior (i.e. information seeking and innovativeness) data to determine if OSL was a mediating variable. According to their results, OSL did not act as a mediating variable. Instead, both OSL and personality traits directly affected exploratory consumer behavior. Therefore, using OSL should not preclude using other trait variables that might help explain differences in exploratory behaviors.

Curiosity may be viewed as a personality trait or as a motivational state (Langevin 1971). Personality questionnaires and teacher or peer ratings are used when curiosity is viewed as a personality trait. Behavioral indices are used when curiosity is viewed as a motivational state (Olson and Camp 1984). According to Olson and Camp (1984), there are five curiosity scales that can be reasonably used as a general curiosity measure (the Melbourne State and Trait Curiosity Questionnaires, the Academic Curiosity Scale, Spielberger's State and Trait Curiosity Inventory, and the Ontario Specific Curiosity Scale). There are also three other scales that should not be used as general measures of curiosity (Diversive Curiosity scale, the Proverbs Test, and the Sensation Seeking Scale). The selection of the appropriate scale for this study is discussed in Chapter III.

Direct causes of exploratory (i.e. varied) behavior include curiosity, novelty, information seeking, balancing, etc. (Handelsman and Munson 1985). Dember and Earl (1957) and Hoyer and Ridgway (1984) also

indicated curiosity as an important motivation for exploratory (variety seeking) behavior. They note:

> Certain people are simply more curious of new stimuli than others...those with a higher level of curiosity drive would be more likely to try out new brands/products in a choice context. (Hoyer and Ridgway, 1984 p. 116).

Raju (1980) suggests the basic underlying motivations for exploratory responses such as information processing, interpersonal communication and shopping may be curiosity. Curiosity may be defined as the degree to which an individual:

> (a) reacts positively to new, strange, incongruous or mysterious elements in his environment by moving towards them, by exploring them, or by manipulating them; (b) exhibits a need or desire to know more about himself and/or his environment; (c) scans his environment, seeking new experiences; and/or (d) persists in examining and exploring stimuli in order to know more about them (Maw and Maw 1964, p. 1085).

To date, curiosity measures have not been correlated with exploratory consumer behaviors.

Additional Variables of Interest

As previously discussed, ongoing search behavior and vicarious exploration may occur without any specific purchase intention. There may be other similar motives and outcomes between these two constructs. Different determinants, motives and outcomes associated with ongoing search were included in the framework developed by Bloch, Sherrell and Ridgway (1986). The determinants of ongoing search (an aspect of vicarious exploration) included: product involvement, market factors (e.g. availability of product information) and situational constraints (e.g. time). Motives included: acquiring product information for future use and experiencing fun and pleasure. The outcomes included: future purchasing efficiencies, personal influence, impulse purchasing and greater leisure satisfaction.

Bloch, Sherrell, and Ridgway (1986) examined ongoing search behavior for clothing and computers. Subjects rated the perceived informativeness and enjoyment of ongoing search activities. The combination of these two motives explained 25-30 percent of the variance in ongoing search behavior. Enduring product involvement was examined for clothing and computers as a determinant of ongoing search and a statistically significant relationship was found. The impact of ongoing searchers in the marketplace was also examined. The results indicated that heavy ongoing searchers (for clothing) spend over twice as much in the same time period as do light searchers. Heavy ongoing searchers (for computers) invested three times as much in their computer systems as did light searchers. Therefore, ongoing search was significantly related to product expenditures. The relationship between ongoing search and opinion leadership was also statistically significant. These factors may also be relevant to vicarious exploration; however, they have not been investigated.

Exploratory Shopping Behavior

Scholars have been interested in understanding individual shopping behavior for some time. One particular area of study has been to examine what factors motivate an individual to go shopping. Tauber (1972) has identified both personal and social shopping motives. Within his classification exist motives for sensory stimulation, diversion, self-gratification, and new product learning. These motivations are similar to ideas presented by Berlyne (1960) and others who suggest that individuals vary in their needs for stimulation. This need for varied experience or exploratory drive leads to curiosity and novelty seeking

to escape the aversive state of boredom (e.g. Berlyne 1960; Fiske and Maddi 1961).

Recreational Shopping

A study by Korgaonkar and Bellenger (1980) examined differences between recreational and economic shopping orientations. A recreational shopper was described as someone who enjoys shopping as a leisure time pursuit. They found that the majority of their respondents (69%) were classified as recreational shoppers. When nonrespondents were included the percentage of recreational shoppers dropped to 37%. Recreational shoppers as compared to economic shoppers were more likely to: (a) spend more time shopping per trip, (b) shop without having an idea of what to buy, (c) shop with others, (d) prefer department stores more than discount stores, and (e) prefer women's magazines more than news magazines. In addition, recreational shoppers were more actively involved in information seeking and attached more importance to the store decor than did economic shoppers.

Consumer browsing behavior is a form of recreation and a form of external search that has also been examined (Bloch and Richins 1983a). Browsing behavior is defined as "...the examination of a store's merchandise for recreational or informational purposes without a current intent to buy" Bloch and Richins 1983a, pg. 389). Findings indicated that a significant number of individuals browse in retail stores without any specific purchase intention. Statistically significant relationships between the individual's degree of interest, readership, knowledge, and word-of-mouth communication concerning the product (automobiles and clothing in their study) and their browsing behavior were found. Browsers disseminated more product information and were exposed to greater amounts of mass media than non-browsers. They were

also more interested in and had more knowledge of the product class than non-browsers. The authors indicated additional factors that may influence the consumer's propensity to engage in browsing behavior, such as: store attributes (e.g. atmospherics, ease of access, merchandise assortments, the number of sales clerks) and product characteristics (e.g. product complexity).

Retail Environmental Stimulation

Westbrook and Black (1985) confirmed and extended Tauber's (1972) earlier proposals by identifying the existence of seven shopping motivations. The first two motivations are additions to Tauber's classification. The seven shopping motivations identified included: (1) anticipated utility of prospective purchases, which is the expectation of benefits or hedonic states provided by the product; (2) optimization of merchandise choice; (3) enactment of an economic shopping role; (4) negotiation to obtain price concessions from the seller; (5) affiliation with reference groups; (6) exercise of power and authority in marketplace exchanges; and (7) sensory stimulation from the marketplace itself, or to seek novel and interesting stimuli from retail environment. It is this last motivation, novelty seeking, that is of primary interest to the present discussion.

Lesser and Marine (1984) and Lesser and Jain (1985) investigated the relationship between arousal and shopping behavior by examining epistemic and exploratory shopping behaviors. Epistemic shopping behavior was characterized as problem solving or reasoning behavior and has been the primary focus of consumer behavior models (e.g. Engel, Kollat, and Blackwell 1968; Howard and Sheth 1969). That is, consumers have been perceived primarily as thinkers (cognitive orientation) rather than to examine the feeling (hedonic orientation) or sensory aspects of

exploration (Holbrook and Hirschman 1982). Exploratory behavior involves activities undertaken to acquire new information and is often associated with boredom, curiosity, and recreation (Lesser and Jain 1985; Lesser and Marine 1984). Epistemic and exploratory behaviors are considered to be independent but related activities that may occur at the same time (Lesser and Jain 1985).

A scale was developed to measure epistemic and exploratory shopping behavior (Lesser and Marine 1984). Arousal level was measured (using Thayer's self-report arousal instrument) by having respondents indicate whether they had "too little" or "too much" of six different arousal related attributes while they were shopping. They found that arousal may stimulate increases in exploratory behavior until arousal nears the optimal level. However, when arousal is near optimal exploratory shopping behavior may decline slightly and then continue to increase as arousal exceeds an optimal level. Conversely, epistemic behavior showed little variability at different levels of arousal in comparison to exploratory behavior.

In summary Lesser and Marine (1984) state:

> The most striking differences in the curves were at extreme arousal levels. When shoppers believed that they had too little arousal, exploratory behavior was at extremely low levels. However, when arousal exceeded their desired levels, shopping behavior was better characterized by exploratory behavior than by epistemic behavior (p.19).

Respondents who had "too much" arousal were characterized by a much higher level of exploratory shopping behavior than epistemic shopping behavior. Their activity in the mall was to seek information rather than to solve shopping-related problems. "This research suggested that information seeking may not merely be a preliminary means of solving a

consumer problem, as often implied by consumer behavior models" (Lesser and Marine 1984, p.20).

A few studies have specifically addressed the issue of retail environmental stimulation. These studies have examined differences in individual OSL's and their acceptance or adoption of retail innovations.

The first study hypothesized that differences in individual's stimulus needs (OSL) and their perceptions of downtown shopping milieu would better predict shopping behavior (Grossbart, Mittelstaedt, Curtis, and Rogers 1975). The three shopping behaviors included: (a) trip frequency, (b) trip duration, and the (c) stores visited per shopping trip. High sensation seeking (HSS) individuals (measured by Zuckerman's scale) were also expected to be more sensitive to the perceived environment than low sensation seekers (LSS). When individuals were divided into HSS and LSS groups an increase in explained variance occurred for trip frequency and trip duration but not for the number of stores visited. In addition, the R^2 values were higher for the HSS group than for the LSS group for both trip frequency and trip duration. Grossbart, et. al. (1975) concluded that HSS's appear to be more environmentally sensitive than LSS's and they differ in terms of the perceptual dimensions accounting for their shopping behavior. They note that individuals may evaluate environments similarly, but respond to those same environments differently.

Grossbart, Mittelstaedt, and Devere (1976) examined OSL and innovative shopping behavior (i.e. a desire to shop at recycled urban shopping areas). Results indicated that the high sensation seekers (HSS) were more likely than the low sensation seekers (LSS) to be aware of the new retail facilities, to consider shopping at the new facilities, to symbolically accept the new facilities, to actually shop

at the new facilities, and to confirm the decision to continue shopping at the new facilities. Demographic characteristics were poor predictors of which groups were attracted to recycled facilities. Their findings suggest that the adoption of recycled facilities is dependent upon differences in individual needs for stimulation. However, the degree of stimulus input associated with different types of retail innovations has not yet been determined.

The decision making process for adopting new retail facilities and new products was hypothesized to differ between HSS's and LSS's (Mittelstaedt, Grossbart, Curtis, and DeVere 1976). Seven stages in the adoption decision process (i.e. awareness, evaluation, symbolic rejection, trial, trial rejection, adoption, and decision time) were examined for new retail facilities and new products. The use of trial differed between the two groups. HSS's had a significantly shorter decision time from awareness to trial of new products than did LSS's. In addition, HSS's were significantly less likely to reject stores or products symbolically and they tried more stores and products, of the alternatives considered, than LSS's. Therefore, HSS's move more quickly to trial and take a greater risk that the product or store will be acceptable than LSS's. Awareness and the ultimate adoption patterns also differed according to the type of innovation (i.e. stores and products). HSS's were more aware of retail facilities than LSS's; however, they were not more aware of new products than LSS's. A larger proportion of new products considered were rejected and a smaller proportion were accepted when compared to new retail facilities. The authors suggested that retail facilities may have more stimulating properties than products, especially those which are considered to be discontinuous innovations.

According to the previous discussion, it is implicitly assumed that product and service assortments offered in the marketplace may help satisfy an individual's variety seeking drive or OSL. Handelsman and Munson (1985) offer a discussion and illustration of the importance of variety seeking to retailer assortment decisions. They provide evidence to support a utility function for assortment size that approximates a bell-shaped (inverted U) curve for the consumer. Increasing the assortment size increases consumer utility up to a point, then utility declines as the store becomes difficult to shop because of confusion and fatigue. However, developing an assortment size that satisfies the consumer's need for variety may be quite difficult.

In-Home Shopping Behavior

Another aspect of shopping behavior that has received attention is in-home shopping, which is also referred to as non-store retailing. In the following discussion the term in-home shopping will be used instead of non-store retailing. These purchases can be classified into: (a) direct marketing and (b) direct-to-home selling (Berman and Evans 1986). Through direct marketing customers are first exposed to a nonpersonal medium. Different types of nonpersonal media include direct-mail catalogs, conventional or cable television (e.g. Home Shopping Network), electronic shopping (e.g. Viewtron), radio and/or magazines. With direct-to-home selling, customers are personally contacted (e.g. sales representatives) at their homes. The term door-to-door is synonymous with direct-to-home selling.

The previous research on in-home shopping has focused on three primary methods of in-home shopping: (a) mail-order catalogs (e.g. Riecken, Yavas and Samli 1980), (b) telephone orders (e.g. Cox and Rich

1964), and (c) direct-to-home (e.g. Peters and Ford 1972; Spence, Engel and Blackwell 1970). More recently, electronic shopping behavior has been examined (Korgaonkar and Smith 1986; Sharma, Bearden, and Teel 1983).

Since the first empirical investigation by Cox and Rich 1964, only a handful of studies have examined in-home shopping. The majority of these studies have attempted to develop profiles of the in-home shopper and isolate variables that help explain why consumers shop at home. These studies typically classify in-home shoppers according to either (a) the frequency of mail and/or telephone orders placed over some time period, generally a year and (b) the total mail and/or telephone expenditures over a given time period. These studies typically examine individual differences of in-home shoppers and nonshoppers, such as demographics, attitudes, and perceived risk as explanations for in-home shopping.

Both of these issues are reviewed. First, different methods of classifying in-home shoppers are presented. Next, an overview of the variables that have been used to develop profiles of the in-home shopper and/or determine in-home shopping are detailed. This information is summarized in Table II, Appendix B. Previous authors have also reviewed the findings of individual differences for in-home shoppers and nonshoppers (Gehrt 1986; Gillett 1976; Lumpkin and Hawes 1985). Specific findings concerning demographic profiles and/or operationalizations for in-home shoppers can be found in these sources.

Classifying In-Home Shoppers

Catalog and telephone shopping have been combined to identify and classify in-home shopping groups (De Korte 1977; Lumpkin and Hawes 1985). In other cases, mail orders, telephone orders and orders placed

at catalog counters in retail stores are combined to classify in-home shoppers (Gillett 1970; Reynolds, Martin and Martin 1977).

Number and Frequency of Orders. The frequency with which individuals order goods from mail-order catalogs or over the telephone is also used to classify in-home shoppers. Generally, respondents are asked to recall the number of in-home shopping orders they placed during some previous time period. These time periods range from five to twelve months (De Korte 1977; Gillett 1970; Lumpkin and Hawes 1985; Reynolds 1974; Reynolds, Martin, and Martin 1977; Riecken, Yavas, and Samli 1980). The number of in-home orders placed are used as cutoff points in classifying frequent and infrequent in-home shoppers. These numbers vary across studies. For example, in one study individuals who placed three or more orders were frequent in-home shoppers (Lumpkin and Hawes 1985) and in another study individuals had to order twelve or more times during the past year to be classified as frequent in-home shoppers (Reynolds (1974). Even more extreme, individuals have been classified as catalog shoppers if they placed only one purchase within the previous year (Riecken, Yavas and Samli 1981; Gillett 1970).

Not all studies operationalize in-home shopping according to the specific number of orders placed in-home. For example, individuals have been classified as "active" in-home shoppers if they purchased goods at home regularly or occasionally and as "inactive" in-home shoppers if they purchased goods at home very rarely or not at all (Cunningham and Cunningham 1973).

These same discrepancies exist when placing individuals into infrequent in-home shopping groups. Individuals have been classified as infrequent in-home shoppers if they placed one or two orders (Lumpkin and Hawes 1985) or less than twelve orders (Reynolds 1974) during the

past year. Individuals who reported placing zero catalog orders during the past year were classified as nonbuyers (Cox and Rich 1964; Lumpkin and Hawes 1985; Reynolds 1974).

Percentage of purchases has also been used to differentiate groups of in-home shoppers. Individuals were classified as high volume shoppers if they ordered one-fourth or more of clothing and household items over the telephone during the past year whereas, low volume shoppers had placed less than one-fourth of orders over the telephone (Cox and Rich 1964). In another study, women were classified as "heavy in-home buyers" if they purchased over half of their cosmetics at home (Peters and Ford 1972).

Expenditures. Individuals have also been asked to recall the amount of dollars spent on catalog, direct mail, and telephone purchases (over an 11 month period) to differentiate in-home shoppers (Gillett 1970). Although 70% of the sample had shopped at home, their total in-home purchases (mean expenditure $58.00) were only a small percentage of total family expenditures for general merchandise items. De Korte (1977) found a higher mean expenditure ($67.00) for mail and telephone orders.

A few attempts at using multiple measures for in-home shopping proneness have occurred. De Korte (1977) developed a composite index of in-home shopping, which consisted of: (1) mail order frequency, (2) total mail expenditures, (3) telephone order frequency, and (4) total telephone expenditures. Individuals who did not order by mail or telephone had an index value of zero. Lumpkin and Hawes (1985) used a combination of measures to identify differences in catalog shopping. Respondents were classified into three groups: nonusers, infrequent users, and frequent users according to the number of catalog orders

placed during the past 12 months. This classification was verified by examining the in-home shopping orientations for each of the groups. The results of the in-home shopping orientation measure provided support for their user categorization.

As is evident, a systematic classification of in-home shoppers and non-shoppers has not occurred. Unfortunately, this inconsistency in operationalizing in-home shoppers and nonshoppers makes comparison of results across studies quite difficult.

Determinants of In-Home Shopping

Individual's demographics, attitudes toward local retail facilities, perceptions of risk and their general interest in shopping have all been examined as possible explanations for why individuals engage in-home shopping activities.

Demographics. A number of in-home shopping studies have examined demographic and socioeconomic variables in an attempt to develop customer profiles of in-home shoppers (e.g. Berkowitz, Walton and Walker 1979; Cunningham and Cunningham 1973; Gillett 1970; Reynolds 1974; Riecken, Yavas, and Samli 1980). Recently, Lumpkin and Hawes (1985) have criticized previous studies that included only women in their samples. They reexamined the demographic profile of catalog shoppers and found households headed by older males with a higher education, and income to be more frequent catalog users. Still, wide variations among studies exist and an overall demographic profile of the in-home shopper has not emerged. Reviews of these mixed results can be found in Gillett (1976), Lumpkin and Hawes (1985), and Gehrt (1986).

More than ten years ago Gillett (1976) suggested that variables other than demographics, such as prior shopping experience, perceived purchase involvement and/or the quality of product descriptions, could

better explain in-home shopping behavior. Although past studies have not empirically examined variables that are exogenous to the individual, Gehrt (1986) has provided a theoretical justification for using situational variables.

Attitudes Toward Local Retail Facilities. Previous studies have found that catalog shoppers held more negative attitudes toward local retail facilities and more favorable attitudes toward shopping in large cities and shopping centers (Bolfing, Hills, and Barnaby 1981; Reynolds 1974). These findings are very consistent with findings from the "outshopping" literature. The amount of outshopping that occurs is generally related to the consumer's satisfaction/dissatisfaction with local shopping conditions (e.g. Lillis and Hawkins 1974; Samli and Uhr 1974) and the outshopping phenomenon generally occurs with consumers in small rural towns.

Criticisms have been raised concerning studies that restrict their data collection to a single community, that is typically an urban setting, rather than examining rural locations (exceptions include Bolfing, Hills and Barnaby 1981; Lumpkin and Hawes 1985; Riecken, Yavas, and Samli 1981). Lumpkin and Hawes (1985) included fourteen communities with populations of 1,000 to 50,000 persons in their sample. However, they did not find statistical support for residential location and catalog usage. Bolfing, Hills, and Barnaby (1981) found no demographic differences between rural and urban catalog shoppers, yet they did find that rural consumers differed significantly from urban consumers with respect to perceived risk toward mail-order buying.

The importance of various attributes in the selection of a shopping area has also been examined. Convenience has been found to be an important patronage attribute for telephone shoppers (Cox and Rich 1964;

Gillett 1970), catalog shoppers (Riecken, Yavas, and Samli 1980), and users of in-home food services (Berkowitz, Walton, and Walker 1979). "Catalog nonshoppers" placed more importance on courteous salespeople (Riecken, Yavas, and Samli 1980). Individuals who shopped by telephone also considered past experience and impulse purchasing to be important motives for shopping by telephone (Gillett 1970). Individuals who shopped by catalog rated merchandise availability, quality assortments, and low prices as important attributes (Gillett 1970).

Perceived Risk. Since Bauer's (1960) conceptualization of perceived risk a large number of studies have examined risk as it relates to consumer decision making. Jacoby and Kaplan (1972) borrowed from Bauer's discussion and developed a risk measure that contains five types of perceived risk (i.e. financial, performance, physical, psychological, and social) and an overall measure of risk. Roselius (1971) added a "time loss" dimension, which considers the time, convenience and effort expended to repair or replace a malfunctioning product. All of these risk dimensions have been incorporated into a measure by Brooker (1984).

Although in-home shopping may be a very convenient mode of shopping, still many individuals avoid this method of shopping. The lack of in-home shopping has often been attributed to the degree of risk associated with this mode of shopping. Unfortunately, results are mixed. This may be partly attributed to the varied ways perceived risk has been measured.

Cox and Rich (1964) indicated that perceived risk may come from three sources: the product, the brand, and the mode of purchase. Gillett (1970) has listed additional factors that may also influence perceived risk. These include, quality of product descriptions, price,

delivery, guarantee policies, prior shopping experience, perceived purchase importance or involvement, and self-confidence. Dash, Schiffman, and Berenson (1976) have also suggested that self-confidence and perceived purchase involvement are important dimensions of perceived shopping risk that influence store choice.

The findings from various in-home shopping studies will be discussed in relation to five of the aforementioned factors: (a) mode of purchase, (b) self-confidence, (c) prior shopping experience, (d) purchase involvement and (e) product characteristics.

Mode of Purchase. There are various costs associated with the buying decision, such as economic, temporal, physical, psychological costs (Cox and Rich 1964). Spence, Engel, and Blackwell (1970) sought to determine whether consumers perceive greater risk when buying by mail than when buying from a salesman. They identified three reasons why mail-order might be perceived as more risky:

> (1) lack of opportunity to examine products prior to a purchase; (2) difficulties in returning faulty merchandise; and (3) frequent suspicion of business ethics of certain mail-order operations (Spence, Engel, and Blackwell, 1970, p. 364).

Results indicated a general tendency for individuals to perceive higher risk in buying by mail than in buying from a store or salesperson. However, mail-order buyers of hospitalization insurance did not view less risk in mail-order buying of insurance or other products as compared to nonbuyers. Gillett (1976) has indicated that hospitalization insurance may not be an adequate representation of classifying shoppers by "mail-order shopping experience."

Self-Confidence. Personal differences among individuals may help explain why some people perceive more risk with in-home shopping. As previously mentioned, self-confidence may be another way of identifying

the degree of perceived risk. A number of in-home shopping studies have used general and specific measures of self-confidence (e.g. Cox and Rich 1964; De Korte 1977; Lumpkin and Hawes 1985; Peters and Ford 1972; Reynolds 1974; Sharma, Bearden, and Teel 1983).

De Korte (1977) examined the individuals's degree of self-confidence and catalog shopping. General self-confidence was measured by two components of the California Test of Personality (1953). Thirty items were included to measure self-reliance and a sense-of-personal-worth. Specific self-confidence, "the confidence of the consumer in her own ability to get what she wants in a risky buying situation," was measured by using a difference score. Each individual was asked to describe their degree of confidence in their ability to get what they wanted through mail order (based on a printed advertisement) or from a store or salesperson. They reported their degree of confidence for a list of different products. De Korte (1977) suggested that a single measure would be insufficient because if an individual lacked confidence in all shopping situations, simply a low confidence rating for mail ordering would be misleading (De Korte 1977). Therefore, a more meaningful rating was to have individuals rate their degree of confidence for each product by both shopping modes. This approach was very similar to that used by Spence, Engel and Blackwell (1970). Sense-of-personal-worth was significantly related to in-home shopping but self-reliance was not (De Korte 1977). An earlier study by Peters and Ford (1972) used the same personality scale as De Korte (1977), however, no significant differences between in-home and in-store cosmetic shoppers were found.

Studies have shown that individuals are less confident in buying products in the mail (De Korte 1977) or from the telephone (Cox and Rich

1964) than in a store, including insurance (Spence, Engel, and Blackwell 1970). However, those who do shop by catalog have been found to be more self-confident (e.g. De Korte 1977; Reynolds 1974) and more venturesome (Cunningham and Cunningham 1973; Reynolds 1974). Users of in-home food services also appear to be more venturesome and more willing to try new things and take risks than store shoppers (Berkowitz, Walton, and Walker 1979).

In an experiment by Sharma, Bearden, and Teel (1983) the individual's degree of confidence with their purchase decision and perceived risk were hypothesized to differ between two shopping modes: catalog shopping and electronic shopping. Confidence was operationalized as six statements [e.g. "How certain are you the product will perform satisfactorily (Uncertain-Certain)]?" Financial risk was operationalized with three items [e.g. "Considering the investment associated with the product, your purchase involved (Very little risk - Substantial Risk)?"] Differences between shopping modes for self-confidence and financial risk were not found.

Prior Shopping Experience. Frequent in-home shoppers have been found to be more self-confident than nonbuyers (Reynolds 1974) and more experienced in-store shoppers (Gillett 1970). Past shopping experience may, therefore, contribute to the individual's feelings of confidence and influence the degree of perceived risk with the shopping mode or purchase. Findings indicated that past experience was an important to telephone shoppers, but not for catalog shoppers (Gillett 1970). It was concluded that consumers may perceive less risk in ordering from general merchandise catalogs than from telephone shopping.

Past studies have typically considered catalogs to be a less familiar shopping mode than stores. More recently, it was hypothesized

that individuals should feel more confident when using catalogs than when using electronic shopping systems (Sharma, Bearden, and Teel 1983). This reasoning is consistent with the suggestion that past experience leads to increased confidence. Therefore, prior shopping experience with different shopping modes (rather than shopping experience in general) should influence the individual's degree of confidence which affects their level of perceived risk associated with the shopping mode.

Purchase Involvement. Gillett (1970) has indicated that perceived purchase importance or involvement may be an underlying factor of perceived risk. Individuals may select catalogs since they offer the ability to spend as much time as desired for product evaluation. Therefore, "the ability to 'evaluate carefully' may be a salient attribute of the catalog shopping experience" (Lumpkin and Hawes, 1985, p. 149). Their findings indicated that "careful shopping" was related to catalog shopping.

According to Gillett (1970) both in-home shoppers and store shoppers had similar perceptions regarding the pleasure or difficulty associated with shopping in stores. Yet, Berkowitz, Walton and Walker (1979) found users of in-home food services hold more negative attitudes toward shopping. Lumpkin and Hawes (1985) specifically examined various dimensions of shopping interest in relation to catalog shopping, however, these items were not significantly related to catalog shopping.

Product Characteristics. A wide variety of products have been included in the various studies of in-home shopping. Spence, Engel and Blackwell (1970) defined perceived risk as "the amount of risk that a respondent says he sees in the purchase of a product in a specific buying situation (p. 365)." Respondents rated the amount of risk perceived for 20 products in two situations (buying from a store or a

salesperson and buying by mail). Other product categories have included in-home food retailing systems (Berkowitz, Walton, and Walker 1979), cosmetics (Peters and Ford 1972), hospitalization insurance (Spence, Engel, and Blackwell 1970). In some studies lists of products, rather than focusing on a specific product category were used (e.g. Cox and Rich 1964; De Korte 1977; Lumpkin and Hawes 1985).

Cox and Rich (1964) examined the perceived risk of those products ordered by phone. Subjects indicated that having knowledge about the brand, size, fit and color of the product increased their confidence with ordering over the phone. Greater confidence and less perceived risk was also noted when the size, fit, and color was not important or when items were standardized or being reordered. Higher perceived risk was associated with products where style, fit, or individualized needs were important. Results suggest that when perceived risk was high, telephone shopping was avoided. The amount of perceived risk was also the most powerful factor differentiating telephone shoppers from store shoppers.

Products have been classified as requiring low shopping effort (alarm clock, coffee maker, and pencil sharpener) and high shopping effort (bicycle, camera, and turntable) for simulating shopping decisions made via a catalog or electronic computer system (Sharma, Bearden, and Teel 1983). Perceived financial risk and self-confidence were hypothesized to differ between high and low levels of shopping effort. Individuals did perceive more financial risk with high effort products and less financial risk for low effort products as expected; however, no significant differences for self-confidence and shopping effort were found.

Summary

Various facets of exploratory consumer behavior have been reviewed. Categorizations of these exploratory consumer behaviors that have been developed were presented. Previous researchers have examined the relationships between individual difference variables and exploratory tendencies. Optimal stimulation level (OSL) has been one of the most common individual characteristics investigated. These studies have found significant relationships between OSL and exploratory behaviors. Curiosity has been suggested as an important motivator for exploratory behavior by a number of scholars. However, it has not been included as a trait variable in past studies.

Exploratory behaviors with retail environments have also been investigated. The scope of these studies was typically limited to the retail store or downtown areas. Individuals may also engage in exploratory behaviors through in-home shopping (i.e. catalogs) modes.

CHAPTER III

RESEARCH METHODOLOGY

Two research questions were raised concerning exploratory behavior. First, is curiosity more strongly related to vicarious exploratory behaviors than optimal stimulation level? Second, is there a significant relationship between other individual difference variables (i.e. perceived risk, perceived novelty, clothing involvement, and past catalog usage) and vicarious exploration with catalogs?

The major objective of this descriptive study was to determine whether individual difference variables were related to vicarious exploration. Hypotheses were tested with correlated data obtained from two separate questionnaire administrations. Between the two questionnaire administrations an existing, yet relatively unknown stimuli (i.e. the J. Crew clothing catalog), was introduced to the respondents via the U.S. Postal Service. The major advantage of introducing the stimulus to the respondents through the mail was the provision of realism. The first questionnaire administration was used to collect primarily individual trait data (i.e. individual difference variables identified above). During the second questionnaire administration data pertaining to the respondent's vicarious exploratory behavior with the catalog was collected through individual recall measures. Undergraduate college students were included in the sample.

Sample

Due to the exploratory nature of the study, a convenience sample of students was selected. Collecting data from students was justified by the theoretical nature of the study (Calder, Phillips and Tybout 1981). A large sample size that compensated for subject attrition was necessary since the data collection process occurred over four separate phases. Students enrolled in ten summer session business courses (i.e. marketing, management, and business law) were sampled. The size of the original subject pool was 450.

In addition, 40 graduate students from two business courses were selected for pretesting the questionnaires. A discussion of the pretest results follows the discussion of selecting the measures included in both questionnaires.

Research Stimulus

In the study, an existing specialty catalog was selected to examine vicarious exploratory behaviors with catalogs. It was important that a novel catalog be selected since novelty is considered to be a stimulus property that may have arousal potential and lead to exploration behavior (Berlyne 1960). Because the J. Crew Outfitters (hereafter referred to as J. Crew catalog) catalog company located in Lynchburg, Virginia was relatively unknown to the region it was selected to represent a novel stimulus. The J. Crew company donated 450 spring, 1986 catalogs for the study.

Hypotheses

Relationships were hypothesized for vicarious exploration with catalogs and six individual difference variables. The individual difference variables included (1) optimal stimulation level, (2) curiosity, (3) perceived risk, (4) perceived novelty, (5) clothing involvement, and (6) past catalog usage.

Vicarious Exploratory Behavior

Behaviors such as reading about, talking about, and shopping for new and unfamiliar products (rather than actual purchase behavior) have been referred to as vicarious exploration (Hirschman 1980, Raju 1980, Price and Ridgway 1982). While the information seeking and interpersonal communication dimensions seemed relevant for vicarious exploration with catalogs, the exploration through shopping dimension appeared to be more relevant for in-store shopping. This dimension was considered less useful for vicarious exploration with catalogs (i.e. catalog browsing behavior). Therefore, additional information concerning exploration with catalogs was obtained through an informal survey with experienced catalog shoppers. As a result, a dreaming and fantasy aspect of catalog shopping became apparent. This dimension replaced the previous exploration through shopping dimension. The conceptualization of vicarious exploration with catalogs included three dimensions: daydreaming or fantasizing about product ownership, information seeking and interpersonal communication. The development of this measure is discussed in Chapter IV.

OSL and Curiosity

Raju (1980) categorized exploratory tendencies into seven different groups and correlated these category totals with OSL. Statistically

significant relationships ($p < .01$) were found between OSL and each group. However, lower correlations were found between OSL and vicarious exploratory behaviors: exploration through shopping (.22), interpersonal communication (.26), and information seeking than between OSL and risk taking (.62), innovativeness (.51), brand switching (.39), and repetitive behavior proneness (.36). Curiosity may be more closely associated with vicarious exploration (i.e. exploratory shopping, interpersonal communication, and information seeking) than OSL (Raju 1980).

The relationships between OSL and exploratory behaviors have also been tested by Price and Ridgway (1982). Their operationalization of vicarious exploration consisted of 21-general statements taken from Raju's (1980) exploratory behavior scale. A statistically significant relationship ($p < .01$) between OSL and vicarious exploration was found. However, correlations between OSL and vicarious exploration were weaker (.33) than correlations between OSL and exploratory purchase (.61) and use innovativeness (.50). Therefore, two previous studies have found significant, yet weak, relationships between OSL and exploratory consumer behavior (Raju 1980, Price and Ridgway 1982).

Raju (1980) suggested that curiosity is perhaps more closely related to vicarious exploratory behavior than the individual's optimal stimulation level (OSL). The following hypotheses will determine whether individual differences in OSL and curiosity are significantly related to vicarious exploratory behavior with catalogs:

H1: Individuals with a high OSL will exhibit more vicarious exploratory behavior.

H2: Individuals with a high degree of curiosity will engage in more vicarious exploration.

According to previous literature, curiosity was expected to be more strongly correlated with vicarious exploration than optimal stimulation level.

Perceived Risk

Preferences for vicarious exploration versus exploratory purchase behavior are a result of individual factors such as tolerance for risk (Price and Ridgway 1982). A low risk individual should prefer vicarious exploratory behavior since there is little risk associated with information seeking or reading and talking about new or unfamiliar products. Conversely, a high risk individual should be more likely to engage in exploratory purchase behavior since more risk is associated with actual product purchasing behavior. Risk has been associated with an individual's optimal stimulation level. Individuals with a high OSL are more likely to engage in exploratory behaviors, especially in the form of risk taking or innovativeness (Raju 1980). Exploratory purchase behavior was more closely related to risk taking and more highly correlated with OSL than other exploratory behaviors (Price and Ridgway 1982).

Perceived risk has also been associated with catalog purchasing. It is often a factor that differentiates in-home shoppers from nonshoppers. Individuals who were less frequent in-home shoppers perceived greater risk with purchasing via telephone (Cox and Rich 1964) or mail (Spence, Engel, and Blackwell 1970). Although past in-home shopping research has considered perceived risk as a partial explanation for avoiding catalog shopping, there is reason to doubt the strength of the relationship between vicarious exploration and perceived risk. This study distinguishes between catalog purchasing behavior and catalog shopping/browsing behavior. The latter behavior does not include actual

purchase decisions; therefore, the degree of perceived risk typically associated with catalog purchasing should be less for catalog browsing.

H3: An individual's perception of risk will influence the amount of vicarious exploratory behavior in which they engage.

Perceived Novelty

According to Berlyne (1960), novelty, incongruity, ambiguity, uncertainty, and change are stimulus properties that can activate arousal and lead to exploratory behavior. Therefore, receiving a new and/or novel catalog should increase the chance of observing exploratory behaviors associated with the catalog. That is, new and/or novel stimuli may help stimulate greater amounts of vicarious exploratory behavior than would a familiar stimulus, especially when there is no specific purchase intention.

H4: Individuals who perceive greater novelty with the catalog will engage in more vicarious exploratory behavior.

Clothing Involvement and Past Catalog Usage

Purchase involvement and prior shopping experience are underlying factors of perceived risk that may better explain in-home shopping (Gillett 1976). Purchase involvement and product involvement have been conceptually differentiated from one another. That is, purchase involvement is often associated with the actual decision making process. This type of involvement has been referred to as "situational involvement" (Houston and Rothschild 1978; Rothschild 1975, 1979) and occurs when individuals are temporarily involved with the product during the purchase process due to the high risks associated with the outcome of the purchase. Purchase involvement may be more closely associated with purchase exploration (i.e. actual catalog'purchase behaviors); therefore, it was not examined in the present study.

Product involvement, also referred to as "enduring involvement," may be more closely associated with vicarious exploration. "Enduring involvement" is based upon the strength of the relationship between the product and the individual's needs, values, and self-concept (Houston and Rothschild 1978) and may occur without a purchase goal. Recently, Bloch, Sherrell, and Ridgway (1986) examined the relationship between enduring product involvement and ongoing search. Two product classes were investigated: clothing and computers. Statistically significant correlations for clothing (.70) and computers (.67) provide additional support (Bloch 1981; Bloch and Richins 1983a; 1983b) for the relationship between the individual's product involvement and propensity to engage in ongoing search. These previous studies indicate that the individual's product involvement may also strongly influence the amount of vicarious exploration in which she/he engages.

In addition, greater amounts of catalog usage may be a reflection of a stronger interest in this particular mode of shopping. It may be that heavy catalog shoppers spend a great deal of time browsing through catalogs prior to actual purchase. This shopping process may become habitual (e.g. Assael 1984); that is, heavy catalog purchasers may also be heavy catalog browsers or vicarious explorers. Therefore, the following relationships were hypothesized:

H5: Individuals with greater clothing involvement will engage in more vicarious exploration with the catalog.

H6: Individuals who are heavy catalog shoppers will engage in more vicarious exploration with the catalog.

Selection of Measures

Three existing measures were used to determine relationships between individual difference variables and vicarious exploration with

catalogs. The various measures are discussed in two sections: premeasure and postmeasure. The premeasure included a series of measures that were administered prior to subjects receiving the research stimulus, (i.e. catalog). The postmeasure was administered after the catalog had been received by subjects. The selection of each of the measures is discussed followed by a brief discussion of the pretesting of these measures.

Premeasure

Prior to distributing the catalog, a variety of existing measures were administered to the subjects. A number of criteria were used for selection of the most appropriate measures for the study. First, the measures needed to be a reasonable length. Second, the measures needed to be relevant to consumer shopping behavior. Third, the measures needed to be easy to administer and score. Fourth, the measures needed to have acceptable reliability and validity. For some of the measures, researchers who had previous experience with these measures were also contacted to discuss the selection and to identify any potential problems with using these measures.

Reported reliability and validity assessments from the borrowed measures are presented with the discussion of the selection of each measure. Reliability assessments for those measures developed by the author are discussed in Chapter IV.

OSL Measure. The two most often used OSL scales in the marketing literature have been Zuckerman's Sensation Seeking scale (e.g. Grossbart, Mittelstaedt, Curtis and Rogers 1975; Grossbart, Mittelstaedt, and DeVere 1976; Hirschman 1984; Mittelstaedt, Grossbart, Curtis and DeVere 1976; Venkatraman and MacInnis 1985; and Wahlers and Etzel 1985) and Mehrabian and Russell's Arousal Seeking Tendency scale

(e.g. Goodwin 1980; Price and Ridgway 1982; and Raju 1980). While the Zuckerman Sensation Seeking scale has good reported reliability (Zuckerman 1979), measures internal sensation seeking (through imagery/fantasy) and external sensation seeking (through direct sensory stimulation) (Pearson 1970), other measures have been found to be more highly correlated with exploratory consumer behaviors. Recently, Wahlers, Etzel, and Dunn (1986) found that both the 1974 and 1978 versions of the Arousal Seeking Tendency scale were more correlated with exploratory consumer behaviors (i.e. exploration via shopping, risk taking, and innovativeness) than Zuckerman's Sensation Seeking scale. The Arousal Seeking Tendency scale has also been used by Raju (1980) and Price and Ridgway (1982) to examine vicarious exploration, exploratory purchase and use innovativeness. Since vicarious exploration is central to the present study, the 1978 version of the Arousal Seeking Tendency scale was selected over the Sensation Seeking scale. The 1978 version contains fewer items and uses more contemporary language than the earlier version.

The Kuder-Richardson reliability for the Arousal Seeking Tendency scale was .93 (Mehrabian and Russell 1978). Half of the scale items are worded positively and half negatively to balance the scale for response bias. Discriminant validity of the arousal seeking scale was determined through correlations with other personality measures (Mehrabian and Russell 1978). The results indicated that the arousal seeking scale measures personality dimensions that are different from social desirability and stimulus screening. See Table III, Appendix C for the Mehrabian and Russell's Arousal Seeking Tendency scale.

Curiosity Measure. According to Olson and Camp (1984), there are four different scales that can be used as a general measure of

curiosity. These include: (1) the Melbourne State and Trait Curiosity Questionnaires, (2) the Academic Curiosity Scale, (3) Speilberger's State and Trait Curiosity Inventory, and (4) the Ontario Specific Curiosity Scale.

The Ontario Specific Curiosity Scale was excluded from selection due to its length (110 items). Both the Academic Curiosity Scale and Speilberger's State and Trait Scale were also excluded since they were not closely related to shopping behavior. The scale that appeared to be most appropriate for the present study was the Melbourne Trait Curiosity (MCI) scale.

Trait curiosity refers to individual differences in a person's capacity to experience curiosity, whereas state curiosity refers to differences in individual responses to a particular curiosity arousing situation. Naylor (1980) reported the validity and reliability of the Melbourne Curiosity Trait/State form. Through factor analysis, trait and state items were found to be related but separate constructs. Construct and discriminant validity were assessed by correlating the curiosity measures with the RIASEC (Holland 1973) and the SCII (Campbell 1977) scales. The curiosity trait scale had alpha reliability coefficients that were acceptable (from .84-.93) and test-retest reliability of .83 and .77, respectively. The curiosity trait scale appeared to be somewhat insensitive to situational influence. Naylor (1980) warns, however, that the stability of the scale has not yet been fully determined. The curiosity state scale had alpha reliability coefficients that were also acceptable (from .87-.92). Since the present study measures curiosity during the catalog shopping experience it is not possible to acquire a state measure of curiosity, therefore,

only the curiosity trait scale will be used. See Table III, Appendix C for the Melbourne Curiosity Trait scale.

Perceived Risk Measure. A weaker association was expected between perceived risk and vicarious catalog exploration than what had been previously found with catalog purchasing behaviors. The individual's degree of perceived risk associated with catalogs must be ascertained to test this hypothesis. Jacoby and Kaplan (1972) developed a paper and pencil test to measure six different varieties (i.e. financial, performance, physical, psychological, social, and overall perceived risk) of risk. They used a student sample that had been instructed concerning the nature of the perceived risk construct. Their study was successfully cross-validated using a different student sample (Kaplan, Szybillo and Jacoby 1974). According to Roselius (1971) perceived risk also includes "time loss," which refers to the time, convenience, and effort wasted when a product fails and it had to be adjusted, repaired, or replaced. Brooker (1984) recently incorporated all of these types of perceived risk in a study of generic products. In his study, a naive adult sample was used and the criterion-related validity and reliability of this perceived risk measure was supported. An adaptation of this measure was included to determine individual differences in perceived risk with catalog shopping. See Table III, Appendix C for the perceived risk scale.

Clothing Involvement Measure. It is possible that the individual's interest and involvement in clothing may influence his or her amount of vicarious exploratory behavior with the catalog. Zaichkowsky (1985) developed a 20-item bipolar adjective scale to measure product involvement. The scale had good internal reliability (Cronbach coefficient alpha of .95 and test-retest reliability of .97). It also

meet standards for content validity, criterion related validity, and construct validity. This scale has also been used for measuring involvement in fashion apparel (Fairhurst, Good, and Gentry 1986). In the present study, an adaptation of the Zaichkowsky involvement scale was used to measure clothing involvement.

Enduring product involvement has been examined in relation to ongoing search. In a recent study, statistically significant correlations for clothing (.70) and computer (.67) involvement and search behavior provided additional support for the relationship between an individual's enduring product involvement and propensity to engage in ongoing search (Bloch, Sherrell, and Ridgway 1986). Items similar to those used by Bloch, Sherrell, and Ridgway (1986) were incorporated in the study to measure clothing involvement. See Table III, Appendix C for the items included in both involvement measures.

Postmeasure

After the catalogs were distributed, a questionnaire was administered to obtain information concerning the individual's degree of vicarious exploration. Measures of perceived novelty with the catalog and past catalog usage were also taken. The criteria and procedures used to evaluate these measures are discussed in Chapter IV. Each of these measures were developed by the researcher and are discussed below.

Vicarious Exploration Measure. According to previous literature vicarious exploration was composed of three dimensions: (a) exploration through shopping, (b) information seeking and (c) interpersonal communication. The exploration through shopping dimension appeared to be most relevant to actual store visits. This conceptualization was less useful for vicarious exploration with catalogs. Therefore, an informal survey of ten individuals who had previous experience with

catalogs was used to generate insights into the vicarious exploration construct as it related to catalog browsing behavior. As a result, a daydreaming and/or fantasy aspect of vicarious exploration became apparent. This "new" fantasy dimension replaced the exploration through shopping dimension and items were generated to represent it. Items were also constructed to represent the two previous dimensions: information seeking and interpersonal communication with the catalog. A total of 30 Likert scaled statements were developed to represent the three dimensions of vicarious exploration. Again, the three dimensions used to represent vicarious exploration with catalogs included: (a) fantasizing or daydreaming about product ownership, (b) interpersonal communication and (c) information seeking. To provide a better foundation for the final measure a number of the items were reworded in a slightly different manner. Some of the items were also recast to be negatively stated to reduce "yea" or "nay" saying. Further refinement occurred in two stages. First, a pretest of the measure was conducted with graduate students to reword those items that were unclear. Second, the data collection process was used to eliminate items that were weakly related to the construct and to assess the internal reliability of the measure. See Table IV, Appendix D for the items included in each dimension of the vicarious exploration measure.

Perceived Novelty Measure. Since the degree of perceived novelty may influence the individual's amount of exploratory behavior, a measure of perceived novelty was developed to ascertain individual differences in perceived novelty with the J. Crew catalog. A six item measure was developed that included statements concerning the individual's perceptions of similarities and differences with various aspects of the

catalog. See Table IV, Appendix D for the items included in the novelty measure.

Past Catalog Usage Measure. Catalog shopping experience may influence vicarious exploration with catalogs. Three open-ended items were used to determine the individual's past catalog usage. See Table IV, Appendix D for the three items used for past catalog usage. The scoring for each measure and the hypothesized relationships are summarized in Figure 1, Appendix A.

Pretesting

Prior to data collection a pretest was conducted on all of the measures included in the premeasure and postmeasure questionnaires. Graduate students were used for the pretest sample. The first step of the pretest was to obtain the premeasure information from the students. Once the questionnaires were collected, the students were given a catalog and were asked to take it home that evening. A couple of days later the students received the postmeasure questionnaire. This process closely simulated the final data collection process, except that the students did not receive the catalog in the mail and a shorter time period was used for data collection.

Results of the Pretest

The primary intent for the pretest was to minimize any possible interpretation problems with the questionnaires. Whereas, results concerning the final refinement of the measures developed by the researcher are discussed in Chapter IV. The following changes in the premeasure and postmeasure occurred as a result of the pretest.

Premeasure

There were four different versions of the questionnaire so that the Likert items could be randomized among the OSL and curiosity constructs. As a result of the pretest, a code number was placed in the bottom right hand corner of the questionnaire to identify each version of the questionnaire. A space was also inserted at the top right hand corner for the individual's identification number. This number consisted of the student's last initial and their student identification number. Both of these additions would assist the data input process.

The order of the headings for the Likert scale were incorrect in the original version of the questionnaire. To correct this problem, the order of slightly agree and agree were reversed to agree and slightly agree and the order of disagree and slightly disagree were reversed to slightly disagree and disagree. In addition, the headings (i.e. strongly agree, agree and slightly agree, etc.) for the Likert items were reproduced on each page to assist the respondents.

A few of the questions were ambiguous and clarification was necessary. For example, the term "regularly" was replaced with the phrase "during a typical year" and "how many" was replaced with "specify the number of." Item number seven, "I spend: almost no (a great deal of) time thinking about clothing" was deleted from the involvement measure because it was too similar to item five, "How frequently do you find yourself thinking about clothing and clothing styles?" Directions were also rewritten for Part B, "Clothing Interest," and Part C, "Shopping Behavior," which included seven-point semantic differential scales and fixed alternative questions. Raju's (1980) set of vicarious exploration Likert scaled items was added to the premeasure questionnaire, Part D "Information Search Behavior."

Postmeasure

The original draft of the postmeasure contained four open-ended questions, each of these were deleted. Six additional questions were deleted from the postmeasure reducing it from six to five pages in length. The questionnaire was divided into four different sections. Item number fourteen was deleted from the perceived novelty measure since it reflected a preference with the catalog rather than a perception of novelty. Ten or more questions were reworded for clarification. For example, "how many" was changed to "specify the number of," or "indicate the number of."

To differentiate the postmeasure from the premeasure the following changes occurred. First, a cover page was added to the postmeasure which included a brief overview of the study, the directions, a different space for the respondent's identification number, and a new code number to identify the version of the questionnaire. In addition, the questionnaire was printed in letter quality print instead of dot matrix, page numbers were added to each page, and a different format for the Likert item headings and responses was used. Therefore, the final appearance of the postmeasure was quite different from the premeasure.

Data Collection

The data collection process consisted of four separate phases. After presenting these, the issue of possible deception is briefly examined.

Phase One

Students were asked by their instructors (cooperating faculty members) to fill out index cards with their name, address, phone numbers, sex and age. Other variables (e.g. major, minor, career

objectives, work experience, etc.) were also included to make the request appear valid. These index cards provided the names and addresses necessary for the mailing list for phase three of the study. Mailing labels for the catalog distribution were typed from these index cards. Phase one was completed during the first week of summer school. It was conducted as a regular part of class activities to minimize demand artifacts.

Phase Two

During the fourth week of summer school the premeasure was collected. This questionnaire contained four of the six individual difference variables: OSL, curiosity, perceived risk, and clothing involvement.

Two research assistants administered the questionnaires to students during their regularly scheduled class periods. These assistants briefly mentioned that they were developing psychological scales for marketing and consumer behavior research and that the student's participation in filling out the questionnaire items would be very helpful. This procedure was used to minimize demand artifacts.

Phase Three

During the sixth week of summer school, the catalog was mailed to the student's campus residences. It was important that students received the catalogs quickly and at almost the same time to complete the fourth phase of the data collection process. Therefore, to increase the reliability of delivery the catalogs were mailed first class to those students with mailing labels who had completed the premeasure questionnaire.

Phase Four

The final phase of the data collection was to measure the subject's vicarious exploration with the catalog. In addition, information was obtained concerning the individual's perceived novelty with the catalog and past catalog usage. Postmeasure questionnaires were administered four to five days after the subjects received the catalog to allow them time to engage in vicarious exploratory behaviors.

Two research assistants were assigned to classes that they had not previously attended, during the premeasure collection, to collect the postmeasure data. Using different research assistants was deemed necessary to reduce the students' association between the pre and postmeasure. The research assistants indicated to the students that they were collecting data for a direct marketing company that wanted to learn more about consumer shopping behavior. Again, this procedure was used to help minimize demand artifacts.

Deception

Whenever human subjects are used in research, it is important to consider whether the research poses any threat to the subject's physical or mental well being. In this study, each of the data collection phases included a minor degree of deception. For example, in phase one the subjects did not know that personal information was being collected for a mailing list. During phase three, the subjects received catalogs that they did not request. However, in both cases it is very common for individuals to be placed on mailing lists and sent catalogs which they have not requested. Last, a ruse was set up for administering the questionnaires (second and fourth phase) where subjects were told that the information was being conducted as a part of a psychological and direct-marketing study, respectively. The extent of deception in each

phase of the data collection process appeared to be minor and no cause for concern.

Results of the Data Collection Process

A total of 450 addresses were collected from those students that attended class during phase one; however, some of these addresses were duplicates and were dropped from the final mailing list. During phase two, the premeasure questionnaire which included the psychological measures (OSL, curiosity, perceived risk, and clothing involvement), was distributed to all ten classes. Three-hundred and fifty students completed phase one and two, and were mailed a catalog during the seventh week of summer school (phase three). The second questionnaire was distributed during phase four of the data collection process and all students who attended class completed the questionnaire. The data collected during phase two and four needed to be matched for each subject. Two hundred and fifty-five subjects completed both phase two and four of the data collection process; those subjects who missed either of these phases were not included in the final analysis. In addition, those subjects who did not remember receiving a catalog did not respond to the vicarious exploration measure and were eliminated from the subject pool. As a result, the final sample size was further reduced to 184 subjects which were used to test the hypotheses. It should be noted that there was no way to determine if the subjects had actually received the catalog prior to phase four.

Analysis

After the data collection was completed and the data were coded, a variety of analysis techniques were used. First, multiple criteria were

used for the refinement of the vicarious exploration measure: (a) internal reliability assessments, (b) item-total correlations with each hypothesized dimension and (c) factor analysis. Second, correlation analysis was used for testing the six hypotheses.

Internal Reliability

The internal consistency of vicarious exploration, perceived novelty, and past catalog usage were ascertained through the use of Cronbach coefficient alphas. A coefficient alpha was calculated for each separate dimension and for the overall measure. Prior to hypothesis testing, a coefficient alpha was also calculated for the borrowed items used to measure the individual difference variables.

Item-Total Correlations

The item-total correlations for each dimension of vicarious exploration were calculated to identify individual items that were not a part of each a priori dimension. This procedure was also used with the perceived novelty measure.

Factor Analysis

Previous exploratory consumer behavior studies have used factor analysis to examine the dimensionality of a construct. Raju's exploratory consumer behavior scale was factor analyzed using principal component factor analysis, using an oblique rotation (Wahlers, Dunn and Etzel 1986). Seven different factors with eigenvalues greater than one were identified, four of which were very similar to Raju's categorization and three that were redefined dimensions. Thirteen of the 39 items failed to load on any factor and were excluded from further analysis.

This study also used factor analyses to examine each item's association with the hypothesized dimensions of the vicarious

exploration measure. A principal components factor analysis followed by a varimax and an oblique rotation was used. This procedure is supported on two grounds. First, this was an exploratory study and Stewart (1981) has suggested that both forms of rotation should be performed and compared, particularly in exploratory studies. Second, there was little prior evidence to indicate whether the three dimensions of vicarious exploration should be independent or dependent dimensions; therefore, the varimax-Harris-Kaiser sequence was used. In conducting exploratory research, using the varimax-Harris-Kaiser sequence offers a basis for determining whether orthogonal or oblique factors are more acceptable (Gorsuch 1974). This procedure also avoids having to assume whether the dimensions are related or unrelated. The rotated factor patterns were examined and items that did not load highly on each factor were considered for exclusion. Once the vicarious exploration measure was refined it was used for hypothesis testing.

Correlation Analysis

The original measure of vicarious exploration included 30 Likert items and was specifically developed to examine vicarious exploration with catalog shopping. A significant, positive relationship was expected between OSL and vicarious exploration (Hypothesis 1) and between curiosity and vicarious exploration (Hypothesis 2). These relationships were tested using pairwise correlation (Pearson correlation coefficients). Because of the weak correlations between OSL and vicarious exploration found in past studies and speculation by previous researchers, curiosity was expected to be more highly correlated with vicarious exploratory behavior than OSL.

Significant, positive relationships were also hypothesized between perceived novelty (Hypothesis 4), clothing involvement (Hypothesis 5),

past catalog usage (Hypothesis 6) and vicarious exploration with the J. Crew catalog. A moderate relationship between perceived risk and vicarious exploration was expected (Hypothesis 3). Again, the strength of these relationships were tested using pairwise correlation.

CHAPTER IV

RESEARCH RESULTS

Vicarious exploration is a form of exploratory consumer behavior conceptualized by Hirschman (1980). Behaviors such as shopping, reading, and talking about new products have been associated with vicarious exploration. Although it does not necessarily involve actual product purchases, individuals may engage in vicarious exploration for recreation, to satisfy curiosity, accumulate product knowledge, and/or to improve problem solving skills (Bloch, Sherrell and Ridgway 1986; Hirschman 1980). These motivations may result in efficiency in future purchasing, word-of-mouth communications, and/or impulse purchasing (Bloch, Sherrell and Ridgway 1986).

Previous research has found significant, yet weak, relationships between an individual's optimal stimulation level and vicarious exploration (Raju 1980; Price and Ridgway 1982). Significant relationships were also found between two personality traits (i.e. locus of control and social character) and one dimension of vicarious exploration (i.e. information seeking) (Joachimsthaler and Lastovika 1984). Previous authors have suggested that an individual's degree of curiosity may be more closely associated with vicarious exploration, than their needs for stimulation. There are probably other individual difference variables, besides OSL, curiosity, locus of control, and social character that are related to vicarious exploratory behavior.

For example, this study examined the relationship between clothing involvement, past catalog usage, perceived novelty and perceived risk and vicarious exploration with a clothing catalog. The selection of each of these individual difference variables was discussed in Chapter III. A wide variety of measures were used in the present study to examine the relationships between individual differences and vicarious exploratory behavior. These measures were borrowed from past research in most cases; however, three measures were specifically developed for this research. A discussion of the procedures for developing these measures will be presented. Six hypotheses were developed in Chapter III. The results for each of these hypotheses are also presented.

Development of Measures

Prior to testing hypotheses for these relationships, the quality of the vicarious exploration measure was examined. Measures for perceived novelty and past catalog use were also developed by the researcher and were examined prior to hypothesis testing. The procedures used to evaluate these three measures are presented below.

Vicarious Exploration

Relationships between vicarious exploration and individual difference variables (OSL, locus of control, and social character) have been examined in a general sense, but not for a specific situation. The present study examined the relationship between vicarious exploration and individual difference variables in a specific catalog shopping scenario.

Behaviors such as shopping for, reading about, and talking about, new and unfamiliar products (rather than actual purchase behavior) have been associated with vicarious exploration (Hirschman 1980, Raju 1980,

Price and Ridgway 1982). These three behaviors have been labeled as exploration through shopping, information seeking, and interpersonal communication (Raju 1980) and together have been classified as vicarious exploration.

Generating Items. For this study, the information seeking and interpersonal communication dimensions appeared relevant. However, the exploration through shopping dimension appeared to be more relevant for in-store shopping than catalog shopping. To generate insights concerning vicarious exploration with catalogs an informal survey with experienced catalog shoppers (n=10) was used. From this approach, a dreaming and fantasy aspect of catalog shopping emerged. This "new" dimension replaced the previous exploration through shopping dimension. Therefore, the conceptualization of vicarious exploration (VE) with catalogs in this study included: (1) fantasy of ownership, (2) information seeking, and (3) interpersonal communication dimensions.

First, items were developed for the "fantasy of ownership" dimension to capture a type of shopping behavior that is somewhat different from Raju's (1980) conceptualization of exploration through shopping (i.e. "a preference for shopping and investigating brands." Raju 1980, p. 278). Many of his items were relevant to actual store visits; for example, "I like to shop around and look at displays," "I enjoy exploring several different alternatives or brands while shopping," or "I hate window shopping." In this study, the "fantasy of ownership" dimension is a type of daydreaming about product ownership or about how these products will be compatible with or enhance one's lifestyle. The fantasy of ownership dimension represents a type of behavior that includes thinking, wishing, and daydreaming about products that an individual may never own, these are mental processes rather than

behavioral processes. These items could also be adapted for browsing through magazines or stores. Examples of statements included: "I wondered which colors would look best on me," or "I wondered how I would look in the clothes."

Second, the "information seeking" dimension included items that tapped the individual's degree of catalog search behavior, such as: "I examined the fine print to find the prices of the products in the catalog" or "I looked through the catalog to find information about several different types of products." These items may be more important for individuals who are interested in or curious about new products or who have a high level of involvement with the type of item presented in the catalog (in this study it was clothing). These items reflect an "ongoing search" behavior that has been discussed by Bloch, Sherrell and Ridgway (1986); however, they indicated that it is difficult to operationally distinguish between "ongoing search" and "prepurchase search" behaviors.

Third, the "interpersonal communication" dimension consisted of statements to determine whether an individual discussed the catalog with friends or acquaintances, such as "I was eager to tell my friends and/or acquaintances about the catalog." Again, these statements may be more important to individuals who are interested or highly involved in clothing.

Initially, a total of 30 items were generated to represent these three dimensions of vicarious exploration. A seven point Likert scale format was used with all of these items.

Initial 30-Item VE Measure. The objective of the analysis was to produce an internally consistent measure vicarious exploration with catalogs. Therefore, a Cronbach coefficient alpha was calculated since

it is the most commonly accepted formula for determining internal consistency for multi-item measures (Peter 1979). A separate coefficient alpha was calculated for each of the dimensions (Churchill 1979) of the 30-item measure based on the original assignment of the items to the three dimensions. The alphas for the three hypothesized dimensions with all thirty items were quite good (between .77 and .88) and above Nunnally's (1978) recommended values of .50 to .60 for early stages of basic research (see Table VII, Appendix F). Although these coefficient alphas were good, the researcher employed additional criteria to further examine the vicarious exploration measure.

The objective of the additional analysis was to produce a multi-item measure of vicarious exploration with catalogs that contained the three underlying dimensions identified in the research. The quality of multi-item measures can be examined based upon (a) the item's association with the hypothesized dimensions of the measure and (b) each item's common variance with the domain of the measure. Both of these procedures were used to evaluate the quality and select the items that would be used in the vicarious exploration measure to facilitate hypothesis testing.

Multiple criteria were used for the final selection of the items to be included in the vicarious exploratory measure: (a) high item-total correlations on the dimensions of vicarious exploration; (b) high item-total correlations on the total vicarious exploration measure; and (c) high factor loadings on the factor they represent. Similar procedures were employed by Price and Ridgway (1983) in selecting the final items to be included in their measure for use innovativeness, a form of exploratory behavior.

During the purification stage of scale development, Churchill (1979) suggests examining the item-total correlations for items representing each dimension. Correlations near zero or items that produce a sudden drop in item-total correlations should be deleted. The correlations were, therefore, arranged in decreasing order of magnitude to identify low correlations and to examine a sudden drop in item-total correlations to determine which items should be deleted. Items 21 and 26 were considered to be weakly correlated with the "information seeking" dimension and item 30 was weakly related to the "interpersonal communication" dimension of vicarious exploration. These three items had low item-total correlations (correlations less than .25) and were deleted from the thirty-item vicarious exploration measure. All items were retained in the "fantasy of ownership" dimension which had item-total correlations from .31 to .77. See Table VII, Appendix F for the item-total correlations and the Cronbach alpha coefficients for the three dimensions of the original thirty-item vicarious exploration measure.

Reduced 27-Item VE Measure. After these three items were deleted, Cronbach alphas were again calculated for each dimension. The alpha coefficient for dimension two, "information seeking," improved from .82 to .85. For the third dimension, "interpersonal communication," the alpha coefficient increased from .77 to .89. The alpha coefficient remained the same (.88) for dimension one, "fantasy of ownership," since no items were deleted. Coefficient alpha is positively correlated with the number of items in a measure (Nunnally 1978). Therefore, an increase in the coefficient alphas for the reduced measure is an indication of an improvement.

Factor analyses were used to examine each item's association with the hypothesized dimensions of the measure. Typically if independent dimensions are hypothesized, then orthogonal transformations are the desired method. If dimensions are assumed to be related, then oblique rotation is the preferred method. When conducting exploratory factor analysis, using the varimax-Harris-Kaiser sequence offers a basis for determining whether orthogonal or oblique factors are more acceptable (Gorsuch 1974). This procedure also avoids having to assume whether the dimensions are related or unrelated.

Because this was an exploratory study and there was little prior evidence to indicate whether the three dimensions of vicarious exploration should be independent or dependent dimensions, the varimax-Harris-Kaiser sequence was used. Stewart (1981) has also suggested that both forms of rotation should be performed and compared, particularly in exploratory studies.

The correlations among the oblique factors were .28 (see Table VIII, Appendix F). According to Gorsuch (1974), the varimax solution is the accepted solution if correlations among oblique factors are negligible. Unfortunately, he did not give any parameters to define a "negligible" correlation. Due to the exploratory nature of this study, rather than eliminating either factor solution both were retained and examined.

In both cases, the factor analyses were constrained to three factors to summarize the data according to the three underlying dimensions of the vicarious exploration construct. The rotated factor patterns were examined and items that did not load highly on each factor were considered for exclusion. A high loading was defined as items with loadings over .50 with a .20 difference between loadings. For example,

an item that loaded as .58 on factor three and .47 on factor one was considered for elimination, since there was not a .20 difference between loadings. The results of both rotations were extremely similar and are discussed below (See Table VIII, Appendix F).

Sixteen items had factor loadings of .50 or greater with the varimax rotation and only two of these items (items 1 and 10) had high loadings on more than one factor. With the oblique factor analysis, nineteen items had factor loadings of .50 or greater and six of these items (items 1, 4, 9, 10, 14, and 15) had high loadings on more than one factor. Items 1 and 10 were eliminated as they were not unique to factor one (i.e. they also loaded highly on factor three) in both rotation methods. According to the oblique factor analysis, four items remained that had high loadings on more than one factor. Differences between factor loadings (.08, .08, .02, and .18, respectively) for these remaining items were calculated. All of these items, except for item 15, were eliminated from the final vicarious exploration measure. Item 15 had a high factor loading (.65) and a .18 difference between loadings and appeared to be a stronger item than the other three. As a result of these factor analyses, an additional thirteen items were excluded from the final vicarious exploration (VE) measure.

Refined 14-Item VE Measure. To verify the conceptualized dimensions and ensure factor stability, an orthogonal and oblique factor analysis of the reduced 14-item measure were run (Churchill 1979). The results of the unrotated factor patterns indicated a significant drop in eigenvalues between Factor 1 (5.99) and Factor 2 (1.88). Factor 3 also had an eigenvalue greater than one (1.44), consequently, there were three factors with eigenvalues greater than one. These three factors were rotated using the varimax-Harris-Kaiser sequence and the resulting

solutions appeared to reflect the original hypothesized dimensions of vicarious exploration. That is, the items included in each dimension were the same as those items originally designated to represent those dimensions.[1]

By examining the content of the remaining fourteen items, the three factors were interpreted as follows: (a) Factor 1: Fantasy of Ownership; (b) Factor 2: Information Seeking; and (c) Factor 3: Interpersonal Communication. Six of the fourteen items represented the "fantasy of ownership" dimension of vicarious exploration. The "information seeking" dimension was composed of five items and "interpersonal communication" included three items. The fourteen items used to represent the three dimensions of vicarious exploration and their factor loadings are included in Table IX, Appendix F.

To verify the internal consistency of the reduced vicarious exploration measure, Cronbach coefficient alphas were computed for the reduced fourteen item measure. Item-total correlations were also calculated to reexamine the extent to which these items were still related to their particular dimension. Both coefficient alphas and item-total correlations were quite high between .85 and .89 and between .45 and .84, respectively.

The number of items in the "fantasy of ownership" dimension were reduced from thirteen to six and Cronbach's alpha dropped from .88 to .86. The alpha for the "information seeking" dimension remained the same (.85), although six items were deleted. The alpha also remained the same (.89) for the "interpersonal communication" dimension which

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[1] These results are also supportive evidence of content validity. They provide evidence that the various items represented the dimensions as intended.

contained the same number of items (three). Coefficient alpha is positively correlated with the number of items in a measure (Nunnally 1978). Since the alphas stayed relatively consistent despite the large reductions of items, these alphas provide additional evidence of acceptable internal consistency.

The Cronbach coefficient alpha for the 27-item vicarious exploration measure was .92. The alpha for the 14-item measure was .90. This is considered to be very good, since the alpha did not drop significantly even with a large reduction in items. Therefore, the vicarious exploration measure was considered to have acceptable internal consistency according to Nunnally (1978). Table X, Appendix F includes the coefficient alphas for the 30-item, 27-item and 14-item measures of vicarious exploration.

The correlation matrix of the summated dimensions of vicarious exploration with each other and with the total 14-item vicarious exploration measure is reported in Table XI, Appendix F. The correlations between each dimension and the total measure ranged from .87 to .66 and were statistically significant ($p < .0001$). Therefore, each of these dimensions can be considered as important components of the vicarious exploration construct.

Statistically significant correlations (.53 to .40) were also found among each dimension. The highest correlations were between "fantasy of ownership" and "information seeking" (.53). Therefore, these three dimensions are significantly related to one another and are not considered to be independent dimensions.

Perceived Novelty

Perceived novelty was an important construct in the present study since it is one stimulus property that is supposed to activate

exploratory behaviors. Therefore, the degree of perceived novelty with the clothing catalog needed to be assessed. The author developed a multi-item measure for perceived novelty. It consisted of five items such as, "How different is the J. Crew catalog compared to other mail order clothing catalogs?" Due to the relatively low Cronbach alpha for the measure (.57), factor analysis was used to determine whether the measure was multidimensional. Two factors were found in the analysis and the internal consistency of these two dimensions was examined. By examining the content of the items with the highest loading, the first factor appeared to represent "perceived differences" with the products in the catalog and the second factor represented "perceived similarities" with the products and models in the catalog. Factor 1 (two items) had a Cronbach coefficient alpha of .80 and Factor 2 (three items) had a coefficient alpha of .58.[2] The results for the perceived novelty variable are contained in Table XII, Appendix F.

Item four, "How similar are the prices in the J. Crew catalog to the prices you are generally willing to pay for this type of merchandise?" did not appear to be closely associated with the other items in the measure. This was apparent by examining its low item-total correlation of .27 and the relatively low factor loading (.56), as compared to factor loadings for the other items (.80 to .91). Item four was, therefore, dropped from Factor 2 and another Cronbach coefficient alpha was computed. The reliability coefficient for the second factor increased from .58 to .65. Therefore, the novelty measure was considered to have reasonable reliability (Nunnally 1967).

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[2] The use of Cronbach's coefficient alpha to assess internal reliability is typically limited to measures that contain a minimum of three items (Peter 1979). Therefore, the reliability of each novelty dimension may be suspect.

Past Catalog Usage

Previous studies have not examined usage patterns in relation to vicarious exploration. However, usage patterns have been examined for use innovativeness, a form of exploratory consumer behavior (Price and Ridgway 1983). Three different items were used to ascertain the respondent's past catalog usage, such as "Please specify the number of different mail order clothing catalogs you look through in a typical month." The Cronbach coefficient alpha was .44. Each of the items were reasonably correlated with the total measure (.32-.46). Items two and three were more strongly correlated with one another than items one and two or one and three. The first item had a relatively lower correlation with the overall measure and when deleted the coefficient alpha improved to .55. However, item one was retained so there would be an adequate number of items in the measure. Caution is warranted when interpreting the results related to past catalog usage since the internal reliability was low relative to the other measures.

Additional Measures

The other measures were borrowed from previous studies. The reliability of these measures has been discussed in Chapter II and III. To have some indication as to the internal reliability of these measures in the present study, Cronbach coefficient alphas were calculated for each of these measures. Factor analysis was also run to observe the dimensionality of these borrowed measures. Interestingly, the results indicated all of the measures, except one, to be multidimensional. These constructs are typically treated as unidimensional measures in the literature. The involvement measure, adapted from Bloch, Sherrell and Ridgway (1986), was the only unidimensional measure.

A brief overview of the number of items, number of factors, and the alpha coefficients of the individual difference measures is presented in Table XIII, Appendix F.

Hypothesis Testing

The relationships between six individual difference variables and vicarious exploration were examined. As discussed above, the 14-item vicarious exploration measure was composed of three dimensions; therefore, correlation coefficients are also reported for each dimension. Correlation coefficients for each of the hypotheses are presented in Table XIV, Appendix F.

Hypothesis 1: OSL

According to Price and Ridgway (1982), high levels of OSL should be correlated with vicarious exploratory behavior. Past studies (Raju 1980, Price and Ridgway 1982) have found significant relationships between an individual's optimal stimulation level and vicarious exploratory behavior. In this study, optimal stimulation level was not significantly related to vicarious exploration ($p=.06$). Hypothesis one was, therefore, rejected.

Hypothesis 2: Curiosity

Curiosity was hypothesized to be strongly correlated with vicarious exploratory behavior. The correlation coefficient (.17) between these two variables was statistically significant ($p < .05$). This hypothesis was supported.

Hypothesis 3: Perceived Risk

It was hypothesized that perceived risk would be associated with vicarious exploratory behavior with catalogs. No statistically significant relationships were found between perceived risk and

vicarious exploration ($p > .05$).[3] Therefore, hypothesis three was rejected.

Hypothesis 4: Perceived Novelty

Novelty is considered a stimulus property that can activate exploratory behavior. Therefore, individuals who perceived novelty with the catalog were hypothesized to engage in vicarious exploratory behavior. The novelty measure developed by the researcher included two factors: "perceived similarities" and "perceived differences." A statistically significant ($p < .05$), negative, correlation (-.30) was found for the "perceived similarities" dimension of novelty and vicarious exploration. The "perceived differences" dimension was positively correlated (.24) with vicarious exploration and statistically significant ($p < .05$). The results supported hypothesis four.

Hypothesis 5: Clothing Involvement

Recent research has indicated that product involvement is closely associated with browsing behavior. In this study, individuals with greater clothing involvement were expected to exhibit more vicarious exploration with the clothing catalog.

Two measures were used to assess the individual's degree of clothing involvement. The first scale was adapted from Zaichkowsky (1985) and included ten items. The second measure was borrowed from Bloch, Sherrell, and Ridgway (1986) and included six items.

A stronger correlation coefficient (.39) was found using Bloch, Sherrell and Ridgway's (1986) clothing involvement measure than when

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[3] This finding is supportive evidence of discriminant validity. Past research has found significant relationships between perceived risk and catalog shopping behavior. The insignificant results in this study indirectly demonstrate that there is a difference between vicarious exploration with catalogs (i.e. browsing) and catalog shopping (i.e. purchasing) behavior.

using Zaichkowsky's (1985) clothing involvement measure (.29).[4] In both situations, statistically significant relationships (p =.0001) were found between clothing involvement and vicarious exploration. The results strongly supported hypothesis five.

Hypothesis 6: Past Catalog Usage

Past experience with catalog shopping may be an indicator of greater interest in vicarious exploration with catalogs. It was hypothesized that catalog users with more catalog shopping experience would be likely to engage in vicarious exploration. A statistically significant ($p < .001$) relationship was found between past catalog usage and vicarious exploration. The correlation coefficient was the higher (.41) for this relationship, than for the other five previously discussed relationships.[5] Hypothesis six was strongly supported.

Dimensions of Vicarious Exploration. The three dimensions of vicarious exploration were also examined. Statistically significant relationships ($p \leq .05$) were found between the "fantasy of ownership" dimension and all of the individual difference variables, except risk. The "information seeking" dimension was significantly related ($p < .05$) to all of the individual difference variables, except for OSL and risk. Significant relationships ($p \leq .05$) were also found between the "interpersonal communication" dimension of vicarious exploration and OSL, the "perceived differences" aspect of novelty, clothing involvement, and past catalog usage.

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[4] This bivariate relationship may be considered as supportive evidence of predictive validity. In future studies, the involvement construct could be used as a predictor of vicarious exploration.

[5] This bivariate relationship may be considered as supportive evidence of predictive validity. Future research could include past catalog usage as a predictor of vicarious exploration.

Conclusion

Four of the six hypotheses were strongly supported by the research (H2, H4, H5, and H6). The other two hypotheses (H1 and H3) were rejected. It should also be noted, that statistically significant results were found for the "fantasy of ownership" dimension and all but one individual difference variable (i.e. risk). While the relationships were statistically significant, the correlation coefficients were modest (between .17 and .41). The individual difference variables that had the highest correlation coefficients were past catalog usage (.41) and clothing involvement (.39).

CHAPTER V

SUMMARY, INTERPRETATION, AND RECOMMENDATIONS

The research process is summarized, findings are interpreted, contributions are highlighted and directions for future research are presented in this chapter.

Summary

Recently marketing scholars have suggested that marketing researchers should begin to study consumption behaviors that are not directly associated with solving specific purchase problems. Instead of focusing on observable buying behavior, the "experiential view" of consumer behavior devotes attention to the mental processes surrounding the act of consumption (Holbrook and Hirschman 1982). To the author's knowledge only a few prior studies have examined vicarious exploratory behavior; therefore, very little is known about this type of consumer behavior.

Vicarious exploration has been conceptualized as including behaviors other than actual purchase of products or services. Since the study examined vicarious exploration within a catalog shopping scenario, past catalog studies were reviewed. Previous in-home shopping (e.g. catalog shopping) studies have often classified catalog shoppers based on the number of in-home shopping purchases made during a given time period, typically one year. However, little is known about the

consumer's actual catalog shopping or browsing behavior. Therefore, a distinction was made in this study between catalog shopping/browsing behavior and catalog purchasing behavior. The basic purpose of this exploratory research was to study the relationship between six individual difference variables and vicarious exploratory behavior with catalogs.

Three stages of data collection occurred. First, subject's were selected from ten summer school business classes and their addresses were obtained by each faculty member. A few weeks later students responded to the first questionnaire, which included measures of individual difference variables (i.e. OSL, curiosity, and perceived risk). Next, the clothing catalog was mailed to those subjects who responded to the first questionnaire. Five days later the subjects responded to a second questionnaire, which included the other three individual difference variables (i.e. perceived novelty, past catalog usage, and clothing involvement) and questions pertaining to behaviors associated with this mail-order catalog (i.e. vicarious exploration). Both of the questionnaires were administered in the classroom to reduce nonresponse problems. The analysis was run only for matched sets of subjects. That is, individuals had to respond to both the first and second questionnaire. The final sample size consisted of 255 subjects. It was also necessary for subjects to have remembered receiving a catalog when responding to the vicarious exploration measure; therefore, the actual sample used to test the hypotheses was 184.

Interpretation of Major Findings

The quality of the measures, developed by the researcher, were analyzed prior to hypothesis testing. This included the measure for

vicarious exploration and the perceived novelty and past catalog usage measures. Once these measures were refined, the relationships between the six individual difference variables and vicarious exploration were analyzed. The results concerning (a) quality assessments of the measures and (b) hypothesis testing are discussed in the following section.

Quality of Measures

The quality of the vicarious exploration measure was assessed through Cronbach alpha coefficients, item-total correlations, and factor analysis. The quality of the perceived novelty and past catalog usage measures were also examined using the above criteria. The quality assessment of the vicarious exploration, perceived novelty, and past catalog usage measures follows.

Vicarious Exploration. A situation specific measure of vicarious exploration was developed to examine vicarious exploratory behavior with catalog shopping. According to previous literature, vicarious exploration includes behaviors such as reading about, talking to others about, or shopping for new and unfamiliar products (Hirschman 1980, Raju 1980, Price and Ridgway 1982). These behaviors have been labeled as: information seeking, interpersonal communication, and exploration through shopping (Raju 1980). The information seeking and interpersonal communication dimensions appeared to be relevant for this study. However, the exploration through shopping aspect of vicarious exploration included items that were primarily directed towards in-store shopping rather than catalog shopping. To generate insights concerning vicarious shopping exploration as it pertained to catalog shopping an informal survey, of individuals who had previously used catalogs, was conducted. As previously discussed a dreaming and/or fantasying about

product ownership dimension emerged from these discussions. The vicarious exploration measure developed in this study consisted of three dimensions: (a) "fantasy of ownership," (b) "information seeking," and (c) "interpersonal communication." Thirty items were then generated to capture these dimensions.

The initial 30 items used to represent these three dimensions were refined and the final vicarious exploration measure included a total of 14 items. Those items that were retained after examining item-total correlations and factor scores were very similar to those hypothesized to represent each dimension.

Each of the dimensions of the vicarious exploration measure had good internal reliability: "fantasy of ownership" (.86), information seeking (.85), and "interpersonal communication" (.89). Finding adequate internal consistency for the vicarious exploration measure provided greater assurance of the results of the relationships between the individual difference variables and vicarious exploration.

Results indicated that the three factors (i.e. dimensions) were related. The factor correlations ranged from .19 to .25. Stronger interrelatedness was demonstrated by the statistically significant correlation coefficients (.40 to .53) between each of the dimensions. This is supportive evidence that the three dimensions of vicarious exploration were not independent of one another. The three dimensions were also significantly correlated with the total 14-item vicarious exploration measure (.66 to .87).

Perceived Novelty. Novelty is one stimulus property that is supposed to activate exploratory behaviors; therefore, it was important to assess the degree of perceived novelty with the clothing catalog. The novelty measure originally consisted of five items, such as "How

different is the J. Crew catalog compared to other mail order clothing catalogs?" One of these items, "How similar are the prices in the J. Crew catalog to the prices you are generally willing to pay for this type of merchandise?" was dropped due to low item-total correlations (.27). The final perceived novelty measure consisted of four items. The items in the measure were stated in opposite directions (i.e. different, similar). Interestingly, this resulted in a multidimensional measure of perceived novelty: (a) "perceived differences," and (b) "perceived similarities." The coefficient alpha was higher for the "perceived differences" dimension (.80) than for the "perceived similarities" dimension (.65).[1] These dimensions were not significantly correlated with one another.

Past Catalog Usage. An individual's past experience with catalog shopping was expected to influence the degree of vicarious exploration with the clothing catalog. Three items were included in this measure. The Cronbach coefficient alpha was lower than desirable (.44). This was probably due to the fact that item one of the measure was not strongly correlated with the total measure or with item two and three; however, it was retained to have a reasonable number of items in the measure. Because the internal reliability was low relative to the other measures, caution is warranted when interpreting the results related to past catalog usage.

Hypothesis Testing

The relationships between vicarious exploration and the six individual difference variables were examined. Statistically

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[1] When calculating Cronbach coefficient alpha the measure should contain at least three items (Peter 1979). In this case, coefficient alpha was computed with only two items; therefore, caution is warranted.

significant relationships were found between vicarious exploration with catalogs and four of the six individual difference variables. These included: curiosity, perceived novelty, clothing involvement and past catalog usage. The "fantasy of ownership" dimension of vicarious exploration was also significantly related to all of the individual difference variables, except perceived risk. Implications for each of these relationships are discussed below.

Curiosity. Curiosity has been proposed as a possible underlying motivation for vicarious exploration by previous researchers (Raju 1980, Price and Ridgway 1982), but the relationship has never been verified. In this study, vicarious exploration was significantly correlated with curiosity. A significant, positive, relationship between curiosity and two of the dimensions of vicarious exploration, (i.e. and "fantasy of ownership" and "information seeking") was also found. Individuals who were more curious fantasized about products and engaged in information seeking, but did not engage in more interpersonal communication than those who were less curious. A partial explanation for these findings could be that the "fantasy of ownership" and "information seeking" dimensions of vicarious exploration can be primarily mental processes, whereas, the interpersonal communication dimension requires a greater amount of physical effort.

It seems apparent that more curious individuals would be more likely to engage in all forms of vicarious exploration than less curious individuals. It may be that the relationship between curiosity and vicarious exploration is mediated by other variables, such as the extent of clothing involvement an individual possesses. Since the trait measure of curiosity was a general measure of the amount of curiosity possessed by an individual, significant relationships might have been

found for interpersonal communication if a state measure (situational based) of curiosity had been used. In fact, a methodological problem with examining hedonic responses is that they are likely to be susceptible to fluctuations across situations (Holbrook and Hirschman 1982). Stronger relationships might have also been found if a general measure of vicarious exploration was used, rather than the specific measure of vicarious exploration with catalogs that was employed with this study.

Perceived Novelty. Novelty is considered a stimulus property that may activate exploratory behaviors (Berlyne 1960). Past vicarious exploratory research has not assessed the importance of novelty as a stimulus variable. In this study, perceived novelty with the catalog was measured to determine the extent to which an individual would respond to novel stimuli by engaging in vicarious exploratory behaviors. A statistically significant, positive, relationship between the "perceived differences" novelty dimension and vicarious exploration supported the hypothesized relationship. The general conclusion drawn from this finding is that the greater the "perceived differences" (i.e. perceived novelty) with the catalog the more vicarious exploration, probably because it is more interesting to read, talk, or daydream about something that is new and different. A similar finding by Wahlers and Etzel (1985) indicated that stimulation seekers wanted a vacation that was "new and different" or "a change of pace."

Just the opposite was found (i.e. a negative relationship) between the "perceived similarities" dimension of novelty and vicarious exploration. That is, the more similar the catalog was perceived compared to existing catalogs the less vicarious exploration. Because the dimensions of novelty are exact opposites and the findings were also

opposite one another, both sets of results support the hypothesized relationship between perceived novelty and vicarious exploration. The greater the perceived novelty the greater the vicarious exploration with the catalog.

Clothing Involvement. Significant, positive relationships were found between clothing involvement and vicarious exploration for both involvement measures. The correlation coefficient was higher with the involvement measure borrowed from Bloch, Sherrell and Ridgway (1986) than with Zaichkowsky's (1985) measure. The results obtained when using the Bloch, Sherrell, and Ridgway (1986) measure indicated a stronger relationship between vicarious exploration and the "fantasy of ownership" dimension than for the information seeking and interpersonal communication dimensions. Perhaps individuals who are involved with clothing use catalogs to plan and fantasize about future purchases. Individuals with high levels of clothing involvement may also be clothing opinion leaders and may use the catalog for gathering non-specific product information to stay abreast of clothing trends and to disseminate this information to their friends. Individuals with greater clothing involvement were more likely to engage in all forms of vicarious exploration with the catalog than individuals not involved with clothing. This finding supports earlier research (Bloch, Sherrell, and Ridgway 1986) that found a significant relationship between clothing involvement and "ongoing search" which may be a subset of vicarious exploration. Interestingly, clothing involvement and past catalog usage were also significantly correlated with one another. Those individuals who were more interested or involved with clothing also had more previous experience with catalog shopping.

Past Catalog Usage. Past catalog usage, a behavioral variable, was included to ascertain whether past experience with catalog shopping would influence the extent of vicarious exploration with the novel catalog. In this study, a significant, positive relationship between past catalog usage and vicarious exploration was found. Individuals who had more experience with catalog shopping engaged in more vicarious exploration with catalogs. Past catalog usage was also significantly correlated with each of the three dimensions of vicarious exploration. The "information seeking" dimension had a higher correlation coefficient than the other two dimensions. It may be that heavy catalog users form catalog shopping habits. That is, the experienced catalog shopper engages in greater amounts of information seeking, perhaps to find detailed information about the newer products in each issue of the catalog. In addition, they engage in information search in the form of interpersonal communication and fantasizing or thinking about future product ownership.

OSL. Past research has found significant, yet weak, relationships between OSL and vicarious exploration (Raju 1980, Price and Ridgway 1982). Past findings also indicate that certain types of exploratory behaviors are more closely related to stimulation needs (Raju 1980). The strength of the relationship in this study was weaker than those found in past research and it was not statistically significant. Interestingly two of the dimensions of vicarious exploration (i.e. "fantasy of ownership" and "interpersonal communication") were significantly correlated with OSL. Although statistically significant, these relationships were quite weak (.15). It may be that vicarious exploration with catalogs does not provide sufficient behavioral stimulation for individuals with high levels of OSL.

Perceived Risk. Past research has often considered perceived risk as a potential explanation for a lack of catalog purchasing. This research distinguished between catalog purchasing behavior and catalog browsing and examined whether vicarious exploration with catalogs was perceived as a risky behavior. No significant relationship between perceived risk and vicarious exploration was found; therefore, the hypothesis that perceived risk is related to vicarious exploration was not supported. Since catalog browsing does not necessitate any actual purchase decisions, significant amounts of time, and because it need not be a highly visible activity, it is reasonable that catalog browsing would not be perceived as a risky behavior. Once individuals move from catalog browsing to catalog shopping behaviors that involve actual purchase decisions, then the potential risks become more apparent.

Contributions

The results of this empirical investigation contributed to a greater understanding of both vicarious exploration and catalog shopping behavior. Contributions are highlighted for both the academic community and for the marketing practitioner.

Marketing Academicians

Four contributions are noteworthy, (a) the vicarious exploratory behavior concept was extended to included behaviors not previously a part of its domain; (b) vicarious exploration was examined and measured for a specific situation that used an existing "real world" stimulus; (c) individual difference variables, other than OSL, were examined; and (d) catalog shopping was examined from a browsing rather than a purchasing perspective.

First, the "experiential view" of consumer behavior emphasizes the importance of consumption for fun, amusement, fantasy, arousal, sensory stimulation, and enjoyment (Holbrook and Hirschman 1982). The "fantasy of ownership" dimension of vicarious exploration through catalog browsing captured the spirit of the "experiential view." Results from this study suggest that fantasizing about product ownership is an important component of vicarious exploration.

Second, stimulus properties in consumer behavior have traditionally relied upon verbal product descriptions. When examining consumer behavior via the "experiential view" stimulus properties should be based on real or realistic products or consumption-like experiences (Holbrook and Hirschman 1982). The stimulus in this study was an existing direct-mail catalog, which was mailed to subjects through the U.S. Post Office.

Third, optimal stimulation level and curiosity are considered important personality variables from an experiential consumption view (Holbrook and Hirschman 1982). However, previous studies found weak correlations between vicarious exploratory behaviors and OSL. Rather, what motivates individuals toward these types of exploratory behaviors may be a desire to satisfy their curiosity. This was the first attempt to assess the strength of association between curiosity and vicarious exploratory behavior with catalogs. In addition, optimal stimulation level should not preclude the use of other trait variables since it does not act as a mediating variable (Joachimsthaler and Lastovika 1984). Therefore, four additional individual characteristics were selected that had not been previously associated with vicarious exploration. These included: perceived novelty, clothing involvement, past catalog experience, and perceived risk with the catalog.

Significant relationships were found between vicarious exploration and curiosity, clothing involvement, past catalog experience, and perceived novelty. Those individuals who were more curious, more involved in clothing, and more experienced with catalogs engaged in greater amounts of vicarious exploration with the catalog. Those individuals who perceived the catalog as more novel also displayed greater amounts of vicarious exploration. Vicarious exploration was not significantly associated with the individual's optimal stimulation level or their perceived risk with catalogs shopping.

Last, past scholars have traditionally investigated in-home shopping from strictly a purchasing perspective and classified individuals as catalog shoppers or nonshoppers based on their number of purchases. This research proposed that catalog shopping was often used for browsing or gathering product information and examined catalog shopping from a browsing (i.e. passive) rather than a purchasing (i.e. active) perspective.

Marketing Practitioner

Vicarious exploration should be important to marketing managers since almost every consumer daydreams and fantasizes about products prior to product ownership. Findings suggest that those individuals who exhibit greater interest or involvement in a product class engage in greater amounts of vicarious exploration through information seeking and interpersonal communication. Therefore, the potential outcomes of vicarious exploration may include the gathering of product information for future purchases or interpersonal communication. However, specific outcomes associated with vicarious exploration still need to be empirically examined. If research finds significant differences in shopping patterns (or other behaviors) between high, medium, and low

vicarious exploration groups, then individuals could be classified according to their level of vicarious exploration. This information could be used by marketers for segmenting based on the consumer's extent of vicarious exploration. Previous studies have already found that individuals with high use innovativeness (another category of exploratory consumer behavior) scores engage in significantly more innovative behaviors than other groups (Price and Ridgway 1983).

The details of the catalog that were perceived as novel are unknown; however, a significant relationship between novelty and vicarious exploration suggests that providing novel stimuli can influence the extent of vicarious exploratory behaviors. To encourage this phenomenon, direct marketers should seek ways to enhance vicarious exploration either visually or though copy writing. Also providing consumers with new and novel catalog formats and/or products may stimulate vicarious exploration. In fact, many direct marketers already employ strategies that regularly change the cover page or the layout and photographs in the catalog, even though the merchandise is often the same for many issues.

Future Research Recommendations

Given the exploratory nature of this study, a variety of future research questions await investigation. Suggestions for future research are highlighted below according to scale development, specifying situations, specifying variables, or methodologies that may be relevant to vicarious exploratory behaviors.

Scale Development

The vicarious exploration measure developed for the study included a dimension that has not been previously identified as a part of the

vicarious exploration construct. The "fantasy of ownership" dimension that involves daydreaming and fantasizing about products has not been included in previous vicarious exploration measures. Continued efforts should be directed toward determining what specific types of behaviors should be included or excluded in the domain of vicarious exploration. For example, it may be that ongoing search is a part of the vicarious exploration domain, or vice versa. Scale development can only proceed once the domain is specified. The scale would also need to be tested on a variety of samples using a variety of situations to validate the relationships between the constructs examined in this study.

Specify Situations

Vicarious exploratory behavior may be situation specific or it may encompass many forms of shopping behavior. The study examined vicarious exploration for a specific situation, catalog shopping. Vicarious exploration may also occur in other settings, such as electronic shopping or in-store shopping. The items in the measure could be adapted to other situations, such as vicarious exploration with specialty magazines, electronic shopping, or browsing behavior in retail environments.

Those variables not significantly related to all three dimensions of vicarious exploration (OSL, curiosity, and perceived risk) may be important for other situations or other forms of exploratory consumer behavior. It is likely that shopping through a catalog does not provide enough stimulation for those with high levels of OSL. Weak relationships between OSL and exploratory behaviors have also been found by Raju (1980) and Price and Ridgway (1982). OSL may be situation specific and a set of scenarios involving consumer exploratory behaviors with varying degrees of excitement or risk could be developed to examine

the strength of their relationships to OSL, curiosity, and perceived risk.

Specify Variables

This study examined the relationships of individual difference variables and vicarious exploration. The variables that were significantly related to vicarious exploration included: curiosity, perceived novelty, clothing involvement, and past catalog usage. There may be other variables that are also useful for identifying individuals who engage in greater amounts of vicarious exploration. For example, determining the link of demographic variables to vicarious exploration would be useful to help marketers segment the market into groups of high/low vicarious explorers.

While important individual difference variables have been identified, the relationship between different outcome variables (such as impulse purchasing) and vicarious exploration needs to be ascertained. Although precisely specifying when an individual moves from the browsing stage to problem recognition and starts the decision making process is difficult, scenarios should be developed and relationships tested to further clarify the distinction between catalog shopping and catalog purchasing. Similar problems exist in making the distinction between prepurchase search and ongoing search (Bloch, Sherrell, and Ridgway 1986).

Methodology

Research needs to move beyond the correlational level to developing experimental designs to investigate possible interactions between the individual difference variables and how these affect vicarious exploratory behavior as well as exploratory purchase behaviors. It would also be useful to group individuals according to their degree of

vicarious exploration and examine the variation in their responses to a variety of outcome variables.

Continued efforts in the area of vicarious exploratory behavior will add to a fuller and more complete understanding of consumer behavior. There are many unexplored avenues that deserve future research attention. This study has extended the journey into the vicarious exploratory region of consumer behavior.

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APPENDIXES

APPENDIX A

FIGURE OF HYPOTHESIZED RELATIONSHIPS

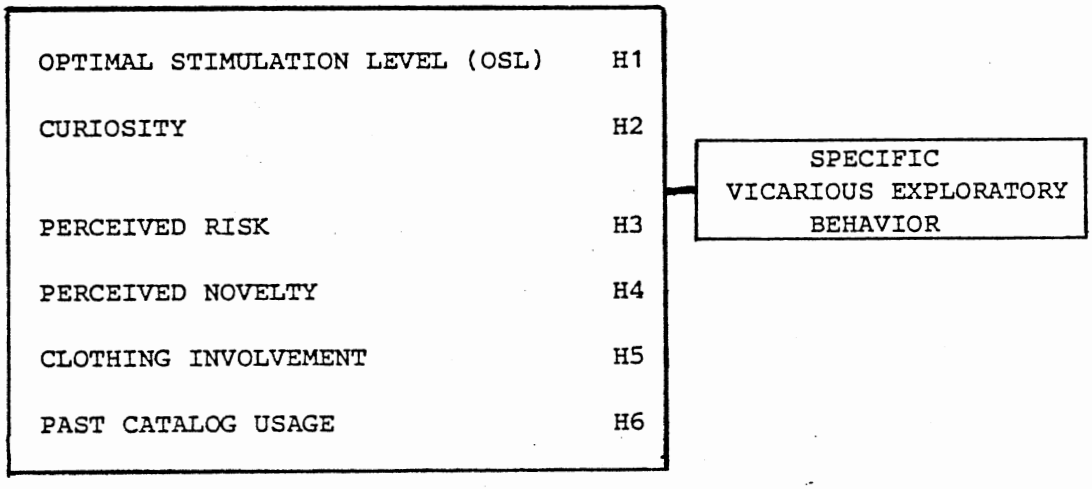

Figure 1. Hypothesized Relationships

Hypothesis One: Individuals with a high OSL will exhibit more vicarious exploratory behavior.

OSL Measure: Menrabian and Russell, 7 point Likert (adapted)
Scoring: A total score was computed for each individual.

Hypothesis Two: Individuals with a high degree of curiosity will engage in more vicarious exploration.

Curiosity Measure: Melbourne Trait, 7 point Likert scale (adapted)
Scoring: An average score for each individual was calculated.

Hypothesis Three: An individuals's perception of risk will influence the amount of vicarious exploratory behavior in which they engage.

Risk Measure: Jacoby/Kaplan and Brooker, 7 point scale (adapted)
Scoring: An average score was computed for each individual.

Hypothesis Four: Individual's who perceive greater novelty with the catalog will engage in more vicarious exploratory behavior.

Novelty Measure: (developed by author), 7 point scale
Scoring: An average score for each individual was calculated.

Hypothesis Five: Individuals with greater clothing involvement will engage in more vicarious exploration with the catalog.

Enduring Involvement Measure: Bloch/Sherrel/Ridgway, 7 point scale, and Zaichkowsky: 7 point bipolar scale (adapted)
Scoring: Two separate involvement scores for each individual were calculated. NOTE: A separate correlation analyses between vicarious exploration and individual scores from each involvement scale was calculated.

Hypothesis Six: Individuals who are heavy catalog shoppers will engage in more vicarious exploration with the catalog.

Past Usage Measure: (developed by author) 3 questions.
Scoring: A total score for each individual was computed.

Vicarious Exploration Measure:
The vicarious exploration measure was developed by the author. After refinement it consisted of 14 Likert items on a 7-point scale. To determine the extent of vicarious exploration a summated score was calculated for each individual.

NOTE: Some of the items in the measures are in reversed polarity. Prior to calculating individual scores for these measures, the polarity of these items were reversed so that all items were consistently scored.

APPENDIX B

SUMMARY TABLES OF PREVIOUS STUDIES FOR EXPLORATORY CONSUMER BEHAVIOR AND IN-HOME SHOPPING

TABLE I

SUMMARY OF EXPLORATORY CONSUMER BEHAVIOR STUDIES

AUTHOR(S)	SAMPLE/STUDY	INDIVIDUAL DIFFERENCES	EXPLORATORY BEHAVIORS
Hirschman (1980)	Conceptual	Motives for Novelty Seeking -accumulate knowledge -improve problem solving skills	Actualized Innovativeness -vicarious innovation -adoptive innovation
McAlister Pessemier (1982)	Conceptual	Direct Intrapersonal Motives for Varied Behavior -desire for: the unfamiliar, information and alteration among familiar alternatives Interpersonal Motives for Varied Behavior -group affiliation -individual identity	Varied Behaviors -switching among:product variants, service alternatives, various activities
Hoyer Ridgway (1984)	Conceptual	Personality Traits -extroversion, authoritarianism, dogmatism, liberaliness, ability to deal with complex stimuli, and creativity Motivational Factors -need for change, uniqueness, risk, danger or thritls and curiosity motive Product Characteristics -number of alternatives, interpurchase frequency -involvement, perceived risk, brand loyalty, dependence on sensation, difference between brands	Exploratory Purchase Behaviors -brand switching -innovating

TABLE I (Continued)

AUTHOR(S)	SAMPLE/STUDY	INDIVIDUAL DIFFERENCES	EXPLORATORY BEHAVIORS
Grossbart Mittelstaedt Curtis Rogers (1975)	adult females	General Sensation Seeking (Zuckerman's scale) Individual Perceptions of Downtown Shopping Milieus	Shopping Behaviors -trip frequency -trip duration -number of trips
Grossbart Mittelstaedt DeVere (1976)	adult females (same as above)	General Sensation Seeking (Zuckerman's scale)	Adoption Process for New Retail Facilities (Klonglan/Coward model) -awareness -evaluation -symbolic acceptance -trial use or shopping visit -confirmation
Mittelstaedt Grossbart Curtis DeVere (1976)	adult females (same as above)	General Sensation Seeking (Zuckerman's scale)	Adoption of Retail Facilities/ New Products (Klonglan/Coward model) -awareness -evaluation -symbolic rejection -trial -trial rejection -adoption -decision time between awareness/trial
Lesser/Marine (1984) Lesser/Jain (1985)	college students	Intrinsic Motivation (enjoyment of shopping, perceived competence of shopping) Arousal (Thayer's self-report)	Exploratory Behaviors Epistemic Behaviors

TABLE I (Continued)

AUTHOR(S)	SAMPLE/STUDY	INDIVIDUAL DIFFERENCES	EXPLORATORY BEHAVIORS
Raju (1980)	homemakers and students	OSL (Mehrabian/Russell's scale) OSL & Personality variables OSL & Demographics	General Exploratory Behaviors -reptitive behavior -innovativeness -risk taking -brand switching -exploration through shopping -interpersonal communication -information seeking
Price Ridgway (1982)	college students	OSL (Mehrabian/Russell's scale)	*Exploratory purchase behavior *Vicarious exploratory behavior Use innovativeness
Price Ridgway (1983)	college students	Dimensions of Use Innovativeness -creativity/curiosity -voluntary simplicity -risk -multiple use potential -creative re-use	Use innovativeness -hand held calculators
Joachimsthaler Lastovicka (1984)	college students	OSL (Mehrabian/Russell's scale) Personality Traits -locus of control -social character	*Exploratory Behaviors -information seeking -innovativeness

*items were borrowed from Raju's exploratory behavior scale

TABLE I (Continued)

AUTHOR(S)	SAMPLE/STUDY	INDIVIDUAL DIFFERENCES	EXPLORATORY BEHAVIORS
Whalers Etzel (1985a) (1985b)	adult sample	OSL (Zuckerman's scale) Lifestyle stimulation	Stimulus Activity -ideal vacation preferences
Whalers Dunn Etzel (1986)	college students	OSL -Arousal Seeking Tendency (Mehrabian/ Russell's 1974, 1978 scales) -Sensation Seeking (Zuckerman's scale) -Desire for Novelty (Pearson's scale) -Stimulus Screening (Mehrabian's scale)	*Exploratory Behaviors -repetitive behavior -innovativeness -risk taking -brand switching -exploration through shopping -interpersonal communication -information seeking
Venkatraman MacInnis (1985)	college students	Interindividual Differences (a)cognitive individuals (Cognition Seeking Scale) (b)hedonic individuals (Zuckerman's scale) (c)experience seekers (a and b) (d)experience avoiders (neither a or b)	Epistemic/Sensory Exploratory Behaviors -verbal information search -sensory information search -variety seeking w/ functional products -variety seeking w/ esthetic products -innovativeness w/ functional products -innovativeness w/ esthetic products
Bloch Richins (1983)	adult sample	Product interest Information seeking Self-perceived product knowledge Word-of-mouth communication	Browsing Behavior -clothing/computers

*items were borrowed from Raju's exploratory behavior scale

TABLE II

SUMMARY OF IN-HOME SHOPPING STUDIES

AUTHOR(S)	TYPE OF STUDY	MODE OF IN-HOME SHOPPING	CLASSIFICATION OF IN-HOME SHOPPERS	INDIVIDUAL DIFFERENCES	PRODUCTS
Cox/Rich 1964	survey female shoppers (urban)	telephone	"High volume" 1/4 of purchases over past year "Low volume"	income perceived risk	20 general merchandise items
Gillett 1970	survey female shoppers (urban)	mail/phone orders from catalogs and orders at catalog counters in retail stores	catalog, direct-mail, phone spending over 11 months "in-home shopper" (at least one order)	socioeconomics "locked-in" shopper (e.g. distance to nearest bus) attitudes toward shopping factors	general merchandise items
Spence Engel Blackwell 1970	experiment -policyholders -prospective policyholders -control group (urban)	mail-order		socioeconomics perceived risk desire for certainty	supplementary hospital insurance plan
Peters Ford 1972	survey housewives (urban)	door-to-door	"heavy in-home buyers" ½ of cosmetics purchased in their home	socioeconomics self-confidence -self-reliance -sense of personal worth -sense of personal freedom -feeling of belonging -freedom from withdrawing -freedom from nervous symptons	cosmetics

TABLE II (Continued)

AUTHOR(S)	TYPE OF STUDY	MODE OF IN-HOME SHOPPING	CLASSIFICATION OF IN-HOME SHOPPERS	INDIVIDUAL DIFFERENCES	PRODUCTS
Cunningham Cunningham 1973	survey females (urban)	-lg. catalog dept. store -club-of-the-month -novelty catalogs -specialty houses -newspaper/magazines -credit card organiz.	"Active in-home" (regularly/occassionaly) "In-active in-home" (rarely/never)	socioeconomics motivation/attitudinal trust in people cosmopolitan attitude attitude toward credit attitude, impulse buying adventursomeness conservatism	not specified
Reynolds 1974 Reynolds Martin Martin 1977	survey homemakers (urban)	mail, phone, desk orders	"Frequent catalog buyer" (12 or more times yeay) "Infrequent catalog buyer" (1-11 times yr) "nonbuyers (none)	socioeconomic lifestyle statements self-confidence attitude toward local shopping	not specified
De Korte 1977	survey female heads of household (urban)	mail, phone, desk orders	frequency of mail/phone orders for 5 months total mail/phone expenditures for 5 months	general self-confidence self-reliance sense of personal worth specific self-confidence	10 general merchandise items

TABLE II (Continued)

AUTHOR(S)	TYPE OF STUDY	MODE OF IN-HOME SHOPPING	CLASSIFICATION OF IN-HOME SHOPPERS	INDIVIDUAL DIFFERENCES	PRODUCTS
Berkowitz Walton Walker 1979	survey women (93%) (urban)	phone orders	users of in-home food retailer	socioeconomics "locked-in" shopping behavior attitudes toward shopping and store attributes	in-home food service
Riecken Yvas Samli 1980	survey households (rural)	mail-order catalogs	number of orders over past year "in-home shopper" (one or more) "nonshopper" (zero)	socioeconomics patronage motives perceptions of local shopping facilities	not specified
Bolfing Hills Barnaby 1981	survey female homemakers (rural/urban)	mail, phone, catalog orders	frequency of orders past year	perceived risk attitudes, local stores geographic location catalog buying behavior	not specified
Sharma Bearden Teel 1983	experiment students	catalog and electronic shopping	n/a	confidence in choice perceived time pressure adequacy of information provided financial risk	high-low shopping effort products

TABLE II (Continued)

AUTHOR(S)	TYPE OF STUDY	MODE OF IN-HOME SHOPPING	CLASSIFICATION OF IN-HOME SHOPPERS	INDIVIDUAL DIFFERENCES	PRODUCTS
Lumpkin Hawes 1985	survey male, female households (urban/rural)	mail, phone, catalog orders	"Frequent catalog users" (3 or more orders past year) "Infrequent users" (1-2 orders past year) "Nonusers" (no orders)	demographics lifestyle variables frequency of different products purchased	8 general merchandise categories
Korgaonkar Smith 1986	survey consumers	videotex services	Desirability of videotex services -desirable -undesirable -indifferent	demographics shopping orientation	7 types of videotex services
Gehrt 1986	literature review				
Gillett 1976	literature review				

APPENDIX C

ITEMS USED TO MEASURE INDIVIDUAL DIFFERENCE VARIABLES INCLUDED IN THE PREMEASURE

TABLE III

PREMEASURE ITEMS

OPTIMAL STIMULATION LEVEL MEASURE
(Arousal Seeking Tendency Scale: Mehrabian/Russell, 1978)

1. I sometimes look for ways to change my daily routine.
2. It is difficult for me to get excited about scenery.
3. It's unpleasant seeing people in strange, weird clothes.
4. I am not interested in poetry.
5. I prefer an unpredictable life that is full of change to a more routine one.
6. I like surprises.
7. I prefer friends who are reliable and predictable to those who are excitingly unpredictable.
8. As a child I often imagined leaving home, just to explore the world.
9. I don't like to have lots of activity around me.
10. I prefer to stay put rather than keep moving.
11. I like meeting people who give me new ideas.
12. I would be content to live in the same town for the rest of my life.
13. I like continually changing activities.
14. I like a job that offers change, variety, and travel, even if it involves some danger.
15. I don't make much effort to change my daily routines.
16. I like to know people who are rapidly changing in their thinking or way of life.
17. I wouldn't enjoy dangerous sports such as mountain climbing, airplane flying, or sky diving.
18. I like to experience novelty and change in my daily routine.
19. I am interested in new and varied interpretations of different art forms.
20. I much prefer familiar people and places.
21. When things get boring, I like to find some new and unfamiliar experience.
22. I don't enjoy doing daring, foolhardy things just for fun.
23. I prefer a routine way of life to an unpredictable one full of change.
24. I like to go somewhere different nearly every day.
25. I seldom change the decor and furniture arrangement at my place.
26. I like people who do things that are different from what I usually do.
27. I like to run through heaps of fallen leaves.
28. I don't pay much attention to my surroundings.
29. I sometimes like to do things that are a little frightening.
30. I am continually seeking new ideas and experiences.
31. I seldom change the pictures on my walls.
32. I like predictable people.

Scoring: 9-point Likert format (+4 very strong agreement/-4 very strong disagreement), adapted to a 7-point Likert format.

TABLE III (Continued)

CURIOSITY MEASURE
(Melbourne Trait Curiosity Inventory: Naylor 1980)

1. I think learning "about things" is interesting and exciting.
2. I am curious about things.
3. I enjoy taking things apart to "see what makes them tick."
4. I feel involved in what I do.
5. My spare time is filled with interesting activities.
6. I like to try to solve problems that puzzle me.
7. I want to probe deeply into things.
8. I enjoy exploring new places.
9. I feel active.
10. New situations capture my attention.
11. I feel inquisitive.
12. I feel like asking questions about what is happening.
13. The prospect of learning new things excites me.
14. I feel like searching for answers.
15. I feel absorbed in things I do.
16. I like speculating about things.
17. I like to experience new sensations.
18. I feel interested in things.
19. I like to enquire about things I don't understand.
20. I feel like seeking things out.

Scoring: (1) almost never; (2) sometimes; (3) often; (4) almost always, adapted to a 7-point Likert format.

PERCEIVED RISK SCALE
(Brooker 1984; Jacoby and Kaplan 1972)

1. What is the risk that you will loose money if you purchase from an unfamiliar catalog?
   VERY HIGH FINANCIAL RISK/VERY LOW FINANCIAL RISK

2. What is the risk that there will be something wrong with a product or that it will not work properly if purchased from an unfamiliar catalog?
   VERY LOW PERFORMANCE RISK/VERY HIGH PERFORMANCE RISK

3. What is the risk that a product purchased from an unfamiliar catalog may not be safe; i.e. may be (or become) harmful or injurious to your health?
   VERY HIGH SAFETY RISK/VERY LOW SAFETY RISK

4. What is the risk that a product purchased from an unfamiliar catalog will not fit well with your self-image or self-concept (i.e. the way you think about yourself)?
   VERY LOW PSYCHOLOGICAL RISK/VERY HIGH PSYCHOLOGICAL RISK

TABLE III (Continued)

---

5. What is the risk that a product purchased from an unfamiliar catalog will affect the way others think of you?
   VERY HIGH SOCIAL RISK/VERY LOW SOCIAL RISK

6. What is the risk that you will waste time by replacing or returning a product purchased from an unfamiliar catalog?
   VERY LOW TIME-LOSS RISK/VERY HIGH TIME-LOSS RISK

7. On the whole, considering all sorts of factors combined, about how risky would you say it is to buy a product from an unfamiliar catalog?
   NOT RISK AT ALL/EXTREMELY RISKY

Scoring: 7-point bipolar format.

CLOTHING INVOLVEMENT MEASURES

Involvement Measure (Zaichkowsky 1985)

1. On the scales below, please indicate how you feel about clothing and how important this product category is to your daily life. To me, clothing is:

   important/unimportant
   mundane/fascinating
   essential/nonessential
   significant/insignificant
   appealing/unappealing
   unexciting/exciting
   beneficial/not beneficial
   boring/interesting
   valuable/worthless
   useless/useful

   Scoring: adapted to a 7-point bipolar adjective format.

Enduring Involvement Measure (Bloch, Sherrell, Ridgway 1986)

1. How interested are you in the subject of clothing styles and trends?
   NOT AT ALL INTERESTED/EXTREMELY INTERESTED

2. In my everyday life, clothing is:
   EXTREMELY IMPORTANT/NOT AT ALL IMPORTANT

TABLE III (Continued)

---

3. Thinking about clothing and clothing styles is:
   ONE OF MY LEAST FAVORITE ACTIVITIES/ONE OF MY MOST FAVORITE ACTIVITIES

4. How frequently do you find yourself thinking about clothing and clothing styles?
   VERY FREQUENTLY/NEVER OR ALMOST NEVER

5. How much do you enjoy thinking about clothing and clothing styles?
   DO NOT ENJOY AT ALL/ENJOY IT VERY MUCH

6. How important is it to you to keep up with the new clothing styles and trends?
   EXTREMELY IMPORTANT/NOT AT ALL IMPORTANT

   Scoring: 7-point bipolar format.

VICARIOUS EXPLORATION ITEMS

[Raju's (1980) scale divided into vicarious exploration items by Price and Ridgway (1983)]

1. I have little interest in fads and fashions.
2. I like to shop around and look at displays.
3. I get very bored listening to others talk about their purchases.
4. I like to browse through mail order catalogs even when I don't plan to buy anything.
5. When I see a new or different brand on the shelf, I often pick it up just to see what it is like.
6. I often read the information on the package of products just out of curiosity.
7. I shop around a lot for my clothes just to find out more about the latest styles.
8. A new store or restaurant is not something I would be eager to find out about.
9. I generally read even junk mail just to know what it is about.
10. I don't like to talk to my friends about my purchases.
11. I usually throw away mail advertisements without reading them.
12. I don't care to find out what types or brand names of appliances and gadgets my friends have.
13. I hate window shopping.
14. I often read advertisements just out of curiosity.
15. When I see a new brand somewhat different from the usual, I investigate it.
16. Investigating new brands of grocery and other similar products is generally a waste of time.
17. My friends and neighbors often come to me for advice.
18. I rarely read advertisements that just seem to contain a lot of information.

TABLE III (Continued)

19. When I hear about a new store or restaurant, I take advantage of the first opportunity to find out more about it.
20. I would prefer to keep using old appliances and gadgets even if it means having to get them fixed, rather than buying new ones every few years.
21. I enjoy exploring several different alternatives or brands while shopping.

Scoring: 7-point Likert format.

APPENDIX D

ITEMS USED TO MEASURE INDIVIDUAL DIFFERENCE VARIABLES INCLUDED IN THE POSTMEASURE

TABLE IV

POSTMEASURE ITEMS

VICARIOUS EXPLORATION (dimensions developed by the author)

"Fantasy of Ownership"

1. I wondered how long the clothes would stay in style.
2. I wondered about the quality of the clothes in the catalog.
3. I spent a lot of time thinking about how long the clothes would last.
4. I wondered if the clothing would go with clothes I already owned.
5. I did not spend much time looking at the models in the catalog.
6. I wondered how I would look in the clothes.
7. I tried to imagine how I would look in the clothes.
8. I wondered if the clothes were too casual to wear to work.
9. I wondered what others would think if I wore the clothes in the catalog.
10. I wondered if my friends would really like the clothes in the catalog.
11. I wondered where I would wear the clothes in the catalog.
12. I really wondered which colors I would like best.
13. I wondered which colors would look best on me.

"Information Seeking"

14. I looked through the catalog for specific product information.
15. I looked through the catalog to find information about several different types of products.
16. I examined the fine print for most of the products in the catalog.
17. Reading the fine print was not of interest to me.
18. I examined the fine print to find the prices of the products in the catalog.
19. I looked at the photographs in the catalog to learn about the products.
20. I examined the fine print to learn what the products were made of and how they were constructed.
21. I never read the center page order form to learn what size I would wear in this brand of clothing.
22. I spent almost no time reading the information about ordering, shipping, and returning or exchanging products.
23. I looked through the catalog for specific colors of clothing.
24. I looked through the catalog for specific types of clothes.
25. I looked at the catalog as soon as I received it in the mail.
26. I looked at the catalog when I got a chance.

"Interpersonal Communication"

27. I was eager to tell my friends and/or acquaintances about the catalog.
28. I was eager to show my friends and/or acquaintances the catalog.

TABLE IV (Continued)

29. I gave my friends and/or acquaintances a great deal of information about the products in the catalog.

30. I did not receive much information from my friends and/or acquaintances about the products in the catalog.

Scoring: 7-point Likert format

PERCEIVED NOVELTY (developed by the author)

1. How similar is the clothing in the J.CREW catalog to the clothing you already own.
   VERY SIMILAR/VERY DISSIMILAR

2. How similar are the individuals in the J.CREW catalog to you and your friends.
   VERY SIMILAR/VERY DISSIMILAR

3. How different do the products in the J.CREW catalog appear to be compared to products in other mail order catalogs?
   NOT VERY DIFFERENT/VERY DIFFERENT

4. How similar are the prices in the J.CREW catalog to the prices you are generally willing to pay for this type of merchandise.
   VERY SIMILAR/VERY DISSIMILAR

5. How different is the J. CREW catalog compared to other mail order catalogs?
   NOT VERY DIFFERENT/VERY DIFFERENT

Scoring: 7-point bipolar format

PAST CATALOG USAGE (developed by the author)

1. Please specify the number of different mail order clothing catalogs you look through in a typical month.

2. Please specify the number of different mail order clothing catalogs you purchase from in a typical month.

3. Please specify the number of different mail order catalog companies that you purchased from during the past year.

Scoring: open-ended format

APPENDIX E

PREMEASURE AND POSTMEASURE QUESTIONNAIRES

USED DURING THE DATA COLLECTION PROCESS

TABLE V

PREMEASURE QUESTIONNAIRE

ID Number _____ /___ ___ ___ ___ ___ ___

CONSUMER SURVEY

The following study attempts to develop several psychological measures that may be used to better understand consumer behaviors. Please be as complete as possible in your answers. We thank you in advance for your assistance.

PART A: Individual Differences
A number of statements which people have used to describe themselves are given below. Read each statement and then mark an "X" in the appropriate space to indicate how you generally feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

Please use the following key:

(SA) STRONGLY AGREE
(A) AGREE
(SLA) SLIGHTLY AGREE
(NS) NOT SURE
(SLD) SLIGHTLY DISAGREE
(D) DISAGREE
(SD) STRONGLY DISAGREE

	/ SA /	A /	SLA /	NS /	SLD /	D /	SD /
1. I like surprises.	/____/	____/	____/	____/	____/	____/	____/
2. I enjoy exploring new places.	/____/	____/	____/	____/	____/	____/	____/
3. I feel active.	/____/	____/	____/	____/	____/	____/	____/
4. I want to probe deeply into things.	/____/	____/	____/	____/	____/	____/	____/
5. I don't make much effort to change my daily routines.	/____/	____/	____/	____/	____/	____/	____/
6. I am interested in new and varied interpretations of different art forms.	/____/	____/	____/	____/	____/	____/	____/
7. I sometimes look for ways to change my daily routine.	/____/	____/	____/	____/	____/	____/	____/
8. I am continually seeking new ideas and experiences.	/____/	____/	____/	____/	____/	____/	____/
9. I like speculating about things.	/____/	____/	____/	____/	____/	____/	____/
10. I like meeting people who give me new ideas.	/____/	____/	____/	____/	____/	____/	____/
11. I think learning "about things" is interesting and exciting.	/____/	____/	____/	____/	____/	____/	____/
12. I like to run through heaps of fallen leaves.	/____/	____/	____/	____/	____/	____/	____/
13. I prefer an unpredictable life that is full of change to a more routine one.	/____/	____/	____/	____/	____/	____/	____/
14. I enjoy taking things apart to "see what makes them tick."	/____/	____/	____/	____/	____/	____/	____/
15. I much prefer familiar people and places.	/____/	____/	____/	____/	____/	____/	____/
16. I feel like searching for answers.	/____/	____/	____/	____/	____/	____/	____/
17. It is difficult for me to get excited about scenery.	/____/	____/	____/	____/	____/	____/	____/
18. I feel inquisitive.	/____/	____/	____/	____/	____/	____/	____/
19. As a child I often imagined leaving home, just to explore the world.	/____/	____/	____/	____/	____/	____/	____/

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TABLE V (Continued)

Please use the following key: (SA) STRONGLY AGREE: (A) AGREE: (SLA) SLIGHTLY AGREE: (NS) NOT SURE: (SLD) SLIGHTLY DISAGREE: (D) DISAGREE: (SD) STRONGLY DISAGREE

	SA	A	SLA	NS	SLD	D	SD
20. I don't enjoy doing daring, foolhardy things just for fun.							
21. I like to know people who are rapidly changing in their thinking or way of life.							
22. My spare time is filled with interesting activities.							
23. I like people who do things that are different from what I usually do.							
24. It's unpleasant seeing people in strange, weird clothes.							
25. I like a job that offers change, variety, and travel, even if it involves some danger.							
26. I feel like seeking things out.							
27. I wouldn't enjoy dangerous sports such as mountain climbing, airplane flying, or sky diving.							
28. I don't like to have lots of activity around me.							
29. I like continually changing activities.							
30. I like to experience new sensations.							
31. I sometimes like to do things that are a little frightening.							
32. I am not interested in poetry.							
33. I prefer to stay put rather than keep moving.							
34. I don't pay much attention to my surroundings.							
35. I prefer friends who are reliable and predictable to those who are excitingly unpredictable.							
36. I feel absorbed in things I do.							
37. I feel like asking questions about what is happening.							
38. I like to enquire about things I don't understand.							
39. When things get boring, I like to find some new and unfamiliar experience.							
40. I like predictable people.							
41. I like to go somewhere different nearly every day.							
42. I like to try to solve problems that puzzle me.							
43. I like to experience novelty and change in my daily routine.							

TABLE V (Continued)

Please use the following key: (SA) STRONGLY AGREE: (A) AGREE: (SLA) SLIGHTLY AGREE: (NS) NOT SURE: (SLD) SLIGHTLY DISAGREE: (D) DISAGREE: (SD) STRONGLY DISAGREE

	SA	A	SLA	NS	SLD	D	SD
44. I prefer a routine way of life to an unpredictable one full of change.							
45. I feel involved in what I do.							
46. I seldom change the pictures on my walls.							
47. I seldom change the decor and furniture arrangement at my place.							
48. I feel interested in things.							
49. I am curious about things.							
50. I would be content to live in the same town for the rest of my life.							
51. New situations capture my attention.							
52. The prospect of learning new things excites me.							

PART B: Clothing Interest
In this section we ask you a few questions concerning your interests in clothing. In stating your opinions, please remember there are no right or wrong answers. We are only interested in how you feel.

On the scales below, please indicate how you feel about clothing and how important this product category is to your daily life by marking an "X" in the appropriate space.

1. To me, clothing is:

important	/ / / / / / /	unimportant
mundane	/ / / / / / /	fascinating
essential	/ / / / / / /	nonessential
significant	/ / / / / / /	insignificant
appealing	/ / / / / / /	unappealing
unexciting	/ / / / / / /	exciting
beneficial	/ / / / / / /	not beneficial
boring	/ / / / / / /	interesting
valuable	/ / / / / / /	worthless
useless	/ / / / / / /	useful

2. How interested are you in the subject of clothing styles and trends?

NOT AT ALL INTERESTED / / / / / / / EXTREMELY INTERESTED

3. In my everyday life, clothing is:

NOT AT ALL IMPORTANT / / / / / / / EXTREMELY IMPORTANT

4. Thinking about clothing and clothing styles is:

ONE OF MY LEAST FAVORITE ACTIVITIES / / / / / / / ONE OF MY MOST FAVORITE ACTIVITIES

5. How frequently do you find yourself thinking about clothing and clothing styles?

NEVER OR ALMOST NEVER / / / / / / / VERY FREQUENTLY

TABLE V (Continued)

6. How much do you enjoy thinking about clothing and clothing styles?

DO NOT ENJOY IT AT ALL	/____/____/____/____/____/____/____/	ENJOY IT VERY MUCH

7. How important is it to you to keep up with new clothing styles and trends?

NOT AT ALL IMPORTANT	/____/____/____/____/____/____/____/	EXTREMELY IMPORTANT

PART C: Shopping Behavior
In this section we ask you a few questions concerning your shopping behavior. In stating your opinions, please remember there are no right or wrong answers. We are only interested in how you feel.

On the scales below, please indicate how you feel about shopping by marking an "X" in the appropriate space.

1. What is the risk that you will lose money if you purchase a product from an unfamiliar catalog?

VERY LOW FINANCIAL RISK	/___/___/___/___/___/___/___/	VERY HIGH FINANCIAL RISK

2. What is the risk that there will be something wrong with a product or that it will not work properly if purchased from an unfamiliar catalog?

VERY LOW PERFORMANCE RISK	/___/___/___/___/___/___/___/	VERY HIGH PERFORMANCE RISK

3. What is the risk that a product purchased from an unfamiliar catalog may not be safe; i.e. may be (or become) harmful or injurious to your health?

VERY LOW SAFETY RISK	/___/___/___/___/___/___/___/	VERY HIGH SAFETY RISK

4. What is the risk that a product purchased from an unfamiliar catalog will not fit well with your self-image or self-concept (i.e. the way you think about yourself)?

VERY LOW PSYCHOLOGICAL RISK	/___/___/___/___/___/___/___/	VERY HIGH PSYCHOLOGICAL RISK

5. What is the risk that a product purchased from an unfamiliar catalog will affect the way others think of you?

VERY LOW SOCIAL RISK	/___/___/___/___/___/___/___/	VERY HIGH SOCIAL RISK

6. What is the risk that you will waste time by replacing or returning a product purchased from an unfamiliar catalog?

VERY LOW TIME-LOSS RISK	/___/___/___/___/___/___/___/	VERY HIGH TIME-LOSS RISK

7. On the whole, considering all sorts of factors combined, about how risky would you say it is to buy a product from an unfamiliar catalog?

NOT RISKY AT ALL	/___/___/___/___/___/___/___/	EXTREMELY RISKY

DIRECTIONS: Please answer the first three questions by marking an "X" in the space that corresponds to your shopping behavior. For questions four and five, indicate the number that represents your shopping behavior in the space provided.

1. How often do you visit clothing stores or departments, just to look around and get information, rather than to make a specific purchase?

____ Never, or almost never
____ About once every 2-3 months
____ Once a month
____ Once every two weeks
____ Once a week
____ More than once a week

TABLE V (Continued)

2. In a typical month, how many mail order clothing catalogs do you look through?
   ____ None
   ____ One
   ____ 2-3
   ____ 4-5
   ____ 6 or more

3. How often do you talk to your friends and acquaintances to get information or advice concerning clothing and clothing styles?

   ____ Never, or almost never
   ____ Once every 2-3 months
   ____ Once a month
   ____ Once every 2 weeks
   ____ Once a week
   ____ Two or three times a week
   ____ Every day

4. Please specify the number of clothing or fashion-related magazines that you subscribe to during a typical year.
   _____ Magazines

5. Please specify the number of clothing or fashion-related magazines that you read during a typical month, but do not subscribe to. _____ Magazines

PART D: Information Search Behavior

A number of statements which people have used to describe their information search behavior are given below. Read each statement and then mark an "X" in the appropriate space to indicate how you feel. There are no right or wrong answers.

Please use the following key:
(SA) STRONGLY AGREE
(A) AGREE
(SLA) SLIGHTLY AGREE
(NS) NOT SURE
(SLD) SLIGHTLY DISAGREE
(D) DISAGREE
(SD) STRONGLY DISAGREE

	/ SA /	A /	SLA /	NS /	SLD /	D /	SD /
1. I would prefer to keep using old appliances and gadgets even if it means having to have them fixed, rather than buying new ones every few years.	/____/	____/	____/	____/	____/	____/	____/
2. I hate window shopping.	/____/	____/	____/	____/	____/	____/	____/
3. When I hear about a new store or restaurant, I take advantage of the first opportunity to find out more about it.	/____/	____/	____/	____/	____/	____/	____/
4. I often read advertisements just out of curiosity.	/____/	____/	____/	____/	____/	____/	____/
5. A new store or restaurant is not something I would be eager to find out about.	/____/	____/	____/	____/	____/	____/	____/
6. My friends and neighbors often come to me for advice.	/____/	____/	____/	____/	____/	____/	____/
7. I often read the information on the package of products just out of curiosity.	/____/	____/	____/	____/	____/	____/	____/
8. I have little interest in fads and fashions.	/____/	____/	____	____/	____/	____/	____/
9. I rarely read advertisements that just seem to contain a lot of information.	/____/	____/	____/	____/	____/	____/	____/
10. When I see a new brand somewhat different from the usual, I investigate it.	/____/	____/	____/	____/	____/	____/	____/
11. I don't care to find out what types or brand names of appliances and gadgets my friends have.	/____/	____/	____/	____/	____	____/	____/
12. I like to browse through mail order catalogs even when I don't plan to buy anything.	/____/	____/	____/	____/	____/	____/	____/

TABLE V (Continued)

Please use the following key: (SA) STRONGLY AGREE: (A) AGREE: (SLA) SLIGHTLY AGREE: (NS) NOT SURE: (SLD) SLIGHTLY DISAGREE: (D) DISAGREE: (SD) STRONGLY DISAGREE

	/ SA /	A /	SLA /	NS /	SLD /	D /	SD /
12. I enjoy exploring several different alternatives or brands while shopping.	/	/	/	/	/	/	/
13. My friends and neighbors often come to me for advice.	/	/	/	/	/	/	/
14. I often read the information on the package of products just out of curiosity.	/	/	/	/	/	/	/
15. I often read advertisements just out of curiosity.	/	/	/	/	/	/	/
16. When I see a new brand somewhat different from the usual, I investigate it.	/	/	/	/	/	/	/
17. A new store or restaurant is not something I would be eager to find out about.	/	/	/	/	/	/	/
18. I rarely read advertisements that just seem to contain a lot of information.	/	/	/	/	/	/	/
19. I have little interest in fads and fashions.	/	/	/	/	/	/	/
20. I get very bored listening to others talk about their purchases.	/	/	/	/	/	/	/
21. When I hear about a new store or restaurant, I take advantage of the first opportunity to find out more about it.	/	/	/	/	/	/	/

TABLE VI

POSTMEASURE QUESTIONNAIRE

RESPONDENT NUMBER: Please insert, in the boxes below, the initials of your first and last name and your OSU student number.

DIRECT MARKETING RESEARCH STUDY

Direct marketing is becoming increasingly popular in today's society due to changing lifestyles and interests. However, it is sometimes difficult for direct marketing companies to keep up with all the changes in customer needs and wants. This study is concerned with learning more about the consumer and his or her catalog shopping behavior.

DIRECTIONS: There are four (4) sections to this survey. Please read the directions for each section carefully and give your honest response.

AG*099/002

TABLE VI (Continued)

PAGE 1

SECTION ONE: DIRECT MARKETING

1. Our catalog was recently sent to a sample of Oklahoma State University students. Did you receive a J.CREW catalog in the mail?

____yes. IF YES, PLEASE GO TO QUESTION 2.
____no. IF NO, PLEASE GO TO SECTION TWO: PAGE 3.

2. When did you receive the J.CREW catalog in the mail?
____Monday
____Tuesday
____Wednesday
____Thursday
____Friday
____Saturday
____Sunday
____not sure

3. How soon after getting the catalog did you look at the J.CREW catalog?
____immediately
____within one hour
____within two-four hours
____within five or more hours
____the next day
____a couple of days later
____not sure

4. What time of day did you look at the J.CREW catalog?
____morning
____afternoon
____evening
____not sure

5. What were you doing while looking through the J.CREW catalog?
____watching TV
____walking from the mailbox
____working
____riding in the car
____nothing else
____eating
____other (please specify)_____

6. Please indicate the approximate number of minutes that you browsed through the J.CREW catalog. _____

7. Please indicate the number of people that you showed the J.CREW catalog to. _____

8. Please indicate the number of different times that you have looked at the J.CREW catalog since receiving it.
____one
____two
____three
____four
____five or more
____not sure

9. Have you ever heard of the J.CREW catalog before receiving your catalog in the mail?
____yes
____no

10. Have you ever received a J.CREW catalog before?
____yes, from the J.CREW company
____yes, from someone other than the J.CREW company
____no, I have never received a J.CREW catalog

TABLE VI (Continued)

PAGE 2

DIRECTIONS: For questions 11-15, please mark an "X" in the space that corresponds to your feelings toward the J.CREW catalog.

11. How similar is the clothing in the J.CREW catalog to the clothing you already own?

VERY SIMILAR:___:___:___:___:___:___:___:VERY DISSIMILAR

12. How similar are the individuals in the J.CREW catalog to you and your friends.

VERY SIMILAR:___:___:___:___:___:___:___:VERY DISSIMILAR

13. How different do the products in the J.CREW catalog appear to be compared to products in other mail order catalogs?

NOT VERY DIFFERENT:___:___:___:___:___:___:___:VERY DIFFERENT

14. How similar are the prices in the J.CREW catalog to the prices you are generally willing to pay for this type of merchandise?

VERY SIMILAR:___:___:___:___:___:___:___:VERY DISSIMILAR

15. How different is the J.CREW catalog compared to other mail order clothing catalogs?

NOT VERY DIFFERENT:___:___:___:___:___:___:___:VERY DIFFERENT

16. Please indicate any specific product offerings you saw in the J.CREW catalog. (check all that apply)

____bedding accessories	____jackets	____shoes
____belts	____luggage	____skirts
____bicycle equipment	____pants	____socks
____camping equipment	____rugby clothes	____sweaters
____dresses	____shirts	____ties

17. Please indicate the number of different items in the catalog that you closely examined. _____

18. Have you ever purchased merchandise from the J.CREW catalog?

____yes. IF YES, PLEASE GO TO QUESTION 19.
____no. IF NO, PLEASE GO TO QUESTION 21.

19. Please indicate the last time you purchased merchandise from the J.CREW catalog.

____within the past week	____four-five months ago
____within the past month	____six or more months ago
____two-three months ago	

20. Please indicate the number of times, in the past year, that have you purchased from the J.CREW catalog. _____

21. What is the likelihood that you would purchase any merchandise for yourself from the J.CREW catalog in the future?

VERY LIKELY:___:___:___:___:___:___:___:NOT VERY LIKELY

22. What is the likelihood that you would purchase any merchandise for others from the J.CREW catalog?

VERY LIKELY:___:___:___:___:___:___:___:NOT VERY LIKELY

23. How interested are you in remaining on the mailing list to receive future J.CREW catalogs?

VERY INTERESTED:___:___:___:___:___:___:___:NOT VERY INTERESTED

TABLE VI (Continued)

SECTION TWO: CATALOG SHOPPING

Read each of the statements below and give the answer which seems to describe how you feel about catalog shopping. Mark an "x" in the space to indicate your feelings.

	Strongly Agree	Slightly Agree	Not Sure	Slightly Disagree	Disagree	Strongly Disagree
1. I wondered where I would wear the clothes in the catalog.						
2. I did not spend much time looking at the models in the catalog.						
3. I looked through the catalog for specific colors of clothing.						
4. I did not receive much information from my friends or acquaintances about the products in the catalog.						
5. I looked at the catalog as soon as I received it in the mail.						
6. I wondered how I would look in the clothes.						
7. Reading the fine print in the catalog was not of interest to me.						
8. I looked through the catalog for specific types of clothes.						
9. I wondered about the quality of the clothes in the catalog.						
10. I really wondered which colors I would like best.						
11. I spent almost no time reading the information about ordering, shipping, and returning or exchanging products.						
12. I looked through the catalog to find information about several different types of products.						
13. I looked at the catalog when I got a chance.						
14. I examined the fine print to find the prices of the products in the catalog.						
15. I was eager to show my friends or acquaintances the catalog.						
16. I tried to imagine how I would look in the clothes.						
17. I wondered if my friends would really like the clothes in the catalog.						
18. I looked at the photographs in the catalog to learn about the products.						
19. I was eager to tell my friends or acquaintances about the catalog.						
20. I spent a lot of time thinking about how long the clothes would last.						

TABLE VI (Continued)

PAGE 4

	Strongly Agree	Slightly Agree	Not Sure	Slightly Disagree	Disagree	Strongly Disagree
21. I never read the center page order form to learn what size I would wear in this brand of clothing.	:	:	:	:	:	:
22. I wondered how long the clothes would stay in style.	:	:	:	:	:	:
23. I wondered which colors would look best on me.	:	:	:	:	:	:
24. I wondered what others would think if I wore the clothes in the catalog.	:	:	:	:	:	:
25. I examined the fine print for most of the products in the catalog.	:	:	:	:	:	:
26. I gave my friends or acquaintances a great deal of information about the products in the catalog.	:	:	:	:	:	:
27. I wondered if the clothing would go with clothes I already owned.	:	:	:	:	:	:
28. I wondered if the clothes were too casual to wear to work.	:	:	:	:	:	:
29. I looked through the catalog for specific product information.	:	:	:	:	:	:
30. I examined the fine print to learn what the products were made of and how they were constructed.	:	:	:	:	:	:

SECTION THREE: PAST CATALOG SHOPPING EXPERIENCE

1. Please specify the number of different mail order clothing catalogs you look through in a typical month. _____ CATALOGS

2. Please specify the number of different mail order clothing catalogs you purchase from in a typical month. _____ CATALOGS

3. Please specify the number of different mail order catalog companies that you purchased from during the past year. _____ CATALOG COMPANIES

4. When was the last time you purchased clothing or other merchandise from a catalog within the past year?
   ____None
   ____within the past week
   ____within the past month
   ____two-three months ago
   ____four-five months ago
   ____six or more months ago

5. What percentage of your household purchases are made from mail-order catalogs?
   ____None
   ____About 10%
   ____About 25%
   ____About 50%
   ____About 75% or more

6. As a college student, what percentage of your clothing is purchased with your own money rather than your parents money?
   ____None
   ____About 10%
   ____About 25%
   ____About 50%
   ____About 75% or more

TABLE VI (Continued)

7. What would you say is the most important reason(s) you use catalogs? (check all that apply)

____comparison shopping
____getting ideas for future purchases
____collecting information for future purchases
____saving time in purchasing
____entertainment
____could not get to the store
____more convenient than shopping at the store
____better merchandise assortment
____lower prices or sale prices in the catalog
____no particular reason
____other (please specify)_____

8. Please indicate your feelings toward catalog shopping by marking an "X" in the space that represents how you feel.

pleasant	:___:___:___:___:___:___:___:	unpleasant
like	:___:___:___:___:___:___:___:	dislike
boring	:___:___:___:___:___:___:___:	entertaining
convenient	:___:___:___:___:___:___:___:	inconvenient
poor selection	:___:___:___:___:___:___:___:	good selection
inexpensive	:___:___:___:___:___:___:___:	expensive
inadequate information	:___:___:___:___:___:___:___:	adequate information

SECTION FOUR: BACKGROUND INFORMATION

For purposes of grouping people together for statistical analysis, please complete the following items.

1. What is your sex? ____Male ____Female
2. What is your birthdate? ____Month ____Day ____Year
3. What is your marital status? ____Married ____Unmarried
4. What is your total annual personal income?

____under $5,000
____$ 5,000 - 9,999
____$10,000 - 14,999
____$15,000 - 19,999
____$20,000 - 24,999
____$25,000 - 29,999
____$30,000 - 34,999
____$35,000 - 39,999
____$40,000 - 44,999
____$45,000 - 49,999
____$50,000 or above

THANK YOU FOR YOUR GENEROUS ASSISTANCE
IN COMPLETING THIS SURVEY!

This survey does not reflect any official policy
or statement of Oklahoma State University.

APPENDIX F

TABLES OF DATA ANALYSIS RESULTS

TABLE VII

ITEM-TOTAL CORRELATIONS AND COEFFICIENT ALPHAS
FOR THREE VICARIOUS EXPLORATION
DIMENSIONS: 30-ITEMS

ITEMS	ITEM-TOTAL CORRELATIONS
DIMENSION ONE: FANTASY OF OWNERSHIP	
12. I really wondered which colors I would like best.	.7231
13. I wondered which colors would look best on me.	.7184
7. I tried to imagine how I would look in the clothes.	.6972
6. I wondered how I would look in the clothes.	.6642
4. I wondered if the clothing would go with clothes I already owned.	.6023
10. I wondered if my friends would really like the clothes in the catalog.	.5838
1. I wondered how long the clothes would stay in style.	.5708
11. I wondered where I would wear the clothes in the catalog.	.5504
9. I wondered what others would think if I wore the clothes in the catalog.	.5356
3. I spent a lot of time thinking about how long the clothes would last.	.4930
2. I wondered about the quality of the clothes in the catalog.	.4304
8. I wondered if the clothes were too casual to wear to work.	.3606
5. I did not spend much time looking at the models in the catalog.	.3085
Cronbach coefficient alpha for dimension 1 = .8772	
DIMENSION TWO: INFORMATION SEEKING	
16. I examined the fine print for most of the products in the catalog.	.6642
14. I looked through the catalog for specific product information.	.6425
20. I examined the fine print to learn what the products were made of and how they were constructed.	.6402
15. I looked through the catalog to find information about several different types of products.	.6278
18. I examined the fine print to find the prices of the products in the catalog.	.6132
17. Reading the fine print was not of interest to me.	.6111
24. I looked through the catalog for specific types of clothes.	.4673
23. I looked through the catalog for specific colors of clothing.	.4252
25. I looked at the catalog as soon as I received it in the mail.	.4165
19. I looked at the photographs in the catalog to learn about the products.	.3574
22. I spent almost no time reading the information about ordering, shipping, and returning or exchanging products.	.3102

TABLE VII (Continued)

21.	I never read the center page order form to learn what size I would wear in this brand of clothing.	.2260
26.	I looked at the catalog when I got a chance.	.0428

Cronbach coefficient alpha for dimension 2 = .8216

DIMENSION THREE: INTERPERSONAL COMMUNICATION

27.	I was eager to tell my friends and/or acquaintances about the catalog.	.7706
28.	I was eager to show my friends and/or acquaintances the catalog.	.7531
29.	I gave my friends and/or acquaintances a great deal of information about the products in the catalog.	.6299
30.	I did not receive much information from my friends and/or acquaintances about the products in the catalog.	.1989

Cronbach coefficient alpha for dimension 3 = .7658

TABLE VIII

FACTOR ANALYSES AND COEFFICIENT ALPHAS FOR VICARIOUS EXPLORATION: 27-ITEMS

	VARIMAX ROTATION - ORTHOGONAL DIMENSIONS		
	FANTASY OF OWNERHSIP	INFORMATION SEEKING	INTERPERSONAL COMMUNICATION
ITEM NUMBER[1]	FACTOR LOADINGS[2]		
1[3]	.52650*		
2	.52443		
6	.75235		
7	.74617		
10			.58483*
11	.54282		
12	.75539		
13	.79859		
15		.58945	
16		.67720	
17		.82211	
18		.73696	
20		.71319	
27			.78172
28			.79032
29			.80437

1 Appendix D provides a listing of the items.

2 All loadings $\geq$ .50 are reported.

3 The factor loadings with an asterisk did not have a .20 difference between factors.

TABLE VIII (Continued)

HARRIS-KAISER ROTATION - OBLIQUE

	DIMENSIONS		
	FANTASY OF OWNERHSIP	INFORMATION SEEKING	INTERPERSONAL COMMUNICATION
ITEM NUMBER	FACTOR LOADINGS		
1	.57056*		
2	.54169		
4	.57650*	.50134	
6	.77672		
7	.78485		
9	.53587*		
10	.55499		.64233*
11	.58826		
12	.80117		
13	.82235		
14		.54515	.56594*
15		.64563*	
16		.71216	
17		.82193	
18		.77231	
20		.74311	
27			.84264
28			.84664
29			.83940

Dimension	Cronbach's Alpha (Diagonal) and Factor Correlations		
Fantasy of Ownership	.8772	.2848	.2840
Information Seeking		.8458	.2822
Interpersonal Communication			.8876

TABLE IX

FACTOR ANALYSES AND COEFFICIENT ALPHAS FOR
VICARIOUS EXPLORATION: 14-ITEMS

	VARIMAX ROTATION - ORTHOGONAL		
	DIMENSIONS		
	FANTASY OF OWNERHSIP	INFORMATION SEEKING	INTERPERSONAL COMMUNICATION
ITEM NUMBER[1]	FACTOR LOADINGS[2]		
2	.56309		
6	.81858		
7	.76991		
11	.55229		
12	.79279		
13	.85819		
15	.58951		
16		.70680	
17		.84324	
18		.73051	
20		.73682	
27			.85519
28			.87796
29			.83803

[1] Appendix D provides a listing of the items.

[2] All loadings $\geq$ .50 are reported.

TABLE IX (Continued)

HARRIS-KAISER ROTATION - OBLIQUE

	DIMENSIONS		
	FANTASY OF OWNERHSIP	INFORMATION SEEKING	INTERPERSONAL COMMUNICATION
ITEM NUMBER	FACTOR LOADINGS		
2	.57757		
6	.83225		
7	.79822		
11	.58526		
12	.82482		
13	.87601		
15		.65420	
16		.75200	
17		.84744	
18		.77037	
20		.78702	
27			.89322
28			.91004
29			.86152

Dimension	Cronbach's Alpha (Diagonal) and Factor Correlations		
Fantasy of Ownership	.8596	.2519	.1895
Information Seeking		.8465	.2340
Interpersonal Communication			.8876

TABLE X

COEFFICIENT ALPHAS FOR THREE DIMENSIONS
OF VICARIOUS EXPLORATION DIMENSIONS

DIMENSIONS	COEFFICIENT ALPHA
30-ITEMS	.9165
Fantasy of Ownership: 13 items (1-13)	.8772
Information Seeking: 13 items (14-26)	.8216
Interpersonal Communication: 4 items (27-30)	.7658
27-ITEM MEASURE	.9232
Fantasy of Ownership: 13 items (1-13)	.8772
Information Seeking: 11 items (14-20, 22-25)	.8450
Interpersonal Communication: 3 items (27-29)	.8876
14-ITEM MEASURE	.8955
Fantasy of Ownership: 6 items (2, 6, 7, 11-13)	.8596
Information Seeking: 5 items (15-18, 20)	.8465
Interpersonal Communication: 3 items (27-29)	.8876

TABLE XI

CORRELATIONS[1] BETWEEN DIMENSIONS AND
FINAL VICARIOUS EXPLORATION
MEASURE: 14-ITEMS

	FANTASY OF OWNERSHIP	INFORMATION SEEKING	INTERPERSONAL COMMUNICATION
FINAL VE MEASURE	.8356	.8679	.6613
FANTASY OF OWNERSHIP	1.0000	.5294	.4044
INFORMATION SEEKING		1.0000	.4556
INTERPERSONAL COMMUNICATION			1.0000

[1] All correlations were significant at the .0001 level of statistical significance.

TABLE XII

ITEM-TOTAL CORRELATIONS AND RELIABILITY
PERCEIVED NOVELTY: 5-ITEMS

	ITEM-TOTAL[1] CORRELATION	FACTOR LOADING
DIMENSION ONE: PERCEIVED DIFFERENCES		
3. How different do the products in the J.Crew catalog appear to be compared to other mail order catalog?	.6603	.91430
5. How different is the J.Crew catalog compared to other mail order clothing catalogs?	.6603	.89601
Cronbach Coefficient Alpha: .7953[2]		
Eigenvalue: 1.670		
DIMENSION TWO: PERCEIVED SIMILARITIES		
1. How similar is the clothing in the J.Crew catalog to the clothing you already own?	.4922	.83303
2. How similar are the individuals in the J.Crew catalog to you and your friends?	.4220	.80026
4. How similar are the prices in the J.Crew catalog to the prices you are generally willing to pay for this type of merchandise?	.2735	.56045
Cronbach Coefficient Alpha: .5827		
Cronbach Coefficient Alpha with item 4 deleted: .6501		
Eigenvalue: 1.656		

1 Item-total correlations correspond to each dimension, rather than to the total 5-item measure.

2 The use of Cronbach coefficient alpha is typically limited to measures that contain a minimum of three items (Peter 1979). Therefore, the internal reliability of the novelty dimension(s) with only two items may be suspect.

TABLE XIII

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FACTOR ANALYSIS AND RELIABILITY
INDIVIDUAL DIFFERENCE VARIABLES

INDIVIDUAL DIFFERENCE VARIABLES	NUMBER OF ITEMS	NUMBER OF[1] FACTORS	COEFFICIENT[2] ALPHA
OSL	32	9	.8879
CURIOSITY	20	5	.8802
CLOTHING INVOLVEMENT: Zaichowsky	10	2	.9095
CLOTHING INVOLVEMENT: Bloch	6	1	.9299
PERCEIVED RISK	7	2	.8494
PERCEIVED NOVELTY	5	2	.5415
PAST CATALOG USAGE[3]	3	na	.4350

1 The number of factors retained by the factor analysis was based upon the number of eigenvalues greater than one (Green 1978).

2 A separate Cronbach alpha coefficient should be calculated for each dimension of a construct. These alpha coefficients treat each construct as a unidimensional measure. Further analysis is necessary to fully assess the reliability of these constructs (Churchill 1979).

3 The measure of past catalog usage included only three items, therefore, it could not be factor analyzed.

TABLE XIV

CORRELATION COEFFICIENTS
HYPOTHESIS TESTING

HYPOTHESES	CORRELATION COEFFICIENT	PROBABILITY	r_2
Hypothesis 1:			
OSL-VICARIOUS EXPLORATION	**.1384**	**.0631**	**.0192**
OSL-Fantasy of Ownership	.1459	.0501	
OSL-Information Seeking	.0772	.3014	
OSL-Interpersonal Communication	.1490	.0453	
Hypothesis 2:			
CURIOSITY-VICARIOUS EXPLORATION	**.1719**	**.0206***	**.0295**
CURIOSITY-Fantasy of Ownership	.1551	.0370	
CURIOSITY-Information Seeking	.1473	.0478	
CURIOSITY-Interpersonal Communication	.1187	.1115	
Hypothesis 3:			
RISK-VICARIOUS EXPLORATION	**.0772**	**.3019**	**.0060**
RISK-Fantasy of Ownership	.0988	.1856	
RISK-Information Seeking	.0494	.5093	
RISK-Interpersonal Communication	.0441	.5554	
Hypothesis 4:[1]			
NOVELTY/1-VICARIOUS EXPLORATION	**.2427**	**.0009***	**.0589**
NOVELTY/1-Fantasy of Ownership	.1711	.0206	
NOVELTY/1-Information Seeking	.1867	.0114	
NOVELTY/1-Interpersonal Communication	.2889	.0001	
NOVELTY/2-VICARIOUS EXPLORATION	**-.3037**	**.0001***	**.0922**
NOVELTY/2-Fantasy of Ownership	-.3171	.0001	
NOVELTY/2-Information Seeking	-.2462	.0008	
NOVELTY/2-Interpersonal Communication	-.1283	.0843	

[1] There are two sets of results for the relationship between novelty and vicarious exploration. Novelty/1 represents a "perceived differences" dimension and Novelty/2 represents a "perceived similarities" dimension.

TABLE XIV (Continued)

Hypothesis 5:[2]			
INVOLVEMENT/Z-VICARIOUS EXPLORATION	**.2926**	**.0001***	**.0856**
INVOLVEMENT/Z-Fantasy of Ownership	.2552	.0005	
INVOLVEMENT/Z-Information Seeking	.2342	.0015	
INVOLVEMENT/Z-Interpersonal Commun.	.2409	.0011	
INVOLVEMENT/B-VICARIOUS EXPLORATION	**.3926**	**.0001***	**.1541**
INVOLVEMENT/B-Fantasy of Ownership	.3894	.0001	
INVOLVEMENT/B-Information Seeking	.2760	.0002	
INVOLVEMENT/B-Interpersonal Commun.	.2800	.0001	
Hypothesis 6:			
PAST USE-VICARIOUS EXPLORATION	**.4054**	**.0001***	**.1643**
PAST USE-Fantasy of Ownership	.2732	.0002	
PAST USE-Information Seeking	.3911	.0001	
PAST USE-Interpersonal Communication	.2860	.0001	

[2] Two measures of involvement were used to assess the relationship between clothing involvement and vicarious exploration. Involvement/Z was adapted from Zaichkowsky (1985) and Involvement/B was adapted from Bloch, Sherrell, and Ridgway (1986).

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