INFORMATION SEEKING STRATEGIES FOR AN INNOVATIVE PRODUCT WITHIN THE HUSBAND-WIFE DYAD

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Abstract

This research investigated modes of information seeking within the husband-wife dyad for a high risk innovation. Subjects completed a twenty-one item behavioral differential designed to measure the tendency to seek seven different information sources. Subjects also completed measures of generalized self-confidence, specific self-confidence, and anxiety. Multiple discriminant analysis was used to reveal the differences between the husband's and the wife's information search patterns. The results show the wife's greater tendency to ask her husband's opinion, the husband's willingness to evaluate advertising, and the husband's greater confidence levels (both generalized and product specific) as the major discriminators between the husband's and wife's information search.

Introduction

An area of continued interest to consumer behavior researchers is family buying behavior or more specifically, the interaction between the husband and the wife in the purchasing process (Davis and Rigaux, 1974; Ferber and Lee, 1974; Albaum, Hawkins, and Dickson, 1979; Consenza and Davis, 1980). However, these efforts have primarily concentrated on relatively common product categories or products that were not high in perceived risk. The purpose of this study is to examine information seeking within the husband-wife dyad for a dynamically continuous innovation which is quite high in perceived risk.

Davis and Rigaux (1974) have clearly indicated the importance of role specialization in the family purchasing process. They utilized four categories: 1) Wife dominant, 2) Husband dominant, 3) Syncratic (joint decision making), and 4) Autonomic (an equal number of decisions made individually by each spouse). Davis and Rigaux (1974) also point out the shifts that occur within these role structures during the buying process proceeding from problem recognition to information search to purchase decision. Information search tends to generate more autonomic behavior than the other two stages, i.e., one partner accepts the task of seeking additional data. The present research is concerned exculsively with the information search stage of the purchasing process.

A microwave oven was chosen as the product stimulus considered for purchase, because it represented a dynamically continuous or possibly discontinuous innovation according to Robertson's (1971) schema at the time of the survey, 1975. Microwave ovens had been available to consumers for some time, but the product had not gained its projected market acceptance as of 1975 (Advertising Age, 1975). This was, in part, due to such factors as the radiation scare started in 1973. Microwave ovens represent a new way of cooking and have received adverse publicity regarding potential health hazards. These factors indicate extremely high performance risk associated with the product. Zikmund and Scott (1973)measured the perceived risk for microwave ovens and also for other typical consumer goods such as lawn furniture. The study showed microwave ovens had significantly higher risk ratings than all other products tested. Because of this, Zikmund and Scott

(1973) eliminated the microwave oven from their study after the intital comparative risk scaling.

Given the high risk and relative technical complexity of information regarding the performance of a microwave oven, this study attempted to examine the information sources utilized by the husband and the wife.

Taylor (1974) has developed a comprehensive theory of consumer risk taking. **Figure 1** illustrates the choice-risk part of the theory that is utilized in this study. The consumer in any choice situation is confronted with uncertainty or perceived risk. This linkage is well documented in the literature (Roselius, 1971; Bauer, 1960). However, the amount of perceived risk varies by product class (Lutz and Reilley, 1973; Zikmund and Scott, 1973). The uncertainty experienced by consumers leads to the development of risk reduction strategies. In the context of consumer behavior, risk has been viewed as containing two components; 1) uncertainty and 2) importance or danger (Cunningham, 1967). For the most part, consumers tend to reduce the uncertainty component by seeking information about the purchase decision (Roselius, 1971).

FIGURE 1
RELATIONSHIP BETWEEN CHOICE AND RISK REDUCTION STRATEGIES (TAYLOR, 1974)
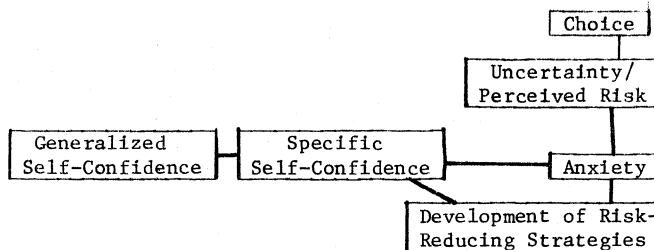
Empirical research on the effect of the intervening variables (self-confidence and anxiety) is far from complete according to Taylor (1974). Most studies dealing with information seeking and product choice situations have been done with relatively common products such as, automobiles (Bell, 1967), appliances (Newman and Staelin, 1972), and food products (Lambert, 1972). Zikmund and Scott (1973) have reported the importance of self-esteem in reducing risk. Bell (1967) reports on the interaction between general and specific self-confidence for purchasing automobiles. Uncertainty led to seeking the support of a "purchase pal" forming a buying team with the overall result that customer self-confidence was enhanced by the pal.

Researchers have developed a useful typology of various information sources that consumers use to reduce risk (Andresen, 1968; Lutz and Reilly, 1973). Lutz and Reilly (1973) developed operational measures which were subsequently used by Hermann and Locander (1977) and Locander and Hermann (1979) to examine the relationships between the components of Taylor's (1974) model. Specific Self-Confidence (SSC)emerged as the dominant variable in determining the extent of information seeking an individual engaged in for a broad range of products, including a microwave oven. Neither Generalized Self-

Confidence (GSC) or Anxiety had the theorized impact in either study. Thus, it is hypothesized that SSC will be the major factor in the husband-wife information search.

Methodology

Subjects

The subjects consisted of 89 married couples contacted through a local civic club in a predominantly white suburb of Houston, Texas in the spring of 1975. The Hollingshead (1957) index indicated the respondents were primarily from the middle and upper middle social classes.

Description of Measures

As previously described, the product stimulus was a high risk microwave oven. In the present study, the subjects were asked to project themselves into the following hypothetical purchase situation. The following paragraph was developed and used by Lutz and Reilly (1973):

You need to buy a microwave oven for your personal use, but when you go shopping you discover that all the brands that you are familiar with are unavailable. The only brands available in the entire town are brands A, B, C, D, and E, brands which you know nothing about. Nevertheless, you need the product and, therefore, must make a choice among the five brands. However, for you to select a brand without any information about the brands would be virtually the same as selecting at random.

Information Seeking Strategies

These measures were based on the well established notion (Roselius, 1971; Andreasen, 1968) that consumers do seek information from different sources when faced with risk or uncertainty. Andreasen (1968) outlined five types of information sources from which the consumer can seek information to satisfy a particular need:

1. Impersonal Advocate (IA) - mass media advertising including reading magazine ads, listening to a radio commercial, reading newspaper ads, viewing TV commercials, or looking at point-of-purchase displays.

2. Impersonal Independent (II) - checking with Consumer Reports, or a product test report.

3. Personal Advocate (PA) - asking sales clerk or store manager's opinion.

4. Personal Independent (PI) - trying to remember what brand a friend uses, asking opinions of family members, seeking the opinion of a neighbor or co-worker.

5. Direct Observation/Experience (OE) - ask for a product demonstration, rely on past personal experience, try the product before buying, or read the information on the package.

In their original work, Lutz and Reilly (1973) operationalized the above typology and added a sixth:

6. Pick a brand (BUY) - a behavior to go ahead and pick a brand.

The rationale for number six was that it allowed the subject to respond without being forced to select an outside information source.

7. Spouse Opinion (SPOUSE) - ask for the spouse's opinion.

All subjects were asked to respond to the microwave situation by rating their information search pattern on twenty-one behavioral differential items (Triandis, 1964) as developed in Lutz and Reilly (1973). These items measure the seven information seeking strategies. The twenty-one items were coded from 1 (I would) to 7 (I would not) seek the particular source in question.

Generalized Self-Confidence (GSC)

Subjects were then asked to complete the short version of the Coopersmith Self-Esteem Inventory (1970). The scale contains 25 self-administered items in which the subject answers "like me" or "unlike me." An additive score of self-confidence was then calculated for each person. Generalized self-confidence was then calculated for each person. Generalized self-confidence refers to the extent to which an individual believed himself to be capable, significant, successful, and worthy (Coopersmith, 1967).

Specific Self-Confidence (SSC)

This refers to the subject's confidence with respect to the decision at hand. Much of the work with specific self-esteem has been conducted in a persuasibility context (Cox and Bauer, 1964). Bell (1967) studied self-confidence and persuasion in automobile buying. From this work, a seven point specific self-confidence measure was developed. Respondents were asked to complete a rating scale with bipolar adjectives "I would," "would not," be confident of my ability to pick the best buy from the five available brands.

The brands (A through E) refer to the unfamiliar ones set up as part of the role playing situation mentioned previously.

Anxiety (A)

Near the end of the instrument subjects completed the Bendig (1956) Short From Manifest Scale. This is a shortened form of the Taylor Manifest Scale (1953) which is an extensively used and validated measure of trait anxiety. It is a 20 item scale in which subjects respond "true for me" or "false for me." An additive score of deviant responses was then constructed for each subject. These ten variables constituted the operational measures in the study.

Procedure

The sample of 89 husband-wife pairs were contacted through a suburban civic club. The civic club was compensated for completed interviews which were administered using a drop off and pick up method. A professional researcher supervised and acted as liason for the field work.

Design

The data were analyzed using the SPSS (Nie, et.al, 1975) multiple discriminant analysis program which searched for differences between the husbands and wives with respect to their information seeking strategies. Incomplete questionnaires led to a total of 71 wives and 78 husbands being used in the final analysis.

Results

The discriminant function differentiating between husbands and wives is significant at the p = .0009 level.

TABLE 1
STANDARDIZED DISCRIMINANT FUNCTION
COEFFICIENTS

Information Source	Discriminant Coefficient
Observation/Experience (OE)	0.344
Personal Independent (PI)	-0.309
Impersonal Advocate (IA)	-0.434
Personal Advocate (PA)	0.303
Impersonal Independent (II)	-0.243
Pick a Brand (BUY)	-0.109
Ask Spouse's Opinion (SPOUSE)	0.683
Specific Self-Confidence (SSC)	-0.364
Generalized Self-Confidence (GSC)	0.404
Anxiety (ANX)	-0.183

TABLE 2
OVERALL MEANS FOR HUSBAND-WIFE UTILIZATION
OF INFORMATION SOURCES

Information Source	Mean for Husbands	Mean for Wives	Significance (T-test)
Observation/Experience (OE)	2.386	2.188	.236
Personal Independent (PI)	2.795	2.892	.688
Impersonal Advocate (IA)	3.069	3.335	.274
Personal Advocate (PA)	3.905	3.640	.320
Impersonal Independent (II)	2.193	2.568	.100
Pick a Brand (BUY)	3.386	3.966	.075
Ask Spouse's Opinion (SPOUSE)	1.832	1.236	.002
Specific Self-Confidence (SSC)	2.079	2.523	.056
Generalized Self-Confidence (GSC)	20.528	18.861	.007
Anxiety (ANX)	4.077	5.141	.071

Note: Information seeking; 1 = would, 7 = would not use
      SSC; 1 = high SSC, 7 = low SSC
      GSC; 25 = high GSC, 1 = low GSC
      ANX; 0 = low ANX, 20 = high ANX

The standardized coefficients are given in Table 1. Interpretation of the function is greatly enhanced by an examination of the mean values for each of the variables (see Table 2). For each of the information seeking strategies, the lower the scale value, the more the particular source was used. Thus, the positively weighted coefficients were those preferred by the wives and the negatively weighted coefficients were those information sources preferred by the husbands. From this it is clear the key difference is the wife's greater tendency to ask her spouse's opinion before making the purchase. The wife also tends to rely on her own experience and observation and to ask a salesperson more than her husband. The husband will utilize advertising and both independent sources more than the wife. However, a full interpretation of the discriminant function requires a closer examination of the personality constructs.

The lower the scale value for SSC the greater the level of SSC, thus the negative sign in the discriminant function indicates a higher level of SSC for the husbands. Similarly, the lower the level of anxiety, the lower the ANX score, and again the husbands had lower levels of anxiety. For GSC the scaling was reversed and a higher score indicated greater level of GSC. The husbands had a higher GSC score, thus the positive discriminant coefficient.

The overall interpretation is that for this highly risky product the additional confidence of the husband, both generalized and product specific, was being heavily relied upon by the wife, which was reflected in the discriminant function.

Discussion

The findings strongly indicate a husband dominant information search for this risky product. This seems reasonable given the technical nature of the product, however, since a microwave oven is a kitchen appliance, one might not expect this strong a finding.

It should be noted the discriminant function serves to differentiate between the husband's and the wife's information seeking behavior, but it does not indicate differences in relative utilization of the sources. The T-test results give the significance of the different rate of seeking the information sources. While the discriminant analysis was highly significant the means for husbands and wives showed relatively small actual differences which indicates a potential problem with statistical versus operational significance (Green, 1978). A more significant limitation relates to ownership of a microwave oven. It is not known which respondents did or did not own a microwave oven at the time of the survey and product familiarity can affect both consumer evaluations (Pickering and Greatorex, 1980) and information search (Raju and Reilly, 1980). A replication with current innovative products, especially some products with a less pronounced sexual orientation, is needed.

The strength of the GSC variable was not expected since the prior study by Hermann and Locander (1977) demonstrated SSC as the dominant variable in information seeking for a microwave oven. However, that study was concerned with significant differences between the rates of utilization of information sources in reducing perceived risk and not with the objective of discrim-

inating between specific populations. The reliance of the wife on the husband, the use of advertising (IA), and the husband's level of confidence (both GSC and SSC) were the primary differentiating variables between the husband's and the wife's information search behavior.

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