A PRELIMINARY INVESTIGATION OF PERCEIVED RISK DIFFERENCES IN THE FIRST ORDER AND SECOND ORDER RETAIL MARKETS

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Abstract

The second order (previously owned merchandise) retail market is receiving increased attention from consumers. This study compared the perceived risk in the retailing of new versus used merchandise and the applicability of the traditional risk reduction strategies to the second order markets. Differences were found between risk perception of new versus used merchandise. However, the importance of various information sources to reduce risk did not differ by type of merchandise. Strategy implications for second order merchants are derived.

Introduction

Researchers in retailing have traditionally concentrated on purchasers of new merchandise (i.e., first order retail goods). As a result, there is a body of literature concerning first order markets. However, there is a lack of information on used merchandise purchasers or retailers (i.e., second order goods) (Dovell and Healy, 1977; Riecken, Yavas and Battle, 1979; Yavas and Riecken, in press). Yet current economic conditions combined with new social orientations appear to make second order market buying an important retailing phenomenon.

The proliferation of institutions selling second order goods as well as the record sales levels of some second order retailers (Dovell and Healy, 1977) show the increased interest in second order goods. The popularity of garage sales and auctions are well documented in most local newspapers. Although the volume in the second order market is not as large as the first order market, it is substantial and growing. Therefore, it is necessary to investigate this segment to see if second order customers behave in the same manner as first order customers.

Previous studies indicate that buying motives for used merchandise shoppers tend to center around price and quality (Gatlin, 1980; Riecken, Yavas and Battle, 1979), although this may be modified by the amount of shopping done. One study found that light and medium shoppers of a used merchandise outlet were more concerned with "adventure" in shopping than were heavy users of the outlet (Yavas and Riecken, in press). Patronage motives of shoppers of informal second order retail outlets center around price, type of good, adventure, and location (Dovell and Healy, 1977). Garage sale shoppers were found to be unwilling to travel very far or to spend much time shopping (Dovell and Healy, 1977).

Typical patrons of second order retail outlets may be described as "bargain hunters" in that they overwhelmingly view used merchandise as representing good value (Riecken, Yavas and Battle, 1979; Yavas and Riecken, in press) and are very price sensitive (Dovell and Healy, 1977; Riecken, Yavas and Battle, 1979; Yavas and Riecken, in press). Over three-quarters of the garage sale shoppers indicated that they tried to negotiate price at least some of the time, and over one-third stated that they attempted to obtain a 50 percent reduction in price (Dovell and Healy, 1977).

Overall, the patronage motives and shopping behavior of second order merchandise buyers seem to differ very little from those of the traditional retail customer (Bearden, 1977; Brunner and Mason, 1968; Cox and Cook, 1970). Price, quality, and location are important to both markets. The importance of price and bargaining to second order shoppers suggests that they may view haggling and low price as a means of reducing perceived risk in their buying.

Almost two decades ago, Bauer (1967) asserted that "consumer behavior involves risk in the sense that any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty." The consequences may be psychological, physical, functional, financial, or social (Cox, 1967). To cope with the hazards of buying, consumers tend to develop risk reduction strategies. These strategies enable the consumers to act with increased confidence in their purchase decisions. A commonly employed risk reduction strategy involves seeking additional information from a number of sources (Bauer, 1967; Cox, 1967; Lutz and Reilly, 1973).

Purpose of Study

Although there is a plethora of articles investigating both the relative usefulness of various information sources in reducing perceived risk and the variation of risk across product categories, the topics researched have yet to be applied to used merchandise buying (Bauer, 1967; Bearden, 1977; Cox, 1967; Jacoby and Kaplan, 1972). Thus, the purposes of this study are two-fold: (1) to compare perception of risk between selected new and used products and (2) to determine if consumers differ in their evaluations of information sources to aid risk reduction for new versus used merchandise.

A better understanding of consumers' risk perception and information seeking behavior concerning used merchandise vis-a-vis new merchandise may be helpful to retailers serving the second order retail markets. The results, for instance, may suggest specific strategies that a retailer can follow in inducing consumers to reduce perceived risk.

Methodology

The data for the study were collected as part of a larger study through self-administered questionnaires from a sample of 178 undergraduate students in a midwestern community. With the thrust of the study being to explore the existence of relationships rather than to generalize to a universe, a student sample was satisfactory (Morgan, 1979).

A pilot study was undertaken to obtain a representative list of used products that were purchased by students. A group of subjects who would not participate in the primary survey were asked to list the products that they had considered buying or had bought secondhand during their college years. Books were eliminated

because of college students' common practice of purchasing secondhand books. The grouping of individual products (e.g., chairs, tables) into broader categories, enabled the derivation of the following product groups (1) bikes, (2) furniture, (3) stereo sets, (4) appliances, and (5) sporting equipment.

Measurement of Risk

Cox and Rich (1964), considering Cox's original conceptualization, state that the two components of perceived risk are uncertainty and fear of the consequences with a purchase. The types of risk, refined by Jacoby and Kaplan (1972) and Roselius (1971), include money, time, ego, and hazard loss. Each type of risk was defined (see Exhibit 1), and respondents were asked to indicate on a seven-point scale (7 equals very important to 1 equals not important at all) how important each type of risk was to them in buying both new and used versions of the products included in the survey (Jacoby and Kaplan, 1972; Roselius, 1971). To measure the uncertainty component, respondents were asked to indicate on a five-point scale (5 equals very probable to 1 equals very improbable) the likelihood that each type of risk would occur as a result of buying these products (Jacoby and Kaplan, 1972; Roselius, 1971). Consequence and uncertainty components were combined multiplicatively so that a respondent's risk score on each type of risk could range between 1 and 35. An overall risk score was derived by summing the four risk scores; thus, the procedure was repeated for both new and used versions of each product category.

EXHIBIT 1

COMPONENT OF TOTAL RISK[a]

Ego Risk:	Sometimes when we buy a product that turns out to be defective, we feel foolish, or other people make us feel foolish.
Hazard Risk:	Some products are dangerous to our health or safety when they fail.
Time Risk:	When some products fail we waste time, convenience, or effort getting it adjusted, repaired, or replaced.
Money Risk:	When some products fail, our loss is the money loss it takes to make the product work properly, or to replace it with a satisfactory product.

[a]Source: Bauer, Raymond A. "Consumer Behavior as Risk Taking," Proceedings American Marketing Association, 1960. D. F. Cox, ed., Risk Taking and Information Handling in Consumer Behavior Boston: Harvard University, 1967.

To operationalize high risk perceivers for the new and used versions of each product, respondents were rank ordered based on their overall risk scores. Those whose overall risk scores were in the top twenty-five percent (first quartile) were called high risk perceivers.

Operationalizing Information Sources and Risk Reduction

Consumers engage in information search activities to facilitate their decisions concerning some goal-object in the marketplace (Bauer, 1967). The search activity becomes especially significant if the consumers perceive high risk in regard to the goal-object. Under such circumstances, consumers consult several sources to reduce the risk to a tolerable level. The information sources identified in the literature can be classified into three broad categories: (1) market dominated sources, e.g., advertising; (2) consumer dominated sources, e.g., word-of-mouth; and (3) neutral sources, e.g., consumer reports (Zikmund and Scott, 1973). To determine if the level of importance attached to the information sources was related to risk perception, respondents were asked how important (5 equals very important to 1 equals not important) they viewed seven information sources which were relative to purchasing the products under consideration. This was repeated for new and used versions of each product.

Findings

Overall Risk Differences

Table 1 shows the overall mean perceived risk scores for the new and used products for each product category. Table 1 shows that the highest mean risk score in the case of used products was a relation to appliances, followed by bikes and stereo sets. In the case of new products, consumers perceived the highest risk relative to stereo sets and the lowest risk relative to furniture. The data further show the overall mean risk scores for used merchandise were consistently higher than the scores for new goods in the same product category. The differences in each case were statistically significant ($P < .0001$) as confirmed by the t-test results. Therefore, it can be concluded that the levels of perceived risk associated with new and used merchandise are not the same. Used merchandise is perceived as more risky to purchase than new merchandise.

TABLE 1

OVERALL MEAN PERCEIVED RISK INDEX SCORES: T-TEST RESULTS[b]

	New	Used	t
Bikes	59.46	71.84	5.01[a]
Furniture	52.51	61.69	-4.09[a]
Stereo Set	60.45	70.51	4.10[a]
Appliances	59.40	76.02	6.87[a]
Sport Equipment	54.40	64.37	4.37[a]

[a]$P < .0001$

[b]Mean scores reported in the table can range between 4 and 140. The lower the score is the lower the level of perceived risk.

Risk Differences by Type of Risk

To determine if the overall risk differences could be attributable to some or all of the four risk types previously defined, a further exploration of differences was undertaken by comparing mean risk scores under each type of risk for new and used versions of each product. Table 2 summarizes the results of this analysis. It appears that time risk did not contribute to overall

TABLE 2

MEAN RISK SCORES FOR TYPES OF RISK: T-TEST RESULTS[e]

	Bikes			Furniture			Stereo Sets			Appliances			Sporting Equipment		
	New	Used	t	New	Used	t	New	Used	t	New	Used	t	New	Used	t
Time	14.48	16.65	2.53[b]	14.01	15.17	-1.42[d]	15.85	18.32	2.71[b]	15.97	19.33	-3.75[a]	13.06	13.86	1.05[d]
Hazard	15.24	20.95	7.89[a]	8.80	12.83	-7.69[a]	11.64	12.82	2.06[c]	14.00	20.15	8.45[a]	13.68	18.14	6.08[a]
Ego	13.02	13.45	.49[d]	12.93	13.91	-1.16[d]	15.36	16.42	1.10[d]	12.11	14.32	2.66[b]	11.83	13.44	2.23[c]
Money	16.26	19.94	4.05[a]	15.97	19.28	-3.71[a]	17.25	22.45	5.66[a]	16.84	21.94	-5.74[a]	15.62	18.16	2.93[b]

[a] $P < .001$

[b] $P < .01$

[c] $P < .05$

[d] Not significant

[e] Mean scores reported in the table can range between 1 and 35. The lower the score is the lower the level of perceived risk.

risk difference in the cases of furniture and sporting equipment. In other words, the consumer is not concerned with loss of time in repairing or replacing furniture or sporting equipment. However, it was significant for bikes and stereo sets at $P < .01$ and appliances at $P < .0001$. Likewise, ego risk was not instrumental in the overall risk perception differences in relation to bikes, furniture, and stereo sets. Ego risk was significant only for appliances ($P < .01$) and sporting equipment ($P < .05$).

Based on the levels of statistical significance reported in Table 2, one can infer that the two types of risk which contribute most to overall risk differences concerning each product are money and hazard. The higher risk scores for used products again suggest that they are perceived more risky than their new counterparts relative to each risk type.

Information Sources

An interesting pattern emerged when the high risk perceivers of new and used products were compared relative to the level of importance they attached to information sources. Cox (1967) claims that "the consumer will utilize information which is relevant to the type of problems confronting her; that is, information which promises to reduce the type of perceived risk." Furthermore, Zikmund and Scott (1973) suggest that risk reduction activities, such as information search, are associated with high risk perception. As shown in Table 3, high risk perceivers of used and new merchandise for each product category tended to treat information sources equally importantly except in two instances. The exceptions were in the category of appliances. The high risk perceivers of used appliances more than high risk perceivers of new appliances viewed friends' recommendations as important. The opposite was found to be true concerning a neutral purchasing information source (consumer reports).

Summary and Implications

The findings of the study suggest that risk perception does vary between used and new products. Consumers perceive more risk in the purchase of used products relative to new ones. The further analysis of data by risk types also shows, contrary to the Dovell and Healy study (1977), financial (money) risk is not the only concern in the second order markets. Other risks, notably performance risk, are also of concern to consumers. Another conclusion stemming from the study is that people in the second order market are not significantly more influenced by information sources in reducing their risk. This means that second order retailers can follow the patterns of risk reduction strategies commonly used by first order retailers.

Until now, most second order retailers have relied on word-of-mouth in increasing their awareness among the general public (Sparks and Tucker, 1972). Although this strategy may be fruitful in reducing social (ego)

TABLE 3

A COMPARISON OF THE INFORMATION SOURCES USED BY HIGH-RISK PERCEIVERS IN PURCHASING NEW AND USED PRODUCTS: T-TEST RESULTS

	Product				
Source	Bike	Furn	Stereo	Appl	Spor
TV Commercials	ns	ns	ns	ns	ns
Salesmen	ns	ns	ns	ns	ns
Newspaper Ads	ns	ns	ns	ns	ns
Magazine Ads	ns	ns	ns	ns	ns
Consumer Reports	ns	ns	ns	*	ns
Friends' Recommendations	ns	ns	ns	*	ns
Family Members' Recommendations	ns	ns	ns	ns	ns

ns: Not Significant

*: $P < .05$

risk perceived by consumers (Gatlin, 1980; Roselius, 1971), the results of this study show that reliance on mass media advertising should be helpful for second order retailers.

Within this context, several specific recommendations can be made to second order retailers located in college towns. Since perceived risk is higher for second order merchandise than for first order goods, second order retailers, in order to increase their sales volume, must actively try to reduce the perceived risk of their customers. It is apparent from the findings of this study that perceived risk is a factor in the consumers' buying decision for second order goods. Some of this concern may reflect the uncertainty associated with changes in previously learned buying patterns or is due to the lack of confidence in second order retailers.

Second order retailers must specifically try to reduce high levels of financial risk (money loss) and physical risk (hazard loss). Marketing strategies of these retailers must emphasize warranties, guarantees, safety inspections, etc., to minimize the idea that there may be money loss and hazard to their potential customers. Strategies with these specific emphases will tend to build consumer confidence and the retailer's image.

In conclusion it should be stated that inquiry into the second order market is in the embryonic stage. This exploratory study investigated the possible commonalities of perceived risk and the use of informational sources in the first order and second order markets. Like most exploratory studies, many questions arise which call for additional research in this area. However, before conclusions can be drawn, replication of the study is necessary. A study which includes an extension of perceived risk into other product categories of second order goods would be beneficial. Additionally, inquiry into the information processing techniques used by the purchasers of second order goods might provide additional insight into that market.

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