

THE IMPACT OF BUYER-SELLER RELATIONSHIPS ON ORGANIZATIONAL PURCHASING

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The use of the perceived risk model as an explanation for purchasing behavior is a well accepted practice in both consumer and organizational contexts. The present study went a step further by introducing the concept of the buyer-seller relationship into the perceived risk/risk reduction behavior context. In this empirical work, the existence of an established buyer-seller relationship was found to significantly reduce the magnitude of overall risk perceived, the level of financial risk felt, and the extent to which various risk reduction strategies would be used.

INTRODUCTION

The marketing discipline is characterized by shifting paradigms. In response to changing marketing environments, new paradigms are developed and research attention is diverted towards these. In the process, the long established, well researched, old paradigms are either ignored or forgotten. This seems to result in constantly shifting research attention from the old to the new, with the net result being a lack of continuity and accumulation.

A more desirable approach to the sound development of the marketing discipline would involve not only embracing the new paradigms dictated by shifting environmental forces, but also systematically integrating them with the long established paradigms. This ideal approach of integrating the old and the new may result in a more systematic accumulation of marketing knowledge and enhance its application potential.

From these perspectives, an attempt is made in this paper to integrate the older perceived risk/risk reduction paradigm with the newer buyer-seller relationship paradigm in the industrial marketing (purchasing) context. The former represents a well-accepted, partial explanation for the behavior of individual purchasers (Webster and Wind, 1972) while the latter is a manifestation of the growing trend toward long-term relationships in industrial markets (Arndt, 1979). As

individual buyers are influenced by the environmental context in which they operate (Webster and Wind, 1972), it is imperative that attempts are made to understand the impact that these changing environments have on individual purchasing behavior.

To report on the testing of the integration of these two paradigms, this paper is structured into four major sections. First, the paradigms and their development are briefly reviewed. Second, research propositions based on the integration of the two paradigms are stated. Third, empirical research results relating to the research propositions are presented. Finally, the implications of the research are indicated.

BACKGROUND

Buyer-Seller Relationship

Early work in organizational purchasing often looked at a buyer as a passive recipient of an industrial salesperson's stimulus (Bonoma and Johnston, 1978). The interaction, give-and-take, and the ability of either party to take the initiative was often ignored. Recent efforts have appropriately stressed the importance of the buyer-seller relationship as opposed to simply studying the buyer or the seller in isolation from their counterpart (e.g. Moller and Wilson, 1988; Campbell, 1985).

Additionally, earlier research often focused on discrete purchase events, systematically ignoring the relationships that may have developed over multiple interactions (IMP Group, 1982). More recent work has tended to stress the importance of understanding the initiation, development, and maintenance of these long-term

relationships (e.g. Jackson, 1985; Dwyer, Schurr, and Oh, 1987).

The increased emphasis on the importance of buyer-seller interactions and long-term relationships is spawning a large amount of longitudinal research aimed at understanding issues such as adaptation, commitment, and mutual investments (e.g. Jackson, 1985; IMP Group, 1982; Dwyer, Schurr, and Oh, 1987; Ford, 1990). The advantages of long term relationships are acknowledged and the tendency for inertia to develop in a buyer-seller relationship is accepted.

One of the most important ideas to come out of this paradigm shift is that the relationship between a buyer and a seller is a process phenomenon (Ford, 1980; Dwyer, Schurr, and Oh, 1987; Ford 1990). It is a process in the sense that it goes through distinct stages that are characterized by certain degrees of commitment, adaptation, experience, uncertainty, and distance. An example of this type of conceptualization is Ford's (1980) work where he used this process perspective in tracing buyer-seller relationships over the stages of: 1) pre-relationship, 2) early relationship, 3) relationship development, 4) long-term relationship, and 5) final commitment.

This shift in paradigm opens up significant research opportunities. First, it provides a chance to do seminal work utilizing a new perspective. Second, it provides an opportunity to test previously researched paradigms in a new and more comprehensive context. It is in this latter category that the present research falls. Specifically, this study focused on the concept of perceived risk in the context of the buyer-seller relationship paradigm.

Perceived Risk

Perceived risk is a concept that falls within the general framework of consumer (buyer) decision making, the process by which consumers (buyers) decide what product or brand to buy (Cunningham, 1967). Since its initial formulation by Bauer in 1960, the perceived risk paradigm has received extensive research attention both in consumer behavior and in organizational buyer behavior areas.

As Cox (1967) proposed, perceived risk can best be understood in the context of a set of buying goals associated with each purchase. To the extent that the buyer realizes all of the buying goals may not be attained, risk is perceived. Bonoma, Zaltman and Johnston (1977) maintained that the central notion of

the perceived risk model is that "buyers perceive different purchases to have differential levels of risk, respond to these perceptions, and indeed prefer certain levels to others".

The perceived risk model is part of the non-task group of organizational purchasing models (Bonoma, Zaltman, and Johnston, 1977). Non-task models emphasize variables such as emotion, personal goals, and internal politics (Webster and Wind, 1972a). The non-task models can be compared with the task models which use rational economic factors as the major explanatory mechanism for buying decisions. An integration of the task and non-task explanations are the "general models" of Webster and Wind (1972) and Sheth (1973). As such, the perceived risk model represents only one of many models used over the years to explain purchasing behavior. Nonetheless, Wilson (1971b) identifies perceived risk as the most important factor affecting industrial buyers' decision styles (Choffray and Johnston, 1979).

The concept of perceived risk has clearly been shown to be a multi-dimensional phenomenon. Based on an exhaustive review of the risk related literature, one may conclude that risk can be perceived along: 1) financial, 2) performance, 3) physical, 4) psychological, and 5) social dimensions (Jacoby & Kaplan, 1972; Peter & Tarpey, 1975); along a 6) time dimension (Peter & Tarpey, 1975; Roselius, 1971); and along an 7) opportunity dimension (Zikmund & Scott, 1973). These dimensions of risk, as typically operationalized, are presented in Table 1.

An analysis of the literature suggests that there are four major questions of relevance inherent in the perceived risk concept. Specifically, these are: 1) what is the scope and dimensionality of perceived risk, 2) how do risk perceptions manifest themselves, 3) what characteristics moderate the felt risk, and 4) what characteristics moderate the manifestation of the felt risk? Over the past three decades, these research questions have been addressed extensively in consumer behavior research and to a lesser extent in industrial buyer behavior research. Relatively nothing has been done to examine these research issues in the context of the newer buyer-seller relationship paradigm. Given the recent emphasis on interactions and relationships between buyers and sellers (e.g. Arndt, 1979; Campbell, 1985; Dwyer, Schurr and Oh, 1987; IMP Group, 1982; Ford, 1980a, 1990b; Moller and Wilson, 1988), this examination is critical for organizational buying theory and practice.

TABLE 1
RISK DIMENSIONS

Risk Dimension	Operational Definition
	The certainty that buying a particular product from a particular vendor will not:
Financial	Result in a loss of money.
Performance	Result in an unacceptable performance.
Psychological	Adversely impact the way you think of yourself as a purchasing professional.
Social	Adversely impact the way others in the organization think of you.
Physical	Result in someone in your organization being injured or harmed.
Time	Result in wasted time because the purchase is not satisfactory.
Opportunity	Prohibit a more favorable selection in the future.

Risk Reduction

If high levels of perceived risk are viewed as an undesirable state, then it is likely that some effort will be made to reduce risk to an acceptable level. Cox (1967) contended that if the amount of perceived risk is a function of the amount at stake and the individual's feeling of certainty that loss will occur, then perceived risk reduction would involve: 1) reducing the amount at stake, and/or 2) increasing the feeling of certainty that loss would not occur (i.e. become more certain that the consequences of actions would be favorable).

In the organizational purchasing context, Webster and Wind (1972) have identified four major classes of risk reduction strategies. These are: 1) information acquisition and processing, 2) goal reduction, 3) loyalty, and 4) investment reduction.

Information acquisition and processing is the most frequently used. As information is collected, the perceived risk is reduced as the range of possible outcomes is reduced. Goal reduction involves a lowering of standards for a particular situation. A buyer reduces risk by not taking chances and consequently may enter into acceptable, but not optimal, purchase agreements.

Loyalty is a risk reducing strategy that maintains goals at acceptable levels. Loyalty may extend to particular brands, products, or vendors. Investment reduction refers generally to the minimization of investment on the part of a buyer. This may occur through: 1) a reduction in the time and effort involved in the search, 2) a reduction in the financial investment, and 3) a

reduction in personal commitment to the buying situation.

Sweeney, Mathews, and Wilson (1973) have also examined the "dimensionality" of risk reduction strategies. In their work, they factor analyzed a set of ten strategies and elicited the structure found in Table 2.

External uncertainty reduction strategies require the industrial buyer to go outside of his or her own organization in order to reduce the uncertainty in the buying situation. Internal consequence reduction strategies require the industrial buyer to stay within their firm in their attempts to reduce the seriousness of negative consequences. Internal uncertainty reduction strategies are attempts to reduce uncertainty and are those that can be initiated within the buyer's organization or buying community. External consequence reduction strategies generally involve some type of negotiation outside of the buyer's organization and would reduce the seriousness of negative consequences.

The research groups of Webster and Wind (1972) and Sweeney, Mathews, and Wilson (1973) have both captured the scope and domain of risk reduction strategies, but from different perspectives. As would be expected, these two taxonomies can be related to each other. For instance, Webster and Wind's "information acquisition and processing" and "loyalty" strategies are typical of what Sweeney, Mathews, and Wilson would call "uncertainty reduction" (both internal and external) strategies. Likewise, Webster and Wind's "goal reduction" and "investment reduction" strategies reflect Sweeney,

TABLE 2
SWEENEY, MATHEWS & WILSON'S (1973) RISK REDUCTION FACTORS

Factor	Label	Dominant Strategy
1	External Uncertainty Reduction	2. Arrange for a visit to the supplier plant. 3. Investigate possible means of expediting the supplier's delivery commitment.
2	Internal Consequence Reduction	4. Seek top management commitment from the supplier 6. Consult with own top management before decision 8. Consult with own manufacturing people about rescheduling production.
3	Internal Uncertainty Reduction	1. Consult with buyers in other firms about their experience with the supplier. 5. Search for additional published information 7. Negotiate a penalty clause in the supplier contract.
4	External Consequence Reduction	9. Negotiate with supplier for a better price 10. Split the order between suppliers at some acceptable level.

Mathews, and Wilson's consequence reduction (both internal and external) strategies.

INTEGRATION AND RESEARCH PROPOSITIONS

The buyer-seller interaction and overall perceived risk relationship is straightforward. As two firms interact over a period of time and transactions, it is logical to believe that the risk felt by each party in the transaction is diminished. If perceived risk is made up of both an uncertainty and a consequences component as posited by Bauer (1960), then it can be expected that "overall" risk is reduced due to the reduction of uncertainty attributable to the buyer-seller relationship.

Proposition 1: Buyers perceive greater overall risk in the earlier stages of a relationship than in the later stages.

Rationale: This relationship, although previously untested, is quite logical. Arndt (1979) has suggested that "domesticated" markets result in uncertainty reduction, a component of perceived risk. Conceptual discussions by Ford (1980, 1990) and Dwyer, Schurr, and Oh (1987) also suggest this relationship.

Additionally, it is certainly conceivable that the individual dimensions of risk are impacted selectively as a buyer-seller relationship is established. For example, a buyer contemplating a purchase from a vendor with whom they have established a long-standing relationship may not perceive very high risk with regard to the ability of the vendor to provide service (performance risk). The same buyer, considering a vendor with whom they have never established a relationship, may have a high degree of perceived risk with regard to the service dimension.

Proposition 2: Buyers perceive greater risk on the dimensions in earlier stages of a relationship than in the later stages.

Rationale: If overall risk is greater in the earlier stages than in the later stages of a relationship (Research proposition 1), then this pattern would be expected to hold for each specific risk dimension.

Finally, it is quite likely that the buyer's response to perceived risk is related to the buyer-seller relationship. What is appropriate risk reducing behavior in one buyer-seller relationship may be inappropriate or undesirable in the next. Talking to other buyers

concerning their experience with a particular vendor is an often used strategy to reduce perceived risk. This type of strategy is certainly appropriate and likely if the potential buyer doesn't have an established relationship with the vendor. If the buyer and the seller already have an established relationship, then this action is much less likely to be performed.

Proposition 3: Buyers utilize to a greater extent risk reduction strategies in the earlier stages of relationship than in the later stages.

Rationale: If relationship stages impact perceived risk (Research propositions 1 and 2 above), and perceived risk is related to risk reduction strategies (Roselius, 1971; Perry and Hamm, 1969; Zikmund and Scott, 1973), then by transitivity relationship stages are related to risk reduction strategies.

METHODOLOGY

The nature of this study was exploratory. According to Aaker and Day (1986):

"Exploratory research is used when one is seeking insights into the general nature of a problem, the possible decision alternatives, and relevant variables that need to be considered. There is typically little prior knowledge upon which to build ... Exploratory research hypotheses are either vague and ill-defined or do not exist at all." (p.51)

Consequently, only propositions were formulated in this research.

The study employed a classic experimental design. The general approach involved the manipulation of buyer-seller relationship stages while assessing the levels of perceived risk and the use of risk reduction strategies.

The buyer-seller relationship was operationalized in this study at three levels. These three levels were the initiation, development, and maintenance stages and reflected the first, third, and fifth stages respectively of the previously mentioned Ford (1980) process model.

Even though Ford described five stages in his model, a closer examination reveals a substantial similarity between his first and second stages and his fourth and fifth stages. This, when combined with the increased chance for respondent discrimination with three stages as opposed to five, made this approach attractive and appropriate.

The research used case scenarios in the presentation and manipulation of relationship stages. Generally, this method has been well-accepted in organizational buyer behavior research and, as evidenced by the number of studies using this approach (e.g. Krapfel, 1985; Crow, Olshavsky, and Summers, 1980; Puto, Patton, and King, 1985), is quite popular. A manipulation check of the case scenarios used in this research was conducted with 186 members of the Twin City Purchasing Management Association. This procedure insured that the scenarios were capable of creating the proper "setting" for each respondent.

The measurement of perceived risk was accomplished using a modified version of the Cunningham (1967) scale. Cunningham operationalized perceived risk by measuring the perceived certainty of a given event happening and the consequences involved if the event should happen. These two questions were each collapsed into a three-point scale and a numeric value assigned to each point. The two questions were then multiplied together in a matrix and each cell was given a specific weight as a basis for ordering the combined index.

The major problem with the Cunningham (1967) scale is that it facilitates the loss of information as the second and third response levels are collapsed into one category. Because of this, researchers have often modified the original Cunningham formulation. Copley and Calom (1971) used a five-point scale for each dimension and, like Cunningham (1967), multiplied the dimension scores. This research, in concordance with Fester-vand (1980), employed a four-point scale for the certainty and consequences dimensions and multiplied these together for a "perceived risk" value.

As a first step, respondents were asked to read their particular scenario. Then, they were asked to indicate the overall "certainty" surrounding the situation, and the seriousness of the "consequences" if the product or vendor fails. Next, respondents were asked to indicate the "certainty" that the situation would not result in each of the seven negative consequences (see Table 1), and the seriousness of each of the "consequences". In all cases, the "uncertainty" and "consequences" scores were then multiplied to generate a risk score.

Finally, respondents were asked to indicate the extent to which they would make use of 10 risk reducing strategies. For purposes of operationalizing the risk reduction strategies, the Sweeney, Mathews, and Wilson (1973) typology was selected as the "structure" to be used. "Extent of use" was measured on a 6 point

scale with the terms "to a great extent" and "to no extent" anchoring the endpoints.

Data Collection

The sample for the study was provided by the National Association of Purchasing Management (NAPM). The sample was selected from those NAPM members who had listed the major activity of the company, or plant that they work for as SIC major group 36. Major group 36 includes those firms involved primarily with electronic and other electrical equipment and components and falls under the SIC manufacturing division (division D). From the 2,352 NAPM members who had listed major code 36 as their firm's major activity, 1176 were systematically selected for the sample. As the list was ordered by Zip Code, periodicity was not considered a problem.

Given the nature and quantity of information required in this study, a decision was made to employ a mail survey. The initial mailing included a copy of the research instrument, a personalized cover letter and a coded pre-addressed, pre-paid return envelope. A follow-up postcard was sent to all potential respondents five days after the initial mailing.

RESULTS

Response Rates

As mentioned earlier, a total of 1176 questionnaires were mailed to the members of the National Association of Purchasing Management (NAPM). Only 474 of the 526 questionnaires returned were deemed usable yielding a response rate of 41%.

Research Proposition 1

Research proposition 1 stated that:

Buyers perceive greater overall risk in the earlier stages of a relationship than in the later stages.

To test this proposition, a one-way ANOVA was conducted using overall risk as the dependent variable and the buyer-seller relationship as the independent. The results are presented in Table 3 below.

This proposition was partially supported by the data. Buyers perceived significantly more overall risk when purchasing from a firm for the first time than they did in buying from a firm from which they had previously purchased. Significant differences in overall risk perceptions were found between the initiation stage and the development stage of the buyer-seller relationship, and between the initiation stage and the maintenance stage of the relationship. No significant differences were found in overall risk perceptions between the development and maintenance stages of the buyer-seller relationship. However, the mean difference between the development and maintenance stages is in the postulated direction.

Research Proposition 2

Research proposition 2 stated that:

Buyers perceive greater risk on the dimensions in earlier stages of a relationship than in the later stages.

To evaluate this research proposition, a combination of MANOVA and ANOVA testing procedures was utilized. The test results are presented in Table 4.

As evidenced from the data presented in Table 4, the MANOVA analysis revealed a significant buyer-seller relationship impact on the seven risk dimensions considered collectively. Consequently, a series of seven one-way ANOVAs was performed. In each case, the

TABLE 3
ONE-WAY ANOVA OF OVERALL RISK ACROSS BUYER-SELLER RELATIONSHIPS

Variable	Buyer-Seller Relationship			F-Value	F-Prob
	Initiation	Development	Maintenance		
Overall Risk	2.92a	3.94b	4.04b	11.183	.000

Note: Mean scores that do not share common subscripts differ at the .05 level.

TABLE 4
MANOVA AND ANOVAS OF RISK DIMENSIONS
ACROSS BUYER-SELLER RELATIONSHIPS

Risk Dimension	Buyer-Seller Relationship			F-Value	F-Prob
	Initiation	Development	Maintenance		
Financial	3.62a	4.31b	4.08b	3.996	.019
Performance	3.75a	4.02a	4.13a	1.069	.344
Psychological	7.15a	7.65a	7.57a	.618	.539
Social	5.76a	6.22a	5.46a	2.023	.134
Physical	3.70a	3.81a	3.88a	.142	.868
Time	4.69a	5.07a	5.11a	1.239	.291
Opportunity	6.14a	5.80a	5.75a	.592	.554
MANOVA	WILK'S LAMBDA: .954 APPROX F: 1.571			F-PROB: .081	

Note: Mean scores that do not share common subscripts differ at the .1 level.

individual risk dimension score was used as the dependent variable while the buyer-seller relationship was used as the independent.

Even though the MANOVA analysis revealed a significant buyer-seller relationship effect on the seven risk dimensions considered simultaneously, the one-way ANOVAs of each risk dimension considered individually revealed only one significant relationship. Organizational buyers perceived more financial risk in an initiation stage situation than they did in either development or maintenance stage situations.

The buyer-seller relationship did impact risk dimensions when they were considered collectively (MANOVA analysis). It also impacted the financial risk dimension in the predicted manner (ANOVA analysis). Consequently, partial support was found for proposition 2.

Research Proposition 3

Research proposition 3 stated that:

Buyers utilize to a greater extent risk reduction strategies in the earlier stages of a relationship than in the later stages.

As an initial step in testing proposition 3, a MANOVA analysis was conducted using the ten risk reduction strategies simultaneously as dependent variables and the buyer-seller relationship as the independent variable. Given a significant MANOVA, a series of ten one-way ANOVAs was computed for the strategies

across the buyer-seller relationship stages. As can be seen in Table 5, the ANOVA analyses revealed five risk reduction strategies that varied significantly in the extent of use across buyer-seller relationships.

The first of these was the extent to which the respondent would "arrange a visit to EPO's home office" (a fictitious name given to the supplying company in the scenarios). A buyer would be more likely to visit the vendor's facility in an initiation stage situation than they would be in a maintenance stage situation. Given the extent of use scores for this strategy across all buyer-seller relationships, it appears that this is a commonly used, popular strategy.

The next significant difference had to do with the extent to which the buyer would "investigate possible means of expediting EPO's delivery commitment". Surprisingly, the mean scores were opposite of what was hypothesized in proposition 3. Buyers would be more likely to employ this risk reduction strategy when dealing with a known firm than when dealing with a relatively unknown firm.

The third significant difference was in the extent to which the buyer would "consult the buyers in other firms about their experiences with EPO". Buyers would be more likely to use this strategy in an initiation stage than in development or maintenance stage situations.

The extent to which the buyer would "search for additional published material on EPO" was the fourth significant difference found across buyer-seller rela-

TABLE 5
MANOVA AND ANOVAS OF RISK REDUCTION ACROSS BUYER-SELLER RELATIONSHIPS

Risk Strategy		Buyer-Seller Relationship			F-Value	F-Prob
		Initiation	Development	Maintenance		
External Uncertainty						
Visit EPO's plant/ office		1.21a	1.27a	1.41b	3.400	.034
Investigate expediting delivery		2.25a	2.11ab	1.96b	2.836	.060
Seek management commitment		1.54a	1.52a	1.38a	1.740	.177
Internal Consequence						
Seek your management's commitment		2.08a	2.27a	2.01a	2.128	.120
Consult with your own manufacturing		3.07a	2.79a	2.83a	1.647	.194
Internal Uncertainty						
Consult other buyers		2.49a	3.04b	3.12b	10.066	.000
Search for more published information		1.94a	2.12a	2.56b	10.581	.000
Negotiate penalty clause		2.05a	2.28a	2.12a	1.515	.221
External Consequence						
Negotiate better price		2.35a	2.28a	2.18a	.799	.450
Split the order		2.55a	3.10b	3.06b	7.796	.001
MANOVA	WILK'S LAMBDA: .849		APPROX: 3.936		F-PROB: .000	

Note: Mean scores that do not share common subscript differ at .1 level.

tionships. This strategy would more likely be used in an initiation stage situation than in a maintenance stage situation.

The final significant difference involved the extent to which the buyers would "split the order between suppliers at some acceptable level". Specifically, buyers would be more likely to split an order between suppliers if they were considering a new vendor for at least part of the purchase. Conversely, they would be less likely to split the order if they were considering making part of the purchase from a vendor with whom they have an established relationship. This finding is logical as a buyer is likely to feel more secure putting "all his eggs

in one basket" with an established vendor than with a relatively unknown vendor.

The use of risk reduction strategies was seemingly impacted by the buyer-seller relationship. Four of the ten risk reduction strategies were used to a greater extent in the earlier stages of a buyer-seller relationship than in the later stages. Consequently partial support was found for proposition 3.

DISCUSSION

The findings suggest that the factors of increased experience, decreased uncertainty, decreased social

distance, increased adaptation, and increased commitment (the dimensions of the buyer-seller relationship reflected in the scenarios) impact overall risk perceptions. This study has also shown that a well established buyer-seller relationship is effective in reducing at least the financial risk perceived by organizational buyers. If one assumes that less risk is preferred to more, then this finding helps explain the tendency for vendor loyalty and inertia developing in industrial markets. Buyers stick with vendors because they perceive less risk in doing so. This situation would seem to have an important manifestation.

As shown by Peters and Venkatesan (1973), perceived risk is inversely related to innovative behavior. This suggests that buyers are more likely to try a new innovative product if it is offered by a vendor they know well than if it is offered by a relatively unknown firm. This in itself is not that surprising, yet if the tendency is for longer lasting relationships in industrial settings (Ardnt, 1979), then diffusion of innovation within industrial markets should be speeding up. Longer term relationships (Ardnt, 1979) reduce risk (this study) which increases innovative behavior (Peters and Venkatesan, 1973), which in general speeds up the diffusion of innovation.

This study operationalized the buyer-seller relationship at three levels, yet the findings suggest that buyers view the relationship in a dichotomous fashion. Significant differences in risk perceptions were not found between all three levels of the buyer-seller relationship. Rather, they were only found between two of the three levels of the buyer-seller relationship. This suggests that the "intensity" of the relationship may not be particularly

important. The important issue seems to be whether or not there was any previous relationship at all.

With regard to risk reduction strategy use, the findings imply that buyers do not follow a set risk reduction strategy use pattern, but rather modify their behaviors in accordance with the situation at hand. Even though the buyer-seller relationship was found to significantly impact one consequence reducing strategy (split the order), its major impact was clearly on the use of uncertainty reducing strategies. Four of the five strategies that varied with the buyer-seller relationship were of this type. This finding is not particularly surprising given the operationalization of the buyer-seller relationship and the theory surrounding the concept.

This study has shown that the strategies employed to reduce risk vary with the buyer-seller relationship. An astute salesperson would take this to heart and develop an understanding of what behaviors are likely in different situations. An understanding of this would allow a salesperson to predict buyer actions, and if appropriate, help the potential buyer engage in these behaviors.

CONCLUSIONS

The research reported in this paper in general supports the contentions of Ardnt (1979), Ford (1980, 1990), and Dwyer, Schurr and Oh (1987) who all suggest that the relationship between a buyer and a seller is a critical factor. The buyer-seller relationship appears to be a powerful mechanism in explaining both risk perceptions and risk reduction behavior. Consequently, any subsequent research in this area that fails to take into consideration this important factor will have to be deemed deficient.

REFERENCES

- Aaker, D. A. & Day, G. S. (1986), *Marketing Research*, New York: John Wiley & Sons.
- Ardnt, J. (1979), "Toward a Concept of Domesticated Markets," *Journal of Marketing*, 43, pp. 69-75.
- Bauer, R. A. (1960), "Consumer Behavior as Risk Taking," in R. S. Hancock (Ed.), *Dynamic Marketing for a Changing World*, Chicago: American Marketing Association, pp. 389-398.
- Bonoma, T. V. & Johnston, W. J. (1978), "The Social Psychology of Industrial Buying and Selling," *Industrial Marketing Management*, 7, pp. 213-224.
- Bonoma, T. V., Zaltman, G., & Johnston, W. J. (1977), *Industrial Buying Behavior: Marketing Science Institute Monograph: Report No. 77-117*. Cambridge, MA: Marketing Science Institute.
- Campbell, N. C. G. (1985), "An Interaction Approach to Organizational Buying Behavior," *Journal of Business Research*, 13, pp. 35-48.
- Copley, T. P. & Callom, F. L. (1971), "Industrial Search Behavior and Perceived Risk," in D. M. Gardner (Ed.), *Proceedings: Second Annual Convention of Association for Consumer Research*, pp. 208-217.
- Choffray, J. M. & Johnston, P. E. (1979), "Measuring Perceived Pre-purchase Risk for a New Industrial Product," *Industrial Marketing Management*, 8, pp. 333-340.
- Cox, D. F. (1967), "Risk Handling in Consumer Behavior-An Intensive Study of Two Cases," in D. F. Cox (Ed.), *Risk Taking and Information-Handling in Consumer Behavior*, Boston: Harvard University Press, pp. 34-81.
- Crow, L. E., Olshavsky, R. W., & Summers, J. O. (1980), "Industrial Buyers' Choice Strategies: A Protocol

- Analysis," *Journal of Marketing Research*, 17, pp. 34-44.
- Cunningham, S. M. (1967), "The Major Dimensions of Perceived Risk," in D. F. Cox (Ed.), *Risk Taking and Information-Handling in Consumer Behavior*, Boston: Harvard University Press, pp. 82-108.
- Dwyer, F. R., Schurr, P. H., & Oh, S. (1987), "Developing Buyer-Seller Relationships," *Journal of Marketing*, 51, pp. 11-27.
- Festervand, T. A. (1980), *An eMpirical Investigation of the Relationships Between Perceived Risk and the Experience of Organizational Buyers*. Unpublished doctoral dissertation, University of Arkansas, Fayetteville.
- Ford, D. (1980), "The Development of Buyer-Seller Relationships in Industrial Markets," *European Journal of Marketing*, 14, pp. 339-353.
- Ford, D. (1990), *Understanding Business Markets: Interactions, Relationships, Networks*. London: Academic Press.
- IMP Group (1982), *International Marketing and Purchasing of Industrial Goods*. Hakan Hakansson (Ed.), New York: John Wiley & Sons.
- Jackson, B. B. (1985), *Winning and Keeping Industrial Customers: The Dynamics of Customer Relationships*. Lexington, MA: Lexington Books.
- Jacoby, J. & Kaplan, L. (1972), "The Components of Perceived Risk," in M. Venkateson (Ed.), *Proceedings: Third Annual Convention of the Association for Consumer Research*, pp. 382-393.
- Krapfel, R. E. (1985), "An Advocacy Behavior Model of Organizational Buyers' Vendor Choice," *Journal of Marketing*, 49, pp. 51-59.
- Moller, K. E. K. & Wilson, D. T. (1988), *Interaction Perspective in Business Marketing: An Exploratory Contingency Framework*. Report # 11-1988 working paper. Institute for the Study of Business Markets, College of Business Administration, The Pennsylvania State University.
- Perry, M. & Hamm, C. B. (1969), "Canonical Analysis of Relations Between Socioeconomic Risk and Personal Influence in Personal Decisions," *Journal of Marketing Research*, 6, pp. 351-354.
- Peter, J. P. & Tarpey, L. X., Sr. (1975), "A Comparative Analysis of Three Consumer Decision Strategies," *Journal of Consumer Research*, 2, pp. 29-37.
- Peters, M. P. & Venkateson, M. (1973), "Exploration of Variables Inherent in Adopting an Industrial Product," *Journal of Marketing Research*, 10, pp. 312-315.
- Puto, C. P., Patton, W. E. III, & King, R. H. (1985), "Risk Handling Strategies in Industrial Vendor Selection Decisions," *Journal of Marketing*, 49, pp. 89-98.
- Roselius, T. (1971), "Consumer Rankings of Risk Reduction Methods," *Journal of Marketing*, 35, pp. 56-61.
- Sheth, J. (1973), "A Model of Industrial Buyer Behavior," *Journal of Marketing*, 37, pp. 50-56.
- Sweeney, T. W., Mathews, H. L., & Wilson, D. T. (1973), "An Analysis of Industrial Buyers' Risk Reducing Behavior: Some Personality Correlates," in *AMA Proceedings*, pp. 217-221.
- Webster, F. E., Jr., & Wind, Y. (1972a), "A General Model for Understanding Organizational Buying Behavior," *Journal of Marketing*, 36, 12-19.
- Webster, F. E., Jr., & Wind, Y. (1972b), *Organizational buying behavior*, Englewood Cliffs, NJ: Prentice Hall.
- Wilson, D. T. (1971b), "Industrial Buyer Segmentation: A Psychographic Approach," in *Marketing in Motion*, Chicago: American Marketing Association.
- Zikmund, W. G. & Scott, J. E. (1973), "A Multivariate Analysis of Perceived Risk, Self Confidence, and Information Sources," in S. Ward & P. Wright (Eds.), *Proceedings: Fourth Annual Convention of the Association of Consumer Research* (pp. 406-416).

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