Consumer Perceived Risk, Involvement and Risk Coping Strategies: A Comparative Study in Product – Service Purchase Situations.

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Abstract

The literature on services marketing holds that a number of unique characteristics separate services from tangible products. These distinguishing characteristics make service more difficult to evaluate than goods and the knowledge developed from experience in physical product marketing is not sufficient to understand service consumer behaviour. From this ferment this study is designed to examine some consumer behavior related conceptsperceived risk, and consumer involvement (CI) -and risk coping strategies in service purchase situations and compare them with product purchase situations. The objectives of the study are (a) to examine whether the differences between product and services influence the degree of association between the perceived risk and the consumer involvement, (b) to investigate whether the differences between product and services influence the consumer's risk coping strategy selection, and (c) to discuss the strategic implications for service marketers. The study is basically an empirical descriptive in nature. A sample survey was conducted with a help of structured questionnaire to collect data. The degree of association between the perceived risk and the consumer involvement was measured by calculating Pearson correlation coefficient. And, the association between the product category and the risk coping strategy selection of consumers was tested by performing Chi-Square test. The results

of the tests show that (a) there is a positive relationship between the degree of perceived risk and the consumer involvement in both purchase situations, and (b) the differences between product and services influence the degree of association between the perceived risk and the consumer involvement, The results also show that the coping strategies vary in terms of the degree of perceived risk. The study recommend that services marketers should understand degree of risk the service customers perceive, their degree of involvement and coping strategies to develop their marketing programmes.

Key words : Perceived risk, Consumer involvement, Risk coping strategies, Service consumer behaves

Introduction

Most of the researchers of consumer behaviour have developed a number of complex theories in the attempt to explain and predict the behaviour of the consumer (e.g. Bettman 1979; Engle, Kollat, and Blackwell 1978; Howard and Seth 1969). These theories relate specifically to physical goods. However, the literature on services marketing holds that a number of unique characteristics -intangibility, inseparability, heterogeneity and perishability- separate services from tangible products (Zeithaml et al, 1985). These distinguishing characteristics make services more difficult to evaluate than goods (Ziethaml 1981). Consumers may rely on different cues and processes when evaluating services due to difficulty in evaluation. Based on the classification of qualities of goods suggested by Nelson (1970) and Darby and Kami (1973), Zeithaml and Bitner (1996) argue that as experience and credence qualities are higher in services than in goods, consumers employ different evaluation processes than those they use with goods where search qualities are higher. The experience qualities are the attributes which can only be discerned after purchase or during consumption (Nelson 1970). The credence qualities are characteristics which the consumer may find impossible to evaluate even after the

purchase and consumption (Darby and Kami 1973). The search qualities are the attributes which a consumer can determine before purchasing a product (Nelson 1970). The inseparability, heterogeneity and intangibility of services lead them to possess few search qualities and many experience and credence qualities. As the theories and the knowledge developed from experience in physical product marketing are not sufficient to understand service consumer behaviour (Zeithaml et al, 1985), an understanding of the factors that affect both the evaluations of different services and final purchase decision is of importance to both academics and marketing practitioners. Some of the concepts which are thought to be of particular significant in explaining considerable portion of consumer purchase choice are 'perceived risk' (Cox 1967; Popielarz 1967; Cunningham 1967), and 'consumer involvement' (Engle and Blackwell, 1982; Zaichkowsky 1985) and 'risk coping strategies' (Roselius 1971). Thus, the purpose of this study is to examine perceived risk, involvement, and risk coping strategies in service purchase situations and compare them with product purchase situations.

Studying perceived risk benefits marketing researchers and practitioners in many ways. Perceived risk theory has intuitive appeal and plays a role in facilitating marketers seeing the market place through their customers' eye(Mitchell 1999). It is suggested that perceived risk is more powerful at explaining consumers' behaviour since consumers are more often motivated to reduce mistakes than to maximize utility in purchasing (Schiffman and Kanauk 2007). Risk perception analysis can also be helpful in marketing resource allocation decision, brand image development, targeting, positioning and segmentation (Mitchell 1999). It is possible that situational and product variables may create not only different degrees of risk but that they may also present qualitatively different forms of risks (Popielarz 1967). Schiffman and Kanauk (2007) also suggest that consumer perception of risk varies

depending on the person, the product, the situation, and the culture. Perceived risk has been found to be related to consumer involvement. Choffee and MeLeod (1973) viewed perceived risk as an antecedent of involvement. Rothschild (1979) relates involvement with risk. He argues that because the risks of a mispurchase are high when price is high, consumers are likely to be involved. Like perceived risk, involvement can be at the product category or brand level (Mitchell 1998),

It is postulated that buyers have a set of many risk-relieving devices and actions ranging from most preferred to least preferred which they call upon as needed. Perception of risk causes the buyer to select whichever device appears to be best suited for the type of risk involved (Roselius 1971).

From this perspective, this study is designed to address two research questions. The first question is, 'do the differences between products and services influence the degree of association between the perceived risk and the consumer involvement?' And the second is, 'do the differences between products and services influence the consumer's risk- coping strategy selection?'

Thus, the objectives of the study are (a) to examine whether the differences between products and services influence the degree of association between the perceived risk and consumer involvement, (b) to explore whether the differences between products and services influence the consumer's risk coping strategy selection and (c) to discuss the strategic implications for service marketers.

To achieve the preceding objectives the rest of the paper presents relevant literature, develops the study's hypotheses, designs the methodology, discusses the findings and offers implication.

Literature Review Product versus services

Economic products lie along a "goods services continuum" with pure goods at one extreme and pure sendee at the other. Most of the economic goods fall between these two extremes. However, there is a growing consensus among the academie community and as well as business professionals that basic differences exists between services and goods. The rationale for the difference centers on the existence of a number of unique characteristics of services which distinguish services from physical products. They are intangibility (Berry 1980: Rathmell 1966: Lovelock 1981); inseperability, heterogeniety, and perishability (Berry 1980: Lovelock 1981: Gronroos 1978). Each unique characteristic of services leads to specific problems for marketers (Zeithaml et al. 1985), Some of these problems are: services cannot be stored since they are performance (Bateson 1977; Berry 1980:), they cannot be protected through patents, they cannot be readily displayed or communicated and transported (Rathmell 1966), difficulty in standardization and quality control (Berry 1980, Booms and Bitner 1981) prices are difficult to set (Lovelock 1981). Furthermore, services are sold, then produced and consumed simultaneously (Zeithaml et al. 1985). Form the customer's perspective, intangibility and inseparability pose few search qualities and many experience and credence qualities. Services high in experience qualities are more difficult to evaluate than a physical product because services must be selected on the basis of less pre purchase information than is the case for products (Zeithaml 1981). Services high in credence qualities are most difficult to evaluate because the consumers may be unaware of or may laek a sufficient knowledge to assess whether the offerings satisfy given wants or needs even after the consumption (Zeithaml et al. 1985). Furthermore, non-standardized nature of services generates uncertainty about the outcome and consequences each time the service is purchased. Because the decrease in the amount and/or quality of information, non-standardized nature and unavailability

of guarantees and warranties are accompanied by a concomitant increase in perceived risk, consumers may perceive greater risk when buying services than when purchasing products. Literature suggests that when the perceived risk is high, consumers are more involved in the decision making process (Mitchell 1998; Choffee and McLeod 1973).

Perceived Risk

The concept of perceived risk is one of the most persuasive in the theories of consumer choice (Dowling 1986). Perceived risk pertains primary to pre decision consumer choice and information search. In the consumer behaviour literature, perceived risk has been defined in many ways. For example, Bauer (1960) conceptualized perceived risk as a dual component, multi-faceted phenomenon. In the same eontext, Kogan and Wallach (1964) defined perceived risk as a chance aspect where the focus is on probability of loosing and a danger aspect where the emphasis is on severity of negative consequences. Cunningham (1967) classified perceived risk into two similar components, namely "the amount that would be lost if the consequences of an aet were not favourable and the individual's subjective feeling of certainty that the consequences will be unfavourable," (p87). The amount at stake is a function of the importance of the goals to be achieved, the seriousness of the penalties that might be imposed for non-attainment, and the amount of means committed to achieving the goals (Cox 1967). The definitions given by Kogan and Wallach (1964) and Cunningham (1967) have been criticized by some other researchers. For example Sjoberg (1980) suggest that perceived risk is seldom well pictured by the product of probability and consequences. In addition to the two principle dimensions of perceived risk, researchers have proposed the fact that there are a number of types or facets of risk namely, performance, social, physical, financial, psychological, time, frustration etc, (Dowling 1985; Peter and

Ryan 1976; Peter and Tarpey 1975). Pires et al (2002) contend perceived risk as a measure of the possible or expected dissatisfaction with the purchase, based on the buying goals of the consumer. Thus perceived risk can be considered as a multi-dimension and multi-facet construct (Dowling 1985; Peter and Ryan 1976).

Consumer Involvement (CI)

CI can generally be defined as personal importance or relevance of a product category (Coulter et al., 2003). From a consumer behaviour perspective, the researchers have given somewhat divergent definitions for the involvement construct. For example, Zaltman and Wallendorf (1983) define involvement as a motivational state of mind that is goal directed. This indicates that there is a link between the level of a person's motivation towards a particular goal and the level of involvement of that person. However, there has been permanent dispute as to the definition of involvement (Laurent, and Kapferer, 1985). In marketing it has always been equated with perceived product importance (Traylor, 1982). A consumer's level of involvement depends on the degree of personal relevance that the product holds for the consumer. High-involvement purchases are those that are very important to the consumer in terms of perceived risk and low-involvement purchases are purchases that are not very important to the consumer, hold little relevance, and have little perceived risk. Depending on their level of involvement, consumers will differ greatly in the extensiveness of their purchase decision process (indicated by the number of attributes used to compare brands, the length of the choice process, and the willingness to reach a maximum or a threshold level of satisfaction) or in their processing of communications (indicated for instance by the extent of information search, receptivity to advertising, and the number and type of cognitive responses generated during exposure) (Krugman 1965, 1967). At a macro level, involvement has been described as an internal state of arousal comprised of three major properties: intensity, direction, and persistence (Andrews et al., 1990).

Intensity refers to a person's degree of involvement or motivation. It ranges along a continuum of high to low involvement and varies across products and situations as well as individuals (Kassarjian, 1981). Direction is defined as the object or issue toward which an individual is motivated, whereas persistence refers to the duration of the involvement intensity (Celsi & Olson, 1988).

There is some agreement in the literature that, at the bare minimum, involvement is to do with personal relevance, a perceived value in the goal object, an arousing motivation reflecting interest in the goal object, and that this arousal or motivation can be stimulated by communication, by the product itself or by the purchase decision context. From this ferment this study defines CI as an unobservable state of motivation, arousal or interest. It is evoked by a particular stimulus or situation and has drive properties. Its consequences are types of searching, information processing and decision making (Rothschild, 1984). And, CI has been conceptualized as a multidimensional construct (Laurent & Kapferer, 1985; MeQuarrie & Munson, 1986).

Method

Descriptive research design was employed in this study since the study tries to explain how the associations between perceived risk and consumer involvement and risk coping strategies vary in terms of services and physical products. A self administered questionnaire was developed to measure the degree of perceived risk, degree of consumer involvement and the type of risk coping strategies.

Operation alizations of variables Perceived risk

Perceived risk was operationalized as a multi component construct. The components (financial risk, performance risk, physical risk, psychological risk, social risk, and

convenience risk) were measured using items employed in previous studies (Jacoby and Kaplan 1972, Peter and Tarpey 1975, Dowling 1986). Subjects responded to the items using a seven point Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Reliability of the measure was established through test - retest reliability and item to total correlation. The product moment correlation, r statistic, was calculated to summarize the strength of association of the both reliability test. The V values of the both tests are over 0.8 suggesting a high level of correlation. However, for the overall risk instrument Cronbach's alpha was also calculated to examine the reliability. The result of the tests in table 1 indicates a high degree of reliability since each of the alpha values is greater than the standard value 0. 7 (Sekarna 2004, Malhothra 2005). An overall risk score was calculated taking un-weighted means of the dimensions.

Product Category	Cronbach's alpha (Overall Risk)	Test -retest reliability (r)
Automobiles	0.76	0.89
Jewelry	0.79	0.88
Clothing	0.82	0.91
Medical diagnosis	0.74	0,91
Auto repair	0.78	0.89
Hair cut	0.78	0.87

 Table 1 :
 Reliability Statistics (Perceived Risk)

Consumer Involvement

The construct 'consumer involvement' was also considered a multidimensional construct. To measure the construct the Consumer Involvement Profile (CIP) developed by Laurent and Kapferer, (1985) was employed with some necessary

adjustment. The CIP identified several dimensions of the CI construct. They are (a) interest, the perceived importance of the product/service; (b) pleasure, hedonic values of the product class; (c) sign value, the degree to which the product expresses the person's self to others; (d) perceived risk importance, the perceived importance of negative consequences of a mispurchase; and (e) perceived probability of error, the subjective probability of mispurchase of the product. Each of the dimensions was measured by employing three items. Altogether, fifteen items were generated for the instrument. Respondents rate the statement of the CIP instrument on a five point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). An overall CI score was calculated taking un-weighted means of the all the dimensions. The reliability of the CI construct was established through Cronbach's alpha. Cronbach's alpha value of the each of the dimensions of the CI construct is greater than the standard value 0.7

Eleven methods of risk coping strategies were selected (Roselius 1971) on the basis of their representativeness, applicability to various methods of purchase, and applicability to kinds of products. All strategies were presented for each buying situation and were defined in the questionnaire. The strategies are as follows: 1. *Endorsements:* Buy the brand whose advertising has endorsements or testimonials from a person like you, from a celebrity, or from an expert on the product. 2. *Brand Loyalty:* Buy the brand you have used before and have been satisfied with in the past. 3. *Major Brand Image:* Buy a major, well-known brand of the product, and rely on reputation of the brand. 4. *Private Testing:* Buy whichever brand has been tested and approved by a private testing company. 5. *Store Image:-* 'Buy the brand that is carried by a store which you think is dependable, and rely on reputation of the store. 6. *Free Sample:* Use a free sample of the product on a trial basis before buying. 7. *Money-back Guarantee:* Buy whichever brand offers a money-back guarantee with the product. 8. *Government Testing:* Buy the brand that has been tested and approved by an official branch of the government. 9.

Shopping: Shop around on your own and compare product features on several brands in several stores. 10. *Expensive Model:* "Buy the most expensive and elaborate model of the product. 11. *Word of Mouth:* Ask friends or family for advice about the product. A university based convenience sample of 160 post graduate students was approached. The student sample assumed to be homogeneous in nature and use of homogeneous samples is supported in the test of theory (Sekaran 2006). Automobiles, Jewelry, and clothing which are high in search qualities were selected as physical products (Zeithaml 1981). Medical diagnosis, auto repair, and hair cut which are low in search qualities though high in credence qualities were selected as services (Zeithaml 1981). Respondents were asked to rate their involvement and perceived risk in each purchasing situation and to select the risk coping strategy to suit their purchasing situation.

Results and Discussion

Product Category, Perceived Risk and Consumer Involvement

One of the objectives of this study is to examine whether the differences between products and services influence the degree of association between the perceived risk and the consumer involvement. Table 2 reports the mean values of both the risk scores and the CI scores. The highest mean value of risk scores and the CI scores are reported in the auto repair services purchase situation while the lowest mean value of risk scores and the CI scores are in the cloth purchase situation.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	AUTTR	4.9427	160	.24589	.01944
	AUTTCI	4.1390	160	.31542	.02494
Pair 2	CLOTR	3.1042	160	.23477	.01856
	CLOTCI	2.2779	160	.35664	.02819
Pair 3	JEWTR	4.2552	160	.16180	.01279
	JEWTCI	3.7272	160	.37691	.02980
Pair 4	MEDTR	4.8458	160	.22396	.01771
	METCI	4.7192	160	.28995	.02292
Pair 5	HCUTTR	4.9500	160	.29127	.02303
	HCUTTCI	4.9493	160	.46166	.03650
Pair6	AREPTR	5.3083	160	.28849	.02281
	AURETCI	5.2676	160	.32186	.02545

Table 2. Paired Samples Statistics - Perceived Risk and Consumer Involvement

Note: AUTTR = Auto Total Risk, AUTTCI = Auto Total Consumer Involvement, CLOTR =Clothing Total Risk, CLOTCI = Clothing Total Consumer Involvement, JEWTR= Jewelry Total Risk, JEWTCI = Jewelry Total Consumer Involvement, MEDTR = Medical Diagnoses Total Risk, METCI = Medical Diagnoses Total Consumer Involvement, HCUTTR = Hair cut Total Risk, HCUTTCI = Haircut Total Consumer involvement, AREPTR + Auto Repair Total Risk, AURETCI + Auto Repair Total Consumer Involvement

The mean values in the table 2 show that the degree of perceived risk and the degree of CI vary in terms of the product category. The statistical significance of these differences was examined by performing a paired samples test. The results which are given in table 3(a) and (b) disclose that the degree of consumer perceived risk and the degree of consumer involvement significantly vary in terms of the product categories. The degree of consumer perceived risk is relatively higher in medical diagnosis, auto repair, and hair cut than that in automobiles, jewelry, and clothing which are high in search qualities.

Paired samples correlation coefficients were calculated for each product category to examine the strength of association between the degree of perceived risk and

the consumer involvement. And, each correlation value was compared with the other to examine whether it varies in terms of the product category. Results reported in table 4 show that the strength of association between the degree of perceived risk and the consumer involvement varies in terms of each product category, especially, that the strength of association between the degree of perceived risk and the consumer involvement for physical product differs significantly from that for services.

		Paired Di	fferences			t	df	Sig. (2- tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confide	nce 1 of the	Mean	Std. Deviat- ion	Std. Error Mean
				Differen	nce		10.11	
	Lower	pper	Lower	Upper	Lower	Upper	Lower	Upper
Pair 1 AUTTR-CLOTR Pair 2	1.83854	.36314	.02871	1.78184	1.89524	64.041	159	.000
AUTTR - JEWTR Pair 3	.68750	.29659	.02345	.64119	.73381	29.321	159	.000
AUTTR - MEDTR Pair 4	.09688	.33878	.02678	.04398-	.14977	3.617-	159	.000
AUTTR-AREPTR Pair 5	36562	.38102	.03012	.42512-	30613	12.138-	159	.000
AUTTR - HCUTTR Pair 6	00729	.39314	.03108	.06868-	.05409	.235-	159	.000
CLOTR - JEWTR Pair 7	-1.15104	.31267	.02472	1.19986-	-1.10222	46.566-	159	.000
CLOTR - MEDTR Pair 8	-1.74167	.29838	.02359	1.78825-	-1.69508	73.835-	159	.000
CLOTR - AREPTR Pair 9	-2.20417	.37985	.03003	2.26348-	-2.14486	73.399-	159	.000
CLOTR - HCUTTR Pair 10	-1.84583	.34697	.02743	1.90001-	-1.79166	67.292-	159	.000
JEWTR-MEDTR Pair 11	59062	.28277	.02236	.63478-	54647	26.420-	159	.000
JEWTR-AREPTR Pair 12	-1.05312	.33195	.02624	1.10496-	-1.00129	40.129-	159	.000
JEWTR-HCUTTR Pair 13	69479	.32870	.02599	.74611-	64347	26.737-	159	.000
MEDTR-AREPTR Pair 14	46250	.35611	.02815	51810-	40690	16.428-	159	.000
MEDTR-HCUTTR Pair15	10417	.34606	.02736	.15820	05013	3.807	159	.000
AREPTR - HCUTTR	.35833	.39925	.03156	.29600	.42067	11.353	159	.000

Table 3 (a) Paired Samples Test- Mean Differences, Total perceived Risk.

Note: AUTTR = Auto Total Risk, CLOTR = Clothing Total Risk, JEWTR= Jewelry Total Risk,, MEDTR = Medical Diagnoses Total Risk,, HCUTTR = Hair cut Total Risk,

AREPTR + Auto Repair Total Risk.

That is, the strength of association between the degree of perceived risk and the consumer involvement for services is greater than that for physical products. These findings are consistent with the literature. For example, Zeithaml et al. (1985) suggest

	Paired Differences					t	df	Sig. (2- tailed)
	Mean	Std.	Std.	95%		Mean	Std.	Std. Error
		Deviation	Error	Confide	ence		Deviat-	Mean
			Mean	Differen	of the		1011	
	Lower	Upper	Lower	Lipper	Lower	Unner	Lower	Upper
	Lower	оррег	Lower	opper	Lower	opper		opper
Pair I AUTTR-CLOTR Pair 2	1.83854	.36314	.02871	1.78184	1.89524	64.041	159	.000
Pain AUTTCI - CLOTCI	1.86113	.48825	.03860	1.78489	1.93736	48.217	159	.000
Pair 2 AUTTCI - JEWTCI	.41175	.49311	.03898	.33476	.48874	10.562	159	.000
Pair 3 AUTTCI - HCUTTCI	81031	.53233	.04208	89343	72720	-19.254	159	.000
Pair 4 AUTTCI - AURETCI	-1.12865	.44583	.03525	-1.19826	-1.05904	-32.022	159	.000
Pair 5 AUTTCI - METCI	58019	.43404	.03431	64796	51242	-16.908	159	.000
Pair 6 CLOTCI - JEWTCI	-1.44938	.54492	.04308	-1.53446	-1.36429	-33.644	159	.000
Pair? CLOTCI - HCUTTCI	-2.87144	.64252	.05080	-2.77176	-2.57112	-52.592	159	.000
PairS CLOTCI-AURETCI	-2.98977	.46241	.03656	-3.06197	-2.91757	-81.785	159	.000
Pair 9 CLOTCI - METCI	-2.44131	.43663	.03452	-2.50949	-2.37314	-70,724	159	.000
Pair 10 JEWTCI - HCUTTCI	-1.22206	.56787	.04488	-1.31070	-1.13343	-27.231	159	.000
Pair 11 JEWTCI-AURETCI	-1.54040	.50323	.03978	-1.61897	-1.46182	-38.719	159	.000
Pair 12 JEWTCI - METCI	99194	.45103	.03566	-1.06236	92152	-27.819	159	.000
Pair 13 HCUTTCI -AURETCI	31833	.57607	.04554	40828	22839	-6.990	159	.000
Pair 14 HCUTTCI - METCI	.23012	.56473	.04465	.14195	.31830	5.154	159	.000
Pair 15 AURETCI - METCI	.54846	.43371	.03429	.48074	.61618	15.996	159	.000

Table 3 (b) Paired Samples Test - Mean Differences, Total Consumer involvement.

Note: AUTTCI = Auto Total Consumer Involvement, CLOTCI = Clothing Total Consumer Involvement, JEWTCI = Jewelry Total Consumer Involvement, METCI = Medical Diagnoses Total Consumer Involvement, HCUTTCI = Haircut Total Consumer involvement, AURETCI = Auto Repair Total Consumer Involvement that services high in credence qualities are most difficult to evaluate because the consumers may be unaware of or may lack a sufficient knowledge to assess whether the offerings satisfy given wants or needs even after the consumption. They also claim that because the decrease in the amount and/or quality of information, non-standardized nature and unavailability of guarantees and warranties are accompanied by a concomitant increase in perceived risk, consumers may perceive greater risk when buying services than when purchasing products. In the same context, Mitchell (1998); and Choffee and McLeod (1973) suggest that when the perceived risk is high, consumers are more involved in the decision making process

		N	Correlation	Sig.
Pair 1	AUTTR & AUTTCI	160	.380	.000
Pair 2	CLOTR & CLOTCI	. 160	.166	.035
Pair 3	JEWTR & JEW'TCI	160	.558	.000
Pair 4	MEDTR & METCI	160	.633	.000
Pair 5	HCUTTR & HCUTTCI	160	.584	.000
Pair6	AREPTR & AURETCI	160	.777	.000

Table 4. Paired Samples Correlations- Perceived Risk and Consumer Involvement

Product Categories and Risk Coping Strategies

The second objective of this study is to investigate whether the differences between product and services influence the consumer's risk coping strategy selection.

Risk Coping Strategies - Auto Purchase

Data in table 5 (a) sheds the light on the consumers' risk coping strategies for auto purchases. The highest percentage of the sample (50%) indicates "Brand Image' as the risk coping strategy while the lowest (18.8%) indicates the "Store Image" strategy. The rest of the respondents (31.3%) consider "Brand Loyalty" as their risk coping strategy.

Table	Table 5 (a) - Risk Coping Strategies - Auto Purehase							
		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	BRALOY	50	31.3	31.3	31.3			
	BRAIMA	80	50.0	50.0	81.3			
	STIMA	30	18.8	18.8	100.0			
	Total	160	100.0	100.0		-		

Note: BRALOY = Brand Loyalty, BRAIMA = Major Brand Image, STIMA = Store image

The frequency distribution in table 5 (a) indicates that the respondents differ in terms of their risk coping strategy selection. Chi-Square test was performed to examine the statistical significance of the difference. The results reported in table 6 disclose that consumers' risk coping strategy selection for auto purchase vary significantly (p = 0.000)

Risk Coping Strategies - Clothing

Data in table 5(b) record the frequencies of the risk coping strategies of the respondent for cloth purchase. According to the table highest percentage (31.3) of the respondents consider 'major brand image' as their risk coping strategy while the lowest percentage (10.6) indicate 'shopping'. However, 30 percent of the respondents select 'expensive brands' as their risk coping strategy while 28.1 percent of the respondents claim 'store image'.

Table	ie 5 (b) - Risk Coping Strategies - Ciotining						
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	BRAIMA	50	31.3	31.3	31.3		
	STIMA	45	28.1	28.1	59.4		
	SHOP	17	10.6	10.6	70.0		
	EXPBRA	48	30.0	30.0	100.0		
	Total	160	100.0	100.0			

Table 5 ((b) -	Risk	Coping	Strategies -	Clothing
I ADIC J	01-	IVIDU	CODINE	Su alceics -	CIOLININE

Note: BRAIMA = Major Brand Image STIMA = Store Image SHOP = Shopping EXPBR = **Expensive Brands**

The results of the Chi-Square test, which was performed to examine whether the variance in risk coping strategy selection is significant, given in table 6 reveal that the consumers' risk coping strategy selection for cloth purchase vary significantly (p = 0.000)

Risk Coping Strategies - Jewelry

Frequencies of the risk coping strategies for jewelry purchase of the respondent are presented in table 5 (c). The table shows that highest percentage (93.1) of the respondents look for 'store image' as their risk coping strategy. The rest (6.9%) select 'word of mouth communication' as their risk coping strategy. It can be observed a huge variance in risk coping strategy selection for jewelry purchase situation. The result of the Chi-Square test, which was employed to examine whether the variance in risk coping strategy selection is statistically significant, is given in table 6. The result reveals that the consumers' risk coping strategy selection for iewelry purchase differs significantly (p = 0.000)

Table	Table 5 (e) - Risk Coping Strategies - Jewelry								
		Frequency	Percent	Valid Percent	Cumulative Percent				
Valid	STIMA	149	93.1	93.1	93.1				
	WOM	11	6.9	6.9	100.0				
	Total	160	100.0	100.0					

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Note : STIMA = Store Image, WOM = Word of mouth communication

Risk Coping Strategies - Medical Diagnosis

Table 5(d) sheds the light on the frequencies of the risk coping strategies of the respondent for medical diagnosis. According to the table highest percentage (70) of the respondents select 'word of mouth communication' as their risk coping strategy while the rest (30%) indicate 'Store image'. The figures in the table show a considerable inconsistency in the risk coping strategy selection.

Table 5(d) - Risk Coping Strategies - Medical Diagnosis							
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	STIMA	48	30.0	30.0	30.0		
	WOM	112	70.0	70.0	100.0		
	Total	160	100.0	100.0			

Note: STIMA = Store Image, WOM = Word of mouth communication

Chi-Square test was performed to examine the statistical significance of the inconsistency. The results reported in table 6 disclose that consumers' risk coping strategy selection for 'medical diagnosis' vary significantly (p = 0.000)

Risk Coping Strategies - Auto Repair

Statistics of the risk coping strategy selection for 'auto repair' purchase of the respondent are in table 5 (e). The table shows that the highest percentage (55) of the respondents considers word of mouth communication as their risk coping strategy. The rest (45%) claim that 'store image' as their risk coping strategy. The result of the Chi-Square test, which was employed to examine whether the variance in risk coping strategy selection is statistically significant, is given in table 6. The result reveals that the inconsistency in the consumers' risk coping strategy selection for 'auto repair' purchase is not significant.

Table 5 (a) • Risk Coping Strategies - Auto Repair

			the second s		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	STIMA	72	45.0	45.0	45.0
	WOM	88	55.0	55.0	100.0
	Total	160	100.0	100.0	

Note: STIMA = Store Image, WOM = Word of mouth communication

Risk Coping Strategies - Hair Cut

Data in table 5(f) show the frequencies of the risk coping strategies of the respondent for 'hair cut' service purchase. According to the table highest percentage (53.8) of the respondents considers 'word of mouth communication' as their risk coping strategy while the lowest percentage (46.3) indicates 'brand loyalty.'

		Frequency	Percent	Valid Percent	Cumulative Percent			
Valid	BRALOY	74	46.3	46.3	46.3			
	WOM	86	53.8	53.8	100.0			
	Total	180	100.0	100.0				

Table 5 (f) - Risk Coping Strategies - Hair Cut

Note BRALOY = Brand Loyalty, WOM = Word of mouth communication

The Chi-Square test was employed to examine whether the variance in risk coping strategy selection is statistically significant. The result which is given in table 6 reveals that the inconsistency in the consumers' risk coping strategy selection for 'hair cut' purchase is not significant.

Above analysis clearly shows that the respondents rely heavily on 'major brand image' as their risk coping strategy for auto purchase. As for the cloth purchase situation, respondents look for 'major brand image' and 'expensive brand' as the risk coping strategies though they do not perceive a higher degree of risk. And, for the jewelry purchase situation the respondents look for the stores image to minimize the risk.

	RCSAUT	RCSCLO	RCSJEW	RCSMED	RCSAREP	RCSHCUT
Chi-	23.750	17.950	119.025	25.600	1.600	.900
Square(a,b,c)						
df	2	3 .000	1.000	1.000	1.206	1
Asymp. Sig.	0.000	0.000	0.000	0.000	0.000	.343

Table 6 - Chi - Square Test Statistics

Note: RCSAUT = Risk Coping Strategies for Auto, RCSCLO = Risk Coping Strategies for cloth, RCSJEW = Risk Coping Strategies for jewelry, RCSMED= Risk Coping Strategies for medical diagnosis, RCSAREP= Risk Coping Strategies for auto repair, RCSHCUT = Risk Coping Strategies for hair eut.

For services - medical diagnosis, auto repair and hair cut - the respondents heavily seek and rely on word of mouth communication. This finding is consistent with the literature also. For example, Zeithaml (1981) states that since consumers can discover few attributes prior to purchase of a service, they may feel greater risk to be associated with selecting an alternative. Given this risk, they may depend to a greater extend on sources such as word of mouth which they may perceive to be more credible and less biased. Furthemore, Robertson (1971) claimed that personal influence becomes pivotal as product complexity increases and when objective standards by which to evaluate the product decreases. The credibility of personal sources encourages their use in situations of high perceived risk (Cunningham 1967). However, the analysis also discloses that other risk coping strategies vary in terms of the product category irrespective of the degree of perceived risk and involvement.

Strategic Implications for Service Marketers

This study discloses that the strength of association between the degree of perceived risk and the consumer involvement for services is greater than that for physical products and that the respondents heavily seek and rely on word of mouth communication when they purchase medical diagnosis, auto repair and hair cut services. The reason for this is the intangible nature of the services. Because of the intangible nature of the services, they are less communicable, less devisable, and more complex than physical products. Furthermore, they cannot be readily displayed. Since they possess few search qualities and many experience qualities mass and selective media can communicate little about experience qualities. Therefore, when purchasing services, the consumer is limited to a small number of cues. To avoid these marketing problems, services marketers can stress tangible cues, use personal sources more than non-personal sources, stimulate or simulate

word of mouth communication, create strong organizational image and engage in post purchase communication.

Conclusion

This study is designed to address two research questions. The first question is, 'do the differences between product and services influence the degree of association between the perceived risk and the consumer involvement?' And the second is, 'do the differences between product and sendees influence the consumer's risk coping strategy selection?' Thus the objectives of the study are to examine the whether (a) the differences between product and services influence the degree of association between the perceived risk and the consumer involvement, and (b) the differences between product and services influence the consumer's risk coping strategy selection and (c) discuss the strategic implications for service marketers. The study is basically an empirical descriptive in nature. A self administered questionnaire was developed to measure the degree of perceived risk, consumer involvement and the type of risk coping strategies. Perceived risk was measured using items employed in previous studies. The construct 'consumer involvement' was measured by using consumer involvement profile (CIP). A university based convenience sample of 160 post graduate students was approached. Results show that the strength of association between the degree of perceived risk and the consumer involvement varies in terms of each product category, especially, that the strength of association between the degree of perceived risk and the consumer involvement for services is higher than that for physical product. And even risk coping strategies vary in terms of the product category irrespective of the degree of perceived risk and involvement. Respondents heavily seek and rely on word of mouth communication when they purchase services. This is due to the intangible nature of the services. The intangible nature of the services poses many problems to the services marketers. Stressing tangible cues, using personal sources, simulating

or stimulating word of mouth communication, creating strong organizational image and engaging in post purchase communication are some of the marketing strategies to solve these problems.

References

Andrews, J. C, Durvasula S, & Akhter, S. H. (1990). "A framework for conceptualizing and measuring the involvement construct in advertising research". *Journal of Advertising*, 19, 27-40.

Bauer, R.A. (1960), "Consumer Behaviour as Risk Taking" in Cox, D.F. (ed) Ris Taking and Information Handling in Consumer behaviour, Harvard University Press, Boston, M.A. 23-33

Bettman, James R (1979), An Information Processing Theory of Consumer Choice, Reading, MA, Addison - Wesley

Celsi, R. L., & Olson, J. C. (1988). "The role of involvement in attention and comprehension processes", *Journal of Consumer Research*, 15, 210-224.

Choffee, S.H. and J.M. McLeod (1973), "Consumer Decision and Information Use," in Ward. S and Robertson. T.S. (Eds). Consumer Behaviour: Theoritical Sources, Prentice Hall Inc, Englewood Cliffs, NJ, pp. 64-73

Cox, D. F. (1967), Risk Taking and Information Handling in Consumer Behaviour, MA Harvard University Press

Cunningham, S.M. (1967), "The Major Dimensions of Perceived Risk," in Cox, D.F. (1967), Risk Taking and Information Handling in Consumer Behaviour, MA Harvard University Press, 82-108

Darby, M.R. and E, Kami (1973)." Free Competition and the Optimal Amount of Fraud." *Journal of Law and Economics*. 16(April), 67-86 Delhi: Preitice-Hall of India Private Limited

Dowling, G.R. (1986), "Perceived Risk: The Concept and Its Measurement," *Psychology and Marketing*, John Wiley and Sons, Inc.

Dowling, G.R. (1986), "The Effectiveness of Advertising Explicit Warrenties," *Journal of Public Policy and Marketing*, 4, 142-152 Engle, James F., and Roger D. Blackwell, (1982), Consumer Behaviour, New York: Dryden Press.

Engle, James F., David Kollat, and Roger D. Blackwell (1978), Consumer Behaviour, New York: Dryden Press.

Howard, John A., and Jagdish N. Seth (1969), The Theory of Buyer Behaviour, New York: John Wiley.

Jacoby, J., and Kaplan, L.B. (1972), "The Components of Perceived Risk," *Advances in Consumer Research*, 1(1), 382-393

Kassarjian, H. H. (1981). Low involvement: A second look. In: K. Monroe (Ed.), *Advances in Consumer Research* (Vol. 8, pp. 31-34). Chicago: American Marketing Association.

Kogan, N. and M.A. Wallach (1964), Risk Taking: A Study in Cognition and Personality, New York: Holt Rinehart and Winston.

Krugman H.E., (1965)., "The impact of television advertising: learning without involvement", *Public Opinion Quarterly*, 29, 349-56

Krugman H.E., (1966-1967), "The measurement of advertising involvement", *Public Opinion Quarterly*, 30, 583-86

Laurent, G, & Kapferer, J. N. (1985), "Measuring Consumer Involvement Profiles", *Journal of Marketing Research*, 22,41-53.

Malhothra, Naresh K, (2005). Marketing Research, An Applied Orientation,. New Delhi, Prentice Hall of India Private limited

McQuarrie, E. F., & Munson, J. M. (1986). "The Zaichkowsky personal involvement inventory: Modification and extension", In P. Anderson & M.Wallendorf (Eds.), *Advances in Consumer Research* (pp. 36-40). Provo, UT: Association for Consumer **Research**,

Mitchell, V.W. (1999) "Consumer Perceived Risk: Conceptualizations and Models," *European Journal of Marketing*, 33 (1/2), 233-248

Nelson. P. (1970) "Advertising as Information," Journal of Political Economy," 81 (July-August): pp 729-754,

Peter, J.P. and Tarpey, L.X. (1975)," A Comparative Analysis of Three Consumer Decision Strategies," *Journal of Consumer Research*, 2, 29-37

Peter, J.P., and Ryan, M.J. (1976), An investigation of Perceived Risk at the Brand *Level*, "*Journal of Marketing Research*, 13, 184-188

Pires, Guilheme, John Stanton, and Andrew Eckford (2002) "Influences on the Perceive Risk of Purchasing Online," *Journal of Consumer Behaviour*, Vol 4.(2). 118-131.

Popielarz, Donald T (1967), An Exploration of Perceived Risk and Willingness to Try New Product," *Journal of Marketing Research*, Vol. IV (November, 368-72

Roselius, Ted (1971), "Consumer Ranking of Risk Reduction methods," *Journal of Marketing*. Vol. 35 (January,), pp. 56-61.

Rothschild, M.L. (1979), "Advertising Strategies for High and Low Involvement Situations," in Attitude Research Plays for High Stakes, J.C. Maloney and B. Silverman (eds), Chicago, American Marketing Association, 74-93

Robertson, T.S. (1971), Innovative Behaviour and Communication, New York: Holt,

Rothsehild, M.L. (1984). "Perspective involvement: current problems and future directions", in Kinnear, T.C. (Ed), *Advances in Consumer Research*, Association for consumer research, 11.

Schiffman, Leon G., and Leslie Lazar Kanauk (2007), Consume Behaviour, New

Sekaran, Uma (2004), Research Method for Business, A skill Building Approach, New Delhi, John Whiles and Sons,

Sjoberg L. (1980), "the Risk of Risks analysis," Acta Psychologica, Vol 45, August, pp 301-321

Traylor, M. B. (1982). "Comment on an experimental investigation of comparative advertising: Impact of message appeal, information load, and utility of product class", *Journal of Marketing Research*, 18, 254-255.

Zaichkowsky, Judith Lynne (1985), "Measuring the Involvement Construct," *Journal of Consumer Research*, 12 (December): 341-352

Zaltman, G, and Wallendorf, M. (1983), Consumer Behaviour: Basic Findings and Management Implications, John Wilely and Sons, New York

Zeithaml, Valarie A(1981), "How Consumer Evaluation Processes Differ between Goods and Services," in Marketing of Services, eds. James H. Donnelly and William F. George, American Marketing Association, Chicago

Zeithaml, Valarie A, and Mary Jo Bitner (1996) Services Marketing, New York: McGraw-Hill Companies, Inc

Zeithaml, Valarie A., A. Parasuranman, and Leonard L. Berry (1985), "Problems and Strategies in Services Marketing," *Journal of Marketing*, 49 (spring): 33-46