# Influence of Perceived Risk towards Women Shopping Behavior in Food and Grocery Stores in Puducherry

### K. Ramprabha

Abstract-Shopping has long been regarded as a risky activity as shoppers may be uncertain of a purchase decision and the consequences of a poor decision (Bauer, 1960). Risk plays an essential role in consumer behaviour, and it makes a valuable contribution towards explaining informationsearching behaviour and consumer purchase decision making. Retail is the dominion of women and shopping is an action frequently seen as complementary to female role. Women consumers actively seek information and are likely to enjoy social interaction and activities outside the home. There is a lot of comparison of the offering before the final purchase. Once a woman is sure that she has gathered enough information and evaluated all possible alternatives, she would arrive at a decision. The Indian food and groceries sector can be divided into fresh groceries, branded packaged foods, personal hygiene products and toiletries and dry unprocessed groceries. According to Krysalis (2014) the food and grocery sector has occupied 60% of the total retail market size. This paper takes a look at the retail factors that influences the consumers' perceived risk which further has an impact on the purchasing behaviour of the consumers shopping at modern retail outlets. To analyze the influence of perceived risk on women shopping behaviour, a scale was generated, validated and compared with the retail factors of the store. The study indicated that female shoppers like to purchase from organized stores because of the product quality and variety. This is because the organized stores claim a lower perceived risk by their store atmospherics, merchandise variety, price and promotions, friendly store personnel; value added services and a store image that gels with the social status of the customers.

*Index Terms*—Perceived risk, women, shopping behaviour, retail, organized retail, food and groceries.

#### I. INTRODUCTION

Shopping has long been regarded as a risky activity as shoppers may be uncertain of a purchase decision and the consequences of a poor decision (Bauer, 1960) [1]. This feeling arises because the consumer cannot judge with certainty the consequences of their purchase decision. Risk plays an essential role in consumer behaviour, and it makes a valuable contribution towards explaining information-searching behaviour and consumer purchase decision making. There are two theoretical perspectives about risk: one that is centered on a decision result's uncertainty and another centered on the costs or consequences of such results (Barnes *et al.*, 2007) [2]. Consumer perception of these risks varies, depending on person, product category,

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K. Ramprabha is with the Department of Business Administration, Annamalai University, Tamil Nadu, India (e-mail: ramprabhaalagappan@gmail.com). the shopping situation (i.e., traditional brick-and-mortar retail stores, online, catalog, direct mail or door to door sales) and also with the culture.

Retail is the dominion of women and shopping is an action frequently seen as complementary to female role. Women go on shopping to purchase both essential and discretionary goods, to relax, and to socialize. They are considered to be the most powerful consumers in the world as they control almost 80 percent of the household spending. Women consumers actively seek information and are likely to enjoy social interaction and activities outside the home. There is a lot of comparison of the offering before the final purchase. Once a woman is sure that she has gathered enough information and evaluated all possible alternatives, she would arrive at a decision. But this buying behaviour of a woman does not end with purchase. Word of mouth for the value plays a significant part in post purchase behaviour. While men rely on their personal assessment while women rely more on personal trust when it comes to buying and are open for inputs at various stages. Women set their decisions and priorities not only according to their needs but also according to people in her personal circle. Hence, it becomes important to position a product, brand or a store in a way that how they will benefit her and other in her life.

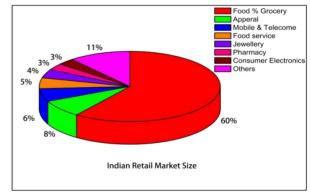


Fig. 1. Indian retail market size.

Growing consumerism is the key driver for organized retail in India. The ever changing consumers' psychographic variables like values, activities, interests, opinions, motives and lifestyles have contributed immensely to the growth of store format typologies such as convenience stores, discount stores, super markets and hypermarkets (Prasad and Reddy, 2007) [3]. India is the world's second largest producer of food. The food and grocery retail in India exceeds US\$ 294 billion representing 16% of India's GDP. The Indian food and groceries sector can be divided into fresh groceries, branded packaged foods, personal hygiene products and toiletries and dry unprocessed groceries. According to Krysalis (2014) [4] the food and grocery sector has occupied 60% of the total retail market size Fig. 1. Modern

retail stores have grown more than 4 times since 2006 and is currently estimated to be more than 40,000 stores in the country and expected to reach 70,000 by 2016.

This paper takes a look at the retail factors that influences the consumers' perceived risk which further has an impact on the purchasing behaviour of the consumers shopping at modern retail outlets. A modern retail store's atmosphere should affect the shoppers' mood/emotions and willingness to visit. This will also influence the consumers' judgments towards the quality of the store. Various factors like store layout, atmospherics, accessibility, time convenience, product assortment, pricing and promotions, product quality, clientele and total shopping experience were identified to find out if they influence the overall purchase behaviour of customers.

The element of convenience is fast gaining prominence in the world of organized retail. This is especially true in case of items like grocery/fruits and chemists. A convenient location is one which minimizes consumer time and effort associated with travelling to the store (Jones, Mothersbaugh, and Beatty 2003) [5]. Retail atmospherics refers to anything inside of a retail environment that is intended to influence the buyer behavior. It creates a psychological feeling to the customer when he/she is visiting the store. Store atmospherics refers to the store's physical characteristics such as colours, designs, smells, lighting, or even music that project an image and draw customers. The layout of a retail store has been found to significantly impact a retailer's overall performance through its influence on information processing, purchase intentions and attitude towards the retail establishment. The range of merchandise is perhaps the most important reason for customers to patronize a particular outlet. Birtwistle and Shearer (2001) [6], and Collins-Dodd and Lindley (2003) [7], found that merchandise has a significant influence on brand perception and store choice across consumer segments. Service refers to the provisions made to ease the shopping process and the infrastructure that enhances the consumer's comfort while shopping (Nevin & Houston, 1980) [8]. Sales personnel play an important role in creating the social cues in a store that are found to improve evaluations of store image (Hu & Jasper, 2006)[9]. The social role and status profoundly influences the consumer behaviour and his purchasing decisions. Price is an important driver in store choice among a battery of patronage motivations. Price levels foster a perception of retail image in consumers' minds and the way prices are displayed is a vital part of atmosphere.

## II. REVIEW OF LITERATURE

The level of perceived risk is related to store selection (Dash, J. F., Schiffman, L. G., & Berenson, C. 1976.,[10] Hisrich, R. D., Dornoff, R. J., & Kernan, J. B. 1972.,[11] and Korgaonakar, P. K. 1982[12]). That is, consumers who perceive less purchasing risk prefer the specialty store, and low social, high economic risk products to the mall and other types of products. Product risk or performance risk is defined as the probability of the item failing to meet the performance requirements originally intended (Peter and Tarpey 1975)[13]. Financial risk is defined as the likelihood

of suffering a monetary loss from a purchase (Horton 1984; [14] Jacoby and Kaplan 1972; [15] Sweeney et al. 1999 [16]). According to Zeithaml (1988) [17] customer perceived value refers to the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given. Darden and Babin (1994) [18] stated that consumer perceptions of prestigious brands create a more exciting retail affective quality. Yoon and Kim (2000) [19] indicated that loyal customers are willing to pay a premium even if price has increased because perceived risk is very high and they prefer to pay a higher price to avoid the risk of any change. However, on the goods-services continuum (retail business), products could be goods or services. Pappu and Quester (2006) [20] defined perceived quality as perception of the quality of the retailer as well as the (perception of) quality of products (goods or services) offered by retailers.

# III. OBJECTIVES

- 1) To develop a comprehensive scale and identify the situations that influences the women shopping behaviour.
- 2) To find out the impact of perceived risk on the factors of retailing.

# IV. RESEARCH METHODOLOGY

Descriptive research design has been adopted for the study. The population of the study involved consumers of selected modern retail stores in Puducherry, India. The selected retail stores are Nilgris, More, Spencer's Daily, Pothys Super Store. Random sampling was used to select the sample stores and the respondents are selected using mall intercept sampling method. The pilot study included 150 female respondents and the main study included 370 female respondents.

Perceived Risk Scale Generation- This process was conducted using two stages. The first stage included the development of questionnaire based on the perceived risk types. The second stage included collection of data from the focused group. This scale was developed on a five point Likert scale with 1 indicating strongly agree, 2 agree, 3 neither agree nor disagree, 4 disagree and 5 strongly disagree. The main research instrument was an interviewer administered survey. The second stage was the pilot study. Based on the pilot study the reliability of the tool was checked and the Cronbach Alpha obtained was 0.946. Since the value is more than 0.70 as suggested by Nunnally (1978)[21], it indicates that the instrument is sufficiently reliable.

Confirmatory Factor Analysis (CFA) - To determine the extent to which the ten questions were robust over new subjects, a confirmatory factor analysis was conducted using AMOS 16.0, estimating the ten situations. When the ten questions were allowed to correlate, the fit statistics suggested a poor model fit. After removing "I feel I am shopping at places where I do not find people matching my social status" and the remaining nine situations were

allowed to correlate, the fit statistics suggested a good model fit Fig. 2. The confirmatory fit index (CFI) = .94, goodness-of-fit index (GFI) = .95, adjusted goodness-of-fit index (AGFI) = .91, RMSEA = .05 and Chi- square = 36.95 (with 26 degrees of freedom). These findings represent a good fit of the data. Kline (2005) [22] stated that an excellent fit should have CFI $\geq$ .95 and RMSEA $\leq$ .05.

For this study the perceived risk is classified into low risk, medium risk and high risk. With the total score of the response as a base, the scores 1-16 were marked as high risk, 17 -32 were marked as medium risk and 33-50 were marked as low risk.

Based on the results of CFA, the primary data was collected and the data was entered into SPSS 16.0. Using the mean values the perceived risk was classified into low risk, medium risk and high risk and the result were analyzed and interpreted through One -way ANOVA to find the second objective. When the ANOVA test indicated significant results, Scheffe's multiple comparisons test was applied to derive precise results.

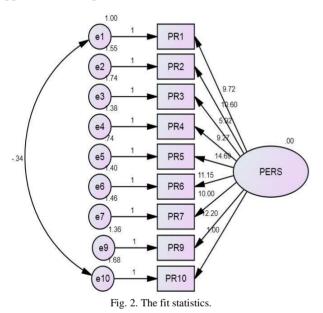


Table I indicates that respondents have a low perceived risk towards atmospherics, layout, merchandise, social, price and promotions, service and staff factors of a retail store with a mean value of 3.96, 3.87, 3.82, 4.02, 3.99, 4.14 and 4.13 respectively. The mean values 3.23, 3.35, 3.07, 3.42, 3.56 and 3.33 indicate that the respondents have medium perceived risk towards the retail factors of the store. The respondents with high perceived risk are indicated by the mean values 2.93, 2.99, 2.67, 2.53, 2.66, 2.68, 2.55 for the retail factors respectively. One way ANOVA test was applied to identify the significant variance between the respondents' perceived risk and the retail store factors. P vale shows that there is a significant difference between the perceived risks of the respondents towards the retail factors of the store at one percent level. Since ANOVA test indicate significant results Scheffe's multiple comparisons test was applied and the results indicate that respondents perceive a low risk towards the retail factors of the store. Van den Poel and Leunis (1999)[23]; Miyazaki and Fernandez (2001)[24] suggested that consumers' perceived risk is low when

buying grocery offline when compared to the consumers who buy online.

#### V. RESULTS AND DISCUSSIONS

This study investigates the influence of perceived risk associated with the retail factors of the store towards the shopping behaviour of women. The findings indicated that female shoppers like to purchase from organized stores because of the product quality and variety. This is because, the organized stores claim a lower perceived risk by their store atmospherics, merchandise variety, price and promotions, friendly store personnel; value added services and a store image that gels with the social status of the customers. With so many value enhancers available under one roof, the urban female shopper can fulfill most of her monthly requirement and sustain a lower perceived risk in one shopping trip. This work shows that the retail factors have influenced the consumer to build opinion about the shopping store. It is also found that respondents' use of various shopping activities appear to be positively influenced by their perceived benefit of the activity to reduce perceived risk. Based on the research made by Arthur (1992)[25] and Bartel Sheechan (1999)[26] almost 70 percent of the product sales are made by female consumers and 60 percent of shopping addicts are females on offline shopping. From this it is clearly found that females tend to enjoy shopping more and are ready to invest more money and time for the reliability and credibility offered by the store. Therefore it is expected that product sales of the organized store sellers can be improved greatly with higher engagement of female consumers. To attract them the stores use take note on the feedback of the customers and also check with their product recommendations. It is known that word-of-mouth communication has a stronger effect on female consumers so the stores can make a trial with the new launches and highly demanded products and keep their sales personnel informed so that when customers are in dilemma or doubt they can be helped by the store personnel. Also the stores can highlight the highly consumer recommended products in separate shelves along with their feedbacks and comments. The stores can also post negative comments in order to increase consumers' perceived credibility of product information and help them change attitudes towards a product or a brand positively. This work has been limited with female consumers of Puducherry town. It can be further extended to various cities and retail sectors such as apparel, jewelry etc. Thus it can be concluded that consumers have a liking towards organized retail stores though they are high in prices and also they feel old fashioned to buy products from the local bania shops because of their improved lifestyle and increased disposable income. This is the right opportunity to the retailers to focus on retaining the customers by providing consistent value on the factors they regard high which would enable them to enjoy the benefit of profit margin and increased sales and give them a strong foothold to stand amidst the online retail giants.

Retail Factors	Perceived Risk	Ν	Mean	SD	F value	Sig	Scheffe
	Low	161	3.96	.71			
Atmospherics	Medium	149	3.47	.85	58.40	0<0.001**	Low risk> Medium risk, High Risk
	High	160	2.93	.97			
Layout	Low	161	3.87	.88	37.32	0<0.001**	Low risk> Medium risk, High Risk
	Medium	149	3.23	.87			
	High	160	2.99	1.04			
Merchandise	Low	161	3.82	.81	73.16	0<0.001**	Low risk> Medium risk, High Risk
	Medium	149	3.35	.77			
	High	160	2.67	.96			
Social	Low	161	4.02	.84	89.27	0<0.001**	
	Medium	149	3.07	1.15			Low risk> Medium
	High	160	2.53	1.01			risk, High Risk
Price& Promotions	Low	161	3.99	.73	92.86	0<0.001**	Low risk> Medium risk, High Risk
	Medium	149	3.42	.89			
	High	160	2.66	.98			
Service	Low	161	4.14	.78	121.67	0<0.001**	Low risk> Medium risk, High Risk
	Medium	149	3.56	.78			
	High	160	2.68	.94			
Staff	Low	161	4.13	.74	115.54	0<0.001**	Low risk> Medium risk, High Risk
	Medium	149	3.33	.92			
	High	160	2.55	1.10			

TABLE I: MEAN, STANDARD DEVIATION OF RETAIL FACTORS ON RESPONDENTS' PERCEIVED RISK

Primary data computed; \*5 percent level; \*\*1 percent level

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