2 Literature Review
2.1 INTRODUCTION

Retailers and consumers impinge on each other (Hansen & Solgaard, 2004). Retailers influence consumers in the short run through their on-going marketing activities, and in the longer run the challenges facing retailers in the form of new technology, emerging electronic markets, increasing concentration, erosion of sector barriers and so on, also will have some bearing on consumers and buying behaviour. Likewise consumers constantly influence retailers through changing preferences and expectations. The literature of marketing science has been enriched by a great number of publications on the subject of consumer behaviour.

Marketing starts with the analysis of consumer behaviour, which is defined by Blackwell, Miniard, & Engel (2001) as those acts of individuals directly involved in obtaining, using, and disposing of economic goods and services, including the decision processes that precede and determine these acts. This, in turn, is not confined to manufacturers but extends into the realms of the retailer and the non-profit marketers. This knowledge of consumer behaviour is an indispensable input to retail strategy decisions.

Most of the consumer behaviour textbooks used as sources of consumer behaviour models for study and research purposes, refer to the elements of the consumer decision process in terms of the traditional five step classification, i.e. the cognitive decision sequence of problem recognition / pre-search stage, information search, alternative evaluation, choice, outcome evaluation (Schiffman & Kanuk, 1994; Solomon, 1996; Foxall, 1983). Some of the best known consumer decision-making models were developed in the 1960s and 1970s during a time characterized by limited theory on consumer behaviour and when theories from other disciplines were
used (Erasmus, Boshoff, & Rousseau, 2001). Howard developed the first consumer decision-model in 1963 (Du Plessis, Rousseau, & Blem, 1991). The consumer decision models that are still used today reflect the consumer decision process in terms of the interrelationship of concepts and flow of activities as understood within the limited theoretical background that inspired model building at the time.

One of the most intriguing areas of consumer purchase decisions involves post purchase phenomena. Because understanding consumer post purchase behaviour helps marketers to (Lindquist & Sirgy, 2003):

- Measure and respond to levels of post purchase satisfaction and dissatisfaction,
- Attract repeat customers and others like them,
- Reduce purchase associated cognitive dissonance at point of purchase,
- Encourage brand and outlet loyalty,
- Respond promptly to dispel rumours, complaints and other negative communications,
- Use feedback from both positive and negative post purchase behaviours to improve products and promotions.

Hence, marketers continue to do research on post purchase related topics such as satisfaction/dissatisfaction with purchase, complaint behaviour, positive/negative word of mouth and loyalty. Also, consequences of dissonance and dissatisfaction, such as negative word of mouth, consumers who quit using the product, consumers who tell others of bad experiences and consumers who vow never to shop at a store
again (Hunt, 1991) may be important along with studies for the consequences of satisfaction such as future intentions and repeat purchases. Further, driven by rapidly changing retail environments, more demanding consumers, intensified competition, and slow growth markets, even retailers are more than ever obliged to continually focus on establishing store satisfaction and store loyalty. Clearly, post purchase responses such as satisfaction and loyalty are important enough to warrant continued research (Montgomery & Barnes, 1993).

Taking on store loyalty and store satisfaction as the two most important phenomena for the retailer success, the next two sections presents a review of literature of the store loyalty and store satisfaction. In the subsequent sections, three store choice criteria viz., merchandise quality, service quality and perceived price, as cognitive variables mediating the environment-behaviour relationship are discussed. The store atmosphere tends to present an environment eliciting different behaviours mediated by cognitions and affect. Hence, a brief account of store atmospherics is presented long with the four most important atmospheric cues i.e., background music, ambient lighting, ambient scent and in-store signage and graphics. Finally, a conceptual model was introduced in order to test the linkages between the variables of the study. The model considers both cognitive and emotional variables as mediators for studying the influence of store environment on store satisfaction and store loyalty.

2.2 STORE LOYALTY

Loyalty is a phenomenon that has always received a great deal of interest among marketers, and store loyalty is the most initial variable of interest to retailers (Reddy, Reddy, & Azeem, 2011). The reasons are that loyal store customers spend more in total. They direct a higher proportion of their expenditure to their main store,
are less likely to switch stores, and may be more tolerant of higher prices. Thus, stores that attract a high proportion of loyal customers may benefit from higher returns per customer and from greater stability in their customer base.

The concept of store loyalty has evolved from brand loyalty with respect to tangible goods (Cunningham, 1956). Cunningham (1961) was the first to extend brand loyalty into store loyalty using the same measures he had used earlier for brands. Hence, based originally on the concept of brand loyalty, at the store level, store loyalty refers to the tendency to repeat purchase at the same store (for similar or other products) (Osman, 1993). But Bloemer and Ruyter (1998), in conceptualizing store loyalty, distinguish between repeat visiting behaviour and store loyalty. Following Jacoby and Chestnut (1978), Bloemer and Ruyter (1998) defined store loyalty as:

The biased (i.e. non-random) behavioural response (i.e. revisit), expressed over time, by some decision-making unit with respect to one store out of a set of stores, which is a function of psychological (decision making and evaluative) processes resulting in brand commitment.

The critical element of this definition is store commitment. Bloemer and Ruyter (1998) propose that for store loyalty to occur, store commitment is the necessary condition and the absence of which leads to spurious loyalty. A consumer becomes committed to the store and, thereby, becomes store loyal based on the explicit and extensive decision making as well as evaluative processes done towards the considered store (Bloemer & Ruyter, 1998).

Previous studies viewed customer loyalty as being both behavioural and attitudinal (Day, 1969; Oliver, 1997). In measuring retail store loyalty, the attitudinal
component of loyalty is operationalized as commitment and the behavioural dimension as repeat purchase and positive word-of-mouth (Bloemer & Ruyter, 1998; de Wulf & Odekerken-Schroder, 2003). Bridson, Evans and Hickman (2008) justified the use of both the behavioural and attitudinal aspects for a more holistic representation of the construct, with the multi-dimensional definition providing greater insight into consumer loyalty motivations than either component in isolation.

A review of the customer loyalty literature reveals that bulk of the studies primarily focuses on the concept of loyalty for tangible goods at the brand level (Chaudhuri & Holbrook, 2001). Studies at the store level focus primarily on store satisfaction in the formation of store loyalty (Bloemer & Ruyter, 1998; Bloemer & Odekerken-Schroder, 2002; Yavas & Babakus, 2008; Sivadas & Baker-Prewitt, 2000). Ercis, Unal, & Yilmaz (2011) in their recent study provided a summary of studies on the factors affecting store loyalty as shown in the Table 2.1.

Research has also shown that store images have critical impact in building store loyalty (Nevin & Houston, 1980; Bloemer & Ruyter, 1998; Koo, 2003). Apart from store satisfaction and store image, perceived value, store trust, store affect, merchandise quality, service quality and price (Ramaseshan & Vinden, 2009; Clottey, Collier, & Stodnick, 2008; Yavas & Babakus, 2008) were also tested for their impact on store loyalty. We found a number of studies which focussed on retail store patronage behaviour in terms of motivating factors to visit a store than on the loyalty factor in totality. From that point of view, Pan and Zinkhan (2006) explored determinants of retail patronage, concluding convenience, pricing, quality, employees and image all influenced the likelihood of a consumer to frequent a retail outlet, however, whilst this research looked at motivating factors to visit a store, there was no mention of loyalty towards the retail outlet. These results suggest that not one single
<table>
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<tr>
<th>Researchers</th>
<th>Dependent Variables</th>
<th>Independent Variables</th>
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<tr>
<td>Fisk (1961-1962)</td>
<td>Store Loyalty</td>
<td>Location convenience, product adequacy, price, sale efforts, store services, return policy</td>
</tr>
<tr>
<td>Bearden (1977)</td>
<td>Patronage intention</td>
<td>Price, product quality, diversity, atmosphere, location, parking facilities, interest of the salesperson</td>
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<td>Yavas, et al. (1981)</td>
<td>Patronage intention</td>
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<td>Osman (1993)</td>
<td>Loyalty</td>
<td>Lifestyle, store image, way of perception that administration and customers have about the store image, previous shopping experiences</td>
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<tr>
<td>Arnold, et al. (1996)</td>
<td>Patronage intentions</td>
<td>Reputation of the store, price, value and store location</td>
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<td>Macintosh &amp; Lockshin (1997)</td>
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<td>Trust, satisfaction, trust towards salesperson, loyalty towards salesman</td>
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<td>Sirohi, et al. (1998)</td>
<td>Store loyalty</td>
<td>Working policy of the store, appearance of the store, personal service, promotion, comparative prices, product quality, monetary value perception, monetary value perception for other stores</td>
</tr>
<tr>
<td>Bloemer &amp; Ruyter (1998)</td>
<td>Store loyalty</td>
<td>Store image, store satisfaction</td>
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<tr>
<td>Merrilees &amp; Miller (2001)</td>
<td>Store loyalty</td>
<td>Low prices, personnel service, store atmosphere, product quality</td>
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| Gilmore, et al. (2001)     | Store preference    | Image dimensions  
-internal elements (physical surroundings, product quality, service quality)  
-external elements (institutional reputation, public relations, social responsibility)  
-consumer dimensions (social expectations, values and culture, psychological and behavioural situation) |
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<tr>
<th>Researchers</th>
<th>Dependent Variables</th>
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<tr>
<td>Juhl, et al. (2002)</td>
<td>Customer loyalty</td>
<td>Satisfaction, value perception, store image, expectations, product quality perception, service quality perception</td>
</tr>
<tr>
<td>Baker, et al. (2002)</td>
<td>Patronage intentions</td>
<td>Product value perception, interpersonal service quality perception, product quality perception, price perception, time/effort/cost perception, physical cost perception, staff, design of the store, music in the store</td>
</tr>
<tr>
<td>Wulf &amp; Odekerken-Schoder (2003)</td>
<td>Behavioural loyalty</td>
<td>Relational commitment, trust, e-mail sending by the retailer, privileged operations, awards</td>
</tr>
<tr>
<td>Koo (2003)</td>
<td>Store loyalty</td>
<td>Store atmosphere, store location, store facilities, financial value, personnel service, post purchase service, product diversity and its quality</td>
</tr>
<tr>
<td>Sawmong &amp; Omar (2004)</td>
<td>Store loyalty, customer satisfaction</td>
<td>Store location, product features, customer service, promotion, store atmosphere, price, design of the store, product display</td>
</tr>
<tr>
<td>Huddleston, et al. (2004)</td>
<td>Store loyalty</td>
<td>Promotions, price, store location, products, store atmosphere, store services, working hours, operation speed</td>
</tr>
<tr>
<td>Cortinas, et al. (2004)</td>
<td>Store loyalty</td>
<td>Promotions, working hours, price, shopping easiness, post-sale service, payment speed, store and its personnel cleaning, information, satisfaction, self-service facility</td>
</tr>
<tr>
<td>Miranda, et al. (2005)</td>
<td>Store loyalty, satisfaction</td>
<td>Product diversity, promotions, price, store atmosphere, closeness to home and office, width between shelves, time elapsed in the store, salesperson, appropriateness of the shelves, amount of purchase</td>
</tr>
<tr>
<td>Merrilees, et al. (2007)</td>
<td>Store loyalty</td>
<td>Price, store location, design of the store, personnel service, attitude towards the retailer brand</td>
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attribute or a set of attributes of a store can ensure patronage, but a sum of many offers decides customer patronage. These findings are consistent with Stewart (1997) who found that customers averaged the evaluation of many factors and then determined their patronage behaviour. While this presents a vast array of published work on stores and shopping experiences, it again highlights the lack of empirical evidence on the actual antecedents of store loyalty. While merchandise quality, service quality, price and store satisfaction were found to frequent in the research for studying store loyalty, Rajaguru & Matanda (2006) confirm that these attributes are important constructs within the Indian context also. Hence, the present study included the above four attributes to study the relationships within store loyalty. In addition, store atmospherics is also considered as an important construct for the formation of store loyalty, the rationale for which is discussed in the later section.

2.3 STORE SATISFACTION

Customer satisfaction is at the heart of all marketing activities (Machleit & Mantel, 2001). From the products and services offered to the way in which they are priced, promoted, distributed, and sold, the marketer is focused on satisfying customer needs. The definition of customer satisfaction has been divergent ever since Cardozo (1965) introduced this concept into the marketing field. Howard and Sheth (1969) first denoted consumer satisfaction as a related psychological state to appraise the reasonableness between what a consumer actually gets and gives. Oliver defined satisfaction as a total psychological state when there is an existed discrepancy between the emerging emotion and expectation, and such an expectation is a consumer’s feeling anticipated and accumulated from his or her previous purchases. Churchill and Surprenant (1982) suggested consumer satisfaction resulted from purchasing and using a certain product, which was made by a consumer to compare
the expected reward and the actual cost of the purchase. Caruana (2002) define customer satisfaction as a post purchase, global affective summary response that may be of different intensities occurring when customers are questioned and undertaken relative to the retail (banking) services offered by competitors.

More directly related to the retailing, Bloemer & Ruyter (1998) defined satisfaction as the outcome of the subjective evaluation that the chosen alternative (the store) meets or exceeds expectations. This definition is based on the expectancy disconfirmation paradigm (Oliver & DeSarbo, 1988; Tse & Wilton, 1988; Yi, 1990). According to this paradigm, consumers form expectations to which they compare the store’s performance. A comparison of expectations and perceptions will result in either confirmation or disconfirmation. Consumers’ expectations are confirmed when store perceptions exactly meet expectations. Disconfirmation will be the result of a discrepancy between expectations and perceptions. Two types of disconfirmation can be identified: positive disconfirmation occurs when store performance exceeds prior expectations and negative disconfirmation occurs when expectations exceed performance. Confirmation and positive disconfirmation will be likely to result in satisfaction, whereas negative disconfirmation leads to dissatisfaction.

Bloemer & Odekerken-Schroder (2002) identify that a number of authors use advanced outcome-type definitions of satisfaction. According to these definitions, satisfaction can be perceived as a state of fulfilment, which is connected to reinforcement and arousal. Several outcome-types exist, according to the satisfaction-as-states framework developed by Oliver (1989). Based on level of reinforcement and degree of arousal the following end states of satisfaction have been advanced: satisfaction-as-contentment, satisfaction-as-pleasure, satisfaction-as-relief,
satisfaction-as-novelty and satisfaction-as-surprise. In line with Oliver (1997), the present study perceives satisfaction as a post-consumption evaluation.

According to Keiningham, Munn, and Evans (2003), “both practitioners and academics have accepted the premise that customer satisfaction results in customer behaviour patterns that positively affect business results.” Hence, customer satisfaction has attracted significant research interest for more than three decades. In particular, researchers have examined theoretical and conceptual underpinnings of customer satisfaction [e.g., Fornell, Johnson, Anderson, Cha, & Bryant, (1996); Luo & Bhattacharya, (2006)]. There is a multitude of scientific articles that have investigated various outcomes of customer satisfaction. Figure 2.1 provides an overview of previous empirical work on the outcomes of customer satisfaction. Luo & Homburg (2007) distinguish four outcome categories: customer-related, employee-related, efficiency-related and overall performance-related outcomes. As Figure 2.1 shows, the majority of studies investigate customer-related outcomes (including customers’ behavioural intentions and behaviours). The most central finding in this context is that satisfaction increases customer loyalty and influences future repurchase intentions and behaviour (Fornell, Johnson, Anderson, Cha, & Bryant, 1996; Mittal & Kamakura, 2001; Mittal, Ross, & Baldasare, 1994; Olsen, 2002). This also is the focus of present research.

In addition, many studies have addressed potential antecedents of customer satisfaction [e.g., Anderson & Sullivan, (1993); Bolton & Lemon, (1999); Oliver, (1980)]. A review of 50 empirical studies on customer satisfaction showed that the antecedents to satisfaction varied between studies (Szymanski & Henard, 2001). Usually expectations, disconfirmation of expectations, performance, affect, and equity were used to model buyers’ level of satisfaction.
Figure 2.1 Outcomes of Customer Satisfaction - Empirical Studies

In the context of this study, satisfaction refers to the customer’s satisfaction with the store. In pursuit of greater specificity, the store or retail offer is comprised of four dimensions: the store’s merchandise, trading format, customer service and customer communication, each of which may be evaluated differently by consumers (McGoldrick & Ho, 1992; Walters & Knee, 1989). Merchandise refers to such things as the range, quality and price of the products carried by the store whilst the trading format encompasses such aspects as the location, layout and atmosphere. Logically, customer service includes the level of assistance provided by the retailer, the speed of service and the friendliness of staff. Lastly, such things as catalogues and advertisements comprise the customer communication element of the store. All four aspects of the store can be manipulated by the retailer and, as such, cumulatively contribute to its positioning in the marketplace (Walters & Knee, 1989). Thus, by gauging satisfaction with the store, a more detailed indication of consumer store satisfaction can be derived.

Parasuraman, Zeithaml and Berry (1994) suggested that, service quality, product quality and price all influence satisfaction. Voss and colleagues (1998) indicated satisfaction results from the function of price, expectation and performance. Hence, the current study also regards store satisfaction as the function of service quality, merchandise quality and price. In addition, store atmospherics is also considered as an important construct for the formation of store loyalty, the rationale for which is discussed in the later section.

2.4 PERCEIVED QUALITY

While quality is a multidimensional concept that cannot be easily defined or measured, a distinction can be made between objective quality and perceived quality.
Objective quality refers to the actual technical excellence of the product that can be verified and measured (Monroe & Krishman, 1985). In contrast, perceived quality is the consumer’s judgment about a product’s overall excellence or superiority (Zeithaml, 1988). Thus, the perceived quality perspective is different from product-based and manufacturing-based approaches. Most corporations adopt their quality definition from market-oriented viewpoints, rather than from objective quality measures that manufacturers use. In recent years, perceived quality has been the subject of considerable interest by both practitioners and researchers, mainly in services marketing (Cronin & Taylor, 1992; Parasuraman, Zeithaml, & Berry, 1996).

As stated by Parasuraman, Zeithaml and Berry (1985), quality has been a complex but vague construct which demands further investigation for the industries to highlight product and service quality as satisfaction management. In most retail marketing literature, perceived service quality captures the spotlight while perceived merchandise quality is absent. For most retail firms providing intangible services and tangible goods, these two forms of products both play important roles in store satisfaction and store loyalty (Bei & Chiao, 2001). Hence, perceived quality in this study is considered in two dimensions, service quality and merchandise quality.

2.5 MERCHANDISE QUALITY

Perceived product quality is a global assessment ranging from “bad” to “good”, characterized by a high abstraction level and refers to a specific consumption setting (Tsiotsou, 2005). After reviewing 32 studies about service industries, Cronin, Brady and Hult (2000) indicated the importance of product quality on consumer decision making. In a study to identify perceived quality constructs of consumers’ durable goods, perceived merchandise quality played a crucial role affecting the
purchase choices (Brukes, Zeithaml, & Naylor, 2000). Often, the terms perceived quality and satisfaction used interchangeably, especially among practitioners. However, Rust and Oliver (1994) proposed that perceived quality and satisfaction differ in two ways: perceived quality is a more specific concept based on product and service features, whilst satisfaction can result from any dimension (e.g. loyalty, expectations). It is further suggested, “When perceived quality and satisfaction are regarded as overall assessments, perceived quality is understood as an antecedent of satisfaction and therefore precedes it” (Llusar, Zornoza, & Tena, 2001). The research findings reported by Caruana (2002) and Tsiotsou (2006) verify the preceding role of perceived quality and suggest a direct effect of perceived quality on consumer satisfaction. Thus, it is expected that the higher the perceived quality of a product, the higher the consumer satisfaction.

Lee (1998) applied the satisfaction model presented in Parasuraman, Zeithaml and Berry (1994) and Zeithaml and Bitner (1996) to explore how perceived quality of gasoline affected consumer satisfaction and loyalty toward gas stations in Taiwan. Although all gasoline from those gas stations was supposed to be the same in quality as one company provided it, Lee’s empirical results demonstrated that drivers’ evaluations of gasoline qualities from different gas stations varied. Perceived product quality not only had effects on consumer satisfaction, but also placed influence directly on consumer loyalty as shown in Lee’s (1998) study. In addition, perceived product quality had a stronger impact on customer loyalty than did satisfaction. In fact, consumers cared more about the quality of gasoline than of service. This was because gasoline rather than service was the core product that consumers purchased in a gas station. The study also implied that consumer behaviour, for example, repeat purchase, related closely to physical products, whereas consumer satisfaction was
mostly associated with service quality. Yavas and Babakus (2008) also identified, in a study done on national retailer, that merchandise quality is the second most important antecedent in the formation of store loyalty.

While some scholars support a positive direct effect of perceived product quality on purchase intentions (Carman, 1990; Boulding, Karla, Staelin, & Zeithaml, 1993; Parasuraman, Zeithaml, & Berry, 1996), others report only an indirect effect through satisfaction (Cronin & Taylor, 1992; Sweeney, Soutar, & Johnson, 1999) and yet others argue that both relationships exist (Tsiotsou, 2006). However, it is of note that the dual effect (direct and indirect) of perceived product quality on purchase intentions found for goods, while the studies focused on services reported single effects (direct or indirect) (Tsiotsou, 2005). Whether an interaction, a direct and/or indirect effect exists between perceived product quality and purchase intentions, marketing scholars agree that a relationship between these two constructs exists.

### 2.6 PERCEIVED SERVICE QUALITY

Service quality is considered as the most important organization performance indicator both at the marketing literature generally and the service marketing literature specifically (Jensen & Markland, 1996). But there have been mixed findings about the causal direction between service quality and customer satisfaction. The most common explanation for the difference is that perceived service quality is described as a form of attitude, a long-run overall evaluation of a product or service, whereas satisfaction is a transaction-specific evaluation (Bitner, 1990; Cronin & Taylor, 1992; Oliver, 1981; Parasuraman, Zeithaml, & Berry, 1988). Based on these conceptualizations, incidents of satisfaction over time lead to perceptions of service quality. For instance,
Bitner (1990) developed a model of service encounter evaluation and empirically showed that satisfaction was an antecedent of service quality.

In contrast, many other researchers empirically supported the influence of perceived service quality on customer satisfaction (Cronin & Taylor, 1992; Spreng & MacKoy, 1996; Ting, 2004). For instance, Cronin and Taylor (1992) examined the conceptualization and measurement of service quality and the relationships among service quality, consumer satisfaction, and purchase intentions. The findings suggested that service quality was an antecedent of consumer satisfaction whereas consumer satisfaction was not a significant predictor of service quality. Spreng and MacKoy (1996) also discussed the conceptual arguments behind the distinction, and investigated the relationship between service quality and satisfaction by testing a modified Oliver’s (1993) satisfaction/service quality model. The results indicated that their modified model fit the data well when perceived service quality was an antecedent of satisfaction. Moreover, Lee, Lee, and Yoo (2000) examined the direction of causality between service quality and satisfaction. The findings showed that perceived service quality was an antecedent of satisfaction, rather than vice versa. Consistent with these findings, Ting (2004) suggested that service quality better explains customer satisfaction, and the coefficient of the path from service quality to customer satisfaction is greater than the coefficient of the path from customer satisfaction to service quality in the service industry.

With regard to the lack of consensus and in line with Parasuraman, Zeithaml and Berry, Ryu and Han propose that customers can evaluate (be satisfied/dissatisfied with) an object or service only after they perceive the object or service. More specifically, customers may perceive the service quality immediately after service experience as well as at a later time and compare their perceptions with their
expectations. Thus, this study considers perceived service quality, expectations and disconfirmation to lead to satisfaction/dissatisfaction (Oliver, 1989).

Several authors have included service quality in their models to explain loyalty or retention (Cronin, Brady, & Hult, 2000; Ennew & Bink, 1999; Fullerton, 2005; Olsen, 2002). Cronin and Taylor (1992) examined the causal relationships among service quality, customer satisfaction, and purchase intention. Each variable was measured by one item. There were 660 usable questionnaires randomly collected from customers of four types of businesses in the south eastern United States: banking, pest control, dry cleaning, and fast food. The results of correlation analysis have suggested that (1) service quality was an antecedent of consumer satisfaction, (2) service quality had less effect on purchase intentions than did consumer satisfaction, and (3) consumer satisfaction had a significant effect on purchase intentions. Cronin, Brady and Hult (2000) suggested that service quality would directly and indirectly lead to favourable behavioural intentions simultaneously. They found that service quality had a direct effect on consumers’ behavioural intentions in four of the six tested industries, and an indirect effect through satisfaction on loyalty in all six industries. Zahorik and Rust (1992) argue that modelling perceived quality as an influencing factor of customer loyalty would provide significant diagnostic ability to any framework that includes customer loyalty as a dependent construct. Hence, in this study, perceived service quality is proposed to investigate both direct and indirect effects on store loyalty.

2.7 PRICE PERCEPTIONS

Price is an essential element in predicting and understanding customer behaviours. From consumer’s cognitive conception, price is something that must be
given up or sacrificed to obtain certain kinds of products or services (Zeithaml, 1988). Alternatively, the definition of price based upon the consumer’s viewpoint was the price that consumers perceived, that is the perceived price (Bei & Chiao, 2001). To consumers, perceived price is more meaningful than monetary price. Thus, perceived price can be described as “the customer’s judgment about a service’s average price in comparison to its competitors” (Chen, Gupta, & Rom, 1994). The concept of perceived price is based on the nature of the competitive-oriented pricing approach. This approach focuses on customers’ concerns about whether they are being charged more than or about the same as charged by competitors. More specifically, as an extension, in the context of retailing, price perception is the general idea of the customer about any retailer which occurs as a result of a comparison of several retailers’ prices as well as the products’ real prices (Zielke, 2006). This perceived price includes both monetary and nonmonetary prices, including the need to consider nonmonetary costs such as time and effort to the consumer (Zeithaml, 1988).

Several satisfaction studies have examined the role of price as an attribute of performance. Clemes, et al. (2008) have done a research on an international air travel industry in order to obtain factors that affect customer satisfaction and their buying behaviour. Their research adopted means end model (Zeithaml, 1988) and satisfaction model (Parasuraman, Zeithaml, & Berry, 1994). They proposed a hypothesis that customer satisfaction is affected by perceived service quality and perceived price. Their research showed that the proposed hypothesis was supported, so it can be concluded that perceived service quality and perceived price are affecting customer satisfaction significantly. Anderson, Fornell and Lehmann (1994) also emphasized price as an important factor for satisfaction, because whenever consumers evaluate the value of an acquired service, they usually think of the price [e.g., Anderson &
Sullivan, (1993); Athanassopoulos, (2000); Cronin, Brady, & Hult, (2000); Fornell, (1992); Zeithaml, (1988)]. Further, consumers usually judge price and service quality by the concept of ‘equity’, and then generate their satisfaction or dissatisfaction level (Oliver, 1997).

Keaveney (1995) reported finding that more than half the customers she surveyed had switched among services because of poor price perceptions. Her qualitative study suggests that unfavourable price perceptions may have a direct effect on customer intention to switch. Bolton and Lemon (1999) examine the impact of price perceptions on depth of usage of cellular phone and entertainment services. Moore and Carpenter (2006) found that price perception affects the patronage behaviour. Smith and Sinha (2000) determined that price level has a considerable effect on store choice. In another study, Gilbert and Jackaria (2002) found that discounts significantly affect customers’ purchase behaviours. But, according to Jiang and Rosenbloom (2005), except for Bolton and Lemon (1999) study, no other empirical studies are known that investigate the impact of price perceptions on traditional behavioural-intention measures such as customer intention to switch, likelihood to recommend, and likelihood of doing more business with the firm (Parasuraman, Zeithaml, & Berry, 1996). Therefore, the present study considers price perception to exert direct influences on store satisfaction and investigate the both direct and indirect effects on store loyalty.

2.8 STORE ATMOSPHERE

The influence of retail environments on consumer perceptions and behavior is a topic that has received little attention till Kotler (1973) introduced the “atmospherics” concept. The term atmospherics – a specialized area evolved out of
environmental psychology research – is conceptualized as the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability. Kotler (1973) suggested that sight, sound, scent and touch are the main sensory channels for perceiving atmosphere. The main dimensions of each sensory channel are: visual, aural, olfactory and tactile. He noted that the perceived atmosphere may vary for different customers, depending on their individual characteristics. According to Kotler (1973), atmosphere can affect purchase behaviour in at least three ways, as an attention creating medium, a message creating medium and as an affect creating medium. The first two, attention and message creating medium, influence the consumers general decision to select and probably patronise a store while the third, affect creating medium, deals with the way atmosphere influences shopping behaviour within the store. In order to achieve this atmospheric effect, major atmospheric variables must be identified to produce the desired customer awareness and reaction. Turley & Milliman (2000) note that while Kotler is often credited for initiating the literature stream on the subject, research to understand the impact of environmental cues predated Kotler’s article. For example, in 1956 Maslow and Mintz published the results of research they conducted on the effects of aesthetic surroundings on people (Maslow & Mintz, 1956). Studies prior to Kotler’s (1973) generally consider the atmosphere to be a component of store image.

2.8.1 The Mehrabian-Russell Model

The conceptual frameworks developed and utilized for atmospheric research often cite one of the first studies that addressed the affective component of behavioural response, the 1974 study by Mehrabian and Russell. Mehrabian and Russell proposed (1974) that physical or social stimuli in the environment directly affect the emotional state of a person, thereby influencing his behaviours in it. The
Mehrabian-Russell environmental psychology model (M-R model) makes two assumptions: (1) people’s feelings and emotions ultimately determine what they do and how they do it; (2) people respond with different sets of emotions to different environments which, in turn, prompt them to approach or avoid the environment. Using a Stimulus-Organism-Response (S-O-R) paradigm, M-R model offer a parsimonious description of environments, intervening variables and behaviours relevant to the retail setting (Figure 2.2). The model is divided into three parts: stimulus taxonomy, a set of intervening variables and taxonomy of responses.

The M-R model takes general account of stimulus factors in that the degree of arousal evoked by an environment is considered to be a direct function of the information load of the situation. The load of the environment is defined as its degree of its novelty and complexity. Novelty implies the unexpected, the surprising, the new and the unfamiliar. Complexity refers to the number of elements or features and to the extent of motion or change in an environment. The more novel and complex the environment, the higher is the information rate. While the Mehrabian-Russell framework specifies the relationships between intervening variables and response outcomes, it leaves the issue of an appropriate stimulus taxonomy largely untouched. Because it is extremely difficult to account for the variety of stimuli in the environment, Russell & Mehrabian (1976) claim that it is essential to seek general variables as descriptors that grasp the main influence of the environment.
Mehrabian and Russell (1974) suggested that consumers experience environments in terms of three major emotional dimensions: Pleasure-displeasure (P), arousal-non arousal (A) and dominance-submissiveness (D). Pleasure-displeasure refers to the extent to which individuals feel good, happy, pleased, or joyful in a situation, whereas arousal-non arousal denotes the degree to which individuals feel stimulated, excited, or active. Dominance-submissiveness is defined as the extent to which a person feels influential, in control, or important. In this framework, the emotional response or mood state is regarded as the key mediator that influences environment-behaviour relationships. The mediating variables, in turn, are related to a generic class of approach-avoidance behaviours. Approach behaviour is a positive response to an environment characterized by the desire to stay and explore a facility. Avoidance behaviours include not wanting to stay in an environment. Approach-avoidance behaviours are reflected in an individual’s desire to affiliate, desire to explore, desire to stay and desire to work.

2.8.2 Donovan-Rossiter Study

The research conducted by Donovan and Rossiter that was published in a Journal of Retailing article entitled “Store Atmosphere: An Environmental Psychology Approach” is considered a “landmark” (Everett, Pieters, & Titus, 1994) for several reasons. First, it was one of the first studies to test the Mehrabian-Russell model in a retail environment. Secondly, it was only one of a few studies done that investigates the effects of store atmospherics on consumer behaviour using mood as an intervening variable (Spies, Hesse, & Loesch, 1997). Thirdly, it revived interest in the study of atmospherics following the publication of Kotler’s 1973 article (Yalch & Spangenberg, 2000). Their study initiated a stream of empirical research documenting
an environment’s ability to change consumer emotions and thereby affect behaviours that drive retail and service performance (Babin & Attaway, 2000).

Donovan and Rossiter’s (1982) study used Mehrabian and Russell’s PAD semantic differential measures, but replaced several of the original dominance items with more context-appropriate scales. Donovan and Rossiter summarized that consumers experience retail environments in two, of the three emotional dimensions proposed by Mehrabian and Russell, pleasantness and arousal. The dominance dimension in their study proved to be weak. These two emotional reactions influence the customers’ shopping related behaviours in a number of ways (Donovan & Rossiter, 1982):

1) Enjoyment of shopping in the store

2) Time spent browsing and exploring the store’s offerings

3) Willingness to talk to sales personnel

4) Tendency to spend more money than originally planned

5) Likelihood of returning to the store (future patronage)

Pleasure was found to be a very powerful determinant of approach-avoidance behaviour within stores, including spending behaviour. The study also suggests arousal (feelings of alertness and excitement) could also increase the willingness of consumers to spend time in a store and interact with sales personnel. However, arousal was shown to work in a positive way only in stores with pleasant environments. Arousal produced no influence and even negative influence in stores with unpleasant environments.
2.8.3 Store Atmospherics Prior Research

Over forty years of academic research clearly demonstrate the nature of the influence the retail environment can have on consumer perceptions and behaviour. The ability to modify in-store behaviour through the creation of an atmosphere has been acknowledged by many retail executives and retail organizations (Turley & Chebat, 2002). In a review of some 60 experiments that manipulated portions of a store’s complex atmosphere, Turley and Milliman (2000) remark that each of these studies uncovered some statistically significant relationship between atmospherics and shopping behaviour. Turley and Milliman provide a thorough summary of atmospheric research up to 1997. Drawing from the literature provided by Turley and Milliman, Table 2.2 shows studies conducted on retail atmospherics in relation to the variables included by this study i.e., satisfaction and loyalty. Of the 60 studies taken by Turley and Milliman (2000), only 14 were found to investigate the influence of store atmospherics on either satisfaction and/or behavioural intentions.

A number of studies conducted later to Turley and Milliman were found to show significance of retail atmospherics in the formation of satisfaction and/or loyalty (Grewal, Baker, Levy, & Voss, 2003; Budisantoso & Mizerski, 2005; Mattila & Wirtz, 2001; Baker, Parasuraman, Grewal, & Voss, 2002; Kaltcheva & Weitz, 2006; Machleit & Eroglu, 2000).

Store atmospherics are found to influence customers’ behavioural intentions depending on the extent of likeness of the store design. D’Astous (2000) assesses the relationship between the store design and the likelihood that consumer go back to the store. Bad design of store increase the probability that consumer does not revisiting the store. This is later on supported by Grewal, et al., (2003), that, customers are more
Table 2.2 Summary of Atmospheric Studies

<table>
<thead>
<tr>
<th>Researchers</th>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>Purpose/Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donovan and Rossiter (1982)</td>
<td>Pleasure</td>
<td>Approach-Avoidance Behaviour Intentions</td>
<td>Purpose was to test whether approach-avoidance behaviour can be predicted from reported PAD emotional states inside a store and information rate. In pleasant environments, enjoyment, shopping time, and spending increases as arousal increases. Dominance does not appear to strongly influence in-store behaviour.</td>
</tr>
<tr>
<td>Andrus (1986)</td>
<td>Waiting room</td>
<td>Satisfaction</td>
<td>The purpose was to see whether dental patient satisfaction is influenced by the independent variables. They were not manipulated to test effects on satisfaction. Patients reported that organization, exam room equipment, and comfort of waiting room furniture influenced satisfaction. Patients may not have been aware of music and temperature.</td>
</tr>
<tr>
<td>Bitner (1990)</td>
<td>Organization</td>
<td>Disconfirmation Attribution Satisfaction Intended behaviours</td>
<td>Environment influences attributions when service failure occurs. Subjects in the organized travel agency condition were less likely to expect the failure to occur again.</td>
</tr>
<tr>
<td>Eroglu and Machleit (1990)</td>
<td>Retail density</td>
<td>Crowding perceptions</td>
<td>Density does increase perceptions of creating and task-oriented shopping and greater perceptions of crowding than non-task-oriented shoppers perceived risk and the pressure intensify perceptions of mental crowding only in high-density conditions. High mental density and lower pressures lead to reduce satisfaction.</td>
</tr>
<tr>
<td>Baker, Levy, and Grewal (1992)</td>
<td>Ambient levels</td>
<td>Willingness to buy</td>
<td>Used videotapes to measure ambient variables (music and lighting) and social levels (retail salespeople) on consumers. Found that social factors influenced arousal and that social-ambiance interaction occurred for pleasure and willingness to buy.</td>
</tr>
<tr>
<td>Bellizzi and Hite (1992)</td>
<td>Colour</td>
<td>Purchase rates</td>
<td>Conducted two simulation experiments to test the effects of the store colour (blue versus red) to induce feelings or moods and purchase intentions. Consumers react more favourably to a blue environment. Also, the blue store resulted in higher simulated purchase rates. Colour effects were more strongly linked to pleasure than they are arousal and dominance.</td>
</tr>
<tr>
<td>Researchers</td>
<td>Independent Variables</td>
<td>Dependent Variables</td>
<td>Purpose/Findings</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Areni and Kim (1993)</td>
<td>Music Gender Customer type Age</td>
<td>Info search Purchase behaviour Consumption behaviour Time spent shopping</td>
<td>Studied the differing effects of classical and top 40 music on wine shoppers. Classical music resulted in significantly higher sales because “classical music led them to buy more expensive items.”</td>
</tr>
<tr>
<td>Akhter, Andrews, and Durvasula (1994)</td>
<td>Store favourability Product type</td>
<td>Brand beliefs Brand attitude Brand evaluation Purchase intention</td>
<td>Reports results of two related experiments. Brand-related judgements are more positive when evaluated in a favourable store compared with an unfavourable store. This relationship held across all three products (beer, watches, and TVs), except for purchase intentions of beer, which were not influenced by store favourability.</td>
</tr>
<tr>
<td>Baker, Grewal, Parasuraman (1994)</td>
<td>Ambient factors Design factors Social factors</td>
<td>Merchandise quality Service quality Store image</td>
<td>This study combined several related atmospheric variables together to note the effect of these categories of variables on merchandise quality, service quality, and store image. Ambient and social factors have greater influence than design factors on service and merchandise quality perceptions and on store image.</td>
</tr>
<tr>
<td>Machleit, Kellaris, and Eroglu (1994)</td>
<td>Crowding</td>
<td>Perceived crowding Satisfaction Crowding expectations</td>
<td>Tested alternative perceived crowding scales in laboratory and field studies. In a lab situation, the authors found crowding to be negatively related to shopping satisfaction. In the field studies, there was no significant correlation between crowding and satisfaction. The authors concluded that consumers have expectations about the conditions they will face when they go shopping. These expectations may be missing in laboratory experiments.</td>
</tr>
<tr>
<td>Pinto and Leonidas (1994)</td>
<td>Cleanliness Parking Convenience Privacy Office condition Size of waiting room Temperature Decorations</td>
<td>Facility satisfaction Overall satisfaction with care provided</td>
<td>This study compares patient attitudes associated with an “old office” and a “new office.” Satisfaction with the facility increased, but overall satisfaction with the service did not. However, the subjects were very satisfied with service in the old office, which left little room for improvement.</td>
</tr>
<tr>
<td>Researchers</td>
<td>Independent Variables</td>
<td>Dependent Variables</td>
<td>Purpose/Findings</td>
</tr>
<tr>
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</tr>
<tr>
<td>Wakefield and Blodgett (1994)</td>
<td>Stadium videotapes</td>
<td>Perceived quality, Perceived satisfaction, Repatronage</td>
<td>The authors examined the servicescape quality-satisfaction-repatronage relationship by using videotapes of two major league baseball stadiums. They found that different atmospheres do tend to affect perceptions of quality and satisfaction and future purchase intentions.</td>
</tr>
<tr>
<td>Spangenberg, Crowley, and Henderson (1996)</td>
<td>Scent affect, Scent intensity</td>
<td>Evaluations of the store, Evaluations of the store environment, Evaluations of the merchandise, Evaluations of specific products, Intentions to visit the store, Purchase intentions for specific products, Actual versus perceived time spent, Number of products examined</td>
<td>The presence or absence of a scent affects both evaluations and in-store behaviours. However, particular scents or scent intensity did not dramatically affect the results. Subjects in scented conditions perceived that they spent less time in the store than they actually did, while those in unscented conditions perceived they spent more time in the store than they actually did.</td>
</tr>
<tr>
<td>Hui, Dube’, Chebat (1997)</td>
<td>Pleasurable music</td>
<td>Time estimation, Emotional evaluation of the environment, Emotional response to waiting, Recommendation of the service</td>
<td>Tested the effects of pleasurable and now pleasurable music on the four dependent variables. Their results indicated that music produces significant effects on all four dependent variables and that those effects are moderated by whether consumers like to dislike the music. Pleasurable music produced longer perceived wait duration.</td>
</tr>
</tbody>
</table>

likely to shop at a store and recommend it to friends if they like the store’s atmosphere and do not have to wait.

Machleit & Eroglu (2000) indicate that the broad range of emotions felt in the shopping context vary considerably across different retail environments. They also show that the Izard and Plutchik measures outperform the Mehrabian and Russell PAD measure by offering a richer assessment of emotional responses to the shopping experience in predicting Satisfaction. However, a number of studies still are using the PAD tool in the atmospheric studies and identified their varied effects on consumer behaviour. Mattila & Wirtz (2001) suggest that the arousing quality of ambient stimuli is one dimension, along which holistic evaluations occur, and that consumers rate the environment significantly more positive, exhibit higher levels of approach and impulse buying behaviours, and experience enhanced satisfaction. Kaltcheva & Weitz (2006) proposes that the consumer’s motivational orientation moderates the effect of the arousal produced by a store environment on the pleasantness of the environment. When consumers have a recreationally motivational orientation, high arousal has a positive effect on pleasantness, but when consumers have a task-oriented motivational orientation, high arousal decreases pleasantness. In addition, high arousal increases consumer intentions to visit and make purchases in the store for recreationally oriented consumers, but it has a negative impact on shopping behaviour for task-oriented consumers. Pleasantness mediates the effect of arousal on shopping behaviour.

Since last decade, the researchers are studying the effects of store atmospherics on consumer behaviour by including additional concepts like cognitive psychology, optimum stimulation level, product/service quality and so on, in their conceptual models to provide more holistic view of the concept of store atmospherics.
Baker, et. al., (2002) developed a model which incorporates insights from Bitner’s conceptualizations (among others) and integrates theories from environmental and cognitive psychology. Baker, et. al., (2002) propose that patronage intentions are influenced by perceptions of service quality, shopping experience costs and merchandise value. According to Baker, et. al., when store environment cues trigger high shopping experience costs, potential customers may avoid the store altogether without weighing those costs against the potential benefits. Budisantoso & Mizerski (2005) examined the interrelationship amongst shopping motivation, optimum stimulation level, perception of store atmosphere, store patronage and satisfaction in Indonesia. Shopping motivations and optimum stimulation level were found to have a moderate influence on the perception of store atmosphere. In addition, there was a significant association between store atmosphere perception and store patronage satisfaction. Vieira (2010) obtained that there is a positive relationship between factors of centrality of visual aesthetic design (CVSA) and consumer satisfaction, loyalty, items bought, minutes visiting the store, and dollars spent; and that high (vs. low) CVSA consumers were more discriminating in their intentions, when the environment had a high arousal. The original value is to support the notion that consumers also evaluate, beyond products, visual aesthetic components in retail and that it plays a moderating role on consumer intention.

Apart from these studies and later to Turley and Milliman, Greenland and McGoldrick’s (2004) also provide a summary of atmospherics research. Though more concise than the Turley and Milliman summary, Greenland and McGoldrick’s summary is of interest because it is organized via the five sensual receptors – visual, aural, tactile, olfactory and taste. Lorenzo-Romero, Gomez-Borja, & Molla-Descals (2011), in a recent study to investigate the role of web atmospherics on online
shopping environments, presented a summary of retail atmospherics studies which are of recent past.

### 2.8.4 Store Atmospheric Components

Turley & Milliman’s (2000) literary review has so far focused on a general idea of atmospherics. In addition, their review also includes several published studies on atmospheric variables, such as scent, music and others. Based on Berman & Evans (1995), Turley & Milliman (2000) provide a logical and organized classification of these atmospheric cues into five basic categories as shown in Table 2.3: external variables, general interior variables, layout and design variables, point-of-purchase and decoration variables and human variables.

<table>
<thead>
<tr>
<th>External Variables</th>
<th>General interior variables</th>
<th>Layout and design variables</th>
<th>Point-of-purchase and decoration variables</th>
<th>Human variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior signs</td>
<td>Flooring and carpeting</td>
<td>Space design and allocation</td>
<td>Point-of-purchase displays</td>
<td>Employee characteristics</td>
</tr>
<tr>
<td>Entrances</td>
<td>Colour schemes</td>
<td>Placement of merchandise</td>
<td>Signs and cards</td>
<td>Employee uniforms</td>
</tr>
<tr>
<td>Exterior display windows</td>
<td>Lighting</td>
<td>Grouping of merchandise</td>
<td>Wall decoration</td>
<td>Crowding</td>
</tr>
<tr>
<td>Height of building</td>
<td>Music</td>
<td>Work station placement</td>
<td>Degrees and certificates</td>
<td>Customer characteristics</td>
</tr>
<tr>
<td>Size of building</td>
<td>P.A. usage</td>
<td>Placement of equipment</td>
<td>Pictures</td>
<td>Privacy</td>
</tr>
<tr>
<td>Colour of building</td>
<td>Scents</td>
<td>Placement of cash registers</td>
<td>Artwork</td>
<td></td>
</tr>
<tr>
<td>Surrounding stores</td>
<td>Tobacco smoke</td>
<td>Waiting areas</td>
<td>Product displays</td>
<td></td>
</tr>
<tr>
<td>Lawns and gardens</td>
<td>Width of aisles</td>
<td>Waiting rooms</td>
<td>Usage instructions</td>
<td></td>
</tr>
<tr>
<td>Address and location</td>
<td>Wall composition</td>
<td>Department locations</td>
<td>Price displays</td>
<td></td>
</tr>
<tr>
<td>Architectural style</td>
<td>Paint and wall paper</td>
<td>Traffic flow</td>
<td>Teletext</td>
<td></td>
</tr>
<tr>
<td>Surrounding area</td>
<td>Ceiling composition</td>
<td>Racks and cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking availability</td>
<td>Merchandise</td>
<td>Waiting cues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congestion and traffic</td>
<td>Temperature</td>
<td>Furniture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior walls</td>
<td>Cleanliness</td>
<td>Dead areas</td>
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</tr>
</tbody>
</table>

These atmospheric variables are conceptualized as stimuli leading to some cognitive affect within the individual which, in turn, leads to some behavioural response. Previous section focused on the studies that investigated the behavioural response interrelationships in terms of satisfaction and loyalty. From this point on, we will introduce some of the most important variables that will be the subject of this study.

2.8.4.1 Music

Music is the most studied variable and found to have significant impact on sales, arousal, perceptions of time spent in the store, in-store traffic flow and visual stimuli perception in the retail store. Nevertheless, the impact of music can be mediated by the music volume (Smith & Curnow, 1966), music tempo (Milliman, 1982; 1986; Chebat, Chebat, & Vaillant, 2001), age of the shopper (Yalch & Spangenberg, 1990), by the use of background or foreground music (Yalch & Spangenberg, 1990; Yalch R., 1993; Areni & Kim, 1993), and wait expectations (Grewal, Baker, Levy, & Voss, 2003). Another important finding in this area is that music can influence customer behaviour, even when consumers are not conscious of its existence (Milliman, 1982). In addition to these, Grewal, Baker, Levy, & Voss, (2003), concluded that classical music had a positive effect on store atmosphere evaluations, consistent with previous store atmosphere studies.

Music may also influence the meaning consumers get about the brand (Spangenberg, Grohmann, & Sprott, 2005). The mediating effects of in-store music on consumer-brand relationship are further explained by Beverland, Lim, Morrison, & Terziovski (2006). Their findings show that fit between in-store music and the brand operated at many levels. For consumers with clearly formed expectations of the brand,
fit results in brand reinforcement and a positive in-store experience, although one that is more satisfactory rather than delightful. For consumers without prior experience of the brand, music is an important signal of product quality and appropriateness (i.e., target market). As a result, this form of fit helps introduce the brand to the consumer. In other cases, music can play a key role in creating a powerful all-encompassing experience resulting in delight. In each case, in-store music plays a key role in reinforcing, forming and transforming a consumer–brand relationship (Beverland, Lim, Morrison, & Terziovski, 2006). On the other hand, misfit triggers counterfactual thinking about the brand and store, potentially leading to discomfort, exit, or non-entry.

Such misfit and music volume effects are key drivers in atmospheric responsiveness (Machleit, Meyer, & Eroglu, 2005) that contribute to both negative in-store experience and patronage decisions. Music that is too quiet imposes an undesired obligation to interact with sales staff, while very loud music intrudes on the overall experience (Arnold, Reynolds, Ponder, & Lueng, 2005).

Existing literature suggests that music has the largest impact on consumer spending when the music and the given scenario are highly congruent. According to congruency theory, consumers spend more when they perceive that the music type is congruent with the business environment (Jacob, 2006).

2.8.4.2 Ambient Scent

Ambient scent refers to scent that does not originate from any particular object but is present in the environment. While a growing body of research documents the psychological and behavioural effects that ambient scent can have on consumer perceptions and behaviour, scholarly research on the effects of ambient scent has been
limited. Studies show that pleasant ambient scents can positively affect product and store evaluations (Chebat & Michon, 2003; Spangenberg, Crowley, & Henderson, 1996), variety-seeking behaviour (Mitchell, Kahn, & Knasko, 1995), attention to brand and packaging information (Morrin & Ratneshwar, 2003), and cognitive elaboration, or the extent to which an individual thinks about a product or advertisement (Bone & Ellen, 1999).

Ambient scent by its mere presence is found to induce effect on behaviour. Hirsch (1995) conducted a study in a Las Vegas casino to determine whether the presence of a pleasant ambient scent would affect the level of slot machine gambling. He found that the presence of one particular scent increased the amount of slot revenues in one area of the casino that was being tested. At the same time, a second scent in a different section had no noticeable effect. Revenues in an unscented section of the casino remained unchanged. Confirming these findings, Spangenberg, Crowley, & Henderson (1996) found that the nature of the odour did not have an impact on consumer behaviour but that the presence or absence of an odour did affect behaviour.

In addition, Scents that are inconsistent with the product tend to have a negative effect on product or ad evaluations (Mitchell, Kahn, & Knasko, 1995). Further, other atmospheric cues found to exert interactional effect on consumer behaviour. Mattila and Wirtz (2001) explored the main and interaction effects of ambient scent and background music on customers’ evaluations of a store’s environment. They found positive main effects for scent and music individually on approach behaviour and store evaluation. The most favourable responses occurred when the scent and music were congruent with each other (i.e., when both the scent and music offered low arousal and both offered high arousal). These results suggest
that customer satisfaction can be increased through thoughtful manipulation of ambient stimuli.

Although most studies in the marketing literature have found null results of scent on standard affective measures consumer researchers have found significant cognitive effects of scents. In addition, Chebat and Michon (2003) examined the mediational issues associated with ambient scent and found that pleasant ambient scent affected shopper behaviour not because of altered mood or arousal levels but because the scent was perceived as a cognitive cue indicating higher product and mall quality levels.

2.8.4.3 Lighting

Literature indicates that lighting can influence mood (Kuller, Ballal, Laike, Mikellides, & Tonello, 2006; McCloughan, Aspinall, & Webb, 1999), emotions (Fleischer, Krueger, & Schierz, 2001) and perceptions (Houser & Tiller, 2003; Veitch, Newsham, Boyce, & Jones, 2008) for lighting design in buildings and in office-environments. Several Previous in-store studies have looked at the effects of lighting on consumer behaviour and sales performances (Areni & Kim, 1994; Cuttle & Bradston, 1995; Boyce, Lloyd, Eklund, & Bradston, 1996; Summers & Hebert, 2001; Freyssinier, Frering, Taylor, Narendran, & Rizzo, 2006).

Studies reported mixed results of the effects of ambient lighting on sales. Areni and Kim (1994) found that brighter lighting influenced shoppers to examine and handle more merchandise, but illumination level had no significant effect on the time spent at the display or on sales. Cuttle and Bradston (1995) studied the effect of relighting two furniture galleries with higher illuminances and a more even light distribution. Sales in one gallery increased by 35%, the other gallery had no consistent
changes in sales. Boyce et al., (1996) tracked sales at a super market. The refurbished bakery section, which included changes to the lighting, layout and display methods, experienced a significant increase in sales during the first 10 weeks after the reopening, though the remainder of the store, which underwent changes in lighting only, did not experience any significant increase in sales. But the study conducted by Freyssinier et al., (2006) found that the lighting did not affect sales. In their study findings, sales during the experimental period were similar to those in the prior year and were comparable to other stores.

Research aimed to quantify the influence of illumination on consumer behaviour in actual retail environments can be beneficial since lighting is recognized as an important component of store atmospherics, affecting the consumers’ visual appraisal of everything in a store, including the merchandise (Gobe, 1990; Rea, 1993; Lopez, 1995). Summers and Hebert (2001) investigated the approach-avoidance behaviours of shoppers at two types of retail stores, specifically the amount of time at display, the number of items touched, and the number of items picked up under two lighting treatments (ambient lighting only and ambient lighting plus supplemental display lighting). They found that the supplemental display lighting treatment produced different effects on consumer behaviour depending on the type of store.

In fact, light and colour can have such a strong influence on people’s attention so as to even physically attract customers toward a retail display and set a tone for the store’s atmospherics (Bellizzi, Crowley, & Hasty, 1983). Research has also shown that light and colour strongly influence the perceived image of a store and its pricing strategy (Babin, Hardesty, & Suter, 2003).
2.8.4.4 In-store Signage and Graphics

This category of atmospheric stimulus is the general interior displays, which is composed by the point-of-purchase display, posters, signs, cards, wall decorations, and other forms of interior signage and layout. Called collectively as Visual Communications by Levy & Weitz (2003), these tend to boost sales by providing information on products and suggesting items or special purchases, help customers find department or merchandise. Also, graphics can add personality, beauty and romance to the store image (Levy & Weitz, 2003). These benefits tend to enhance when signs are combined with sale price information (Chevalier, 1975; Woodside & Waddle, 1975) or a special display (Wilkinson, Mason, & Paksoy, 1982). Inman, McAlister, & Hoyer (1990) conclude that some consumers would pay more attention to signage and cues surrounding the product than the product itself in their decision-making processes. In addition, Patton (1981) reported that the amount of information in the sign could influence sales. He found that when products were of equivalent quality, consumers choose brands that provide the most information. When products are of unequal quality, however, a display containing only a limited amount of pertinent information generates the best decisions in terms of quality of the chosen product.

Apart from their effect on sales, in-store signage and graphics cues also tend to effect brand loyalty and emotions. In 1989, Bawa, Landwehr, & Krishna concluded that display and feature activity increases consumers’ sensitivity to promotions and prices, and decreases brand loyalty. Concerning promotional strategy, their results indicate that promotions, such as special displays and features, are more likely to be effective in stores that carry a larger product assortment and that tend to use promotions more frequently (Bawa, Landwehr, & Krishna, 1989). Ang, Leong, &
Lim (1997) studied the effects of two physical environment factors – layout and signage – and the overall servicescape on customers’ emotional and behaviour responses in retail banking setting. The emotional responses studied were pleasure and arousal. Better layout, signage, and servicescape resulted in more favourable emotional responses, particularly in terms of pleasure. Pleasure was also found to mediate the effects of these environmental factors on customer behaviour. Arousal was found to consist of two dimensions: one more overt and the other more passive. The banking service environment appears to influence the passive dimension of arousal more so than overt arousal.

However, with the advances in technology and the increasing use of new technologies in the retail contexts, a shift is observed in the visual communication research studies. With the increasing adoption of digital signage in retailing, retailers are concerned more about their effects on the customers’ behaviours. Dennis, Michon, & Newman (2008) studied the effect of digital signage as an atmospheric cue using Mehrabian-Russell (1974) framework in a shopping mall. They found that shoppers’ assessment of their environment triggers positive emotions, which in turn influence shoppers’ approach behaviours, including additional spending. Their results support the stimulus-organism-response paradigm from environmental psychology. Recently, Burke (2009) generalized that in-store digital signage featuring "newsworthy" information (e.g., new items, seasonal offers, promotions) has a markedly favourable impact on sales. This effect is stronger for hedonic (food and entertainment) products. Shoppers are most responsive to messages that relate to the task-at-hand and their current need state, and least responsive to traditional brand messages (Burke, 2009).
2.9 CONCEPTUAL MODEL OF THE STUDY

The effect of store environment on customer behaviour within a store has been studied by several environmental psychologists. A number of researchers have applied the M-R model to store environment studies [e.g., Anderson P., (1986); Dawson, Bloch, & Ridgway, (1990); Golden & Zimmer, (1986); Sherman & Smith, (1986)]. This leading environmental psychology approach is based on the Stimulus-Organism-Response paradigm (S-O-R). According to this model, all responses to features of an environment (e.g., music, lighting, or odour) are mediated by consumers’ emotions. In a retailing context, the atmospheric variables are the stimuli (S) that drive consumer evaluations (O), and then influence their behavioural responses (R). The present study adopts this framework as well as includes store choice criteria, as cognitive component, as mediators along with consumers’ emotions as affective component. The conceptual model for the study is shown in the Figure 2.3 below.

2.9.1 Stimulus

Research on store atmosphere has been conducted either by considering the individual effect of each atmospheric cue on shopper behaviour or by considering all the cues as a holistic entity. Donovan and Rossiter (1982) focused their study on the overall influence of store atmospheric cues on customer behaviour by adopting Mehrabian-Russell’s (1974) environmental psychology model (M-R model). The literature indicates that studies have focussed either on one atmospheric stimulus or a combination of two stimuli. The present model includes four atmospheric cues as the stimuli driving consumer behaviour – music, lighting, ambient scent and signage and graphics.
2.9.2 Organism

Researchers have found that physical environment induces two types of internal states for an individual: affective and cognitive (Zeithaml, 1988; Mehrabian & Russell, 1974). Each type of evaluation impacts a consumer’s shopping behaviour in a different way. Affective evaluation is a judgment of something as pleasant, attractive,
Figure 2.3 Conceptual Model of the Study

Cognitive Variables

- Merchandise Quality
- Service Quality
- Perceived Price

Store Atmoicpheric Cues

- Background Music
- Ambient Lighting
- Ambient Scent
- In-store Signage and Graphics

Emotional Variables

- Pleasure
- Arousal

Stimulus ➔ Organism ➔ Response

Store Satisfaction ➔ Store Loyalty
valuable, likable or preferable (Russell & Snodgrass, 1987). Mehrabian and Russell (1974) first suggested that an individuals’ emotional responses to an environment which summarizes the emotion-eliciting qualities of an environment. Though Mehrabian and Russell suggest three dimensions for affective responses, subsequent research concluded that the emotion-eliciting qualities of environments are captured by two dimensions of pleasure and arousal (Russell & Pratt, 1980; Russell & Snodgrass, 1987). In a retailing context Donovan and Rossiter (1982) applied the M-R model and found that affect is a significant factor of consumers’ approach behaviours within a store. Consistent with the S-O-R model, their findings indicate that consumer affective evaluations mediate the relationship between store environments and shopping behaviour. These studies suggest that consumers’ affective evaluations can be explained in terms of pleasure and arousal dimensions. Furthermore, pleasure and arousal mediate the relationship between the physical environments and approach-avoidance behaviour.

Cognitive evaluations are associated with consumer perception. Perception processes are rooted in information-processing and inference theories (Bettman, 1979; Zeithaml, 1988; Baker, 1998). Perception is a high level of psychological activity concerned with the process whereby sensory stimulation (e.g. cues) is converted into meaningful information (Bettman, 1979). When consumers engage in external search during a purchase situation, the stimuli in a physical store provide some important informational cues to consumers. Consumers may use those cues as the basis for forming inference about price, product, or service quality in that store (Baker, 1998; Baker, Parasuraman, Grewal, & Voss, 2002). For example, the use of carpeted floor and elegant décor in a store design may make consumers infer that this store might charge higher prices and provide higher quality of merchandise and service. During
this process, a consumer selects, organizes and interprets information cues residing in
a store to create a meaningful picture of that store. This rational process or “making
sense” is cognitive evaluation.

To consumers, the availability of extrinsic environmental cues is particularly
important for services or manufactured goods that are high in experience, credence
attributes, or unobservable quality (Bitner M. , 1986; Zeithaml, Parasuraman, &
Berry, 1985; Zeithaml, 1988). In the same vein, Kirmani and Rao (2000) argued that
marketing signals serve as surrogate indicators for consumers, as they form beliefs
about services or product quality. Those signals may include a variety of forms such
as brand name, advertising, expenditure, price, or retailer investment in reputation.
The physical environment is rich in such cues, and as such may be very influential in
communicating the company’s image and product or service quality to their
customers (Rapopart, 1982).

Several empirical studies support the argument that environmental cues
influence one’s cognitive responses. Baker, Grewal and Parasuraman (1994) found
that consumers infer higher merchandise quality and service quality in a prestige-
image ambient environment than in a discount-image ambient environment. Further,
consumers’ merchandise and service quality inferences mediate the effects of ambient
and social environmental factors on their store image perceptions. Another study by
Bitner (1990) found that the appearance of the physical environment can influence
how customers perceive causes of service failure in a travel agency. Less control is
attributed to the firm when the service failure occurs in an organized service
environment than when the same event occurs in a disorganized environment.
Additionally, Grewal and Baker (1994) found that the price range of a product item is
more acceptable in a high-social store environment than in a low-social store environment.

The above studies indicate the importance of both cognitive and emotional factors in understanding the environmental influences on consumer behaviour. Although emotions appear to be important variables, they do not fully explain the mechanism by which environmental stimuli affect behaviours. According to Proshansky, Fabian, & Kaminoff (1983) individuals develop both cognitive and affective evaluations to a particular environment. Hence, both the emotional and cognitive factors were included in the model as mediators affecting the atmosphere-behaviour relationship. Based on understanding from above studies, pleasure and arousal are considered as emotional variables and merchandise quality, service quality and perceived price as the cognitive variables for studying the environment-behaviour relationship.

2.9.3 Response

The influence cognitive variables – merchandise quality, service quality, perceived price – on satisfaction and loyalty is well established in the literature as discussed in the previous sections. Hence, consequences of emotional variables are discussed here.

There is strong support for the link between emotions and satisfaction (Bagozzi, Mahesh, & Nyer, 1999; Beverland, Lim, Morrison, & Terziovski, 2006; Mattila & Wirtz, 2000; Nyer, 1997; Spangenberg, Grohmann, & Sprott, 2005; Westbrook & Oliver, 1991). Caro and Garcia (2007) establish that emotions affect customer satisfaction independently from cognitive evaluations. Specifically, they find a significant arousal-satisfaction link and non-significant pleasure-satisfaction
link. The latter relationship not being significant appears counter intuitive and may be due to the sporting-event context in which the study was undertaken. A spectator is likely to derive pleasure from watching her team, but may not necessarily be satisfied in the event of a defeat. In a retailing context, such a confounding effect is not likely to occur. Indeed, consistent with Oliver (1993) and Liljander and Strandvik (1997), emotions are expected to have an impact on satisfaction. The literature further shows strong support for the link between emotions and loyalty. Arousal and pleasure affect consumer approach or avoidance behaviours including choice intentions, patronage behaviours and word-of-mouth (Babin & Darden, 1996; Bagozzi, Mahesh, & Nyer, 1999; Donovan, Rossiter, Marcooly, & Nesdale, 1994). Kaltcheva and Weitz (2006) find that pleasure impacts approach behaviours; while Sherman, Mathur, & Belk (1997) support that arousal increases purchase intentions. Similarly, Chebat and Slusarczyk (2005) show that emotions influence patronage decisions (i.e., loyalty and exit) and Chitturi, Rajagopal, & Mahajan (2008) and Nyer (1997) find emotions to determine post-consumption behaviours, including repurchase. Finally, a large stream of research supports that customer satisfaction leads to loyalty (Yu & Dean, 2001; Szymanski & Henard, 2001; Caro & Garcia, 2007; Chitturi, Rajagopal, & Mahajan, 2008).