Original Article

Growing shopping malls and behaviour of urban shoppers

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ABSTRACT Shopping malls contribute to business more significantly than traditional markets, which are viewed as a simple convergence of supply and demand. Shopping malls attract buyers and sellers, and attract customers, providing enough time to make choices as well as a recreational means of shopping. However, competition between malls, congestion of markets and traditional shopping centres has led mall developers and management to consider alternative methods to build excitement in customers. This study examines the impact of growing congestion of shopping malls in urban areas on shopping convenience and shopping behaviour. Based on the survey of urban shoppers, the study analyses the cognitive attributes of the shoppers towards attractiveness of shopping malls and intensity of shopping. The results of the study reveal that the ambience of shopping malls, assortment of stores, sales promotions and comparative economic gains in the malls attract higher customer traffic to the malls.

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INTRODUCTION

Marketplaces in urban demographic settings attract a large number of buyers and sellers, which can be termed as market thickness. The co-existence of many shopping malls with traditional markets in a marketplace causes market *congestion*. This problem may be resolved by developing small kiosks for transactions and allowing consumers to test out customised products and services from the main stores (Roth, 2008). The growth of market share for specialised retailers and large departmental stores depends on the size of the consumer segment in a

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given urban population. It is observed that consumers' buying preferences become more diversified as the extent of retail stores increases within a confined area. Thus, the market size reaches a threshold and the consumers' shopping preferences are jeopardised owing to indecisiveness in shopping. However, shopping centres and hypermarkets have become important elements in the urban landscape, though lack of planning and vision has led to chaotic development and congestion of marketplaces, affecting the growth of the retailers (Kok, 2007). A larger shopping centre can facilitate a greater variety of shops, and can create a more pleasant environment for shoppers, thus enticing them to visit more often and stay longer. This proposition leads to one of the challenges faced by managers of shopping malls located outside the traditional shopping belt, that is, how to attract shoppers to patronise their malls (Ooi and Sim, 2007).

Narrowing of shopping streets and the rise of shopping malls have been major trends in retailing in emerging markets. There has been no proper planning to manage the shift of agglomeration of retail stores from both a marketing perspective and consumers' point of view. However, the findings of some studies proved to be quite similar for both shopping streets and shopping malls: the retail tenant mix and atmosphere had the highest relative importance (Teller, 2008). The social demand for environment friendly shopping malls is increasing as a result of rapid urbanisation. To ensure the efficiency of public spending, their provision should be based on the socioeconomic criteria of the region. Hence, suburbanisation has been continuing in developing countries such as Mexico, along with the increase in market expansion. The process of suburbanisation has gone beyond purely government-initiated relocation of households and polluting industries in emerging markets like India, China, Brazil and Mexico. In order to reduce the congestion of shopping areas, the new round of suburbanisation has been driven by the development of large suburban shopping malls and retail parks (Feng *et al*, 2008). It has been observed that large recreational shopping malls encourage regular shoppers and tourists to shop frequently. Accordingly, most citizens of growing cities are patronising their suburban shopping malls and power centres, rather than downtown market places (Maronick, 2007). From the perspective of shoppers, the major attributes of shopping mall attractiveness are comfort, entertainment, diversity, mall essence, convenience and luxury. Such shopping mall attractiveness may be designed in reference to the three broad segments of shoppers: stress-free shoppers, demanding shoppers and pragmatic shoppers. This enables mall managers to develop appropriate retailing strategies to satisfy each segment (El-Adly, 2007).

This study discusses the impact of growing congestion of shopping mall in urban areas of Mexico on shopping convenience and shopping behaviour. Based on a survey of urban shoppers, the study analyses the cognitive attributes of shoppers towards attractiveness of shopping malls and intensity of shopping. Personality traits of shoppers affecting preferences for shopping malls with regard to store assortment, convenience, distance to malls, economic advantage and leisure facilities have also been discussed in the study. The discussions in the paper also examine the specific evidence of the

effects of ambience stimuli such as aroma, music and video screen media as major indicators of shopping mall attractiveness.

LITERATURE REVIEW AND FRAMEWORK OF HYPOTHESES

Location and shopping behaviour

The development of shopping malls and leisure facility centres in Mexico needs to be evaluated from the perspectives of economic, operational and managerial efficiency. The economic relationship concerns the degree of dependency between the attractiveness of shopping malls and shoppers' personality traits in reference to market share, returns on investment and profitability (Rajagopal, 2008a). Two types of shopping centre model are observed in the emerging real estate markets in developing countries, which are characterised by their ultimate relationship with the physical shopping centre on whose web site they reside (Dixon and Marston, 2005; Kuruvilla and Ganguli, 2008). The underlying success factors of planned, centrally managed and large shopping malls in the retailing sector rotates around customer satisfaction in reference to selection, atmosphere, convenience, salespeople, refreshments, location, promotional activities and merchandising policy (Anselmsson, 2006). It is observed that agglomerations of small stores selling similar ranges of goods around the shopping malls also cause congestion, and often divert attraction of price-sensitive shoppers towards unfamiliar brands. Although such agglomerations of retailing activity are not unique to Mexico, as there are market places accommodating large numbers of small retail outlets, the development is arguably unusual in the ways that the number of agglomerations continues to grow and these new agglomerations are dealing in a wide range of goods including electronic gadgets (for example, Blois *et al*, 2001). Thus, Hypothesis 1a is framed as follows:

Hypothesis 1a: Congestion of shopping malls with the same store brands reduces attraction towards shopping and visits of shoppers to malls.

It is found that assortment of stores, mall environment and shopping involvement have a differential influence on excitement and desire to stay in malls, which in turn are found to influence patronage intentions and shopping desire in malls (Wakefield and Baker, 1998). However, it is evident from some research studies that conventional retailers in and around the mall and new age tenants have different target groups to serve, small traditional retailers possibly coexist around large shopping malls. Contemporary retailers seem not to have evolved enough to replace conventional retailers around their marketplace (Ibrahim and Galven, 2007). In fact, the presence of small retailers' traditional marketplaces, such as *Pericoapa*¹ in the study region in Mexico, has driven an alternative option for mall managers to rejuvenate the shopping attractions as well as allow a variety of shops in the malls. The retailing territories in Mexico are complex, comprising the distinct habitation

pattern, transit system and state-licensed periodic street markets bridging gaps in public spaces. Such urban planning allows for retailing integration and collective behaviour of consumers in street markets and shopping malls (for example, Loafland, 1985). Small retail stores outside the large shopping malls display ethnic products that are of low price and high appeal. Shoppers visiting large malls choose to shop either in ethnic shops or for mainstream store brands located inside the malls. Such shopping behaviour is observed when ethnic economies and mainstream businesses, both of which have a strong presence in large shopping malls, compete against each other (Wang and Lo, 2007). Accordingly, Hypothesis 1(b) may be derived as follows:

Hypothesis 1b: Agglomeration of small retail stores around large shopping malls deviates consumer shopping focus from stores inside the mall, as customers experience ethnic ambience and economic gain in buying from small retailers.

It is commonly assumed that the consumers' decision concerning the place they usually choose for shopping depends essentially on the distance to the mall. The satisfaction of shoppers plays at least an equally important role in metropolitan areas where commercial zones are numerous enough to lead consumers to choice decisions. Thus, different behavioural aspects including perception of shopping possibilities, expected pricing practices and general global environment of each shopping mall affect the satisfaction or dissatisfaction of consumers (Léo and Philippe, 2002). Motivations for shopping include inside and outside ambience of the mall, layout and extent of involvement in the shopping process. The ambience of the shopping mall, architecture, ergonomics, variety and excitement motivate the shopper to stay longer and make repeated visits to the mall (Craig and Turley, 2004). Common promotional activities employed by the stores in shopping malls include sales and encouragement so that shoppers make frequent visits to the mall. Some traditional promotions such as fashion shows and product displays are shown to be poor performer strategies in generating shopper response, while mall-wide sales are the preferred method of promotion. It is argued that a combination of general entertainment and price-oriented promotions is a strong alternative for encouraging customers to frequently visit and spend more (Parsons, 2003). Hispanic shoppers including Mexican buyers make trips to malls along with family and friends, and largely buy food and beverages. Hispanic shoppers also spend more time at malls, shopping at various stores during their visits. Accordingly, marketers have become increasingly interested in the extent to which situational factors influence consumers' purchase behaviour (Nicholls, 1997). In view of the above studies, Hypothesis 1c may be developed as follows:

Hypothesis 1c: Urban shoppers visit shopping malls as leisure centres to relax, and tend to shop in response to sales promotions employed by different stores.

Ambience and shopping arousal

A common observation about shopping malls is their *similitude*. Despite such uniformity, shopping malls are increasingly using *place branding* as the basis for promotional activities, assortment of shops and customer services at all levels of mall. The effectiveness of malls is enhanced by measuring shopper traffic and sales of retail tenants (Parsons and Ballantine, 2004). Developing the inside and outside ambience of shopping malls to enhance the shopping experience is a recent concept in retailing, and many pleasant ambient stimuli such as product videos, music and fragrance help consumers to make positive buying decisions. Consumers make holistic evaluations of shopping malls in view of the arousing quality of ambient stimuli for buying products, and derive satisfaction from buying products and services. Consumers with strong shopping motives are found to experience more pleasure and arousal, and find the mall ambience to encourage impulse buying behaviour (McGoldrick and Pieros, 1998; Mattila and Wirtz, 2004). The most common configuration of shopping centres is linear. Parking and public conveniences are provided in the mall. Commonly, the ambience around shopping malls is devoted to parking, unless a multi-level parking structure is provided for customer use (Carter and Vendell, 2005).

Motivational forces are commonly accepted to have a key influencing role in the explanation of shopping behaviour. Personal shopping motives, values and perceived shopping alternatives are often considered independent inputs into a choice model; it is argued that shopping motives influence the perception of retail store attributes, as well as the attitude towards retail stores (Morschett *et al*, 2005). The recreational facilities prompt shopping arousal and play a pivotal role in delivering a divulging impact of buying behaviour of young consumers. Shopping supported with recreational attractions may be identified as one of the major drivers in promoting tourism by demonstrating quality fashion products and store preferences among tourist shoppers. Arousal in shopping encourages young consumers to stay longer in stores, to experience the pleasure of products and to make buying decisions. Perceptions of shopping duration, emotional levels and merchandise evaluations are derived from the level of arousal experienced by the consumers in the shopping malls (Rajagopal, 2007). Hence, the following hypothesis is constructed:

Hypothesis 2a: Consumers are influenced in making buying decisions by the product attractiveness and arousal generated while shopping in malls.

Arousal while shopping may be seeded through multi-faceted activity that may be performed in various ways and embody different consumer feelings. It is also argued that there is a need to focus more on the influence of retail ambience on shoppers engaged in leisure shopping (Backstrom, 2006). The three distinct dimensions of emotions, pleasantness, arousal and mall attractiveness, have been identified as major drivers for making buying decisions among shoppers (Rajagopal, 2006). The ambience of shopping malls, whether pleasant or unpleasant,

moderates the arousal effect on satisfaction and in-store buying behaviours. Satisfaction in pleasant retail ambience where music, hands-on experience services, playing areas and recreation are integrated maximises consumer arousal. It has been observed that young consumers perceive a positive effect of in-store behaviours if shopping arousal is high. Thus, retailers need to pay attention not only to the pleasantness of the store environment, but also to arousal-level expectations of shoppers (Wirtz *et al.*, 2007). The impact of inside-mall ambience can be measured by the degree of stimulation and pleasure experienced by consumers. Interactive tools on product learning provided in the retail stores significantly affect the level of arousal and pleasure that contribute towards experience and thereby influence buying behaviour. As higher stimulation or interactive learning provided by the retailers focuses on gaining initial experience on product use, consumers tend to engage in activities that are more highly arousing by acquiring the product (Menon and Kahn, 2002). However, malls at times fail to recognise that what influences buyers' satisfaction is not the same as what engenders store loyalty (of tenants), and consequently do not effectively develop the shopping ambience to stimulate buying decisions. Hence, they need to vigilantly manage the quality of arousal by developing adequate customer involvement in the buying process of retail shoppers (Miranda *et al.*, 2005). Considering the evidence from the previous studies discussed above, Hypothesis 2b is framed as follows:

Hypothesis 2b: Shopping malls with better leisure facilities and ambience attract a large number of visitors, who stay longer in the malls and indulge in compulsive buying.

Retail competition and shopping mall attractiveness

In the retail sector, new players constantly emerge to satisfy consumer demand by placing themselves in better located stores in attractive shopping malls. Retailing strategies are driven by competitive stimulus as consumer demands and desires shift with new offerings, and existing firms disappear when they cannot adapt to the change. Retailers seek to dominate a distinct classification of merchandise and wipe out the competition. Retailers in shopping malls engage outsourced salespeople to promote their brand and prospect new shoppers. The bargaining power of firms increases with outsourced salespeople who stimulate the demand for products and contribute to the enhanced sales at retail outlets. It has been observed that pull effect for the brands supported by the sales promoters increases at the retail stores as customers gather the pre-buying information from sales promoters (Gómez *et al.*, 2007). It is observed that retailers in shopping malls develop competition over business hours and price. Such strategies effect consumers' shopping interest and intensity of shopping, as often change in business hours leads to store-switching behaviour. However, such competition cannot be stretched by the retailers beyond social optimum (Shy and Stenbacka, 2008). It has been further evidenced by another study that retailers compete for market share using both price and variety. Retailers display

extensive product lines and a new variety of products in their stores and maintain differential prices, as retail competition suggests that product heterogeneity is critical to retail price in gaining competitive advantage over others. However, retailers in large shopping malls tend to follow moderately cooperative strategy, and thus competition between malls and smaller forms of shopping centres has led mall developers and management to consider alternative methods to build excitement with customers (Timothy and Stephen, 2006). Therefore, Hypothesis 3 may be constructed as follows:

Hypothesis 3: Competitive sales promotions of retail stores in shopping malls induce variety-seeking behaviour and build store loyalty among shoppers.

Five essential qualities of aesthetic judgment, *interest, subjectivity, exclusivity, thoughtfulness and internality*, need to be nurtured among consumers to develop conviction in buying. The quality of aesthetic judgement driven by in-store aura and arousal towards new products, exercised by the customers in association with the sales promoters, determines the extent to which new products and brands promote an enhanced quality of life (Dobson, 2007). Convergence of sales promotions, customers' perceptions, value for money and product features drive arousal among customers. The nature of the customer–retailer relationship functions as the key in the selling and buying process with regard to in-store promotions. However, in this process the perceptual problems with customers can greatly devalue the customer–promoter relationship and brand as a whole (Platz and Temponi, 2007; Rajagopal, 2007). Consumer appreciation of premium-based promotional offers is more positive when the premium is offered through an easy process and in combination with a relatively lower quantity of products to purchase. It has also been found that when the value of the premium is mentioned and brand perception is positive, compulsive buying tendencies are higher among customers (d'Astous and Jacob, 2002). The in-store environment variables in the shopping malls driving impulsive buying behaviour include displaying point-of-sale posters and exhibiting promotional discounts and cheaper prices, while the atmosphere engagement with regard to enjoyment, elegance and attractiveness is conveyed by the ambience inside the shopping mall. Such behavioural drivers may also be referred to as in-store promotional effect and atmospheric effect (Zhou and Wong, 2004).

STUDY DESIGN

Sampling

This study has been conducted in 14 shopping malls comprising 623 assorted stores located on the street Canal de Miramontes in the south of Mexico City. This street has been purposively selected because it branches out into various residential settlements. The selected street joins two municipalities (known in Spanish as Delegación) – Tlalpan and

Coyoacan – which account respectively for 6.9 per cent (population 607545) and 7.2 per cent (population 628063) of the total population of Mexico City (Distrito Federal) according to the 2005 census (Demographia, 2008; INEGI, 2008). The locations of the malls covered under the study are shown in Figure 1.

People who frequently visit malls for leisure shopping in southern residential areas in Mexico City were selected as sample respondents for this study. These respondents showed homogeneity in shopping behaviour with regard to leisure shopping, impact of shopping mall ambience on shopping visits, store loyalty, point-of-sale promotions, buying decision process, point-of-sale arousal towards store promotions and influence of recreational satisfaction in malls on buying. Data were collected by administering pre-coded structured questionnaires to 1200 customers who were selected following a purposive sampling and snowballing technique. Information collected through the questionnaires was reviewed for each respondent to ascertain quality and fit for analysis.

Data collection tools

The study was conducted between 2005 and 2008 during different festival periods broadly categorised as three seasons: April–June (spring sales following the occasions of Easter vacation, Mother's day and Father's day), July–August (summer sales) and November–January (winter sales following prolonged Christmas celebrations), when point-of-sale

Figure 1: Shopping malls in the study area (Mexico City South).
Sources: Google earth.

promotions were offered frequently by the selected retail stores located in large shopping malls. February, September and October are observed to be lean months for shopping among residents. The data collection process was initiated in July 2005 and terminated in June 2008, covering nine shopping seasons during the study. A focus group session was organised with potential respondents to identify the most appropriate variables for the data collection. Accordingly, 45 variables that were closely related to influencing shopping arousal and customer satisfaction towards point-of-sale promotions were selected and incorporated in the questionnaires. The questionnaires were pilot tested to 225 (14.06 per cent of total sample size) randomly selected respondents, and were finalised after being refined based on the responses during the pilot study. The variables selected for the study have been broadly classified into economic and behavioural variables, as shown in Table 1.

A mall intercept survey was conducted, and visitors to malls were asked where they lived and whether they came from home. More attractive malls were expected to attract customers from greater distances. A questionnaire was developed to investigate the extent to which point-of-sale promotions had influenced buying behaviour, derived post-buying satisfaction and augmented the volume of sales of the retail stores. The pre-test of the preliminary questionnaire on measuring the influence of point-of-sale promotions on stimulated buying behaviour indicated that promotion offers introduced by the retailers acted as strong stimuli for regular and new shoppers. Based on responses from the pre-test, the final questionnaire necessitated no significant changes. The questionnaires were translated into Spanish. All care was taken regarding the terminology and language employed in each version of the questionnaire. The variables used in the questionnaire for data collection included various perspectives of customer satisfaction and promotional practices offered by the retailers to gain competitive advantage, optimal market share and higher aggregate sales.

Table 1: Variables chosen for the study

<i>Physical variables</i>		<i>Cognitive variables</i>	<i>Economic variable</i>	
<i>Logistics related</i>	<i>Ambience related</i>	<i>Arousal and merriment</i>	<i>Comparative</i>	<i>Sale promotion based</i>
VS ₁ (9)	VS ₂ (12)	VS ₃ (10)	VS ₄ (6)	VS ₅ (8)
Distance	Peripheral mall ambience	Creative sales events	Value for money	Promotional attractions
Public transport	Inside mall ambience	Product demonstration	Price sensitivity	Products display
Feeder roads to shopping mall	Flowers and vegetation	In-store advertising	Quality difference	In-store ambience
	Air conditioning	Hands-on experience	Customer service	Availability
Car parking	Lighting	Customer interaction	Cross promotion	Length of promotion
Convenience for disabled and senior citizens	Public audio-video system	Recreation	Competitiveness	Responsiveness
	Recreational place	Sensory appeals		Value added benefits
	Ethnicity	Free samples and gifts		Partners of promotion
Public phone booths	Hallway and shopping space	Newness of products	—	—
Security standards	Relaxing benches	Health oriented		
Information booth	Terrace attractions	—	—	—
Evacuation path	Social status			

VS = Variable segment. Figures in parentheses indicate number of variables.

Table 2: Descriptive statistics for the selected variable groups for the study

Variable groups	VS ₁ (9)	VS ₂ (12)	VS ₃ (10)	VS ₄ (6)	VS ₅ (8)
Sample size	1476	1476	1476	1476	1476
Mean	5.309	7.681	7.443	6.291	4.836
Standard deviation	0.875	0.629	0.643	0.833	0.916
Standard error	0.082	0.073	0.051	0.066	0.068
Skewness	-0.946	-1.122	-0.639	-0.770	-0.643
Sample variance	0.655	0.596	0.482	0.794	0.804
Data reliability test – Cronbach (α) scores	0.84	0.76	0.88	0.82	0.74

VS=Variable segment. Figures in parentheses indicate number of variables.

The descriptive statistics of the data sets for the variable segments used in the analysis of the study are shown in Table 2.

Data were collected by means of personal interviews conducted by undergraduate students of international commerce and marketing, who hand-delivered the questionnaires to the key respondents in the self-service retail stores that had agreed to be the subjects of the research investigation. In most cases, the respondents completed and returned the questionnaires by the predetermined date.

Response trend

Questionnaires were administered to 1600 respondents. However, during the process of data analysis, the questionnaires of 124 respondents were omitted due to paucity of information. In all, 1476 respondents were covered under the study, and the usable response rate was 92.25 per cent. The non-response bias has been measured by applying two statistical techniques. First, telephonic conversations were made with 20 randomly selected non-respondents answering some general questions about sales and services policies of the dealers (Gounaris *et al*, 2007). *t*-tests were used to ascertain emerging differences between respondents and non-respondents concerning the issues pertaining to market orientation and customer services strategies. No statistically significant differences in pre-coded responses ($\alpha = 0.05$) were found. A second test for non-response bias examined the differences between early and late respondents on the same set of factors (Armstrong and Overton, 1977), and this assessment also yielded no significant differences between early and late respondents.

Construct of measures

The location, accessibility and ambience of shopping malls are measured with a 21-variable (logistics-related VS₁ – 9 and ambience-related VS₂ – 12) self-appraisal perceptual scale derived originally on the basis of focus group analysis as mentioned in the pretext. All variables selected for the study are shown in Table 1. Motivation about this construct has been derived from an original scale on market orientation developed by Narver and Slater (1990), who conceptualised this as a multivariate construct comprising customer orientation, competitor orientation and inter-functional coordination as principal behavioural components. This scale also comprised triadic decision coordination

among shopping mall ambience, store assortment and shoppers' preferences, including long-term business horizon and shoppers' value (for example, Ruekert, 1992; Hunt and Morgan, 1995). The impact of arousal and enjoyment, comparative advantages in shopping and store promotions in the shopping malls stimulate buying decisions, enhance overall satisfaction of customers and affect the frequency of visiting shopping malls. This phenomenon has been measured using a 24-variable 'self-appraisal perceptual scale' that included cognitive variables referring to arousal and merriment ($VS_3 - 10$), and economic variables comprising competitive advantages ($VS_4 - 6$) and sales promotions ($VS_5 - 8$) offered by the retail stores in the shopping malls (for example, Rajagopal, 2008b).

In this study, a five-point Likert scale (anchored by strongly agree = 1/strongly disagree = 5) was employed to measure the efficiency of customer services delivered by the automobile dealers in the study region. Respondents were asked the extent to which quality management practices were implemented. The chi-square and comparative-fit index for the factor loadings were analysed for the model. Measures were validated and a performance construct for the point-of-sale promotion was developed for the scores that emerged out of the data analysis. Regression analysis was performed in order to ensure that the results on these constructs were non-correlated with the mutual interaction terms (Jaccard *et al*, 1990).

STRUCTURAL EQUATION MODEL

Structural equation models (SMEs) are also known as simultaneous equation models. In order to analyse the effects of different variables identified in the study on the customer value of buying in shopping malls, a structural equations model is derived. The multivariate regression technique has been used to estimate equations of the model. These structural equations are meant to represent causal relationships among the variables in the model (Fox, 2002). Let us assume that the shopping attractiveness is S_x and shopping ambience in malls is $M_t^{(i_1+i_2+i_3+\dots+i_n)j}$, with leisure attractions ($i_1, i_2, i_3, \dots, i_n$) in j th mall at a given time t in a marketplace location h . Shoppers perceive value in buying products in the stores inside the malls, stimulated by smart sales promotions B_{sp} wherein shopping arousal is driven by the ambience of shopping malls A_{am} and assortment of brand retail stores R_{bs} in a commercial place.

$$S_x = \sum_t^{jh} [M_t^{(i_1+i_2+i_3+\dots+i_n)j}] [B_{sp}, A_{am}, R_{bs}] \quad (1)$$

Hence,

$$\begin{aligned} S_x &= M_p^{jh} \frac{\partial q}{\partial t} = M_p^{jh} \frac{\partial b'}{\partial k} \frac{\partial k}{\partial t} \\ &= M_t^{in,j} \frac{\partial q}{\partial k} [B_{sp}, A_{am}, R_{bs}] \end{aligned} \quad (2)$$

wherein M_p^{jh} denotes buying orientation of shoppers in a mall (j) at location(h) and (q) represents the distance travelled by shoppers to the

mall in time t with preferential shopping interests(k). In the equation, b' expresses the volume of buying during the visits to the shopping malls. The total quality time spent in shopping malls leading to make purchases ($\partial_t / \partial_k > 0$), and customer services offered by the stores affecting the level of satisfaction of the customer ($\partial_{b'} / \partial_k > 0$) increase simultaneously. With regard to the size of mall x , preferential shopping interests(k) of consumers create lower values with smaller size malls to ($\partial_k / \partial_x < 0$), while the assortment of stores in the shopping mall, irrespective of sales promotions and price advantages, enhances the consumer value ($\partial_{k'} / \partial_r > 0$). The location of shopping malls provides less enhancement in consumer satisfaction as compared to the assortment of stores, wide product options, sales promotions, re-buying attributes and customer services

$$\text{Therefore, } \int b' \partial b' = \int = B_{sp} + A_{am} + R_{bs} + V_b \quad (3)$$

In the above equation, V_b denotes the customer value generated by shopping with competitive advantage over time, distance, price and promotion.

In order to measure the cyclicity of shoppers visiting malls in the three festive seasons as discussed in the pre-text, an initial robust weighting matrix and optimal weighting matrix were employed using the following equation:

$$V_b = \frac{\partial b}{\partial k} (S_x) [\beta (\lambda_0 + \gamma_1 + \gamma_2 + \gamma_3) B_{sp}]_t^{jh} \quad (4)$$

The above equation represents frequent visits of the shoppers in mall (j) at location (h), ∂ denotes the consumer preference for the newly introduced products in the market, (γ_0) represents visits to shopping malls influenced by physical variables, (γ_1) denotes visits to shopping malls influenced by cognitive variables, (γ_2) shows visits to shopping malls derived by the economic variables, (γ_3) indicates switching of shopping preferences from malls to traditional markets around large shopping malls and (β) refers to the structural parameter relating the endogenous variables to one another. Ordinary Least Squares method to measure the customer value for buying in shopping malls (dependent variable) with regard to the above-discussed physical, cognitive and economic variables (independent variables) has been computed using the construct below:

$$V_b = \alpha + \beta_1 (B_{sp}) + \beta_2 (A_{am}) + \beta_3 (R_{bs}) + \beta_4 (S_{b'}) + \beta_5 (S_q) + \beta_6 (C_{tm}) + \beta_{6s} (S_{hm}) + \varepsilon \quad (5)$$

In the above equation, ($S_{b'}$) denotes volume of buying by the shoppers in the malls, (S_q) represents distance travelled by the shoppers to visit the malls during the festive seasons, (S_{hm}) indicates the number of hours spent by customers in shopping malls per visit and (C_{tm}) shows the consumer preference to shop in traditional markets located around

large shopping malls. The error term is denoted by ε in the above equation.

The model explains that the value-based buying in shopping malls enhances consumer satisfaction with regard to cognitive pleasure, value for money, reliability, safety and comfort. However, market partitioning between malls and traditional markets around malls generates price sensitivity and product attractions. Traditional markets agglomerated around large shopping malls offer disruptive innovation products at lower prices. When low-priced disruptive innovation products with easy-to-use versions are offered to the low- and middle-end consumers, stores doing business in shopping malls with established brands are affected. Traditional markets around the shopping malls offering disruptive innovative products are always more motivated to target up-markets than to defend low-end markets. Hence, traditional markets pose a continuous threat to malls and play a major role in dividing customer preferences between themselves and shopping malls (Christensen *et al.*, 2006). As a result, a sub-market consists of highly substitutable products, and consumer values are reflected in their competitive gains, perceived use values, volume of buying and level of quintessence with the customer relationship services of the retailing firms (Rajagopal, 2008 b).

RESULTS AND DISCUSSION

Descriptive statistics of the data sets for the variable segments used in the analysis of the study are shown in Table 2. Data have been inputted to the structural equations of the model discussed in the paper. Customer value (V_b) in shopping at malls is analysed with regard to equation (4) and results are shown in Table 3. The structural parameters ($\gamma_0, \gamma_1, \gamma_2, \gamma_3$) are measured as regression coefficients. Standard error in estimation is represented by SE in Table 3. The results reveal that long-term customer values are associated with shopping in the malls, while customers may derive short-term comparative gains over price and newness of products by shopping at traditional markets surrounding large malls. The estimations represented for all the observations of the study and standard error have been calculated accordingly.

In Table 3, estimates of major variables are adjusted to the seasonality pattern of visits to shopping malls using a fixed 4-week time lag of each explanatory variable, and included them in the regressions. It is observed from the results that shopping at malls is highly influenced by physical, cognitive and economic variables. In addition, the results reveal that preference for buying in traditional markets around the malls is high, which indicates the attitude of switching established store brands available in malls with the traditional unfamiliar brands. The cognitive factors among consumers in brand switching include product attractiveness, low price, user-friendly technology and easy product servicing policies of small retail outlets outside the shopping mall. However, the cyclicalities (upon being lagged for 4 weeks) of visits to the shopping malls has shown a positive trend and a statistically significant impact on leisure shopping during the festive seasons ($\beta = 0.8467$). Accordingly, the results exhibited in Table 3 are consistent with Hypotheses 1a and 1b.

Results concerning the impact of various relational variables including sales promotion, ambience, assortment of stores, distance travelled to visit the shopping mall and preference for traditional markets on volume of buying and customer value of buying are shown in Table 4. Variables measured in this table refer to the construct of equation (5) discussed in the paper.

The results presented in the Table 4 show that sales promotions offered in large shopping (LS) malls have a greater impact (91.12 per cent) on customer value in buying goods and services as compared to other categories of malls, because LS malls attract middle- and upper-middle class consumers who are sensitive to price and volume promotion of products and services. Extra large shopping (XLS) malls comprise large departmental stores and brand retail stores that offer premium products attracting a consumer segment of higher economic class. Thus, sales promotions do not affect the customer value in buying products of exclusive brands. However, shopping arousal in XLS malls has a greater impact (81.43 per cent) on customer value in buying products and services than other categories of shopping malls, though the volume of buying is lowest (61.06 per cent) in the XLS category of malls. A principal reason for higher shopping arousal in XLS malls is the large assortment of stores (90.22 per cent) in comparison to other types of shopping malls. Small shopping (SS) malls have a smaller assortment of retail stores (36.11 per cent), which provide less opportunity for sales attractions and lower

Table 3: Estimations of structural equations

Study area		Parameters										
Shopping clusters	No of malls	N	(V_b)	(γ_0)	(γ_1)	(γ_2)	(γ_3)	(β)	SE	($\bar{O}$)	p	chi-Square
SS (1–50)	5	399	0.7366	0.7713	0.7541	0.8301	0.7302	0.6303	6.9971	4.2201	0.6220	128.06
MS (51–100)	3	284	0.8012	0.8308	0.8299	0.7491	0.9182	0.9222	5.1285	5.6539	0.5351	163.72
LS (101–150)	4	435	0.8561	0.7263	0.8202	0.8105	0.8871	0.9373	6.3277	4.7112	0.5219	184.20
XLS (151–200)	2	358	0.9366	0.8913	0.9310	0.8224	0.9586	0.8917	5.4666	5.0010	0.5914	176.44
Overall		1476	0.9251	0.8849	0.8504	0.8329	0.9154	0.8467	5.899	4.513	0.5136	236.72

SS=Small size malls, MS=Medium size malls, LS=large size malls, XLS=Extra large malls, SE=Standard error. Figures in parentheses indicate number of shops in malls.

Table 4: Impact of relational variables on customer value in buying at shopping malls vs. traditional markets

Analytical variables ^a	SS (5)	MS (3)	LS (4)	XLS (2)	Overall (n=1476)
Sales promotions (B_{sp})	0.6297*	0.7538*	0.9112*	0.8366*	0.7932*
Arousal in shopping malls (A_{om})	0.4715**	0.6296*	0.7197*	0.8143*	0.7224*
Assortment of stores (R_{bs})	0.3611	0.5420**	0.7506*	0.9022*	0.8633**
Volume of buying (S_b)	0.7543*	0.7510*	0.8457*	0.6106*	0.7625*
Distance travelled to malls (S_d)	0.3145	0.3026	0.3874	0.3544	0.3136
Time spent in shopping malls (S_{hm})	0.3820	0.4904**	0.6113*	0.9277*	0.6491*
Preference for traditional markets (C_{tm})	0.6430*	0.9874*	0.8861*	0.9417*	0.8445*
Constant	0.1439	0.2215	0.3499	0.1079	0.2115
R ²	0.6753*	0.5586**	0.7986*	0.8413*	0.6642*

^aVariables are described in equation (5).

P value *>0.01 and **>0.05.

shopping arousal to the customers, though the volume of buying (75.43 per cent) is found to be highest in SS malls. Three major attributes of shoppers, including shopping frequency, average buying value and number of stores visited in the shopping malls, were analysed with respect to each shopping season during the study period. The results are graphically illustrated in Figure 2, which reveals that the ratio of frequency of visits to value of buying increases with the hierarchy of shopping malls, except in the case of SS malls. It is found that the ratio of frequency of visit to the value of buying in medium (MS), LS and XLS malls is 1:325.65, 1:581.69 and 1:656.66 Mexican Pesos², respectively.

It is observed from the results that shoppers spend more money on each visit to the XLS malls owing to the planned shopping agenda without higher perceived risk. Inclination towards buying familiar brands in large shopping malls also helps customers to purchase goods of higher value as compared to other categories of shopping malls. The adjusted $\bar{R}^2$ indicates that overall changes in the customer value are observed to be 67.53 per cent in SS malls, 55.86 per cent in MS malls, 79.86 per cent in LS malls and 66.42 per cent in XLS malls during different shopping seasons. Accordingly, it is found that there is a pattern of shopping in malls in synchronisation with the arousal–buying relationship during the shopping life cycle. Hence, the findings discussed above are consistent with Hypotheses 1c and 2a.

Figure 2: Attributes of shopping in malls.

Figures in Parentheses indicate number of shopping seasons.

SS=Small shopping mall, MS=Medium shopping mall, LS=Large shopping mall and XLS=Extra large shopping mall.

Average buying value is indicated in Mexican pesos. Average exchange rate of US Dollar to Mexican Peso (MXN) in June 2008 was 1USD = 10.65 MXN.

It is also observed from the results of Table 4 that the attractive ambience in the XLS malls motivates shoppers to stay for long hours in the mall (92.77 per cent) and encourage them towards casual shopping. LS malls also attract customers to stay for reasonably longer times (61.13 per cent) as compared to MS and SS malls. The results also reveal that seasonality in shopping stimulates visits to shopping malls with a small time lag of approximately 4 weeks, or 28 days. However, customers do not consider the distance factor when visiting malls. These results confirm Hypothesis 2b of the study.

The *beta* coefficient is measured to find out the volatility of customer preferences among familiar and non-familiar brands, shopping malls and retail stores. It is observed that shoppers in festive seasons look for new products that are innovative and technology-based, irrespective of brand. The festive shopping seasons in Mexico have fixed dates. Of these, Christmas is the major leisure-shopping season, and attracts voluminous buying as compared to the shopping on Mother's and Father's day. The leisure-shopping attractions begin in July and rise to their peak during November–December, augmenting consumer opportunities to make impulsive purchases for both gifts and items for personal use. The Christmas shopping season is slightly extended until the first week of January, as 6 January of every year is the 'Twelfth night' or 'Epiphany', when children receive gifts from three wise men or magic kings as observed in the social customs in Mexico. It may be seen from Table 5 that the volume of buying is higher among non-familiar brands.

In Table 5, column 2 shows the effect of new product varieties among familiar brands, and column 3 reveals new product varieties among non-familiar brands. These two columns have no control variables when computing beta coefficients, while physical, cognitive and economic variables have been considered control variables to determine loyalty effects. It has also been observed during the study that SS and MS malls function within budget constraints and often restrain their expenditure on ambience building, and thus the flow of shoppers remains relatively low as compared to LS and XLS malls. Beta-coefficient results explain that variety-seeking behaviour among non-familiar brands during the festive seasons is higher for SS and MS malls (64.61 and 79.21 per cent, respectively), while customers prefer new products among the known brands in the LS and XLS malls (74.11 and 91.77 per cent, respectively). Competitive sales promotion strategies such as free trials, hands-on experience and simulations in retail stores in malls also induce shoppers to seek variety products. However, customer loyalty is higher for LS and XLS malls, which have good ambience, retail stores of exclusive brands and specific class of shoppers, while functional variables such as price and sales promotions influence shopper loyalty in SS and MS malls. These results are consistent with Hypothesis 3, indicating that competitive sales promotions of retail stores in shopping malls induce variety-seeking behaviour and build store loyalty among shoppers.

MANAGERIAL IMPLICATIONS

Shopping malls are dynamic business centres that attract a large section of urban customers to experience the pleasure of modern shopping.

Table 5: Beta coefficient measures for variety seeking behaviour and loyalty

Shopping mall category	Leaning towards variety		Shopping loyalty (n = 1476)	
	Familiar brands	Unfamiliar brands	Mall	Retail store
SS	0.3538 (0.4324)	0.6461* (0.3270)	0.4126 (0.3629)	0.5779** (0.1002)
MS	0.4820 (0.2691)	0.7921* (0.4725)	0.4929** (0.3904)	0.5799** (0.2772)
LS	0.7411* (1.904)	0.3049 (0.2409)	0.7003* (0.4444)	0.5190** (1.1222)
XLS	0.9177* (0.7460)	0.1826 (0.5781)	0.8321* (0.4981)	0.5412** (0.5866)
Overall	0.5238** (1.3170)	0.5314** (0.1455)	0.6624* (0.1992)	0.5424** (1.3101)

P-values * >0.01 and ** >0.001 .

In the above Table coefficients represent the marginal effects on the average time spread associated with the introduction of new products.

Each cell represents separate regression.

Figures presented in parentheses indicate standard errors.

A categorically planned assortment of stores in a mall would provide diversity and arousal, and would encourage a propensity to shop around the mall. Accordingly, mall managers may develop appropriate tenancy policies for retailing firms with regard to the socio-demographic factors of customers in order to satisfy different segments. An appropriate mix of anchor tenants and new age tenants who have different target groups would better attract customers to shopping malls, and such an assortment of stores could coexist in a shopping mall successfully without any conflict of interest. Prospective shopping malls should be able to nurture an environment conducive to the development of all components in the system for successful positioning of malls.

In view of growing competition among retailers and increasing market congestion in urban areas, retailing firms need to adapt to a dynamic strategy to achieve success in the business. Retailers located in LS and XLS malls where intensity of competition is higher should lure customers into non-price promotions and develop a niche of customers to build brand loyalty. If a retailing firm chooses to compete on price, complex pricing actions, cutting of prices in certain channels, or introduction of new products or flanking brands strategies may be used, which allows the firm to selectively target only those segments of customers who are on the verge of switching brands or retail outlets. Such strategies may be implemented in specific malls. The promotional effects generated from various promotional tools may be monitored for longer periods of time and measured with regard to achieving the long-term goals of retail firms. In addition, variability of promotional response in different retail markets, channels and outlets should be analysed to make required modifications in the process of delivery of promotional programmes to customers. Firms should focus on providing information about retailers' offers in advance for the customers who make their purchase decisions before mall visits. However, social and recreational appeals for attracting consumers to malls also act as driving factors in augmenting customer traffic to shopping malls.

Managers of retail firms must understand that shopping behaviour among customers is governed by various factors such as credit availability and customer services offered in the shopping mall. Factors that successfully connect various customer groups with shopping interests continue to build strength in retail brands, stores and malls. At the retail

point-of-purchase convergence of customer loyalty, value for money and competitive product advantages drive loyalty to retail stores. Most successful retail brand stores pass through certain recognisable stages that affect customer decisions on marketing factors such as pricing, product identity, and sales and distribution networks.

CONCLUSION

The perspectives of shopping mall ambience and shopping satisfaction effectively become a measure of retail performance, customer attraction and propensity to shop for urban shoppers. This tendency of shoppers demands change in the strategy of mall management and retailing by offering more recreational infrastructure, extended working hours, place for demonstrations and consumer education on the innovative and high-technology products and services. This study discusses the impact of growing congestion of shopping malls in urban areas of Mexico on shopping convenience and shopping behaviour with regard to personality traits of shoppers affecting the preferences for shopping malls concerning store assortment, convenience, distance to malls, economic advantage and leisure facilities. The results of the study reveal that the ambience of shopping malls and assortment of stores attracts higher customer traffic to the malls. However, an agglomeration of small retail stores around LS malls in a traditional style deviate consumers' shopping focus from stores inside the mall, as they obtain an ethnic ambience and economic gains in buying from small retailers. It was found during this study that urban shoppers visit shopping malls as leisure centres to relax, spending long hours and tending to shop in response to various sales promotions used by different stores.

The discussions in the study divulge that shopping arousal is largely driven by mall attractions, inter-personal influences, sales promotions and comparative gains among urban shoppers. The major factors that affect shopping arousal among urban shoppers concern recreational facilities, location of the mall, ambience and store attractiveness with regard to products and services, brand value and price. Similar to many other empirical studies, this research might also have some limitations with regard to sampling, data collection and generalisation of the findings. The samples drawn for this study may not be enough to generalise the study results. However, the results of this study may indicate a similar pattern of shopping behaviour of urban consumers in shopping malls with regard to other Latin American markets.

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NOTES

- 1 Historically, this market was started as a casual market, but is now a shopping mall and major entertainment complex. However, stores in this market are somewhat informal, and deal in a variety of consumer and electronic merchandise.
- 2 The average exchange rate of US Dollar to Mexican Peso (MXN) in June 2008 was 1USD=10.65 MXN.

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