
Original Article

Coexistence and conflicts between shopping malls and street markets in growing cities: Analysis of shoppers' behaviour

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ABSTRACT Street markets in developing countries constitute an integral part of the local economy as well as exhibiting the ethnic image of the habitat, which continues to function even in growing cities. The shopping malls have intercepted the traditional marketplace culture and are instrumental in shifting the consumer behaviour in urban areas. This article discusses how consumers' decision-making styles shift towards shopping at malls as well as street markets in Mexico City. On the basis of exploratory data and using a theoretical model of consumer decision-making styles, this study addresses the causes and effects of coexistence of shopping malls and street markets. The results show that there are various economic and marketplace ambience-related factors that affect the consumer decision towards shopping. The article concludes with specific suggestions for reducing conflicts and increasing cohesiveness with regard to shopping behaviour between shopping malls and street markets, and advancing strategic retailing strategies to establish the coexistence of contemporary and conventional market systems.

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INTRODUCTION

Marketplaces in urban demographic settings attract large numbers of buyers and sellers, which can be termed as market thickness. Coexistence

of many shopping malls along with traditional markets in a marketplace causes market *congestion*. This problem may be resolved by developing small kiosks for transactions and allowing consumers to indent customized products and services from the base stores (Roth, 2008). The growth of market share for specialized retailers and large departmental stores depends on the size of consumer segment in a given urban population. It is observed that consumers' buying preferences become more diversified as the extent of retail stores increase within a confined area. Thus, the market size reaches a threshold and the consumers' preferences of shopping are jeopardized due to indecisiveness in shopping.

The coexistence of street markets and the rise of shopping malls have been major trends of retailing in developing countries for decades. However, the increasing emphasis on growing cities with contemporary marketplaces have induced a shift of agglomeration format (AF) from a marketing perspective, including the consumer preferences on routes to market. There are some generic similarities and conceptual differences between street markets and shopping malls. The AF-specific characteristics perceived by consumers lead to the change in consumer behaviour towards markets' preferences for shopping (Teller, 2008). In centrally managed and enclosed shopping centres in the retailing sector, eight underlying factors of varying character that drive customer satisfaction are – selection of market outlet, atmosphere, convenience, salespeople, refreshments, location, promotional activities and merchandising policy (Anselmsson, 2006).

This article discusses the consumer attributes that support the existence of both shopping malls and street markets in fast developing urban areas in context of Mexico City. Street markets are considered more as social organizations with ethnic congregation than business networks, whereas shopping malls have emerged as technology-led business outlets and lifestyle centres in urban areas. This article raises various arguments for and against street markets in view of increasing pressure on urban development. The discussion in the article also prompts ideas to converge modern business platforms with cultural and ethnic consumer values.

INTRODUCTION AND FRAMEWORK OF HYPOTHESES

Increasing globalization in developing countries has affected the socio-economic and cultural paradigms in urban areas and consumer behaviour is significantly influenced by the street markets that demonstrate ethnic trade practices. Vending in street markets is considered as parallel leisure, particularly where people tend to move to suburban locations in order to experience the difference from the routine shopping (Powe, 2006). The street markets in urban settings may be considered as 'socially responsible distribution centres' with the initiatives that provide consumers with market access for goods and services that they can benefit from by either buying or selling, thus neutralizing the disadvantages they suffer due to inadequate physical links to large retail outlets, information asymmetries and weak bargaining power (Vachani and Smith, 2008).



Shopping centres and hypermarkets are important routes to market in the urban landscape, though lack of planning and vision in developing urban marketplaces lead to chaos and congestion of traffic affecting the growth retailers (Kok, 2007). A larger shopping centre can facilitate a greater variety of shops and create a more pleasant environment for the shoppers, thus enticing shoppers to visit and stay longer. This proposition leads to one of the challenges faced by the managers of shopping malls located outside the traditional shopping belt, which is how to attract shoppers to patronize their malls (Ooi and Sim, 2007).

Street markets in Mexico employ more people than any single branch of medium-scale industry as they represent one of the largest categories of workers in the retail trade, along with food, drink, grocery and apparel vendors in categorical retail shops. All residential colonies in Mexico are covered by the street markets organized periodically, which attract customers of supermarkets and department stores on the rationale of convenience and low buying cost to customers in addition to the derived satisfaction of the freshness of products (Williams, 2003). However, consequent upon consolidation of structural reforms in Latin American countries, spatial models of enterprises have been changing, making possible large retail enterprises such as supermarkets and malls locate close to residential neighbourhoods, but street markets coexist classically serving customers through informal channels of commerce. Accordingly, the hypothesis may be framed as:

Hypothesis 1: Street markets generate traffic congestion, increase cost of shopping of consumers and affect their buying choices.

Narrowing the 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 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 environmentally friendly shopping malls is increasing as a result of rapid urbanization. To ensure the efficiency of public spending, their provision should be based on socio-economic criteria of the region. Hence, suburbanization has been continuing in developing countries such as Mexico along with the deepening of market expansion. In order to reduce the shopping area congestion, the new round of suburbanization has been driven by the development of large suburban shopping malls and retail parks (Feng *et al*, 2008).

ROUTES TO MARKET 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 the market share, returns on investment

and profitability (Rajagopal, 2008a). Two types of shopping centre models are observed in the emerging real estate markets in developing countries, which are characterized by their ultimate relationship with the physical shopping centre on whose web site they reside (Dixon and Marston, 2005; Kuruvilla and Ganguli, 2008). 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 (for example Blois *et al*, 2001).

It is found that assortment of stores, mall environment and shopping involvement factors have a differential influence on excitement and desire to stay in the malls, which in turn are found to influence patronage intentions and shopping desire in the 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. Accordingly, most of the growing cities are patronizing their suburban shopping malls and power centres, rather than downtown marketplaces (Maronick, 2007). Major attributes of shopping mall attractiveness include comfort, entertainment, diversity, mall essence, convenience and luxury from the perspective of shoppers. Such shopping mall attractiveness may be designed in reference to the three broad segments of shoppers that include stress-free shoppers, demanding shoppers and pragmatic shoppers (El-Adly, 2007).

In Mexico, street markets congregate traditional and modern lifestyles through the agglomeration of small producers, who are dependent on urban consumers and are linked in networks of mutually beneficial relations. These attributes of street markets not only reveal the aesthetic distinction but also exhibit cultural diversity for consumers of urban habitat (Zukin and Kosta, 2004). Vendors define the basic needs of the consumers and offer products at relatively lower prices as compared to the fixed retail outlets and supermarkets. This also influences the shopping behaviour of consumers, which partly explains the resilience of the traditional/small format retailers (D'Andrea *et al*, 2006). Prices in street markets are low as most of the vendors have their own transport and the taxes they pay to the local area governing body or municipality are marginal. Accordingly, the hypothesis may be constructed as:

Hypothesis 2: Shopping malls exhibit recreational attractions and modern amenities for shoppers while street markets exert a pull through ethnic food and clothing, and are held in traditional settings.

Mall shopping has become an expression of personal values (Michon and Chebat, 2004). The contemporary retailers seem to have not evolved enough to replace conventional retailers around their marketplace (Ibrahim and Galven, 2007). 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 retailing integration and collective behaviour



of consumers in street markets and shopping malls (for example Loaffland, 1985). Small retail stores outside the large shopping malls display ethnic products of low price and high attraction. Shoppers visiting large malls choose to shop between ethnic shops and mainstream store brands located inside the malls. Such behaviour of shoppers is observed when the strong presence of ethnic economies and mainstream businesses in large shopping malls compete against each other (Wang and Lo, 2007).

The space and business relationship in retailing is also classically argued as the size of a market area results from the spatial range of the demanded and supplied goods and services. Hence, the distance–sales relations or price–sales relations produce overlapping and interconnecting sales implications in retailing (Löffler, 1998). Proximity to shopping centres largely also influences the choice of residence of urban dwellers. The location preferences largely depend on income and housing budget, proximity to good schools and shopping centres (Chiang and Hsu, 2005). Besides the consideration of distance in predicting accessibility to shopping centres and buying behaviour, time is another important factor that determines the shopping behaviour of urban consumers (Weber and Kwan, 2002). Motivations of shopping in the street markets include inside and outside ambience, layout and extent of involvement of vendors in the selling process. Ambience of marketplace, assortment of vending booths and excitement motivate the buyers to stay long in the street markets (Rajagopal, 1999). Hence, the hypothesis may be framed as:

Hypothesis 3: Street markets are held close to the shopping malls as well as to the residential locations that provide convenience to the shoppers.

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 (Léo and Philippe, 2002). Motivations of shopping include inside and outside ambience of mall, layout and extent of involvement in the shopping process. Ambience of shopping mall, architecture, ergonomics, variety and excitement motivate the shopper to stay long 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 to the shoppers to make frequent visits to the mall. It is argued that a combination of general entertainment and price-oriented promotions are found to be strong alternatives to encourage customers to frequent visits and more spending (Parsons, 2003). Hispanic shoppers including Mexican buyers make the trip to mall for shopping along with family and friends, and buy largely food and beverages during the visit. Accordingly, hypothesis may be stated as:

Hypothesis 4: Shopping malls are commonly visited for shoppers' security and eating-out motives than buying daily needs.

The growing street consumer markets in low-income countries offer easy access to inexpensive food, clothing and grocery as well as a natural ambience of shopping for urban residents. However, consumers rely on sensory effects of touch, feel and pick, appearance, and trustworthiness of vendor in choosing products. As some vendors erect their stalls in street markets that are held periodically, consumers gradually develop loyalty with the vendors in these markets (Rheinländer *et al*, 2008). Street markets in urban settings are associated with diversification of land use away from brick and mortar marketplaces, establish more intense contact with nearby urban centres, and connect strategically two or more number of urban streets to serve urban dwellers (Tipraqsa and Schreinemachers, 2009). Hence,

Hypothesis 5: Street markets serve price-sensitive consumers and those leaning towards buying fresh farm and animal products while it is believed that supermarkets serve frozen and processed products.

SOCIO-CULTURAL DETERMINANTS AND ETHNICITY

The local culture is embedded in urban settings that are evolved historically. Interaction and local culture are essential parts of business community and play guiding role in measuring the consumer behaviour to develop marketing strategies by the firms (Brennan *et al*, 2009). Street markets have emerged not only as a social meeting place for people, but are also considered as political grass roots to institutions to propagate ideologies and debates on the current issues. These markets reflect the characteristics of users, varying degrees of accessibility to diverse populations and state policies towards markets (Stillerman, 2006). The differences in shopping behaviour correspond to clear differences in prices between grocery and food stores serving the two shopping cultural groups. However, some supermarkets also have lower prices across a range of food products but may not be able to simulate the ethnic surroundings of street markets (for example Ackerman and Tellis, 2001). Hence, hypotheses may be structured as:

Hypothesis 6: Both street markets and shopping malls influence consumer culture; however, their attributes to serve consumers and enhance consumer value are different.

In street markets, social and economic activities are stimulated through interactions until realizing the sales. The street vendors are contextually embedded in the urban landscape, and operate within the urban social order (Llewellyn and Burrow, 2008). Location of the street and size of the market play a critical role in establishing the socio-economic thrust among the customers in the area (Bass, 2000). Street vendors tend to offer innovative products in major emerging markets, targeting the consumers falling largely in the middle-class demographic segment (McBride and Gillespie, 2000).



Mall construction has been considered as high-value architecture and the revival of street markets has provided advantage to urban consumers in reference to logistics. Thus, alternate retailing outlets with conventional practice have become increasingly flexible in its geo-demographic marketplace (Marston and Modarres, 2002). The combination of cultural value with functional utility emerges as one of the powerful stimuli for consumers to shop in street markets in large cities where distance to superstore and shopping malls are the major determinants of shopping (Kumar *et al*, 2007; Rajagopal, 2009).

Street markets reveal the relative importance of traditional and ethnic value of consumers and facilitate both consumer understanding and market development. The vendors in the street market understand how to sell products to target customers, how to emphasize commonality with the mainstream markets and where the differences lie (Emslie *et al*, 2007). Over the past several years, working consumers of 21–54 years of age in large growing cities like Mexico have shown tendency to shop for local food in multinational self-service stores as they perceive these outlets as a place of convenience and prestige to purchase ethnic food (for example Cooper and Nelson, 2003). Recently a reverse trend has emerged in shopping of young consumers as they are switching to ethnic street markets as local source of these products. These markets have responded to both types of consumers in some cases by branding the produce as well as by stocking a wide variety of foods including those that are not locally produced (Sinnreich, 2007). Therefore, it may be hypothesized that:

Hypothesis 7: Street markets are held in traditional culture and represent ethnic, linguistic and social homogeneity that help in nurturing consumer values.

AMBIENCE, BELIEFS AND SHOPPING AROUSAL

Consumers make holistic evaluations of shopping malls in view of the arousing quality of ambience stimuli for buying products and derive satisfaction on buying products and services. Consumers with strong shopping motives are found to experience more pleasure and arousal and find the mall ambience to impulse buying behaviour (McGoldrick and Pieros, 1998; Mattila and Wirtz, 2004). The most common configuration for shopping centres is linear. Parking and public conveniences are provided in the mall. Commonly, ambience around shopping malls is devoted to parking unless a multi-level parking structure is provided for customer use (Carter and Vendell, 2005).

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). Shopping supported with recreational attractions is identified as one of the major drivers in promoting tourism by demonstrating the quality fashion products and store preferences among tourist shoppers. Perceptions of shopping duration, emotional levels and merchandize evaluations are

derived from the level of arousal experienced by the consumers in the shopping malls (Rajagopal, 2007).

The pleasing ambient scents positively moderate shoppers' perceptions of their environment. Ambient odours positively influence shoppers' perceptions and a moderate congruity level is more likely to trigger a favourable evaluation of the shopping experience, the products sold and the role of salespeople (Michon *et al*, 2005). It has been revealed in previous research studies that shopping mall drive hedonic shopping motives among consumers that are similar to the utilitarian shopping motives. In modern malls, shoppers fulfil their hedonic values by ways of experiencing fun, amusement, fantasy and sensory stimulation. It has been observed that shoppers enjoy malls as leisure and festive spots in urban areas to derive hedonic pleasure and drive shopping motivation with social status (Sherry, 1990; Arnold and Reynolds, 2003). Thus, the hypothesis may be framed as:

Hypothesis 8: Shopping malls offer hedonic pleasure to shoppers comprising adventure, gratification, consumer role, value and lifestyle, social status, and acquired shopping motivations.

Arousal during shopping may be seeded through multifaceted 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, which include pleasantness, arousal and mall attractiveness, have been identified as major drivers for making buying decisions among shoppers (Rajagopal, 2006a). It has been observed that young consumers perceive positive effect on 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). Interactive tools on product learning provided in the retail stores in shopping malls significantly affect the level of arousal and pleasure that contribute towards experience, and thereby influence the buying behaviour. As higher stimulation or interactive learning provided by the retailers focuses on gaining initial experience on the product use, consumers tend to engage in higher arousing activities by acquiring the product (Menon and Kahn, 2002). Hence, they need to vigilantly manage the quality of arousal by developing adequate customer involvement in the buying process and retail shoppers (Miranda *et al*, 2005). Therefore, hypothesis may be stated as:

Hypothesis 9: Shopping at malls generate arousal among shoppers and stimulates exploring attitude among consumers about innovative products and services.

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 attraction 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). Retailers in large shopping malls tend to follow moderately cooperative strategy, thus competition between malls and smaller forms of shopping centres has led mall developers and management to consider alternative methods to build excitement among customers (Timothy and Stephen, 2006).

ATTRACTIONS IN STREET MARKETS

There exists a high degree of satisfaction in terms of pricing advantages and freshness of products sold by the vendors in the street markets. Shopping and eating out on street markets among consumers of major cultural and ethnic groups have developed as a leisure shopping behaviour in Latin American countries (Steenkamp and Burgess, 2002; Wardrop, 2006). It is perceived by the consumers that food vendors in the street markets use fresh meat and quality cooking ingredients applying semi-mechanized cooking process for the recipes of cultural traditions. The food cooked by the vendors in the street markets is perceived to taste like home cooked food and such cultural identity influences the consumer decisions about the private and public kitchen, the spaces of consumption with ethnicity and an understanding of what is authentically traditional despite the hygiene standards (for example Bennett and Iossa, 2008). Hence, the hypothesis is stated as:

Hypothesis 10: Consumers in street markets show exploring tendencies to ethnic food that has price advantage and homemade savour irrespective of hygiene standards.

It is observed that the attributes determining overall acceptance of food products among Mexican consumers are significantly influenced by product attractiveness and price sensitivity. Purchase intent is influenced by appearance, taste and overall liking (Rajagopal, 2006a; Herrera-Corredor *et al.*, 2007). Preferences and perceptions of Mexican consumers on food products also depend on the social and cultural values and they put more emphasis on the place of origin of food products like recipe of Oaxaca or Chiapas (states in Mexico) than on brand names. The product-place evaluations of Mexicans seemed to be affected by a strong cultural bias (Ahmed and d' Astous, 2006).

STUDY DESIGN

Sampling

This study has been conducted in 14 street markets and six shopping malls located in south of Mexico City. The street markets were

periodically held in Tlalpan (six) and Coyoacan (eight) municipalities, while the shopping malls comprising 342 assorted stores located on three principal streets – Miramontes, Periferico and Insurgentes in the southern part of Mexico City. There were 374 vending stalls in the selected street markets representing 24 vending stalls per market on an average. The selected street markets were located in the urban habitats and were held adjacent to the shopping malls. The sample respondents chosen in this study were those who frequently visit the selected street markets as well as shopping malls. These respondents showed similarity in shopping behaviour in reference to propensity of shopping, location preference, ethnic perceptions, sensitivity to price and customer relationship, and marketplace ambience. Data were collected administering semi-structured questionnaires to 378 customers selected following a snowballing sampling technique who visited both street markets as well as shopping malls in an asymmetric manner. Information collected through the questionnaires were reviewed for each respondent to ascertain quality and fit for analysis.

Data collection tools

The data collection process was initiated in February 2009 and terminated in September 2009 covering all 14 street markets and six shopping malls' locations. The data collection process was prolonged due to interruptions in conducting interviews with consumers and vendors who did not understand the purpose of the research and assumed that this survey would have adverse implications on their business. Hence the interview process was spread over 36 weeks interviewing 10 respondents per week on an average in the selected markets. A focus group session was organized with potential respondents to identify most appropriate variables for data collection for the principal study and relevant variables were chosen for analysis. Accordingly, 38 variables, which were closely related to influencing the shoppers towards market attractions, buying preferences, shopping attributes and buyer–seller relationship, were incorporated in the questionnaires. For conducting pilot test of survey instrument, 42 respondents, who accounted for 11.11 per cent of total sample size, were randomly selected. The questionnaires were finalized after refining them based on the responses during the pilot study. The variables selected for the study have been broadly classified into physical preferences and consumer preferences related variables as exhibited in Table 1.

A questionnaire was developed to investigate the extent to which the selected variables for study have influenced the shoppers. Pre-test of the preliminary questionnaire on measuring the influence of point of sales promotions on stimulated buying behaviour indicated that promotion offers introduced by the retailers acted as strong stimuli for the regular and new shoppers. On the basis of responses from the pre-test, the final questionnaire necessitated no significant changes. The questionnaires were translated in Spanish. All care was taken about the terminology and language being employed in each version of the questionnaire. The variables used in the questionnaire for data collection include various perspectives of customer satisfaction and promotional practices offered

**Table 1:** Variables chosen for the study

Variables by category	Physical preferences		Shopping preferences	
	Logistics and amenities	Marketplace attractions	Shopping attributes	Customer relationship
Analytical segments	VS ₁ (9)	VS ₂ (11)	VS ₃ (13)	VS ₄ (5)
Relevance to hypotheses	H ₁ , H ₃ , H ₄ , H ₈	H ₄ , H ₇ , H ₉	H ₅ , H ₆ , H ₁₀	H ₆ , H ₇
Description of variables selected for data collection	Location Demographic surroundings Accessibility Floor area of shops Car parking Covered place for shopping Sanitation Market governance Security	Ethnicity High technology Assortment of shops Store brands Hygiene and health Freshness of products Food and recreation Sensory appeals Ambiance of marketplace Product experience Sales events	Need Personal beliefs Product differentiation Sales differentiation Sales promotions Product preferences Price advantages Quality measures Credit availability Bargain potential Product display In-store facilities Social status	Vendor interactions Customer services Vendor loyalty Home delivery services Customer satisfaction

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

by the retailers to gain competitive advantage, optimal market share and higher aggregate sales. Data were collected by means of personal interviews by undergraduate students of international commerce and marketing who hand-delivered the questionnaires to the key respondents in the self-service retail stores who had agreed to be the subjects of the research investigation. In most cases, the respondents completed and returned the questionnaires on the predetermined date.

Response trend

Questionnaires were administered to 400 respondents. However, during the process of data analysis, questionnaires of 22 respondents (5.5 per cent of total sample size) were omitted owing to paucity of information. In all, 378 respondents were covered under the study and the usable response rate was 94.5 per cent. The non-response bias has been measured applying two statistical techniques. First, informal conversations were made with those respondents who neither responded to the questions administered to them nor provided adequate information of their preference to shop at street marketplace, economic benefits, lifestyle perceptions and logistics-related issues (for example Gounaris *et al.*, 2007). It was found during the study that 54.55 per cent respondents showed low level of confidence during the interview whereas 27.27 per cent subjects failed to respond to all questions owing to paucity of time and 18.18 per cent subjects depended on their accompanying persons to offer responses who either could not do so or were indifferent to the questions asked. Second, *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 ($\alpha=0.92$) 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; Rajagopal, 2009) and this assessment also yielded no significant differences between early and late respondents.

Construct of measures and data validation

The focus of the study is to analyse the consumer behaviour and it is revealed in previous studies that higher consumer value leads to sustainable consumer behaviour (Jindal *et al.*, 2007; Malthouse and Mulhern, 2008; Rajagopal, 2008a). This consumer value has been considered as dependent variable that is measured in reference to independent variables as shown in the Figure 1 depicting the conceptual framework.

The constructs of the study were measured using reflective indicators showing effects on the core variables. Physical preferences (VS₁ and VS₂) including logistics and marketplace attractions perceived by the consumers towards shopping in the street markets were measured with 20 variables (logistics-related – VS₁ (9) and marketplace attraction-related VS₂ (11)) on a self-appraisal perceptual scale derived originally on the basis of focus group analysis as referred in the pretext. This multivariate construct has been derived in reference to vendors in the street markets with low investment vending operations, customer relationship and ethnic orientation as principal behavioural components. This scale also comprised triadic decision coordination consisting of factors including ambience of street markets, assortment of vending stalls and consumer preferences including long-term customer value (for example Narver and Slater, 1990; Ruekert, 1992; Hunt and Morgan, 1995; Rajagopal, 2009). Constructs related to consumer preferences (VS₃ and VS₄) were measured using 18-variable ‘self-appraisal perceptual scale’ comprising shopping attributes of customers and customer relationship effects.

The data were analysed using statistical package for social sciences (SPSS) platform. All reflective constructs for all variable segments of the study were analysed through the factor analysis model as a single confirmatory test. Estimation displayed desirable goodness-of-fit

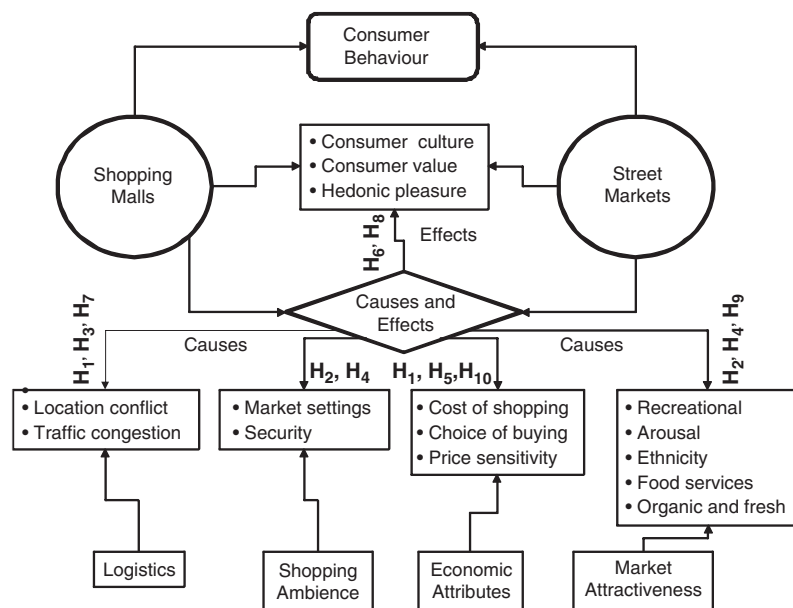


Figure 1: Interrelation between variables and hypotheses of the study.



statistics¹ comprising $\chi^2_{(378)}=3.74$, RMSEA (0.386), TLI (0.693), CFI (0.672) and IFI (0.714) indicate that the model used for analysis in the study fits the data adequately. All variables were loaded significantly on their corresponding segments that revealed significant *P*-value at 0.05–0.10 levels. The data collected from respondents were tested for its reliability applying the Cronbach α test. Variables derived from test instruments are declared to be reliable only when they provide stable and reliable responses over a repeated administration of the test. The test results showed acceptable reliability level ($\alpha=0.692$) on an average for all observations included for analysis in reference to all variables pooled under different segments. All items loaded significantly on their corresponding factors, with *P*-values ranging from $P>0.05$ to $P>0.01$. Also each item's loading on its focal construct was greater than its loading on any other construct. The reliability measures, exploratory factor analyses, confirmatory factor analyses, and convergent and discriminant validity tests were used in the structural equations to support the measurement of constructs. Descriptive statistics and correlation of selected variables are exhibited in Table 2.

In this study, a five-point Likert scale was employed to measure the consumer preferences for street markets with shopping intentions in the study area. Respondents were sought responses on a five-point Likert scale (anchored by strongly agree=1/strongly disagree=5) to analyse the vendor practices influencing consumer behaviour in street markets. The chi-square and comparative-fit index for the factor loadings were analysed for the model. Regression analysis was performed in order to ensure that the results on these constructs become non-correlated with the mutual interaction terms (Jaccard *et al*, 1990).

MODEL SPECIFICATION

The structural equation modelling (SEM) technique is a useful tool for tightening links between theoretical and empirical research. To strengthen ties between theory and analysis in empirical data analysis, 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; Rajagopal, 2009; Roberts *et al*, 2010). Methodology of synthesizing findings in the context of SEM is known as meta-analytic SEM. Although correlation matrices are usually preferred in this process, there are cases in which synthesizing covariance matrices is useful, especially when the scales of the measurement are comparable. Thus, SEM is widely used as a statistical framework to test complex models in behavioural and social sciences (Cheung, 2008).

Let us assume that the shopping attraction at marketplace *m* is (SA_m^t) and type of marketplace is $(MP_i^{(i_1+i_2+i_3+\dots+i_n)jh})$ with factors affecting shopping behaviour of consumers $(i_1, i_2, i_3, \dots, i_n)$ comprising logistics, security, market services, price, sales promotions and customer relationship in *j*th store of the marketplace at a location *h*.

Shoppers perceive value in terms of socio-cultural satisfaction and economic advantage, which is derived by visiting a preferred marketplace (a shopping mall or street market). Consumers make shopping

Table 2: Descriptive statistics, factor loading results and correlations (n=378)

Variables	Mean	SD	Factor loading	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Location	5.13	2.16	0.78	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2 Accessibility	4.91	0.74	0.61	0.47	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3 Ambience	5.02	1.45	0.82	0.31	0.42	1	—	—	—	—	—	—	—	—	—	—	—	—	—
4 Ethnicity	6.74	0.68	0.72	0.36	0.28	0.49	1	—	—	—	—	—	—	—	—	—	—	—	—
5 Shops assortment	3.92	4.35	0.68	0.54	0.21	0.36	0.16	1	—	—	—	—	—	—	—	—	—	—	—
6 Hygiene	8.56	9.03	0.81	0.19	-0.2	0.57	0.23	0.18	1	—	—	—	—	—	—	—	—	—	—
7 Product experience	4.07	1.66	0.79	0.27	0.13	0.48	0.21	0.43	0.44	1	—	—	—	—	—	—	—	—	—
8 Sales events	6.18	1.27	0.74	0.58	0.48	0.51	0.17	0.39	0.34	0.54	1	—	—	—	—	—	—	—	—
9 Personal beliefs	10.53	8.02	0.82	0.46	0.38	0.49	0.56	0.27	0.33	0.41	0.40	1	—	—	—	—	—	—	—
10 Sales promotions	5.95	0.38	0.86	0.48	0.55	0.48	0.37	0.62	0.39	0.59	0.72	0.26	1	—	—	—	—	—	—
11 Price advantage	9.06	1.82	0.74	0.44	0.19	0.14	0.16	0.47	0.14	0.55	0.59	0.45	0.61	1	—	—	—	—	—
12 Product quality	7.25	3.91	0.63	0.30	0.25	0.13	0.17	0.49	0.37	0.64	0.47	0.33	0.42	0.69	1	—	—	—	—
13 Buying experience	6.84	2.86	0.76	0.44	0.32	0.58	0.29	0.55	0.37	0.57	0.60	0.59	0.72	0.51	0.67	1	—	—	—
14 Vendor interactions	4.37	0.92	0.88	0.29	0.18	0.26	0.14	0.36	0.40	0.63	0.66	0.31	0.45	0.50	0.49	0.69	1	—	—
15 Customer service	8.04	1.66	0.75	0.36	0.46	0.30	0.18	0.29	0.41	0.11	0.23	0.31	0.47	0.14	0.49	0.44	0.50	1	—
16 Customer value	11.28	5.73	0.83	0.29	0.12	0.63	0.48	0.59	0.42	0.55	0.59	0.37	0.60	0.64	0.57	0.76	0.54	0.50	1

Note: The absolute value of correlations ≤ 0.21 is significant at the 0.10 level, between 0.22 and 0.47 is significant at 0.05 levels, and above 0.48 is significant at 0.01 levels.



commitments consequent upon shopping arousal (A_{am}) driven by shopping ambience (S_{ax}) and price advantages (B_{sp}). These factors determine the choice of marketplace (C_{mp}^h) among consumers. Hence, the preference of marketplace for shopping can be measured in reference to marketplace attraction considering:

$$SA_m^t = \sum_t^{jh} C_{mp}^h \left[MP_t^{(i_1, i_2, i_3, \dots, i_n)} \right] \left[B_{sp}, A_{am}, S_{ax} \right] \tag{1}$$

In reference to shopping preferences, let us assume that a marketplace (a shopping mall or street market) has predetermined retailing attributes with linear physical amenities. As the street markets are located within close proximity of shopping malls, let the distance $z \geq 0$ between symmetrically located street markets and shopping malls. Accordingly, the consumer value function for marketplace performance can be explained as:

$$C_{mp}^h = MP_t^{jh} \left[S_{cn}^{(x_1+x_2+x_3+\dots+x_n)_t^{jh}} \right] \left[\left\{ p_i S_b \omega_i(A_i) d(t_i) \right\} - CA_t^{jh} \left\{ q_i p_x Z_i(E_n) \right\} \right] \tag{2}$$

Wherein, S_{cn} =cost of shopping in a marketplace with $(x_1+x_2+x_3+\dots+x_n)_t^{jh}$ as cost variables in a j th store at time t and h location; p_i =consumption preference; S_b = volume of buying; $\omega_i(A_i)$ =proportion of customer traffic per stores in a marketplace; $d(t_i)$ =distance and time to travel and shop in a preferred marketplace; CA_t^{jh} =competitive advantage over shopping in a marketplace at j th store at time t in h location; q_i =quality of products and services; p_x =price of identical and similar products in stores across the marketplaces and $Z_i(E_n)$ =ambience and relaxing facilities.

Hence,

$$MP_t^{jh} = SA_m^t \left(\frac{\partial q}{\partial t} \right) = C_b^{jh} \left(\frac{\partial b'}{\partial k} \right) \left(\frac{\partial k}{\partial x} \right) \tag{3}$$

wherein C_b^{jh} denotes buying orientation of shoppers in a store j at location h , q represents attitude towards marketplace ambience in stimulating preferential shopping interests k at a determined store. In the equation b' expresses the volume of buying during the visit to the marketplace. The total quality search performed by the consumer in preferred marketplace to make purchases ($\partial_t/\partial_k > 0$), and customer services offered in the marketplace (malls or street markets) affecting the level of satisfaction ($\partial_b/\partial_k > 0$) increase simultaneously during the process of buying. In reference to the type of marketplace attraction (x), preferential shopping interests (k) of consumers create lower values with less preferred marketplace ambience ($\partial_k/\partial_x < 0$) while the shopping attractions in the marketplace enhance the consumer value ($\partial_b/\partial_x > 0$) irrespective of competitive advantages on price and promotional offers.

$$\therefore \int C_b^{jh} = \int C_{mp}^h \left(A_{am} + B_{sp} + S_{ax} + V_b \right) \tag{4}$$

In the above equation V_b denotes the customer value generated in shopping with competitive advantage over time, distance, price and promotion. Thus, optimizing the impact of marketplace towards shopping in both malls as well as street markets located closely to each other at a distance $z \geq 0$. Such proximity to marketplaces generates higher customer traffic in malls and street markets. In the market competition shopping attraction is initiated by the malls and street markets increasing both the economic and environmental advantages of shopping. This strategy induces choice of marketplace among consumers at the point where $S_{ax} \geq 0$. Hence,

$$S_{ax} = 0 = C_b^{jh} \{ Z_i(E_n) p_i S_{b'} - S_{cn} \} \tag{5}$$

In order to measure variations in the shopping arousal and buying decisions that influence choice of marketplace among shoppers in urban areas where shopping malls and street markets coexist, initial robust weighting matrix and optimal weighting matrix were employed using the equation:

$$V_b = \frac{\mu b'}{\mu k} (C_b^{jh}) \left[\beta (\gamma_1 + \gamma_2 + \gamma_3 + \gamma_4) B_{sp} \right]_t^{jh} \tag{6}$$

The above equation represents the choice of marketplace in preferred store j at location h , μ denotes the consumer preference for the marketing tagged with customer friendly ambience, γ_1 represents the preference for shopping in a marketplace influenced by physical variables, γ_2 denotes inclination towards buying decision persuaded by cognitive variables stimulating arousal and merriment among consumes, γ_3 shows the buying behaviour derived by the economic variables, γ_4 indicates attitude towards cross-cultural shopping experience, and β refers to the structural parameter relating to the endogenous variables to one another. Ordinary Least Square method to measure the choice of marketplace (dependent variable) in reference to the above discussed physical, cognitive and economic variable (independent variables) has been computed using the construct as below:

$$C_{mp}^h = \alpha + \beta_1 (B_{sp}) + \beta_2 (A_{am}) + \beta_3 (C_{mp}^h) + \beta_4 (CA_t^{jh}) + \beta_5 (S_{cn}) + \beta_6 (V_b) + \beta_7 (S_{b'}) + \beta_8 (S_q) + \beta_9 (C_{tm}) + \varepsilon \tag{7}$$

In the above equation $S_{b'}$ denotes volume of buying by the shoppers in chosen retail store, S_q represents quality of shopping that influence shoppers, and cultural factors affecting decision of consumers towards the choice of marketplace C_{tm} . The error term is denoted by ε in the above equation.

Equation (1) describes the choice of marketplace of consumers measuring the customer value factors driven by shopping arousal, price advantage and marketplace ambience (Hypotheses 1, 5 and 10). The consumer arousal, emotions and motivation to consumers for shopping in a chosen marketplace is measured using the equation (2) in reference to



cost, volume of buying, quality of products and convenience to customers (Hypotheses 3, 6 and 9). Equations (3), (4) and (5) have been derived to analyse the data on marketplace ambience to support the Hypotheses 2 and 4. Equation (6) describes that the value drivers (V_b) associated in determining the customer knowledge, perceptions and shopping arousal influence by the stores in a marketplace, when supported with competitive sales promotions $\beta(\gamma_1 + \gamma_2 + \gamma_3 + \gamma_4)$. These equations have been taken as the basis for deriving the analysis from the relevant variables to justify the Hypotheses 7 and 8. Finally equation (7) describes the integrated effects of economic and environmental variables in developing customer value through shopping attractiveness and driving the right choice of marketplace among consumers. This has been measured through the values of β coefficients and interpreted in reference to specific variables determined in the equations to justify related hypothesis of the study. Accordingly, the above equations (1–7) support the hypotheses framed for the study and have been used as the basis of analysis to test these hypotheses.

RESULTS AND DISCUSSION

Shopping at urban malls is highly influenced by the physical, cognitive and economic variables. Consumer preference of buying in traditional markets around the malls is high, which indicates the attitude of switching established store brands available in mall 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 shopping orientation in street markets of urban consumers in reference to physical preferences comprise factors related to logistics market attraction, and consumer preferences including variables concerning shopping attributes and customer relations. It is observed from the results that shoppers spend more money in each visit to the large shopping malls owing to the planned shopping agenda without higher perceived risk as compared to street markets. Inclination towards buying familiar brands in large shopping malls also helps customers in purchasing goods of higher value as compared to other categories of shopping malls.

Data analysed in reference to eight constructs including shopping arousal, price advantage, shopping ambience, cost of shopping, volume of buying, competitive advantage, customer traffic per stores and choice of the marketplace, had an acceptable fit with the following goodness-of-fit statistics comprising chi-square statistic (4.26–10.35); RMSEA (0.15–0.36); NNFI (0.94–2.73); CFI (0.93–1.00); and IFI (0.86–1.05). The model was tested satisfactorily for 'choice of marketplace' that is measured in reference to shopping arousal, shopping ambience and competitive advantage of shopping among consumers. Further, using confirmatory factor analysis, both convergent and discriminant validity of all multi-item reflective constructs were tested. Convergent validity is indicated when the loadings for each measure on its latent construct are statistically significant (Dunn *et al.*, 1994). All items loaded significantly on their corresponding factors, with P -values < 0.05 . Discriminant

validity is indicated when the average variance explained for a construct is greater than the square of correlation between the focal construct and each of the other constructs (Fornell and Larcker, 1981).

In Table 3, results of the estimation are summarized. Overall, the results reveal strong evidence for the association of a choice of marketplace and competitive advantage.

The results show evidence for the physical and cognitive factors association of marketplace search behaviour. The model fits the data well as the adjusted R^2 value is 0.28. The shopping ambience affects significantly the marketplace choice and cost of shopping in reference to both malls and street markets ($\beta=0.51, P<0.01$ and $0.37, P<0.05$), respectively. The ambience of marketplace comprises physical amenities, time to reach and distance, which has positive relationship between a marketplace following a differentiation strategy and factors affecting economic gains in shopping. The result shows that price advantage plays a greater role towards preferring street markets against shopping malls ($\beta=0.41, P<0.05$). It may be seen from Table 2 that variables on location, accessibility, ambience and personal beliefs are closely correlated. Accordingly, the results support clearly the Hypotheses 1, 2 and 3.

The price sensitivity ($\beta=0.39, P<0.05$ and $0.41, P<0.05$), cost of shopping ($\beta=0.47, P<0.01$ and $\beta=0.59, P<0.01$) and volume of buying ($\beta=0.42, P<0.01$ and $\beta=0.34, P<0.05$) also positively influence the choice of marketplace and consumption behaviour in both shopping malls as well as street markets. According to Hypotheses 5 and 10, a positive relationship between the use of an economic shopping strategy and the choice of marketplace was expected. The correlations results exhibited in Table 2 reveal that low-price attraction, followed by sales promotions and customer services, largely determines the choice of marketplace. These hypotheses are clearly supported by the results exhibited in Table 3.

The market attributes including ethnicity, consumer culture, buying experience, personal beliefs and customer value are also closely related, which influence the choice of marketplace among consumers as presented in Table 2. These attributes contribute to the shopping ambience and

Table 3: Estimation of structural equations

Parameters	χ^2	SE	Shopping malls		Street markets	
			β value	F value	β value	F value
Shopping arousal (A_{am})	8.45	3.16	0.46*	8.94*	0.22***	4.39***
Price advantage (B_{sp})	4.92	1.40	0.39**	12.71*	0.41**	6.44**
Shopping ambience (S_{ax})	5.09	0.63	0.51*	14.03*	0.37**	6.82**
Cost of shopping (S_{cn})	7.22	4.75	0.47*	4.52***	0.59*	9.01*
Volume of buying (S_b)	10.35	2.88	0.42**	7.09**	0.34**	5.26***
Competitive advantage (CA_i^{th})	4.75	0.25	0.58*	10.13*	0.32**	10.64*
Customer traffic/store $\{w_i(A_i)\}$	4.26	3.49	0.27***	9.27**	0.36**	8.61*
Choice of marketplace (C_{mp}^h)	6.31	0.42	0.46*	6.63**	0.41**	8.14**

* $P<0.01$, ** $P<0.05$, *** $P<0.10$.

Notes: All significance levels are based on two-tailed tests. $n=378$. F (18, 352) for shopping malls and F(18, 366) for street markets. $R^2=0.42$. Adjusted $R^2=0.28$. SE=Standard Error.

**Table 4:** Customer value (V_b) measurement by marketplace

Study area		Parameters									
Type of marketplace	No of outlets	(V_b)	(γ_1)	(γ_2)	(γ_3)	(γ_4)	(β)	($\mu b'$)	(μk)	SE	χ^2
Shopping mall	6	0.46**	0.79*	0.72*	0.63*	0.61*	0.59*	0.42**	0.39**	2.94	26.06
Street market	14	0.44**	0.68*	0.64*	0.72*	0.49**	0.76*	0.63*	0.65*	6.18	40.72

* $P < 0.01$, ** $P < 0.05$.

SE=Standard Error.

drive shopping arousal ($\beta = 0.46$, $P < 0.01$ and $\beta = 0.22$, $P < 0.10$) in both shopping malls and street markets, respectively. These results are consistent with Hypotheses 7 and 8. The customer value enhancement and marketplace preference are also closely related as discussed in Table 4.

It is observed from the results that shopping at malls is highly influenced by the physical, cognitive and economic variables. Results also reveal that cross-cultural shopping experience was significant among consumers in shopping malls as compared to street markets. However, preference of buying in street markets around the malls appeared to be high, which indicates the attitude of switching established store brands available in mall with the traditional unfamiliar brands as the economic advantage of shopping in street markets has been higher than shopping malls ($\beta = 0.72$, $P < 0.01$). The cognitive factors among consumers in brand switching include product attractiveness, low price, user friendly technology and easy product servicing practices of small vendors in street markets. However, the cyclical (upon lagged by 4-weeks cycle) of visit to the marketplaces has shown positive trend and has statistically significant impact on gaining cross-cultural shopping experience in malls ($\beta = 0.61$, $P < 0.01$) as against street markets ($\beta = 0.49$, $P < 0.05$). These factors enhance customer value and play decisive role towards the choice of marketplace. Accordingly, the results exhibited in Table 4 are consistent with Hypotheses 7 and 8.

POLICY IMPLICATIONS

Growing retailing business and urbanization have prompted development of shopping malls in fast developing cities in developing countries. However, the traditional market formats also coexist along with shopping malls though they contribute to increasing traffic congestions and security threats in urban areas. The coexistence of street markets and shopping malls in urban areas has been accepted by the consumers based on the socio-cultural beliefs even if it generates many operational conflicts. The level of conflicts between shopping malls and street markets include largely traffic congestion, accessibility of shoppers, perceptions of consumers on ethnic values, modern mall amenities and security, cost of shopping, customer services, and overall shopping experience of consumers. The management of urban marketplace is exhibited in Figure 2.

A major threat of selling imitated products in street markets is emerging rapidly in developing countries. Traditional markets

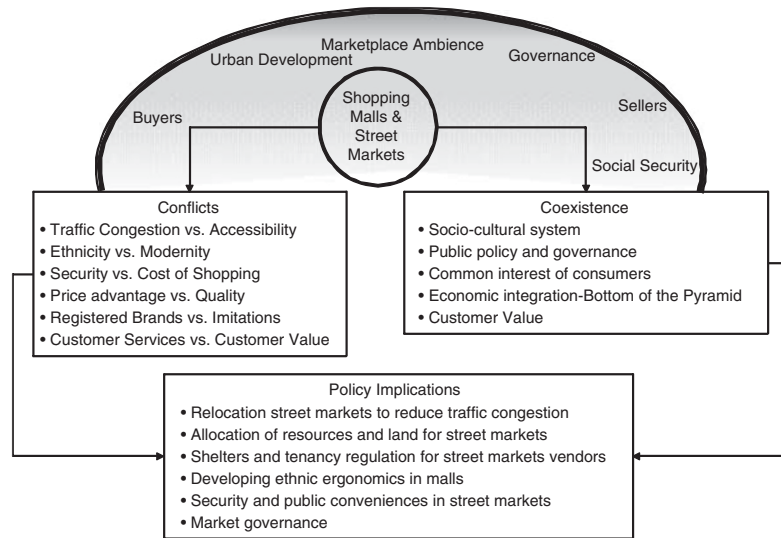


Figure 2: Conflicts and coexistence attributes of urban marketplace.

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 motivated to target up-markets than to defend low-end markets. Hence, traditional markets pose continuous threat to malls and play major role in dividing the customer preferences between them and shopping malls (Christensen *et al*, 2006, Rajagopal, 2009).

The local government may initiate strategies to ensure balanced growth of street markets as well as shopping malls in urban areas. Relocation of street markets at a safe distance from shopping to avoid traffic congestions may help sustainable growth of street markets in urban marketplace. Local authorities should allocate resources, and land for street markets, and develop tenancy regulation to support prospecting and existing vendors. Security and public conveniences should also be planned in the street markets.

Retail price format, in turn, determines the number of shoppers and average spending per consumer. While choosing a store consumers evaluate both the fixed and variable utilities of shopping. Retailers located in large and extra large shopping malls, where intensity of competition is higher, should lure customers into non-price promotions and develop niche of customers to build brand loyalty. If a retailing firm chooses to compete on price, complex pricing actions, cutting prices in certain channels, introducing new products or flanking brands strategies may be used, which allows the firm to selectively target only those segments of the customers who are at the edge of switching brands or retail outlets. Platforms that successfully connect various customer groups with shopping interests continue to build strength to the retail



brands, stores and malls. Convergence of customer loyalty, value for money and competitive product advantages drive the loyalty to retail stores at the retail point of purchase.

CONCLUSION

In urban areas a marketplace achieves differentiation from different market formats – shopping malls and street markets through the pursuit of singular orientations following the hedonic and utilitarian dimensions of shopping. Furthermore, consumer beliefs on the choice of a marketplace are found to positively influence the shopping behaviour. Interestingly, urban orientation of urban shoppers is related to a triadic factor relationship consisting of physical, economic and hedonic elements towards choosing a right marketplace. This study discusses the impact of growing congestion in urban marketplace due to overlapping of market territories of shopping malls and street markets in urban areas of Mexico. The analysis has been carried out in reference to the shopping conveniences and shopping behaviour. The results of the study evidence the complex consumer decision-making styles towards shopping malls and street markets based on competitive advantages. Street markets are largely preferred by the shoppers as they exhibit ethnic and cultural attributes while cross-cultural attributes of stores and shopping ambience is found to be one of the major determinants of shopping behaviour.

The discussions in the study divulge that shopping arousal is the principal determinant in developing preference of marketplace. Shopping arousal is driven by mall attractions, inter-personal influences, ethnicity, shopping ambience, sales promotions and comparative gains among urban shoppers. Other factors that affect the preference of a marketplace among urban shoppers include recreational facilities, location of the mall, ambience and store attractiveness in reference to products and services, brand value, and price.

LIMITATIONS OF THE STUDY

Like many other empirical studies this research might also have some limitations in reference to sampling, data collection and generalization of the findings. The samples drawn for the study may not be enough to generalize the study results. However, results of the study may indicate similar pattern of shopping behaviour of urban consumers in shopping malls also in reference to other Latin American markets.

FUTURE RESEARCH PROSPECTS

The core idea of this study is to examine the factors influencing shopping behaviour in urban marketplace comprising street markets and shopping malls coexisting in growing cities in Mexico. This study reviews the previous contributions on the subject and raises some interesting research questions in reference to the governance of urban marketplace, socio-political factors in developing street markets as an alternate route to market for urban consumers, and sales differentiation strategy. There are very few studies available on street markets and shopping malls that

have addressed these questions either in isolation or considering the interrelationship of the above factors. Researchers exploring the area of street markets and shopping malls are encouraged to carry out comparative studies on consumer behaviour towards traditional markets and modern commercial centres like lifestyle centres. Among many marketing factors product differentiation, pricing parity in urban marketplaces, customer relationship, rotational supply chain management as vendors keep moving to different destination round the week and psychodynamics influencing consumer behaviour need to be addressed in the future studies.

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NOTE

1 The goodness-of-fit statistics that the Tucker-Lewis index (TLI) also known as the Bentler-Bonett non-normed fit index (NNFI), comparative fit index (CFI) and incremental fit index (IFI) tend to range between 0 and 1, with values close to 1 indicating a good fit. The TLI (NNFI) has the advantage of reflecting the model fit very well for all sample sizes. It is observed in past empirical studies that these indices need to have values above 0.9 before the corresponding model can even be considered moderately adequate.

REFERENCES

- Ackerman, D. and Tellis, G. (2001) Can culture affect prices? A cross-cultural study of shopping and retail prices. *Journal of Retailing* 77(1): 57–82.
- Ahmed, S.A. and d' Astous, A. (2006) Product-country images in the context of NAFTA: A Canada–Mexico study. *Journal of Global Marketing* 17(1): 23–43.
- Anselmsson, J. (2006) Sources of customer satisfaction with shopping malls: A comparative study of different customer segments. *The International Review of Retail, Distribution and Consumer Research* 16(1): 115–138.
- Armstrong, J.S. and Overton, T.S. (1977) Estimating non-response bias in mail surveys. *Journal of Marketing Research* 14(3): 396–402.
- Arnold, M.J. and Reynolds, K.E. (2003) Hedonic shopping motivations. *Journal of Retailing* 79(2): 77–95.
- Backstrom, K. (2006) Understanding recreational shopping. *International Review of Retail, Distribution and Consumer Research* 16(2): 143–158.
- Bass, L.E. (2000) Enlarging the street and negotiating the curb: Public space at the edge of an African market. *International Journal of Sociology and Social Policy* 20(1): 74–95.
- Bennett, J. and Iossa, E. (2008) Building and managing facilities for public services. *Journal of Public Economics* 90(10): 2143–2160.
- Blois, K., Mandhachitara, R. and Smith, T. (2001) Retailing in Bangkok: An intriguing example of agglomeration. *International Journal of Retail & Distribution Management* 29(10): 472–479.



- Brennan, M.A., Flint Courtney, G. and Luloff, A.E. (2009) Bringing together local culture and rural development: Findings from Ireland, Pennsylvania and Alaska. *Sociologia Ruralis* 49(1): 97–112.
- Carter, C.C. and Vendell, K.D. (2005) Store location in shopping centres: Theory and estimates. *Journal of Real Estate Research* 25(3): 237–265.
- Cheung, M.W.L. (2008) A model for integrating, fixed-, random-, and mixed effects meta analysis – Introduction to structural equation modeling. *Psychological Methods* 13(3): 182–202.
- Chiang, L.H. and Hsu, J.C. (2005) Locational decisions and residential preferences of Taiwanese immigrants in Australia. *GeoJournal* 64(1): 75–89.
- Christensen, C., Baumann, H., Ruggles, R. and Sadtler, T. (2006) Disruptive innovation for social change. *Harvard Business Review* 84(12): 94–101.
- Cooper, S. and Nelson, M. (2003) Economy line foods from four supermarkets and brand name equivalents: A comparison of their nutrient contents and costs. *Journal of Human Nutrition & Dietetics* 16(5): 339–347.
- Craig, A.M. and Turley, L.W. (2004) Malls and consumption motivation: An exploratory examination of older generation and young consumers. *International Journal of Retail & Distribution Management* 32(10): 464–475.
- D'Andrea, G., Ring, L.J., Aleman, B.L. and Stengel, A. (2006) Breaking the myths on emerging consumers in retailing. *International Journal of Retail & Distribution Management* 34(9): 674–687.
- Dixon, T. and Marston, A. (2005) Taking the shopping centre online: New models in e-commerce. *Property Management* 23(2): 97–109.
- Dunn, S.C., Seaker, R.F. and Walker, M.A. (1994) Latent variables in business logistics research: Scale development and validation. *Journal of Business Logistics* 15(2): 145–172.
- El-Adly, M.I. (2007) Shopping malls attractiveness: A segmentation approach. *International Journal of Retail & Distribution Management* 35(11): 936–950.
- Emslie, L., Bent, R. and Seaman, C. (2007) Missed opportunities? Reaching the ethnic consumer market. *International Journal of Consumer Studies* 31(2): 168–173.
- Feng, J., Zhou, Y. and Wu, F. (2008) New trends of suburbanization in Beijing since 1990: From government-led to market-oriented. *Regional Studies: The Journal of the Regional Studies Association* 42(1): 83–99.
- Fornell, C. and Larcker, D.F. (1981) Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(1): 39–50.
- Fox, J. (2002) *An R and S-plus Companion to Applied Regression*. Thousand Oaks, CA: Sage.
- Gómez, M.L., Maratou, L.M. and Just, D.R. (2007) Factors affecting the allocation of trade promotions in the U.S. food distribution system. *Review of Agricultural Economics* 29(1): 119–140.
- Gounaris, S.P., Panigyrakis, G.G. and Chatzipanagiotou, K.C. (2007) Measuring the effectiveness of marketing information systems: An empirically validated instrument. *Marketing Intelligence & Planning* 25(6): 612–631.
- Herrera-Corredor, J.A., Saidu, J.E.P., Khachatryan, A., Prinyawiwatkul, W., Carballo-Carballo, A. and Zepeda-Bautista, R. (2007) Identifying drivers for consumer acceptance and purchase intent of corn tortilla. *Journal of Food Science* 72(9): 727–731.
- Hunt, S.D. and Morgan, R.M. (1995) The comparative advantage theory of competition. *Journal of Marketing* 59(2): 1–15.
- Ibrahim, M.F. and Galven, T.W.R. (2007) New age retail tenants: A new phenomenon. *Journal of Retail and Leisure Property* 6(3): 239–262.
- Jaccard, J., Turrisi, R. and Wan, C.K. (1990) *International Effects in Multiple Regression*. Thousand Oaks, CA: Sage University Press.
- Jindal, R.P., Reinartz, W., Krafft, M. and Hoyer, W.D. (2007) Determinants of the variety of routes to market. *International Journal of Research in Marketing* 24(1): 17–29.
- Kok, H. (2007) Restructuring retail property markets in Central Europe: Impacts on urban space. *Journal of Housing and the Built Environment* 22(1): 107–126.
- Kumar, S.R., Guruvayurappan, N. and Banerjee, M. (2007) Cultural values and branding in an emerging market: The Indian context. *The Marketing Review* 7(3): 247–272.
- Kuruville, S.J. and Ganguli, J. (2008) Mall development and operations: An Indian perspective. *Journal of Retail and Leisure Property* 7(3): 204–215.
- Léo, P.Y. and Philippe, J. (2002) Retail centres: Location and consumer's satisfaction. *The Service Industries Journal* 22(1): 122–146.
- Llewellyn, N. and Burrow, R. (2008) Streetwise sales and the social order of city streets. *The British Journal of Sociology* 59(3): 561–583.
- Loafland, J. (1985) *Protest: Studies of Collective Behaviour and Social Movements*. New Brunswick, NJ: Transaction Books.
- Löffler, G. (1998) Market areas – A methodological reflection on their boundaries. *GeoJournal* 45(4): 265–272.

- Malthouse, E. and Mulhern, F. (2008) Understanding and using customer loyalty and customer value. *Journal of Relationship Marketing* 6(3): 59–86.
- Maronick, T.J. (2007) Specialty retail centre's impact on downtown shopping, dining, and entertainment. *International Journal of Retail & Distribution Management* 35(7): 556–568.
- Marston, S.A. and Modarres, A. (2002) Flexible retailing: Gap inc. and the multiple spaces of shopping in the United States. *Tijdschrift voor Economische en Sociale Geografie* 93(1): 83–99.
- Mattila, A.S. and Wirtz, J. (2004) Congruency of scent and music as a driver of in-store evaluations and behaviour. *Journal of Retailing* 77(2): 273–289.
- McBride, J.B. and Gillespie, K. (2000) Consumer innovativeness among street vendors in Mexico City. *Latin American Business Review* 1(3): 71–94.
- McGoldrick, P.J. and Pieros, C.P. (1998) Atmospherics, pleasure and arousal: The influence of response moderators. *Journal of Marketing Management* 14(1–3): 173–197.
- Menon, S. and Kahn, B. (2002) Cross-category effects of induced arousal and pleasure on the internet shopping experience. *Journal of Retailing* 78(1): 31–40.
- Michon, R. and Chebat, J.C. (2004) Cross-cultural mall shopping values and habitats: A comparison between English- and French-speaking Canadians. *Journal of Business Research* 57(8): 883–892.
- Michon, R., Chebat, J.C. and Turley, L.W. (2005) Mall atmospherics: The interaction effects of the mall environment on shopping behaviour. *Journal of Business Research* 58(5): 576–583.
- Miranda, M., Konya, L. and Havira, I. (2005) Shopper's satisfaction levels are not only the key to store loyalty. *Marketing Intelligence and Planning* 23(2): 220–232.
- Morschett, D., Swoboda, B. and Foscht, T. (2005) Perception of store attributes and overall attitude towards grocery retailers: The role of shopping motives. *International Review of Retail, Distribution and Consumer Research* 15(4): 423–447.
- Narver, J.C. and Slater, S.F. (1990) The effect of market orientation on business profitability. *Journal of Marketing* 54(4): 20–35.
- Ooi, J.T.L. and Sim, L.L. (2007) The magnetism of suburban shopping centres: Do size and cineplex matter? *Journal of Property Investment and Finance* 25(2): 111–135.
- Parsons, A.G. (2003) Assessing the effectiveness of shopping mall promotions: Customer analysis. *International Journal of Retail & Distribution Management* 31(2): 74–79.
- Powe, N.A. (2006) Understanding urban attitudes towards country towns: Considering their potential as visitor attractions. *Journal of Retail and Leisure Property* 5(4): 255–269.
- Rajagopal (1999) Empowering rural women groups for strengthening economic linkages. *Development in Practice* 9(3): 327–330.
- Rajagopal (2006a) Leisure shopping behaviour and recreational retailing: A symbiotic analysis of marketplace strategy and consumer response. *Journal of Hospitality and Leisure Marketing* 15(2): 5–31.
- Rajagopal (2006b) Measuring consumer value gaps: An empirical study in Mexican retail markets. *Economic Issues* 11(1): 19–40.
- Rajagopal (2007) Stimulating retail sales and upholding customer value. *Journal of Retail and Leisure Property* 6(2): 117–135.
- Rajagopal (2008a) Consumer response and cyclicity in new product management. *Journal of Customer Behaviour* 7(2): 165–180.
- Rajagopal (2008b) Time sharing at leisure facility centres: Analysis of sales performance indicators. *Journal of Retail and Leisure Property* 7(3): 248–262.
- Rajagopal (2009) Growing shopping malls and behaviour of urban consumers. *Journal of Retail and Leisure Property* 8(2): 99–118.
- Rheinländer, T., Olsen, M., Bakang, J.A., Takyi, H., Konradsen, F. and Samuelsen, H. (2008) Keeping up appearances: Perceptions of street food safety in urban Kumasi, Ghana. *Journal of Urban Health* 85(6): 952–964.
- Roberts, N., Thatcher, J. and Grover, V. (2010) Advancing operations management theory using exploratory structural equation modelling techniques. *International Journal of Production Research* 48(15): 4329–4353.
- Roth, A.E. (2008) What have we learned from market design? *The Economic Journal* 118(527): 285–310.
- Ruekert, R.W. (1992) Developing a market orientation: An organisational strategy perspective. *International Journal of Research in Marketing* 9(3): 225–245.
- Sherry, J.F. (1990) A sociocultural analysis of a midwestern American flea market. *Journal of Consumer Research* 17(2): 13–30.
- Shy, O. and Stenbacka, R. (2008) Price competition, business hours and shopping time flexibility. *The Economic Journal* 118(531): 1171–1195.
- Sinreich, H.J. (2007) Baluty market: A study of a food space. *Food, Culture and Society: An International Journal of Multidisciplinary Research* 10(1): 73–84.



- Steenkamp, J-B.E.M. and Burgess, S.M. (2002) Optimum stimulation level and exploratory consumer behaviour in an emerging consumer market. *Future Generation Computer Systems* 19(2): 15–31.
- Stillerman, J. (2006) Private, parochial, and public realms in Santiago, Chile's retail sector. *City & Community* 5(3): 293–317.
- Teller, C. (2008) Shopping streets versus shopping malls – Determinants of agglomeration format attractiveness from the consumers' point of view. *The International Review of Retail, Distribution and Consumer Research* 18(4): 381–403.
- Timothy, J.R. and Stephen, F.H. (2006) Rivalry in price and variety among supermarket retailers. *American Journal of Agricultural Economics* 88(3): 710–726.
- Tipraqsa, P. and Schreinemachers, P. (2009) Agricultural commercialization of Karen hill tribes in Northern Thailand. *Agricultural Economics* 40(1): 43–53.
- Vachani, S. and Smith, N.C. (2008) Socially responsible distribution: strategies for reaching the bottom of the pyramid. *California Management Review* 50(2): 52–84.
- Wakefield, K.L. and Baker, J. (1998) Excitement at the mall: Determinants and effects on shopping response. *Journal of Retailing* 74(4): 515–539.
- Wang, L. and Lo, L. (2007) Global connectivity, local consumption, and Chinese immigrant experience. *GeoJournal* 68(2–3): 183–194.
- Wardrop, J. (2006) Private cooking, public eating: Women street vendors in South Durban. *Gender, Place and Culture* 13(6): 677–683.
- Weber, J. and Kwan, M.P. (2002) Bringing time back in: A study on the influence of travel time variations and facility opening hours on individual accessibility. *The Professional Geographer* 54(2): 226–240.
- Williams, E. (2003) Market reforms, technocrats, and institutional innovation. *World Development* 30(3): 395–412.
- Wirtz, J., Mattila, A.S. and Tan, R.L.P. (2007) The role of arousal congruency in influencing consumers' satisfaction evaluations and in-store behaviours. *International Journal of Service Industry Management* 18(1): 6–24.
- Zukin, S. and Kosta, E. (2004) Bourdieu off-broadway: Managing distinction on a shopping block in the east village. *City and Community* 3(2): 101–114.