Original Article

Investigating the effects of retail agglomeration choice behavior on store attractiveness

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ABSTRACT This study provides an understanding towards linkage between consumers' purchase behavior attributes and store attractiveness. It adds significance to store location decision strategy by undertaking the study in two agglomerations of street shopping area and a shopping mall. Both agglomerations involve clustering of similar stores but have different geographic locations. The study in its first step identifies attributes which influence an individual to purchase from a particular agglomeration. Secondly, the impact of these identified attributes was studied on store attractiveness of both agglomerations. Store attractiveness was measured in terms of time being spent and intention to revisit an agglomeration. The results suggested that in addition to depth and variety of stores, merchandise characteristics such as price of merchandise and accessibility influence an individuals' store selection decision. It was found that the degree of influence varies with type of agglomeration.

INTRODUCTION

Customers spend a significant amount of time and effort in selecting a particular store for their purchase. The choice of a particular store from numerous competing stores situated at a particular location is influenced by various characteristics (Dennis, 2005). Availability of parking space, quality and value of merchandise, availability of variety of products at expected prices, accessibility and ambience of stores are some of the

characteristics that influence consumers' purchase behavior (Arentze and Timmermans, 2001; Baker et al, 2002; Bhatnagar and Ratchford, 2004; Ruiz et al, 2003; Severin et al, 2001; Tang et al, 2001). Such attributes enriching shopping experience vary from one shopping area to another.

A shopping area has number of stores offering variety of products. This clustering of stores termed as agglomeration happens either in planned or unplanned fashion. Traditional shopping areas termed as shopping streets are characterized by unplanned agglomeration of stores. Because of several advantages such as proximity to customers, familiarity and high personal service shopping street retailers were often better positioned to respond to the huge demand. Because of the increase in demand such retail agglomerations faced with numerous challenges because of its unplanned nature. Lack of parking space, pleasing environment, and availability of international brands were a few of them. These drawbacks were overcome by planned development of new retail formats in the form of malls (Hernandez and Biasiotto, 2001). These planned agglomerations were characterized by the presence of international brands, better parking facilities, a broad variety of shops demarcated in planned fashion, and entertainment facilities (Kim, 2002). India has seen an exponential growth in development of organized retail space. As shown in report 'Indian Organized Retail Market: Diagnosis and Outlook (2010)' by Knight Frank Research in 1999, India had just three shopping malls measuring around 1 mn. ft.^{2} and by the end of 2006, the total mall space rose up to 28 mn. ft.^{2} with an average annual addition of 3.9 mn. ft.^{2} Post 2006, on an average 8 mn ft.^{2} of retail space has been added annually, pan India taking the mall space to over 52 mn. ft.^{2} by the end of 2009, and this is expected to grow at an average of 30 per cent per annum in the period 2009–2013. This clearly indicates retailers' preference to locate their stores in malls as

customers' shopping preference showed a shift towards malls from street shopping. However, this rapid growth has resulted in oversupply of retail space and has created an oversupply situation to the magnitude of 21 mn. ft.^{2} until 2012. This situation of oversupply clubbed with high rental costs of retail space especially in urban centers has caused retailers to accrue losses in spite of best marketing efforts.

Under such circumstances, major retailers both domestic and foreign confront a major issue of whether to locate a store in a traditional shopping street which is most of the time located within the city or to locate in new shopping mall establishments which sometimes face the disadvantage of proximity to customers. Thus, analysis of location is vital for retail and commercial enterprises (Hernandez and Bennison, 2000) because poor choice of location can have a significant negative impact on the company both financially and image wise (Berman and Evans, 2001).

Understanding of attributes which influence customers' purchase behavior would be the first step in examining attractiveness of alternative locations (Oppewal et al, 1997). The presence or absence of these attributes in a particular location would directly impact stores' attractiveness (Baker et al, 2002). An attractive store destination would encourage shoppers to spend more time and money and also influence their repurchase intentions (Magi, 2003). This relationship has been examined in this study in two steps: firstly, consumer purchase behavior attributes were identified with regard to both planned and unplanned retail agglomeration. Secondly, causal relationship of these identified attributes was modeled with retention proneness and repurchase intention of store attractiveness. The findings would be useful for managers of retail stores as then they can focus their limited resources in enhancing attributes which have positive impact on store attractiveness and work to remove or reduce the impact of attributes which have negative impact.

LITERATURE REVIEW

Retail location decision making is a complex but an important process. Such decisions are long term and involve substantial investments. According to some industry estimates, rentals comprise approx. 40 per cent of total cost of sales in the retail sector. These costs are directly related to location of retail stores. Urban centers pose challenge of high rental costs and acute shortage of prime locations, thus putting huge pressure on retailers' revenues. The survey findings of research conducted by Hernandez and Bennison (2000) found that a majority of retailers were applying more subjective methods like rule of thumb in location decision making. However, acute competition in retail sector has forced retailers to adopt more scientific approaches in their location decision–making process. It has been argued that location decisions have a long-term impact on viability of commercial retail activities, and therefore, retailers need to utilize various scientific technologies to reduce risk. In this consideration, various researchers such as Wood and Browne (2007) and Wood and Tasker (2008) have emphasized the need of mixture of employment of technologically advanced techniques and location planning analysts' tacit knowledge. Retailers' knowledge of location alternatives within the city and their perspective of consumers' shopping behavior is an essential part of such location models (Reynolds and Wood, 2010).

Various decision–making models involving advanced techniques such as geographic information systems (GISs) have been merged with traditional methods of location decision making and applied in different retail settings (Church, 2002; Mendes and Themido, 2003; Li and Liu, 2012; Roig-Tierno et al, 2013; Rybarczyk and Wu, 2010; Suárez-Vega et al, 2011, 2012; Trubint et al, 2006). These researchers have applied decision-making models using theory of GIS to evaluate performances of retail stores in their existing settings and also to identify locations of new stores in urban areas. The store location decision was analyzed on the basis of variety of decision criteria. One of such criteria is purchase behavior attributes which influences an individual to purchase from a particular shopping area. These attributes were found to vary with type of shopping agglomeration. Also customers vary in terms of socio–economic and location parameters. Different customers segmented on various parameters like income and family size are driven by different shopping behavior attributes. Such state of affairs makes it important to understand these attributes in light of different retail formats and different individual socio–economic criteria (Ganesh et al, 2007). Rhee and Bell (2002) supported the view that customers with different income and age can be targeted by providing merchandise at different price levels.

The importance of identifying the dominant ones from numerous attributes was emphasized by various authors (Briesch et al, 2009; Chan et al, 2007; Karmarkar et al, 2015; Sohail et al, 2012; Sadi and Saricimen, 2010; Van Kenhove et al, 1999). According to the authors, a retailer providing different varieties of goods was more likely to attract customers than a retailer who focuses on price of merchandise. Variety of merchandise, accessibility, and prices were considered as significant contributor in influencing shoppers' selection of retail store (Briesch et al, 2009). In a related study, Sohail et al (2012) identified familiarity towards a particular store, its pleasing atmosphere, and availability of products at perceived prices as major purchase behavior attributes which influence selection of food retail stores. Attributes such as service quality, product quality, and physical appearance were considered to have a significant impact on consumer purchase intentions by Sadi and Saricimen (2010). Research by Karmarkar et al (2015) shows that price highlights

products' monetary worth and customers tend to evaluate a product firstly on the basis of its price and then its features. Attractive prices can increase their buying tendency if they are considered worthwhile by consumers. However, price was found to have little or no impact in influencing purchase intention by Sadi and Saricimen (2010).

The interplay of accessibility and price was examined by Chan *et al* (2007). The authors suggested that accessibility to retailer becomes important if similar products are being offered at similar prices, but accessibility was not found to be an impediment in accessing products of lower prices even if they were available in customers' neighborhood. According to Briesch *et al* (2009), consumers were found to be willing to travel more and spend more if a store offers a better variety of products. However, shoppers who focus less on assortment of products would put more value on accessibility and price. Accessibility measured in travel distance was found to be a major issue for shopping malls as such planned agglomerations are mostly located away from city (Arentze and Timmermans, 2001; Leszczyc *et al*, 2004). Retail malls counter accessibility bottleneck by highlighting on other purchase attributes such as providing variety of international brands, pleasing ambience, efficient parking space, etc. The authors also suggested that by focusing on such attributes malls encourage customers to indulge in multipurpose activities. Dellaert *et al* (1998) had also emphasized the importance of multipurpose activities by providing variety of merchandise. This improves shopping efficiency and influences selection of a particular agglomeration (Bacon, 1995).

Focus on entertainment facilities such as the presence of number of quality restaurants, movie screens, and separate entertainment facilities for children were other activities secondary to main activity of shopping that encourage customers to spend more time in shopping mall agglomerations (Arentze and Timmermans, 2001). Such agglomerations with excellent environment are better equipped to persuade shoppers to indulge in multi-activities. Such entertainment facilities which are not primary activity for a customer provides welcome break from shopping activity and encourage them to spend more time and money (Jones and Reynolds, 2006). Focusing on providing other attributes to offset the disadvantage of accessibility might result in multipurpose activities but not in multiple visits to a particular shopping area (Arentze *et al*, 2005). The lack of such facilities may influence the customers to leave the shopping center prematurely or just focus at fulfilling their immediate needs (Wakefield and Baker, 1998).

According to Kim (2002), stores clustered in a traditional shopping street attract shoppers with different characteristics as compared with stores in a mall. Uniyal (2012) suggested that attributes that drive a shoppers' involvement in shopping activity vary with change in store format and thus it is important to develop a shopper involvement scale in order to measure shoppers' behavioral intentions. Severin *et al* (2001) suggested that attributes like merchandise selection, quality, and price levels facilitate retailers to assess how a consumer chooses a particular shopping center for shopping purposes and in turn facilitate determining store location.

Thus, literature clearly indicates that in light of the presence of number of purchase behavior attributes, understanding which attribute plays a superior role in different retail settings is critical to recognize rationale for selection of particular store or an agglomeration.

Understanding the drivers of consumer behavior that have direct impact on intentions to revisit a particular store and indulge in repeat purchase of variety of products would directly impact profitability of retailer (Meyer-Waarden and Benavent, 2009). Teller and Reutterer (2008) measured

the concept of retail attractiveness in terms of patronage intention and retention proneness. Customers' willingness to spend more time and money and intention to revisit a particular store destination thereby making it more attractive were in direct relation with consumer shopping behavior attributes. Price and variety of merchandise, accessibility of store agglomeration, and their ambience were found to significantly influence shoppers' selection of a particular store agglomeration though differently. Uniyal (2011) suggested that effective communication with customers who are searching and looking for information about products in the store can make a difference between attracting and losing a customer. Such engagement makes a significant contribution in encouraging customer to spend more. The association between store attractiveness measured in terms of repeat purchase and consumer shopping behavior such as merchandise value, price perceptions, etc., was studied by Baker *et al* (2002). The study articulated that these behavioral intentions affected by store environment cues such as social, design, and ambient factors directly influence the future visit of consumers.

Retailer interest in varying needs of different customers was considered to be paramount in influencing revisit and thereby encouraging shoppers to spend more time and money (Lueg *et al*, 2006). Developing emotional ties by offering engagement and involvement was found to be critical in fostering strong relationship between retailers and shoppers (Brocato *et al*, 2015). Such attachment to a particular store would motivate customers to shop from a particular store irrespective of accessibility and price discounts offered by competitor stores. Building of such ties is a painstaking effort and retailers should be aware of which features to be offered to which type of customers in order to nurture long-term relationship. As indicated by Kaltcheva and Weitz (2006) that with the intent of increasing pleasantness of stores, retailers increasingly have applied various methods to enhance attractiveness of store environment. But such methods were found to be useful only for shoppers who visit a store with a recreational intent. Such cues distract or disrupt hurried shoppers and play a negative impact on their intent to revisit. Customers with task shopping orientation tend to indulge more into price and product features rather than environmental cues offered by the store (Baker and Wakefield, 2012). Such shoppers seek control and intimacy towards shopping experience and dislike being suggested. However, recreational shoppers such as mall shoppers respond differently to various retail settings and willingly react to excitement features offered by the retailer which are not linked to their purchase. Thus, proper understanding of demographic and psychographic profile of retail customers was found to be helpful in inducing repeat purchase behavior and making a store attractive (Ruiz *et al*, 2003).

Campo *et al* (2000) did segment consumers on income and location criteria and studied its impact on store selection. It was suggested that consumers' purchase intentions which influence selection of a particular agglomeration or store are significantly governed by characteristics such as income, occupation, and ethnicity. Specific targeting with specific methods would mitigate negative consequences and lead to superior understanding of repatronage.

Visiting a particular store because it offers a particular kind of brand of products indicated loyalty towards brand and not the store, whereas selection of particular store irrespective of brand of product indicates loyalty towards the retailer. Understanding these two types of loyalty was considered important as both are driven by different buying behavior attributes (Liu-Thompkins and Tam, 2013). It was suggested that analysis of such attributes would facilitate retailers to design different promotional

campaigns that work better for different categories of consumers. Magi (2003) studied the impact of such methods like loyalty programs on store attractiveness. The findings of the study suggested that such measures have limited impact in encouraging customers to spend more and visit more frequently. Instead, classifying customers on characteristics such as income and then targeting them with different strategies is a better method of promoting store attractiveness. Liu (2007) also studied relation between attributes influencing shoppers' buying intention and selection of stores which offer rewards. The study suggested that customers who shop light but frequently would intend to revisit the store when targeted with such specific loyalty programs.

Loyalty towards store rather than to a brand tends to amass huge benefits to retailer. Even with change in ownership, a new retailer would have readymade clientele as shoppers are habitually inclined towards shopping from that particular store. Revisiting and indulging in repurchase from the same store would result in high traffic volume. But this changes if store compromises on price and product mix. Thus, for a store to remain attractive in light of change in ownership, it should keep offering similar products at similar prices at least for near future (Van Lin and Gijsbrechts, 2014).

The above discussion from a detailed review of literature indicated the importance of understanding and identifying such purchase behavior attributes pertaining to a particular retail agglomeration. The literature also shows that these attributes are a function of location and demographic characteristics. Previous researches have primarily been conducted by undertaking single store perspective. Minimal studies were subjected to examining these attributes with regard to cluster of stores located at different shopping areas. This study has attempted to enrich the literature by focusing on this research gap of identifying and comparing shopping

behavior attributes by keeping demographic variables such as income, age, and occupation as constants but changing the location of stores. The crucial factors influencing shopping behavior were investigated from consumers' and store managers' perspective of both planned (mall shopping) and unplanned agglomeration (street shopping). This hypothesis studied in part one and two of the study was based on the assumption that such determinants vary from one type of agglomeration to other.

Lastly, literature as discussed presented a strong causal relationship between the impact of shopping behavior attributes on attractiveness of store. But again such a relationship has been studied for single store or only for shopping malls. As there is very high likelihood that individuals select different retail agglomerations for different reasons so it becomes interesting to investigate which attributes result in making an agglomeration attractive. This purpose made us to formulate hypothesis pertaining to causal relationship between each of identified attribute from part one and two of the study and dimensions of store attractiveness. This was accomplished in part three of the study.

METHODOLOGY

Retail site selection

The endeavor of fulfilling the above-mentioned objectives was carried out by taking respondents of a planned agglomeration, i.e., a shopping mall (Elante Mall) and an unplanned agglomeration, i.e., a street shopping center (Sector-17 Plaza). These centers were selected from major city of Chandigarh, India. Both agglomerations represent the largest retail agglomerations of the city and are among the largest in area in terms of reported sales figures. They compete for consumers with similar demographic characteristics, thus, resulting in fairly limited

store heterogeneity with the consequence that two selected retail agglomerations can be regarded as comparable with respect to their competitive standing in relevant market. To maintain homogeneity among selected retail stores in two agglomerations, only respondents of apparel stores were studied. The rental value per square feet of apparel stores in selected shopping street and shopping mall was found to be approximately Rs. 120/ft.^{2} and Rs. 100/ft.^{2} (as per 2014 data), respectively, thus substantiating the homogeneity of selected agglomerations.

Sampling and data collection

There could be numerous attributes such as parking space, variety of stores, etc., which play crucial role in influencing shopping behavior and, in turn, store attractiveness which were found to vary from one type of agglomeration to other (Teller and Reutterer, 2008). The presence of a particular attribute might be considered important in influencing purchase behavior irrespective of type of retail agglomeration. However, some other attribute might influence similar behavior in relation to a particular retail destination. Thus, it becomes essential to identify attributes which exert similar and different influence on purchase behavior for each agglomeration. This was achieved by investigating responses from both consumers and managers of selected retail agglomerations. Firstly, a qualitative survey was conducted to observe consumers' shopping behavior attributes. *The study was conducted in three parts. The first objective of the study pertaining to identification of shopping behavior dimensions of two agglomerations was achieved in the first and second part. In the first part, a qualitative study was conducted involving perspectives of shoppers of both agglomerations.* Fifty shoppers each of street and mall agglomerations were interviewed through an open-ended questionnaire. The respondents were selected from the same age group of 20–30 years with a precondition of apparels

being purchased from retail agglomerations under study. They had similar education background and majority of them were self-employed. The consumers were asked to specify the preferable attributes that a particular retail agglomeration possesses which influence their buying behavior. The analysis of these responses from both type of agglomerations helped in identifying shopping behavior dimensions from consumers' perspective.

The importance assigned to a particular shopping characteristic and its presence in particular agglomeration would influence mangers' location strategy. This suggests that managers of two agglomerations under study consider the presence of certain attributes to influence consumer shopping behavior. Thus, it becomes equally important to assess similarity between purchase behavior attributes for both agglomerations from service providers (managers') perspective as well. Managers' perspective was studied by subjecting managers of 15 apparel stores each from Sector-17 and Elante Mall to a structured questionnaire. The selected managers were asked to rate the importance of deduced consumer shopping behavior attributes on a scale of 1–10. The score indicated the significance assigned to a particular attribute from service providers' perspective. The study of these attributes from perspective of shoppers and managers provided insight into attributes which influence shopping behavior of shoppers of two agglomerations under study. This helped us to substantiate the argument that different agglomerations emphasize on different attributes to attract shoppers.

Such an identification of purchase behavior attributes from both consumer and manager perspective for both agglomerations helped in examining their relationship with dimensions of store attractiveness. The assessment of such relationship suggested which attribute should be focused upon to enhance store attractiveness and which of them should be diminished. This

investigation was conducted for both shopping mall and street shopping centers. This impact was evaluated by administering a structured questionnaire to 500 customers each of Sector-17 and Elante Mall. The respondents selected were of the same demographic characteristics as were in qualitative study. This was a descriptive study where randomly selected shoppers were asked to rate the importance of a dimension on a scale of 1–10 where higher score would imply higher importance given to that dimension. These dimensions were separated in two parts. One part was devoted to shopping behavior attributes and the second part of questionnaire collected responses regarding store attractiveness dimensions which were measured in terms of patronage intention and retention proneness. The content of structured questionnaire was different for respondents of two agglomerations only regarding shopping behavior attributes as findings of the first objective might show that shopping attributes influencing buying behavior vary from one agglomeration to other.

ANALYSIS AND FINDINGS

Shopping behavior characteristics from customers' perspective

After collecting data from consumers of both agglomerations, the variety of characteristics as depicted by sampled individuals was analyzed. Firstly, all the views were organized into common characteristics. It was found that all the viewpoints of both Sector-17 and Elante Mall consumers can be organized into eight attributes. Then a frequency table depicting number of consumers preferring a particular attribute (symbolized from d_1 to d_8) corresponding to that retail agglomeration was constructed (Table 1). The results as shown in Table 1 were achieved by applying z test of proportions to find whether a

significant difference occur between Sector-17 and Elante Mall responses pertaining to each of the eight attributes.

Consumers of both retail agglomerations considered the presence of seven out of eight identified attributes to influence purchase behavior (Table 1). These seven attributes were availability of multiple brands, parking space, variety of merchandise, closeness with other retail stores, distance: away from city, price of products, and the presence of other entertainment facilities.

As discussed in the literature, clustering or agglomeration of stores provide options to customers and induce them to spend more time in the shopping center. The presence of variety of stores would induce customers to spend more time in an agglomeration and in turn spend more money. Thus, closeness with other stores (d_7) attribute was considered as important by customers of both agglomerations and was validated by z score.

The shopping street appeals to inhabitants living nearby, whereas the mall's clientele originates from the whole city area and surrounding regions. Accessibility (d_3) was considered an important characteristic in selection of an agglomeration but less by mall shoppers as availability of personalized transportation and multipurpose nature reduces the frequency of visiting a mall.

Price of products (d_6) in a price-sensitive market is always considered to be an important attribute influencing shopping behavior. The majority of the respondents mentioned price as an important influence of shopping behavior. Sector-17 respondents perceived price can be negotiated and thus an important characteristic of shopping, whereas respondents from Elante Mall correlated highly priced mall shopping with better quality apparels. Thus, price is an attribute for attracting customers in two different agglomerations but for different reasons. z score validates this finding.

The presence of other entertainment facilities (d_8) especially eating joints was another factor considered as a major attribute

Table 1: Number of responses regarding a particular shopping attribute w.r.t. street and mall shopping from customers' perspective

Attributes	Street shopping (Sector-17)	Mall shopping (Elante Mall)	z score
Availability of multiple brands (d_1)	20	23	−0.456
Variety of merchandise (d_2)	25	20	0.741
Distance: away from city (d_3)	24	15	0.342
Availability of open spaces (d_4)	11	2	2.05*
Parking space (d_5)	19	23	−0.614
Price of merchandise (d_6)	20	22	−0.491
Closeness with other retail stores (d_7)	17	23	0.652
Availability of other entertainment facilities (d_8)	13	11	0.199

*Significant at 5 per cent value.

in influencing shopping behavior. Almost similar number of customers from both agglomerations considers this attribute to be important.

Purchase behavior regarding availability of open spaces (d_4) attribute was found to vary significantly. It was considered important by Sector-17 respondents but not by mall shoppers implying that availability of open space influences consumers of planned and unplanned agglomerations differently. Structurally, unplanned agglomerations such as Sector-17 are developed in a manner that they possess open spaces where visitors/consumers can move around. But shopping behavior of customers of planned agglomerations such as Elante Mall was not influenced by the absence of open spaces as other attributes were found to be bigger influencers.

Shopping behavior characteristics from managers' perspective

After collecting data from managers of both agglomerations, the variety of characteristics as depicted by sampled individuals was analyzed. Two-sample independent t test was applied to evaluate the difference between mean scores of ratings given to selected attributes by managers of two agglomerations. An insignificant difference would indicate that a particular attribute which influences consumer shopping behavior is not a function of type of agglomeration. But high mean values associated with a particular attribute indicate importance assigned by managers. According to results in Table 2, managers perceived that customers would be willing to access a particular agglomeration if stores provide different branded products. Customer is looking for choice and shopping sites providing multi-brand products would be successful. The respondents from both Elante Mall ($mean_{mall} = 8.04$) and Sector-17 ($mean_{sec-17} = 7.29$) considered this attribute to be an important characteristic influencing customers' shopping behavior. This was substantiated by insignificant t value.

Availability of variety of branded apparels was given more importance by mall managers ($mean_{mall} = 7.17$) than street shopping managers ($mean_{sec-17} = 6.29$). But as results show, the difference between responses was found to be insignificant. The presence of variety in merchandise provides options to customers and persuades them to stick to one store or agglomeration. Thus, this characteristic plays a significant role in influencing shopping behavior of customers of both agglomerations.

The location of stores in the suburbs or interior of the city was perceived to be an important attribute in influencing shopping behavior of customers of both agglomerations. Sector-17 is located in the heart of the city making it more accessible than Elante Mall which is at the periphery of the city

Table 2: Mean scores of rating given to various shopping attributes w.r.t. street and mall shopping from managers' perspective

Attributes	Mall shopping (Elante Mall)	Street shopping (Sector-17)	t value
Availability of multiple brands (d_1)	8.04	7.29	1.24
Variety of merchandise (d_2)	7.17	6.29	1.62
Distance: away from city (d_3)	7.94	7.29	0.86
Availability of open spaces (d_4)	7.82	7.23	1.04
Parking space (d_5)	9.01	7.71	2.05*
Price of merchandise (d_6)	7.62	5.52	3.12*
Closeness with other retail stores (d_7)	8.05	6.71	2.24*
Availability of other entertainment facilities (d_8)	8.41	6.94	2.96*

*Significant at 5 per cent value.

making its accessibility as time consuming. As results show, managers of both agglomerations ($mean_{mall} = 7.94$, $mean_{sec-17} = 7.29$) perceive accessibility or distance from the city as an essential characteristic of shopping behavior. Lastly, availability of open spaces is considered as an important attribute in influencing shopping behavior of customers of both agglomerations ($mean_{mall} = 7.82$, $mean_{sec-17} = 7.23$). The insignificant t value (Table 2) indicates insignificant difference among responses of sampled respondents from two agglomerations. A shopping mall, in this case Elante Mall, lacks open spaces as it involves closed organized structure, whereas street shopping, in this case Sector-17, does present its customer the benefits of open spaces. It can be inferred from the results that in spite of the absence or presence of attribute, it was perceived as an essential characteristic of shopping behavior.

Significant differences in responses were found among managers of two retail agglomerations with regard to four attributes, namely parking space, price of merchandise, proximity with other stores, and availability of other entertainment facilities. Malls being located at the outskirts of the city force people to use their personal vehicles for accessibility making availability of ample parking space as an essential influencing purchase behavior. Results as shown in Table 2 indicate that the importance given to parking space attribute by mall managers ($mean_{mall} = 9.01$) was much higher than

street shopping managers ($mean_{sec-17} = 7.71$). The responses of sampled managers of two agglomerations under study differed significantly regarding 'price of merchandise' attribute. Because of organized and up-market nature of mall, consumers correlate highly priced products with quality. Thus, managers of Elante Mall ($mean_{mall} = 7.62$) considered price as a strong influence in formulating consumer shopping behavior. As study involved observations from branded apparel stores, so prices of products available in selected stores of both agglomerations were similar, but managers of Sector-17 ($mean_{sec-17} = 5.52$) perceived price to be of less important in influencing consumer shopping behavior.

According to the results as shown in Table 2, managers of Elante Mall ($mean_{mall} = 8.05$) perceived significantly differently from managers of Sector-17 ($mean_{sec-17} = 6.71$) regarding proximity of stores with each other. The sampled managers of the mall considered the existence of store in close proximity to other stores as an important attribute influencing customers' shopping behavior. However, the perception of sampled managers of street shopping stores varied significantly. In a mall, stores are adjacent to each other giving choice to customers which result in agglomeration and has a positive effect on sales. Respondents reflected that as a street shopping site is an unplanned agglomeration so customers might not be willing to move distances to access

other stores, and thus, closeness to other stores was not given as much importance as in the case of mall stores.

Lastly, managers of Sector-17 ($mean_{sec-17} = 6.94$) considered the presence of other entertainment facilities such as eating joints to be not as important an attribute in influencing consumer shopping behavior as is considered by managers of Elante Mall ($mean_{mall} = 8.41$). The difference between their responses was found to be significant as shown in the results (Table 2). The presence of such facilities makes mall shopping as an attractive shopping destination.

The summarized results as shown in Table 3 indicate combined shopping behavior attributes from customers' and managers' perspectives of both agglomerations. The selection of particular attributes for a retail agglomeration was based on the following arguments.

Firstly, those attributes for a particular agglomeration were selected for which importance of the presence of purchase behavior attributes were considered to be similar by both consumers and managers. This was deduced from insignificant statistical values. Secondly, certain attributes were also selected where only one of the parties, i.e., consumer or manager to purchase activity has considered it to be important. But in such cases calculated mean scores was used to designate that attribute to a particular agglomeration. For instance, parking space was considered as an important attribute by

customers of both agglomerations but only by managers of mall. As indicated by mean value (9.01 as shown in Table 2), managers of shopping mall gave more importance to parking space attribute. Thus, this attribute was considered for influencing purchase decision of shopping mall.

For unplanned agglomeration, i.e., Sector-17 Plaza both customers and managers had similar perspective regarding three attributes of buying behavior. The presence of attributes such as availability of multiple brand products, variety of merchandise in the agglomeration, and easy accessibility were important to bring customers to the stores. Importance of availability of open spaces attribute was considered differently by customers of two agglomerations but high and similar importance was given by managers of both of them. Thus, it was included in important attributes for Sector-17 as majority of respondents from this shopping area considered it to be significantly important than customers of shopping mall. Both the parties had different viewpoints regarding parking space, price of products, proximity with other stores, and availability of other entertainment facilities. Customers considered these attributes to be significant in influencing shopping behavior, whereas managers of stores in Sector-17 regarded them otherwise as indicated by lower mean score than managers of Elante Mall.

Interestingly, customers and managers of planned agglomeration under study, i.e.,

Table 3: Summarized results

Street shopping (Sector-17 Plaza)		Mall shopping (Elante Mall)	
Customers	*Managers*	*Customers*	*Managers*
Availability of multiple brands (d_1)		Availability of multiple brands (d_1)	
Variety of merchandise (d_2)		Variety of merchandise (d_2)	
Distance: away from city (d_3)		Distance: away from city (d_3)	
Availability of open spaces (d_4)		Parking space (d_5)	
Parking space		Price of merchandise (d_6)	
Price of merchandise		Closeness with other retail stores (d_7)	
Closeness with other retail stores		Availability of other entertainment facilities (d_8)	
Availability of other entertainment facilities		Availability of open spaces	

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Elante Mall had similar perspective regarding three attributes of buying behavior implying better understanding of shopping process. Similarity between consumers' and managers' perceptions regarding pertaining to availability of multiple brands, variety of merchandise, and accessibility (distance: away from city) implied that both managers and customers of mall considered these attributes as essential in influencing purchase behavior. Attributes such as parking space ($\text{mean}_{\text{mall}} = 9.01$), price of merchandise ($\text{mean}_{\text{mall}} = 7.62$), closeness with other retail stores ($\text{mean}_{\text{mall}} = 8.05$), and availability of other entertainment facilities ($\text{mean}_{\text{mall}} = 8.41$) were also included as these were considered important by managers of mall indicated by significant high mean score. These attributes were given high and equal importance by consumers of both agglomerations as shown by insignificant z scores in Table 1. Thus, in total four attributes for street shopping center (Sec-17 Plaza) and seven for shopping mall (Elante Mall) were selected from identified eight attributes.

These inferred shopping behavior attributes of two agglomerations were used to study their impact on patronage intention and retention proneness dimensions of store attractiveness. Investigating the relation and impact of attributes which have positive and negative impact on store attractiveness dimensions was emphasized in the literature. It was also deduced that such investigation was not compared with different types of retail agglomerations. This study has tried to fulfill such research gap by formulating attribute-wise hypothesis for shopping street and shopping mall agglomerations.

Impact of purchase behavior attributes on store attractiveness: Street shopping (Sector-17)

For a store agglomeration to be successful, it has to be attractive to a shopper. An agglomeration should be able to possess certain attributes which would encourage a shopper to come, stay, spend more time, and revisit it. Environmental cues such as ambience, open spaces, and entertainment facilities play a major role in making an agglomeration attractive (Baker et al, 2002). In addition to these attributes, merchandise price and quality, and perceived service quality also significantly influence customers' patronage intention which measures their inclination to revisit a particular store or an agglomeration (Magi, 2003).

This positive relationship as suggested between purchase behavior attributes and customers' intention to spend more time at a particular agglomeration was examined for each of the identified attribute by applying multivariate regression. The identified attributes availability of multiple brands (d_1), variety of merchandise (d_2), distance: away from city (d_3), availability of open spaces (d_4) with regard to street shopping (Sector-17 Plaza) were considered as causal variable having an effect on patronage intention (a_1) dimension of store attractiveness.

An agglomerations' ability to retain shoppers and encourage them to spend more time and money termed as retention proneness was found to be associated with the presence of variety of stores selling variety of merchandise (Arentze and Timmermans, 2001). Diversity of stores in an agglomeration makes it a more attractive shopping destination as the customers tend to combine non-shopping activities with shopping activities (Weiler et al, 2003). A retail agglomeration which encourages such activities by consistently focusing on attributes influencing purchase behavior was found to reflect higher degree of retention proneness (Arentze et al, 2005).

Thus, it is interesting to examine the relationship and impact of each identified purchase behavior attribute (d_1–d_4) with regard to Sector-17 Plaza on retention proneness (a_2) dimension of store attractiveness. Consistent with extensive literature, it was suggested that the presence of these

Table 4: Impact of purchase behavior attributes on patronage intention w.r.t. street shopping

	Regression coefficients	t values (p values)	R^2 (per cent)	Adjusted R^2 (per cent)	F values
Availability of multiple brands (d_1)	0.260	3.597* (0.000)	43.5	42.1	30.321* (0.000)
Variety of merchandise (d_2)	0.325	4.172* (0.000)			
Distance: away from city (d_3)	0.006	0.063 (0.095)			
Availability of open spaces (d_4)	0.407	5.223* (0.000)			

*Significant at 5 per cent significance level.

Table 5: Impact of purchase behavior attributes on retention proneness w.r.t. street shopping

	Regression coefficients	t values	R^2 (per cent)	Adjusted R^2 (per cent)	F values
Availability of multiple brands (d_1)	0.228	3.213* (0.002)	45.3	44.0	32.633* (0.000)
Variety of merchandise (d_2)	0.415	5.420* (0.000)			
Distance: away from city (d_3)	−0.087	−0.953 (0.122)			
Availability of open spaces (d_4)	0.337	4.397* (0.000)			

*Significant at 5 per cent significance level.

attributes would have a positive impact on retaining customers.

The results in Table 4 show the impact of consumers' purchase behavior attributes which were identified in objective one on customers' intention to spend more time (patronage intention) in street shopping area (Sector-17 Plaza). Availability of multiple brands (d_1), variety of merchandise (d_2), and open spaces (d_4) exert significant influence on customers' intention to enjoy and spend more time (a_1) in traditional shopping area. A significant R^2 value implies that patronage intention dimension of store attractiveness would be influenced by variation in selected shopping attributes. A small difference in R^2 and adjusted R^2 value cross validates the suggested model. This small difference of 1.4 per cent (43.5–42.1 per cent) implies that suggested model is strong enough to explain patronage intention of street shopping agglomeration under study from identified purchase behavior attributes.

Customers' intention to revisit (retention proneness, a_2) the store situated in traditional shopping area was found to be significantly influenced by availability of multiple brands (d_1), variety of merchandise (d_2), and open spaces (d_4; Table 5). A small difference of 1.3 per cent between R^2 and adjusted R^2

validates the strength of model. This indicates that suggested model is appropriate to explain revisit intention of street shoppers from identified purchase behavior attributes.

The results specify that both the dimensions of store attractiveness were influenced by similar purchase behavior attributes indicating that customers tend to spend more time and enjoy street shopping whenever they visit them. However, comparatively revisit intention was found to be negatively affected by accessibility factor (d_3) though insignificantly. Shoppers, thus, would be unwilling to revisit a street shopping store if it is located far away but would intend to spend more time whenever they visit it.

Impact of purchase behavior attributes on store attractiveness: Mall shopping

Similar methodology of applying multivariate regression to examine the relationship between selected purchase behavior attributes and store attractiveness dimensions was applied with regard to mall shopping. Consistent with literature, we suggested and investigated such a relationship. It is important to emphasize that such an impact was studied for each of the identified attributes

individually. This was done because such a finding of individual impact would be used for subsequent studies of location decision making. It was further inferred that attributes involving positive association would entail enhanced focus from service provider in order to increase store attractiveness, whereas identification of negatively associated attributes would ask for their alleviation.

Thus, for mall shopping identified purchase behavior attributes availability of multiple brands (d_1), variety of merchandise (d_2), distance: away from city (d_3), parking space (d_5), price of merchandise (d_6), closeness with other retail stores (d_7), availability of other entertainment facilities (d_8) were considered to have a causal effect on patronage intention (a_1) and retention proneness (a_2) dimensions of store attractiveness.

From the results as shown in Table 6, variety of merchandise (d_2), distance: away from city (d_3), and availability of other entertainment facilities (d_8) were found to

significantly impact their intention to spend more time and enjoy facilities of the mall (Elante Mall). The presence of these attributes significantly explains 33.8 per cent of patronage intention. The negative though insignificant influence of clustering of stores and parking space in a mall indicate that the presence of these attributes does not influence an individuals' patronage intention.

Customers' intention to revisit the mall (retention proneness, a_2) was significantly influenced by variety of merchandise (d_2), price of merchandise (d_6), and availability of other entertainment facilities (d_8) as inferred from Table 7. Price of merchandise was found to play a significant role in attracting customers as mall shoppers correlate quality of products with its prices. Furthermore, though slightly accessibility (d_3) influences shoppers' intention to revisit the mall because the ease of personal transport reduces the influencing effect even when malls are located outside the city. But store attractiveness

Table 6: Impact of purchase behavior attributes on patronage intention w.r.t. mall shopping

	Regression coefficients	t values	R^2 (per cent)	Adjusted R^2 (per cent)	F values
Availability of multiple brands (d_1)	0.094	0.950 (0.344)	33.8	32.1	19.874* (0.000)
Variety of merchandise (d_2)	0.318	3.561* (0.001)			
Distance: away from city (d_3)	0.265	2.911* (0.04)			
Closeness with other retail stores (d_7)	−0.003	−0.03 (0.019)			
Parking space (d_5)	−0.096	−1.112 (0.268)			
Price of merchandise (d_6)	0.087	0.959 (0.339)			
Availability of other entertainment facilities (d_8)	0.316	3.064* (0.03)			

*Significant at 5 per cent significance level.

Table 7: Impact of purchase behavior attributes on retention proneness w.r.t. mall shopping

	Regression coefficients	t values	R^2 (per cent)	Adjusted R^2 (per cent)	F values
Availability of multiple brands (d_1)	0.122	1.167 (0.246)	30.00	28.2	16.731* (0.000)
Variety of merchandise (d_2)	0.277	3.030* (0.03)			
Distance: away from city (d_3)	0.145	1.712 (0.089)			
Closeness with other retail stores (d_7)	0.049	0.497 (0.620)			
Parking space (d_5)	−0.098	−1.026 (0.307)			
Price of merchandise (d_6)	0.313	2.414* (0.017)			
Availability of other entertainment facilities (d_8)	0.260	2.448* (0.016)			

*Significant at 5 per cent significance level.

reduces if after traveling such distances shoppers found difficulty in parking their vehicles as indicated by negative d_5. Adjusted R^2 value was found to be similar to R^2 value for both models implying strong appropriateness of suggested model in explaining patronage intention and retention proneness through identified significant purchase behavior attributes.

DISCUSSION

This study has attempted to make a contribution in identifying purchase behavior attributes of two kinds of shoppers: street and mall shoppers. Furthermore, the impact of these attributes on two dimensions of store attractiveness was studied to find which attribute influences the most on which dimension of attractiveness. Considering observations from both consumers and store managers of two agglomerations under study, it was deduced that different attributes influence purchase behavior of respective kind of shoppers. Consistent with results from the literature review, purchase behavior of two kinds of shoppers differs significantly with respect to availability of open spaces, closeness with other retail stores, parking space, and price of merchandise. These factors in addition to availability of multiple brands, variety of merchandise, and distance: away from city played significant role in influencing store attractiveness. Customers of street shopping area did not consider price as a major influencer as it was perceived as negotiable but significantly impacted mall shoppers' purchase behavior as they perceived higher priced products with high quality. The presence of entertainment facilities such as food courts were considered as significant influencer by shoppers of Elante Mall agglomeration. The relationship between purchase behavior attributes and store attractiveness suggested that marketing activities of retail agglomerations should be refocused towards its ultimate core function of providing a broad and deep assortment of

shops and goods. Shoppers of both agglomerations showed their willingness to spend more time and revisit if their immediate needs of availability of variety of apparels at reasonable prices were fulfilled. Furthermore, the results also emphasize the particular relevance of environmental factors such as availability of open spaces which enrich the shopping experience by providing pleasant atmosphere corresponded with the findings from former studies (Arentze and Timmermans, 2001; Ruiz et al, 2003).

Managerial implications

Deciding on geographic location of a retail store has always been an important strategic decision for retailers as numerous studies has shown its profound impact on stores' performance. Formal techniques of location analysis have been available for a long time but it was found that retailers either did not use them or rely primarily on their intuition and experience to make location decisions. However, increasing competition in the organized sector in the form of malls, retail trend towards agglomeration of variety of stores, rapid urbanization, and demanding customer have made or forced the use of various models and quantitative techniques increasingly relevant.

This study has not applied any location model to suggest a geographic area for a retail store but has studied the first step involved in complex store location problems. Several authors especially Hernandez and Bennison (2000) and Birkin et al (2002) have underlined the 'art and science' nature of retail location decisions. Such studies have shown that whichever model and quantitative techniques is adopted it is important to notice the dynamic nature of consumer behavior to effectively argue location decisions. This study has attempted to do that by identifying consumer behavior characteristics influencing shopping decisions and their influence on choice of a particular retail agglomeration. Thus, this study is applicable to retailers in order to

optimize locational strategy and analyze their competition. Retailers who are looking to establish a new store in traditional shopping area or in a planned agglomeration as well as retailers who already have a store in either of these two locations can judge stores' performance and make a location decision by studying multiple factors which influence customers' purchase intentions. Accurate prediction of sales of different locations by applying certain quantitative location model would require correct inputs in the form of multiple factors such as accessibility, store attractiveness, agglomeration, and competition factors. This research has tried to contribute in this aspect and would assist retailers in evaluating store performance. We intend to use these inputs and apply them in certain location model to compare performance of street and mall shopping.

REFERENCES

Arentze, T.A. and Timmermans, H.J.P. (2001) Deriving performance indicators from models of multipurpose shopping behavior. *Journal of Retailing and Consumer Services* 8: 325–334.

Arentze, T.A., Oppewal, H. and Timmermans, H.J.P. (2005) A multipurpose shopping trip model to assess retail agglomeration effects. *Journal of Marketing Research* 42(1): 109–115.

Bacon, R.W. (1995) Combined trips and the frequency of shopping. *Journal of Retailing and Consumer Services* 2(3): 175–183.

Baker, J. and Wakefield, K.L. (2012) How consumer shopping orientation influences perceived crowding, excitement, and stress at the mall. *Journal of the Academy of Marketing Science* 40(6): 791–806.

Baker, J., Parasuraman, A., Grewal, D. and Voss, G.B. (2002) The influence of multiple store environment cues on perceived merchandise value and patronage intentions. *Journal of Marketing* 66(2): 120–141.

Berman, B. and Evans, J.R. (2001) *Retail Management: A Strategic Approach*. Upper Saddle River, NJ: Prentice Hall.

Bhatnagar, A. and Ratchford, B.T. (2004) A model of retail format competition for non-durable goods. *International Journal of Research in Marketing* 21(1): 39–59.

Birkin, M., Clarke, G. and Clarke, M. (2002) *Retail Geography and Intelligent Network Planning*. Chichester: Wiley.

Briesch, R.A., Chintagunta, P.K. and Fox, E.J. (2009) How does assortment affect grocery store choice? *Journal of Marketing Research* 46(2): 176–189.

Brocato, E.D., Baker, J. and Voorhees, C.M. (2015) Creating consumer attachment to retail service firms through sense of place. *Journal of the Academy of Marketing Science* 43(2): 200–220.

Campo, K., Gijsbrechts, E., Goossens, T. and Verhetsel, A. (2000) The impact of location factors on the attractiveness and optimal space shares of product categories. *International Journal of Research in Marketing* 17(4): 255–279.

Chan, T.Y., Padmanabhan, V. and Seetharaman, P.B. (2007) An econometric model of location and pricing in the gasoline market. *Journal of Marketing Research* 44(4): 622–635.

Church, R.L. (2002) Geographical information systems and location science. *Computers and Operations Research* 29: 541–562.

Dellaert, B.G.C., Arentze, T.A., Bierlaire, M., Borgers, A.W.J. and Timmermans, H.J.P. (1998) Investigating consumers' tendency to combine multiple shopping purposes and destinations. *Journal of Marketing Research* 35(2): 177–188.

Dennis, C. (2005) *Objects of Desire: Consumer behavior in Shopping Centre Choices*. New York: Palgrave Macmillan.

Ganesh, J., Reynolds, K.E. and Luckett, M.G. (2007) Retail patronage behavior and shopper typologies: A replication and extension using a multi-format, multi-method approach. *Journal of the Academy of Marketing Science* 35(3): 369–381.

Hernandez, T. and Bennison, D. (2000) The art and science of retail location decisions. *International Journal of Retail and Distribution Management* 28(8): 357–367.

Hernandez, T. and Biasiotto, M. (2001) Retail location decision-making and store portfolio management. *Canadian Journal of Regional Science* 3(Autumn): 399–418.

Jones, M.A. and Reynolds, K.E. (2006) The role of retailer interest on shopping behavior. *Journal of Retailing* 82(2): 115–126.

Kaltcheva, V.D. and Weitz, B.A. (2006) When should a retailer create an exciting store environment? *Journal of Marketing* 70(1): 107–118.

Karmarkar, U.R., Shiv, B. and Knutson, B. (2015) Cost conscious? The neural and behavioral impact of price primacy on decision-making. *Journal of Marketing Research* 52(4): 467–481.

Kim, Y.K. (2002) Consumer value: An application to mall and internet shopping. *International Journal of Retail and Distribution Management* 30(11/12): 595–602.

Leszczyc, P., Peter T.L., Sinha, A. and Sahgal, A. (2004) The effect of multi-purpose shopping on pricing and location strategy for grocery stores. *Journal of Retailing* 80(2): 85–99.

Li, Y. and Liu, L. (2012) Assessing the impact of retail location on store performance: A comparison of Wal-Mart and Kmart Stores in Cincinnati. *Applied Geography* 32: 591–600.

Liu, Y. (2007) The long-term impact of loyalty programs on consumer purchase behavior and loyalty. *Journal of Marketing* 71: 19–35.

Liu-Thompkins, Y. and Tam, L. (2013) Not all repeat customers are the same: Designing effective cross-selling promotion on the basis of attitudinal loyalty and habit. *Journal of Marketing* 77(5): 21–36.

Lueg, J.E., Ponder, N., Beatty, S.E. and Capella, M.L. (2006) Teenagers' use of alternative shopping channels: A consumer socialization perspective. *Journal of Retailing* 82(2): 137–153.

Magi, A.W. (2003) Share of wallet in retailing: The effects of customer satisfaction, loyalty cards and shopper characteristics. *Journal of Retailing* 79: 97–106.

Mendes, A.B. and Themido, I.H. (2003) Multi-outlet retail site location assessment. *International transactions in Operations Research* 11: 1–18.

Meyer-Waarden, L. and Benavent, C. (2009) Grocery retail loyalty program effects: Self-selection or purchase behavior change? *Journal of the Academy of Marketing Science* 37(3): 345–358.

Oppewal, H., Louviere, J. and Timmermans, H. (1997) Modelling the effects of shopping centre size and store variety on consumer choice behaviour. *Environment and Planning* 29(6): 1073–1090.

Reynolds, J. and Wood, S. (2010) Location decision making in retail firms: Evolution and challenge. *International Journal of Retail and Distribution Management* 38(11/12): 828–845.

Rhee, H. and Bell, D.R. (2002) The inter-store mobility of supermarket shoppers. *Journal of Retailing* 78: 225–237.

Roig-Tierno, N., Baviera-Puig, A., Buitrago-Vera, J. and Mas-Verdu, F. (2013) The retail site location decision process using GIS and the analytical hierarchy process. *Applied Geography* 40: 191–198.

Ruiz, J., Chebat, J. and Hansen, P. (2003) Another trip to the mall: A segmentation study of customers based on their activities. *Journal of Retailing and Consumer Services* 11: 333–350.

Rybarczyk, G. and Wu, G. (2010) Bicycle facility planning using GIS and multi-criteria decision analysis. *Applied Geography* 30: 282–293.

Sadi, M.A. and Saricimen, T. (2010) Value factors determining consumer satisfaction at full-scale restaurants in Saudi Arabia. *Journal for Global Business Advancement* 3(4): 285–294.

Severin, V., Louviereb, J.J. and Finn, A. (2001) The stability of retail shopping choices over time and across countries. *Journal of Retailing* 77: 185–202.

Sohail, M.S., Anwar, S.A. and Rabbie, F.H. (2012) Drivers of customer satisfaction: Perspectives from the food retail sector of an Arab nation. *Journal for Global Business Advancement* 5(3): 181–192.

Suárez-Vega, R., Santos-Peñate, D., Dorta-González, P. and Rodríguez-Díaz, M. (2011) A multi-criteria GIS based procedure to solve a network competitive location problem. *Applied Geography* 31: 282–291.

Suárez-Vega, R., Santos-Peñate, D.R. and Dorta-González, P. (2012) Location models and GIS tools for retail site location. *Applied Geography* 35: 12–22.

Tang, C.S., Bell, D.R. and Teck-Hua, H. (2001) Store choice and shopping behavior: How price format works. *California Management Review* 43(2): 56–74.

Teller, C. and Reutterer, T. (2008) The evolving concept of retail attractiveness: What makes retail agglomerations attractive when customers shop at them? *Journal of Retailing and Consumer Services* 15(3): 127–143.

Trubint, N., Ostojic, L. and Bojovic, N. (2006) Determining an optimal retail location by using GIS. *Yugoslav Journal of Operations Research* 16(2): 253–264.

Uniyal, D.P. (2011) An experimental study on the role of store benefit and information search by shoppers towards in-store communication. *Journal for Global Business Advancement* 4(3): 242–259.

Uniyal, D.P. (2012) An exploratory approach to develop a new scale to measure the construct of shopping involvement. *Journal for Global Business Advancement* 5(3): 209–225.

Van Kenhove, P., De Wulf, K. and Van Waterschoot, W. (1999) The impact of task definition on store–attribute salience and store choice. *Journal of Retailing* 75(1): 125–137.

Van Lin, A. and Gijsbrechts, E. (2014) Shopper loyalty to whom? Chain versus outlet loyalty in the context of store acquisitions. *Journal of Marketing Research* 51(3): 352–370.

Wakefield, K.L. and Baker, J. (1998) Excitement at the mall: Determinants and effects on shopping response. *Journal of Retailing* 74(4): 515–539.

Weiler, S., Silverstein, J., Chalmers, K., Lacey, E., Rogers, W. and Widner, B. (2003) Understanding the retail business potential of inner cities. *Journal of Economic Issues* 33(December): 1075–1105.

Wood, S. and Browne, S. (2007) Convenience store location planning and forecasting: A practical research agenda. *International Journal of Retail and Distribution Management* 35(4): 233–255.

Wood, S. and Tasker, A. (2008) The importance of context in store forecasting: The site visit in retail location decision-making. *Journal of Targeting, Measurement and Analysis for Marketing* 16(2): 139–155.