Abstract

This research paper has been attempted to inventory the atmospheric factors, contributing to better sales. Exploratory study was undertaken to identify various signs of store atmospherics variables that influence the buying behaviour of buyers. Thirty-four variables identified from this study were used to create a structured questionnaire. This questionnaire was then administered among shoppers in NCR Delhi using non-probability convenience sampling. To determine the atmospheric factors, Principal Component Analysis (PCA) along with Varimax Rotation was attempted. Using principal component factor analysis on the data collected, nine factors were identified to have impact on the store atmospheric. These were Querulous, Music, Sensitive, Budget Seeker, Sensuous, Light, Idler, Space seeker and Comfort Seeker. Contrary to the various earlier studies where music, space seeker and comfort seeker were considered to be most significant factors, light and querulous have emerged out to be the major factor that influences the store atmospheric. This study shows that customers are sensitive, space seekers and sensuous. Constituents of these factors reveal distinct patterns. This research may be used as guidelines for development and management of shopping malls in emerging countries. Retail marketers in India can take this cue in designing their strategies to attract consumers.

Keywords: Retail, Shopping malls, Store atmospherics, Factor analysis, Consumer behavior, India.

JEL Classification Codes: M30, M31, M39

1. Introduction

Retail atmospheres is the combination of all the tangible and intangible elements of a retail outlet, controlled and managed by the owner-managers for enriched shopping behaviour of the consumer that is favorable to the seller (Eroglu & Machleit, 1989). As defined by Kotler (1973), the concept of atmospherics is defined as "The effort invested to create a desirable buying environment in order to induce specific emotional responses in consumers and ultimately, increase their purchase probability." Store Atmospheres is in what manner the shoppers perceive the store ambiance, which comprises of lighting, store aroma, layout, packaging of product, and music etc. The importance of store atmospherics changes with merchandise category. Generally it is presumed that for fruit, vegetable and food categories, atmospherics doesn't affect the consumer whereas for consumer durables, apparels, and lifestyle it does play a vital role (Gandhi et al., 2010). There seems to be some inherent trustworthiness to the stores (Sinha & Banerjee, 2004). Tangible backed by intangible of the product is important in these categories. In addition to that lighting, store layout, merchandise assortment, background music, class of traffic and odor/ store aroma also has an impact on consumer buying behaviour (Chebat & Dube, 2000).

The stores are perceived by consumers in multi-dimensional ways and these aspects vary significantly across the various kinds of store (Sinha & Banerjee, 2004). In light of the fact that so many similar retail stores are coming up in the country, ambiance has become the mainstay of newly opened stores. Where ambiance shall essentially include lighting, music, store scaping, props and others. An exciting store environment facilitated the motivational factor(s) for purchase. Motivational factors shall be directed and focused when the buying is compulsory then the ambiance has no meaning. If the buying is undirected and focused it shall be recreational and ambiance has a positive effect (Kaltcheva & Weitz, 2006).

Store atmospherics is central to any retail outlet. A lot of experimental studies have been conducted on individual parameters like light, sound, odor and colour etc to study their impact on consumer shopping behaviour. The focus of this paper was to explore the effect of various atmospheric parameters as a whole on the buying behaviour of customers towards a luxury or economy store. A review of literature pertinent to this study
was conducted on the various parameters comprising atmospherics. Within a retail environment, atmospherics enhance the retail space. The environment is the whole of individual parts and the atmospherics are individual parts. Display colour is a stimulus for the customer who may in turn respond through their behaviour. A review of the literature reveals that colours confused customers emotionally (Babin, 2003). Displays can make use of colour to create emotions within the customer.

India’s current retail market size is 500 billion USD and it is expected to cross 1.3 trillion USD by 2020 (PWC, 2012). However, modern retail contributed only 5% of the total retail market size, and it is expected to grow about six times from the 27 billion USD to 220 billion USD, across all categories and segments (PWC, 2012). Arrival of festival and marriage season in the later half of the calendar year make it more active. As a strategy, retail stores continue to focus on improving the ambiance of the store, shifting to economic channels, endorsing more private labels, focus on increasing customer base, discounts and offers and sale during non peak hours are some of them.

In India, north and south India lead in terms of mall space, and number of malls (Asiapac, 2011). In the north, Delhi-NCR has seen high growth in malls. In south, Chennai and Bangalore lead the race. In the west, Mumbai, Thane and Pune dominate the retail scenario. In east, highest development is seen in Kolkata. Delhi-NCR Region has the largest number of operational malls in the country as per 2010 figures. By 2012, the Delhi-NCR market is going to be the largest supplier of retail space, comprising 33% of the national supply.

A study done by the Delhi Government suggests that number of households in Delhi was estimated to be about 36.64 lakh, and out of which 1.12 lakh were in rural and 35.52 lakh in urban areas. The average household size in Delhi worked out to 4.46 persons per household (DES, 2012). Average monthly per capita expenditure of Delhi worked out to Rs. 2811.05. Malls in Delhi-NCR are swarm with shoppers who are residents of the national capital region for shopping. The city has more than 100 shopping malls including the seventh largest in India, Great India Place located in Noida (Asiapac, 2011). Regarded as the shopping hub of north India there definitely existed a need to understand and study the shopping behaviour of mall shoppers in Delhi. Since all major brands of the world are present in the various malls of Delhi, it is difficult for consumers to distinguish between two malls on the basis of merchandise, range and brands. In such cases store atmospherics turns out to be the more appropriate and distinguishing factor for shoppers to choose a mall. Store atmospherics is more significant for malls in Delhi as these attract shoppers from higher socio-economic strata who expect higher standards of service and experience as compared to shoppers who visit malls in other cities of India.

2. Literature Review

Several retail outlets offer similar products and services to the consumers. The competition is not only from outside but also from within as different retail formats. Consumers have multiple criteria for selecting a store. Distance from the store, breadth of merchandise and availability are primary stirring factors in choosing the retail outlet. As per research by Sinha and Banerjee (2004), nearly three-fourth of the participating population signified these elements as critical reasons for the selection of the store. The next reasons identified were ambience and patronized store both at 8 per cent. Indian consumers are looking forward to the organized retail. With the passage of time, as organized retail evolves, consumers will have exposure to newer formats; new terms will come into play and atmospherics emerged as the key differentiator.

Retail environment of the store creates atmospheres that affect buying behavior of the shoppers (Kotler, 1973; Donovan & Rossiter, 1982). Mehrabian and Russells (1974), used Pleasure-Arousal-Dominance (PAD) framework to analysis the impact of store environments on productivity. This work was later used to analyse retail shopping behavior. A significant relationship was found between antecedent factors like the time spent in the store and emotional states, besides the propensity to make a purchase, and satisfaction with the experience (Kellaris & Kent, 1992; Yaich & Spangenberg, 1990).

Individuals judging their emotional states with their behaviour has been proven through a large number of psychological research. However, the contributory role of emotional reactions to atmospheric factors in determining buying behavior remained undefined (Schachter & Singer, 1962). Various scholars have examined the impact of atmospheric factors like crowding, background music, lighting colour and olfactory cues on shopping behaviors (Hui & Bateson, 1991; Yaich & Spangenberg, 1988). However, Donovan and Rossiter (1982) hypothesized the effect of pleasure, excitement and dominance as factors of retail environments that influence purchasing behavior.

Environmental factors such as; aroma, lights, music, colors, crowds, safety and sales employees will affect shoppers shopping habits, these factors are termed as atmospherics. Manipulation in the atmospherics factor is significantly impacting the mood of the customer (Cheng, 2009). A prospective customer stays in a positive store environment longer, the more spends time in a store, more they are likely to purchase. Loyal customers are created due to positive store environment whose repeat shopping purchasing behaviour is accelerated (Bagdare, 2013). The influence of retail store atmospherics has received modest attention although it is acknowledged as an important element in determining the store image (Lindquist, 1974).

Shoppers evaluate information presented to them when exposed to a stimuli in the retail environment, which may affects their attitude toward the obtain information. Lunardo (2012) study suggests that ambient scent or retail aroma may be perceived by consumers as a trick used by shoppers to influence them to purchase more which helps the retailers achieve their corporate goals. Other than aroma elements like weather, employee uniform and merchandise display create a positive feeling amongst customers. A luxury store must have stylish fixtures and furnishings along with well dress knowledgeable sales representative.
that persuade a consumer for purchase (Kiran, 2012). Milliman (1982) and Yalch and Spangenberg (1988) observed through in depth studies that music is an important atmospheric factor. The effect of music is varies with its dimensions like as tempo or speed at which beat progresses, volume and texture of the music on cognitive and emotional processes of the individual (Bruner, 1990).

A loud music speed up the movement of the shoppers in around a store hence, consumer spent less time in a super-market (Milliman, 1982). Milliman (1986), study reveals that fast music in a restaurant encourage the individual to spent less time at their tables as compare to dining under the slow tempo condition. Consumers will spend more time when they are listening to unfamiliar music where as individuals reported shopping longer when listening to familiar music (Yalch & Spangenberg, 1990).

Areni and Kim (1994) study reveals that customers examining and handling time increased under bright lighting as compare to soft lighting. Increased levels of lighting result in arousal and pleasure and the approach behaviour of customers is positive (Mehrabian, 1976). Aroma or Fragrance used by the retailers to influence buying behaviour of the shoppers that leads the consumers to develop a holistic view of the store. Dauçé (2000) study shows the aroma or scents have positive effect on hedonic behavioral of consumer. Soft light with warm colour are helps to attract the customers for luxury goods on the other side bright light are more work for discount store (Baker & Grewal, 1992; Schlosser, 1998). Valdez and Mehrabian (1994) show consumer feel more positive in the blue colour environments than warm-colored.

Good interior designs of a store enhance the customer interest and lower their psychological barrier for purchasing (Davies & Ward, 2002; Omar, 1999; Walters & White, 1987). Globally, consumers select the retail store on the base of store design and its merchandising display (Kerfoot et al., 2003). Many consumer feels shopping is a leisure activity and they select a store on the bases of its entertainment value (Woodside et al., 1992).

3. Research Objectives

A pleasant store atmospherics can be created in malls if mall manager philosophy and practices are perfectly aligned with the purchaser expectations. For doing so, it is necessary to understand the meaning and composition of store atmospherics. Present research aims at finding the factors defining store atmospherics for mall shoppers in Delhi. This research has following objectives:

1. To determine the composition of atmospherics for the malls in Delhi
2. Understanding relationship between various factors
3. Suggest strategies to better the store atmospherics in Delhi malls

4. Research Methodology

This study was divided into two parts like as cross-sectional research design. In the first part secondary data was used for identify the various dimensions of store atmospherics. This exploratory research phase give structured questionnaire, which used for data collection in the conclusive research phase. The study pertained to the most growing hubs of retail i.e. Delhi -NCR which include the fastest growing town Gurgaon, Faridabad, Noida and Ghaziabad besides Delhi. A sampling element was an individual shopper who visits the mall for shopping while the sampling unit for the study would be shopping malls from where the elements are to be drawn. The extent to which people included in the sample can be expressed as persons carrying a minimum of one shopping bag in their hands while coming out of a store in the mall. Non-probabilistic quota sampling method was used in this study. The malls selected for this research were similar in terms of size, age and tenant-mix.

4.1. Data Analysis and Interpretation

Profile of consumers was developed by demographic information obtain from questionnaire. Data relating to mall attributes was subjected to data reduction with the help of Factor Analysis using SPSS 16. The factor analysis reduced a large number of elements into factors.

4.2. Profile of Respondents

Sample depicted the composition of working population in Delhi as it comprised predominantly of males. 88% of respondents were in the economically productive age group 20 years –50 years with majority (59.5%) of them being in the prime of their youth i.e. 20 years –35 years. More than half the population was married (but not necessarily accompanied by the spouse during data collection). Half the respondents were graduates. 29% of respondents were either postgraduates or having a higher qualification. Respondents with an only school education or professional education constituted a minor fraction of the total sample with 7.5% and 13.5% respectively. Understandably more than half the sample (54.5) was employed while carrying a minimum of one shopping bag in their hands when coming out of a store in the mall.

4.3. Factor Output

Data was checked for suitability for factor analysis with the help of correlation analysis, KMO test of sampling adequacy and Bartlett’s test of sphericity (Boyd et al., 2002; Malhotra, 2004). Most variables had significant correlation between them. Both KMO test of sampling adequacy value and Bartlett’s test
of sphericity value were found adequate (Appendix B).
However, when data was subjected to principal component analysis (PCA), the communality value of some of the variables was less than 0.5 (Appendix C). Those variables also had an insignificant factor loadings. For refining result variables with lesser communality values were deleted following an iterative procedure. After six iterations resulting in a deletion of five variables optimum output was obtained. This data set was checked for suitability for factor analysis (Appendix D). The next step was to find the total variances. Nine factors would contribute 73.37 % of the total variance (Table 1). Relevant factor loadings for each variable indicated that all the variables were adequately explained by derived factors. The component matrix was rotated and in eleven iterations, it was confirmed that nine factors were responsible for the twenty nine variables. Varimax rotation was the employed method (Appendix E).

| Component | Initial Eigenvalues | Rotation Sums of Squared Loadings |
|-----------|---------------------|-----------------------------------|
| Total     | % of Variance       | Cumulative %                      | Total     | % of Variance | Cumulative % |
| 1         | 4.64                | 15.99                             | 15.99     | 3.02         | 10.41        |
| 2         | 3.61                | 12.46                             | 28.45     | 2.95         | 10.17        |
| 3         | 2.75                | 9.48                              | 37.93     | 2.72         | 9.38         |
| 4         | 2.4                 | 8.26                              | 46.19     | 2.71         | 9.36         |
| 5         | 2.05                | 7.06                              | 53.24     | 2.61         | 8.98         |
| 6         | 1.87                | 6.43                              | 59.68     | 2.28         | 7.86         |
| 7         | 1.47                | 5.06                              | 64.73     | 1.82         | 6.29         |
| 8         | 1.37                | 4.72                              | 69.45     | 1.59         | 5.48         |
| 9         | 1.14                | 3.92                              | 73.37     | 1.58         | 5.44         |

Factor output comprised of nine factors representing specific forces shaping store atmospherics in Delhi malls. These are presented in the Table 2. These given statements were condensed to a set of nine factors. These factors represented specific forces that influence store atmospherics. These are presented in the table given below.

| Factors | Items                                                                 | Factor Loading | Average Score/ Factor | Rank |
|---------|------------------------------------------------------------------------|----------------|-----------------------|------|
| Querulous | I linger for a longer duration in a brightly illuminated store (3.82) | 0.8727         |                       |      |
|         | I don't feel that the store has provisions for old people, disabled people and children (4.67) | 0.7801         |                       | 3.44 |
|         | I don't like old music being                                           | 0.6463         |                       | II   |
| Idler     | I am able to find a salesperson easily (2.85)                         | 0.6737         |                       | 2.72 |
|           | I am contended (melancholic) with the scent (2.55)                     | 0.6506         |                       | V    |
|           | I would spend time in a store if I like the music (2.77)               | 0.6983         |                       |      |
| Comfort Seeker (5.44%) | I feel the store has provision to sit and rest (2.46) | 0.7390         |                       |      |
|           | I think luxury stores have shades of blue on the interiors (2.82)       | 0.5353         |                       | 2.64 |
| Light (7.86%) | I shop less in a store when the area is dark (3.59) | 0.7927         |                       |      |
|           | I like brightly lit stores (3.8)                                       | 0.5119         |                       |      |
| Sensuous (8.98%) | Right kind of music being played is important for me (2.74) | 0.8824         |                       | 2.66 |
|           | I think that Discount stores have shades of orange on the walls (2.89) | 0.6433         |                       | I    |
| Space seeker (5.48%) | I feel there is congestion during peak sales. (4.29) | 0.5321         |                       | 3.1  |
|           | I feel prices are reasonable in a bluish coloured store (1.9)          | 0.5743         |                       |      |
| Idler (6.29%) | I am able to find a salesperson easily (2.85)                         | 0.6737         |                       |      |
|           | I am contended (melancholic) with the scent (2.55)                     | 0.6506         |                       |      |
|           | I would spend time in a store if I like the music (2.77)               | 0.6983         |                       |      |
| Budget Seeker (9.36%) | I always find a lot of merchandise on discount (3.25) | 0.7461         |                       | 3.21 |
|           | I feel the merchandise are for sale for a large number of days (3.38)  | 0.6974         |                       |      |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
| Sensitive (9.38%) | I don't like current music (latest songs) being played (2.00) | 0.8867         |                       | 3.17 |
|           | I find the salespeople seem to be helpful (3.58)                       | 0.8041         |                       |      |
| Budget Seeker (9.36%) | I feel at ease when the music being played is of my choice (3.53) | 0.7801         |                       |      |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
| Sensitive (9.38%) | I don't like current music (latest songs) being played (2.00) | 0.8867         |                       | 3.17 |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
| Music (10.17%) | I feel at ease when the music being played is of my choice (3.53) | 0.7801         |                       |      |
| Sensitive (9.38%) | I don't like current music (latest songs) being played (2.00) | 0.8867         |                       | 3.17 |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
| Sensitive (9.38%) | I don't like current music (latest songs) being played (2.00) | 0.8867         |                       | 3.17 |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
| Space seeker (5.48%) | I feel there is congestion during peak sales. (4.29) | 0.5321         |                       | 3.1  |
|           | I feel prices are reasonable in a bluish coloured store (1.9)          | 0.5743         |                       |      |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
| Sensitive (9.38%) | I don't like current music (latest songs) being played (2.00) | 0.8867         |                       | 3.17 |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
| Sensitive (9.38%) | I don't like current music (latest songs) being played (2.00) | 0.8867         |                       | 3.17 |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
| Sensitive (9.38%) | I don't like current music (latest songs) being played (2.00) | 0.8867         |                       | 3.17 |
| Idler (2.46%) | I leave the store when music being played is not of my choice (1.73) | 0.9034         |                       |      |
Ranking of Factors

Relative significance of factors is judged by ranking of factors which in turn is assessed calculating average score per factor. The results presented in the above table indicate that light was the most desirable factor (average score 3.7). Another factor very relevant to shoppers was being querulous (average score 3.44) Budget Seeker and sensitive were ranked third and fourth. Music was the least significant factor with score of just 2.44.

4.4. Validity and Reliability of Factor Output

Validity and reliability of factor output was checked statistically. Reliability was established by estimating Cronbach’s Alpha for each factor. Alpha value for all the factors was greater than 0.6 indicating the output to be reliable. Convergent validity for a factor indicates that all variables constituting a single factor actually converge into it i.e. they share a high proportion of variance in common. With the aid of ‘Variance Extracted (VE)’ convergent validity was checked. VE is calculated by adding squared factor loadings of all variables constituting a factor and then dividing it by number of variables (Appendix F). Discriminant validity establishes that the factors extracted are truly distinct from each other. It is established by observing factor loading for each variable under all factors. Final factor output showed that there was a complete absence of cross loading.

5. Discussion

Outcomes of this study validate the notion that store atmospherics is an interplay of a number of factors. For providing superior store atmospherics, one should take an integrated view of the situations and work on multi pronged strategies. These strategies may be designed in light of following observations made in this research:

This study revealed that store atmospherics comprise of nine factors: sensitive, budget seeker, space seeker, music, querulous, idler, sensual, pleasure seeker and relaxer. Store atmospherics in a mall is a cumulative impact of service(s) offered under each factor. It means that shopping malls can offer unique and differentiated store atmospherics to their shoppers by carefully selecting facilities and services under each factor. This selection would depend upon customer preferences and competitive environment.

Though store atmospherics comprises of nine factors, all of them do not contribute equally to it. Average score per factor is a good indicator of significance attached by shoppers to each of these factors. In this study, average score per factor ranged from 3.7 to 2.44. It means mall developers and managers need not emphasize all the factors simultaneously. It is important to know this as each decision aimed at improving atmospherics related to a factor would require commitment of resources. Since resources carry cost it is important to identify activities/ decisions related to the most relevant factor so that resources can be optimally allocated.

Present study reflected that light is the most significant factor for shoppers in terms of store atmospherics. It was followed by querulous, budget seeker and sensitive. It is not a big surprise that budget seeker emerged as the number two factor since Delhi has an actively set of people who are very choosy and perceive that there is a lot of merchandise on sale and for a lengthy period of time. Since these mall shoppers have time they are idlers and seek pleasure and relaxation when they visit a mall.

When compared with similar studies conducted in different parts of the world, number and labelling of factors was expected to be more or less similar as core human needs are common across geographies and cultures. However, similarity ends here only. Different cultures, economies and geographies might select different means or solutions to gratify the same need. In this context it is very important to look into the composition of individual factors (in terms of its constituent variables) and also weight age assigned to these factors and/or variables. Since the target population comprises of mid to high income, most of them are high on education, awareness and connectivity with the world, they are expected to have a higher level of expectations from shopping malls. It is because they have global benchmarks to compare with.

Light is the foremost factor defining store atmospherics for shoppers in Delhi. People who visit these malls look for illuminated stores. It is important for mall developers and managers to ensure their selection of atmospheric factors is such that shoppers feel excited about visiting malls. A significant aspect of it is that Delhi malls need to communicate to the audience spread over a much wider geography as compared to malls elsewhere in the world as the catchment area of Delhi malls is not confined to the city of Delhi.

6. Managerial Implication

The results of this study are quite similar to the conclusions of many other similar researches that have posited that store atmospheric will influence consumers’ perception about their experience, trust, assurance, etc. in retail outlet (Schlosser, 1998). This paper provides a new insight to the retail shops managers for formulating strategies to improve the mall atmospheric. This study provides solution to various important questions such as why the shoppers prefer one specific shop for shopping. An amalgamation of the atmospheric factors can enhance shoppers’ choice behavior and helps the retailers for making an implementing an appropriate marketing strategy. Budget seeker and space seeker approach are use by the retailers to attract the shoppers (Tai & Fung, 1997). This study provides categorization of store atmospherics for a retail store, citing factors that retailers should be aware of while designing a store. It can help a retailer in creating a competitive strategy.

Past studies have posited that lighting, scent, music, colour, layouts are the vital elements for store atmospherics, and thus managerial inferences have highlighted the need to create
pleasing store atmospherics. The findings of this research study, indicate that beside light, scent, music, colour, etc., consumers also look for the economical price of the product, space, relaxation, idling space to purchase at the convenience store. Creating such an ambience that match the consumer’s desired expect-
ations are suggested to enhance customer satisfaction.

While designing a store for customers, it is necessary to keep in mind the hedonic factors that attract customers. In Delhi region, a convenience store is perceived as a budget store. It is much more so in the context of inflationary rises. However, it is paradoxical that while it appeals as a budget store, it should have space for the customer. These are opposites and therefore a trade off would come. In addition to space, the customer would also look for pleasure which would add to the costs. So the implication of store atmospherics is manifold and with incor-
poration of each additional factor, both the design and costs may be prohibitive. There are certain implementations which need to be done in short term and other implementations which have long term effect.

Changes which can be implemented easily are short term implica-
tions. Music can be changed easily as it does not impact the existing infrastructure. Aroma can be also changed easily though changing it is relatively difficult compared to changing the music. Right combination of fragrance /aroma and music en-
hance purchase shopping experience and also leads to custom-
ers to spend more time in the store. Appropriate scent and mu-
sic may inspire shoppers to engage in impulse buying. However, music can also be associated with the promotional events for attracting the shoppers (Alpert & Mark, 1990; Areni & Kim, 1993). Specific scent or aroma and music style perceived as harmonious for the retail outlets as a whole. Retailers can use artificial sensory cues such as lighting, music and aroma as tools to enhance the store environment to influence the shop-
ners’product quality perceive. An artificial fragrance of fresh food in a supermarket is influence the consumer choice behaviour similarly; smells of leather in leather shop make consumers believe leather is actually authentic leather. This could lead to positive, attitudinal and relational responses of buying. This can help retailers differentiate themselves from competitors

Changes which have far reaching outcomes and affect the infra-
structure can be said to be long term. Lighting is one such thing. The intensity of light creates an expected perception of spaciousness in the store. Lowering the intensity of light bellow the threshold level, could result in consistent perceptions of spaci-
ousness in the physical space while increasing the intensity of light above the threshold level, could result in perceptions that store is not spacious. Working on the intensity would mean changing the existing infrastructure which cannot be done with-out disturbing the store. Hence it has to be thought of carefully before going any further. Low intensity lighting on window dis-
play can give a sense of space to the store.

Changing the colour would impact the company’s image. Colours affect customers emotionally supports the finding of Crowley (1993). Red, Orange and Yellow are colours of long wavelength and considered to be warm. Green and blue are of short wavelength and considered to be cool. Colour stimuli are characterized in terms of hue (wavelength), brightness (black to white), and saturation/ vividness (Bellizzi & Robert, 1992). Red and orange have been classified as exciting, blue for calmness and green for tranquility. Layout changes also have long term implications. The choice of proper color and lighting in a retail store is a difficult question and it is better it always consider it with other factors. Another important managerial implication would be to the visual merchandising team. Visual Merchandising is an integral part of a retail organization. If these reports are given to them, they can definitely use it for their displays and store scaping.

Any change made in the store atmospherics must enhance the coherence of the store environment. Store atmospherics has several dimensions: light, colour, music, scent, colour, layout, etc. They are related to the five senses. The most easily changeable elements are the music and scent. Because they can easily be modified, retailers must ensure that they are con-
stantly in accordance with each other. They must also be chosen in accordance with their other strategies.

7. Limitations of the Study

This research is transversal in nature and results are prone to the impact of time. The longitudinal research with a series of data sets collected after a regular interval would insulate the im-
pact of time. Size of the sample is sufficient to overcome the statistical objections, but is still very small as compared to the total population. Another limitation of this study is that results are based on the assumption that the sample is a monolith whereas different segments within it may exhibit different preferences. It was not done, the division of this sample into subsamples (age-wise, gender-wise, income-wise) would have further reduced number of observations (respondents) under each sub-segment. However, it is possible to address this issue with a larger sample and/or adopting the quota sampling. It would be interesting to identify similarities/dissimilarities between genders, age-groups and income segments.

Looking beyond composition of the store atmospherics for a single geographic or cultural market, it would be useful to col-
lect a sample cutting across geographic or cultural boundaries. Such a study would help in highlighting differences between two markets and also point at possible sources/reasons for such differences. For single market studies, deeper insight can be ob-
tained by studying differences along demographic parameters of respondents like age, gender, income, occupation, etc. Such a study would help practitioners in devising segment specific strategies.

8. Conclusion

Results of study reveal interesting patterns in terms of com-
position of store atmospherics. Results can be used by mall de-
velopers and mall managers to make sure that they are able to
provide superior store atmospherics to their shoppers. It is all the more important for Delhi as it attracts shoppers from all across the capital region. However, as time progresses, more and more towns shall have world class malls. In that scenario, some of the shoppers may satisfy their urge by visiting the newly constructed world class malls in their own towns or they may prefer some other shopping destination. So Delhi malls need to reinvent themselves in terms of elements of store atmospherics so as to keep themselves relevant in the eyes of their target group.

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### Appendix A

Table: The Profile of the Respondents

| Marital Status | Qualification | Total |
|----------------|---------------|-------|
| Married        | Schooling     | Graduated | Post Graduated |
| 90             | 60            | 150     | 30             |
| Unmarried      |               |         |                |
| 30             | 60            | 60      | 0              |
| Gender Male    | 120           | 210     |                |
| Female         |               |         |                |
| 30             | 60            | 0       |                |
| Total          | 150           | 210     | 30             |

### Appendix B

Table: KMO and Bartlett’s Test of Sphericity

| KMO and Bartlett’s Test | Initial |
|-------------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | 0.4848 |
| Bartlett's Test of Sphericity | Approx. Chi-Square 6396.44 |
| df | 406 |
| Sig. | 0.0000 |

### Appendix C

Table: Initial Communalities Values

| Initial Extraction | Alpha |
|--------------------|-------|
| 1                  | 0.9366 |
| 2                  | 0.8699 |
| 3                  | 0.8818 |
| 4                  | 0.8769 |
| 5                  | 0.9239 |
| 6                  | 0.3272 |
| 7                  | 0.7313 |
| 8                  | 0.8836 |
| 9                  | 0.7600 |
| 10                 | 0.6271 |
| 11                 | 0.6856 |

### Appendix D

Table: Final Communalities Values

| Final Communalities | Initial |
|---------------------|---------|
| 1                   | 0.9366 |
| 2                   | 0.8699 |
| 3                   | 0.8818 |
| 4                   | 0.8769 |
| 5                   | 0.9239 |
| 6                   | 0.3272 |
| 7                   | 0.7313 |
| 8                   | 0.8836 |
| 9                   | 0.7600 |
| 10                  | 0.6271 |
| 11                  | 0.6856 |
## Appendix E

Table: Rotated Component Matrix

| Component                                                                 | 1   | 2  | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
|---------------------------------------------------------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|
| I linger for a longer duration in a brightly illuminated store            | .770| .018| .198| -.233| -.128| .294| .026| .256| .150|
| I don't feel that the store has provisions for old people, disabled people and children | .741| .093| .153| -.094| .015| .321| .091| -.240| -.145|
| I don't like old music being played                                        | .734| -.048| .032| .068| -.018| -.295| -.016| .073| .078|
| The scent makes me happy. (unhappy)                                       | .641| .200| -.087| -.336| .069| .108| .463| -.043| .261|
| I feel at ease when the music being played is of my choice                | -.566| .291| -.400| .014| .237| .238| .045| .102| -.133|
| I leave the store when music being played is not of my choice             | -.280| .840| .122| -.103| .023| .274| .046| .118| .045|
| Because of the scent, I buy things that I don't require                    | .150| .840| .091| -.171| .175| -.273| .112| -.051| .072|
| I am drawn to a store that plays music of my choice                        | .094| .586| .057| .032| .475| -.446| -.126| .155| -.273|
| I am satisfied (dissatisfied) with the scent                               | .231| .468| -.033| .443| .055| -.020| .034| .024| .174|
| I feel the store plays music that suits my age                            | -.036| .461| -.107| .375| -.286| .069| -.245| .393| .244|
| I don't like current music (the latest songs) being played.               | .075| .208| .847| -.192| -.069| .158| .109| .031| .202|
| I find the salespeople seem to be helpful                                  | -.218| -.188| -.772| .201| .074| .237| -.134| .002| .073|
### Appendix F

Table: Variance Extracted By Each Factor

| S No | Factor No and Label | Variance Extracted (VE) |
|------|---------------------|-------------------------|
| 1    | Querulous           | 0.637                   |
| 2    | Music               | 0.634                   |
| 3    | Sensitive           | 0.765                   |
| 4    | Budget Seeker       | 0.562                   |
| 5    | Sensusous           | 0.630                   |
| 6    | Light               | 0.445                   |
| 7    | Idler               | 0.455                   |
| 8    | Space Seeker        | 0.306                   |
| 9    | Relaxer             | 0.416                   |