Atmospherics: Role of color, lighting, layout and music on consumer behaviour in a retail setting: A critical review and synthesis

1Mallika Chougule, 2Dr Leena Nitin Fukey, 3Dr Mudita Sinha

Abstract--- With the increasing quest to study the role and importance of atmospheric elements, the number of store atmosphere articles have dramatically been increasing in the last few years. By reviewing various articles between 1973 and 2017, this study analyses the role of color, lighting, layout and music on consumer behaviour in Retail Settings. The author summarises prior research store atmosphere research according to topicality and perspective and draws parallels between the impact of each of these elements. Overall, the role of atmospheric elements have shifted towards studying the impact of atmospheric elements.

Keywords: review article; store atmosphere, color, lighting, layout, music, store image.

Introduction:

In today's day and age, the role and importance of pleasant atmosphere in a facility cannot be ignored as consumers look beyond basic product functions and attributes to opt for their preferred store outlets (Turley & Milliman, 2000). Purchase intentions of consumers are triggered or stimulated based on atmospheric variables like lighting, color, scent, display/layout, that could have a positive effect on consumers buying intentions (Riaz Hussain & Mazhar Ali,2015).

Consumers decide the duration they stay at a shopping area, hotel or restaurant based on the store environment of the facility (Wakefield & Baker ,1998). Retailers have to pay keen attention to the design and environment of their store to ensure that costumers spend a good Consumers are constantly evaluating internal atmospheric elements such as lighting, design and temperature and external elements such as parking facilities to the store, that attract or desuade consumers to the shopping environment(Bitner, 1992; Babin& Attaway, 2000).

Elements like color, lighting, layout, etc form a part of the store atmosphere. Atmosphere is "the design of the of retail chain outlet that produces specific emotional effects on the buyer that enhances his purchasing probability". If the storel environment had an effect on human

¹Research Scholar, CHRIST(Deemed to be University), Bangalore 2Associate Professor, CHRIST(Deemed to be University) Bangalore 3Assistant Professor, CHRIST(Deemed to be University), Bangalore

behavior, it would also influence the behavior of individuals in consumer settings such as retail stores(Kotler, 1973-74).

The level of pleasure experienced in the store that has an impact on shopping behaviours of spending extra money, time or the desire to explore the store is a result of the positive effect of environmental stimuli (Tai and Fung ,1997). Research also supports an association between the retail environment and patronage behaviour (McGoldrick and Thompson, 1992).

Color determines consumer behaviour and attitude and also builds feelings (Banat &Wandebori, 2012). Based on the color, experiences, thoughts and memories could be revoked (Bellizzi, Crowley, & Hasty, 1983). Consumers form perceptions about the merchandise based on its color (Yuksel, 2009). By use of good color of the retail chain outlet consumers attentions is caught and positive perception is formed (Crowley,1993). Bright and highly saturated colors tend to produce pleasant feelings towards consumers (Guilford & Smith, 1959). Thus through this it is known that in retail atmospheric studies, color has the ability to attract customers (Bellizzi et al., 1983).

Retailers make use of lighting and variations in order to highlight their products. By using such lighting, excitement is evoked in the minds of the consumers, which also as a positive impact on consumer purchasing behaviour (Mehrabian & Albert, 1976). When retail chain outlets make use of good color, consumers tend to assess the product quality through touching (Areni& Kim, 1994). Consumer's even choose their store partially based on the lighting and the store layout(Wanninayake&Randiwela, 2007).

The effect of atmosphere on the behavior of consumers in the store have been identified by researchers in the past (Russell & Mehrabian, 1978), however there is limited research that studies the impact of store atmosphere on the behavior of consumers is (Zeynep &Nilgun, 2011).

In the case of hotels, there are different elements that make up their physical environment. Servicescape is one such element that is considered as an essential component. 'Servicescape' is the physical environment in which services take place (Bitner ,1992). Hotels aim at building positive first impressions by giving due importance to servicescapes (Knutson,1988), and it is easier to meet or exceed expectations of consumers. Among the many servicescapes that exist within a hotel, hotel lobby is considered as one of the most important of them (Cary C. Countryman &SooCheong Jang, 2006). Hotel lobby and other public spaces are very influential in stimulating hotel purchase decisions (Dube and Renaghan ,2000).

It has been shown in the past that physical environment and human interaction dimensions as part of atmospheric stimuli are generally at the core of consumer experiences (Ritchie & Hudson, 2009). Thus, consumers now form their experience not only through tangible services, but

through the entire combination of goods, services and the environment where it is purchased or acquired(Lewis & Chambers, 2000).

The atmosphere, through the use of atmospheric variables such as colours, layout, music, flooring, lighting and merchandise arrangements creates a package surrounding the merchandise which can create a unique shopping experience. Finding a unique and effective atmospheric design should be a primary concern for retailers in these types of competitive situations (Turley &Chebat, 2002). Store atmosphere could be used as a tool which affected consumers emotionally and had the ability to influence shopping behaviour at the point of sale (Donovan & Rossiter, 1973). In addition, it was also postulated that three emotional states mediated approach-avoidance behaviours: pleasure, arousal and dominance which are often referred to as the PAD dimensions (Meharabian& Russell ,1974). Marketers have known for some time that the store environment is used by many consumers as a component when forming perceptions of store image (Berman& Evans ,1998).

A pleasant shopping experience can be created by environmental elements in the retail store, such as color, layout, architecture, scents, and temperature. In addition to creating pleasant shopping environments, these elements can also provide information cues to consumers (Olson, 1977).

Retail image can be described as "the way a retailer is defined in a shopper's mind, partly by its functional qualities and partly by an aura of psychological attributes" (Martineau ,1958). Although there are some retail services, called facility-driven services, such as golf courses and automated car washes where the consumer purchase involves the right to interact with the physical facility (Turley & Fugate ,1992) for most retailers the atmosphere would be considered a "psychological attribute" of store image.

To fill this gap, the researcher performs an extensive literature review and synthesis to enable a critical review of extant research on the role of color, lighting, layout and music on consumer behaviour in a retail setting, that would form a firm base for future, similar studies to be carried out. The researcher talks about various in-store elements likecolor, lighting, layout and music that have impact on consumer behaviour and their stimulation to purchase. Finally, it is concluded with a discussion of potential research directions.

Research method

Screening

The researcher conducted a search using titles, keywords, phrases or abstracts using the terms 'servicescape/s', 'atmospheric element/s', 'color', 'lighting' 'layout', 'music' so as to refine the search and to cover both singular and plural forms. The researcher limited the investigation to journal articles and review papers, and excluded books and any other form of published material

for our search. By use of reliable online published format, it was made sure that the review focused on the specified area of interest.

The researcher made use of 30 reliable online published journal articles like 'Meaning', 'Impact of color in marketing in contexts of retail settings', 'Influences that store images had on consumer behaviour', 'Importance of Servicescapes in leisure settings' and likewise.

The online journals that were examined were Journal for Global Business Advancement, Int. Rev. of Retail, Distribution and Consumer Research, International journal of research in marketing, Journal of business research, Journal of the academy of marketing science, Psychology & marketing, Journal of Marketing Research, IIE Annual Conference. Proceedings, International Journal of Contemporary Hospitality Management, Current directions in psychological science, Journal of hospitality & tourism research, Journal of food products marketing, Proceedings of the 2010 International Conference on Industrial Engineering and Operations Management, Qualitative Market Research: An International Journal, Journal of retailing, World Applied Sciences Journal, African Journal of Hospitality, Tourism and Leisure, Management decision, Journal of Marketing Management, Journal of services marketing, Journal of Hospitality Marketing & Management, Oxford JournalsWe also sought an article from Cornell's Scholarly Commons, Cornell Hotel and Restaurant Administration Quarterly, World Applied Sciences Journal. We referred to an online review article, Nutrition, and Journal of Food Products Marketing. To include journals with a broader marketing aspects, the researcher also considered International Journal of Marketing Studies and International Journal of Scientific and Technology Research. The researcher searched issues published from each journal and utilised them for further analysis.

Each article gave a clearer and different perspective on how color, lighting, layout and music have an effect on consumer behaviour and stimulates consumers to respond differently in different environments and circumstances. Consumers who don't have adequate information about merchandise or quality tend to base their decisions based on various cues available like atmospheric elements and other information cues (Bloom & Reve, 1990; Nisbett & Ross, 1980; Zeithaml,1988).

Classification by content and perspective

To identify topics related to role of color, lighting, layout and music on consumer behaviour in a retail setting, I developed a list of final topics of the article abstracts. In turn, I systematically categorized each article according to the content of its main topic.

Final List of Topics:

TOPIC	DESCIPTION
Store Atmosphere	Customers look beyond products to choose
	their retail store. Pleasant and exciting
	shopping atmospheres and visual displays help
	differentiate a store from its competitor, and
	increases customer preference to the store.
	Retailers realize the importance of such
	attributes and systematically try to avail of an
	ambience that will attract their target
	audience.
Color	Color is regarded as a source of information
	by customers and hence retailers consider the
	right choice of colors in the design stage to
	acquire expected results.
Lighting	Retailers make use of apt intensities and types
	of lights in their store and different
	departments of their store to attract or divert
	their attention.
Layout	Shop owners showcase their items in a
	pleasing manner, along with the ease of
	mobility to stimulate customers to buy their
	products.
Music	Demographics have to be studied, with their
	likes and dislikes in choice of music and
	accordingly used in the departments that cater
	to particular segments.
Store Image	The elements used in the store help customers
	form an image of the store and make brand
	associations in terms of color, lighting, layout,
	music, etc.

Perspective

With the ease of business, an increasing number of retail stores have been arising, leading to stringent neck to neck competition in the industry. Amidst this competition, customers tend to choose their facility beyond mere product features and quality, and base their decision on atmospheric cues and store environments. Atmospheric elements like color, lighting, layout and

music have varied effects on marketing and consumer behaviour, which has proven to stimulate buying behaviour.

Customers choose to stay longer at a store, choose it over other stores or be loyal to it based on its attractiveness and pleasing atmosphere. This is why retailers are paying attention to the color, lighting, layout, music and various other internal and external elements while planning their marketing strategies, so that it impacts customer's emotions, buying behaviour, patronage, etc in future.

Customer buying behaviour based on Color

In-store elements like lighting, color, music may have immediate effects on decision making(Julie Baker & Dhruv ,1994). Out of varied atmospheric elements like color, lighting and style, that have an effect on guest impressions, color was the most significant of these three and, retailersmust give due importance to this element in the design stage (Cary &SooCheong Jang ,2006). In addition to guest impressions, colors also play roles in forming attitude and stabilising moods and feelings. In suggested findings with respect to consumers' reactions to various color and light combinations and it was found that store consumers may be affected by color (Hannele& Hari ,2014).

Colors have an effect on appetite, behaviour and hence it is this strategy that retailers use colors to increase or decrease appetite, enhance mood, calm down customers, and, reduce perception of waiting time. (Satyendra Singh, 2006).

In terms of customer buying behaviour, purchase outcome is related to the colortreatment, where more simulated purchases, fewer purchase postponements, and a stronger inclination to shop and browse are found in blue retail environments, where subjects in the blue environment expressed a greater intention to shop, browse, and buy in the simulated store (Joseph & Robert, 1992).

Restauranteurs make use of the right colors in their restaurants to attract and retain customers. The use of color red stimulates appetite because of its effect on our metabolism, making red a popular color choice among fast-food restaurants. The color yellow is also employed by fast-food moguls to hijack customers' interests by gaining customers' attention, increasing their appetite, and encouraging them to eat. Fast-food companies generate greater sales in this manner. By contrast, formal restaurants make useof the colorblue to calm and relax their customers. This comforting state is expected to increase the likelihood of the customers lingering longer. Customers staying longer tend to order larger meals, more wine, coffee, or desserts, thus increasing the restaurant's sales. Formal restaurants make use of this strategy to increase their revenue. Although blue is linked to a calm state (Kido, 2000), its excessive use can be an appetite suppressant, which is not desirable by formal restaurants. However, a particular type of restaurant could, to some extent, benefit from the appetite suppressant strategy, like 'All-you-can-eat' style restaurants that offer buffet at a flat rate. In such an instance, using the colorblue could save the restaurant owner money, if guests do not eat as much by benefitting from lowered costs.

Customers regard color as their source of information and use this to differentiate products from its competitors, which help in forming positive or negative attitude towards the product(Satyendra Singh,2006).

Color has a diverse effect on customers which is why it is studied keenly before forming the interiors and exteriors of any retail establishment. However, the keen , scientific study of color and its psychological functioning is not an easy task, as it requires careful assessment and adjustment of lightness and chroma, as well as hue (Andrew & Markus ,2007).

Understanding color preferences of consumers will facilitate in communicating and building, and help in adding value to the store's image (Lawes, 2008). Consumers have learned to associate meaning with different colors or color combination that are imbibed into the culture can. Brands make use of different colors in order to communicate their uniqueness, functionality, value, and category membership. This assists customers in associating brand and store image with their color. For instance, fast-food company, McDonald's uses the color red and yellow to communicate leadership and happiness. Colors also havehave differences in their significance, with changes in cultural context, which retailers have to keep in mind. They have to make use of the right colors in the right place to avoid cultural conflicts. Black colorhas different significance in western and eastern cultures. Commonly the color pink is used to communicate feminity, green is used for freshness, natural, and vegetarian, and so on. Moreover, the color preferences of consumers change with change in fashion, fad, and trend and these color contrasts have different psychological effects (Ishwar et al, 2010).

Customer arousal based on Lighting

Among the various elements that contribute to the retail store atmospherics, literature has shown that lighting is one of the crucial and important determinant of the retail environment. (Baker, Grewal, &Prasuraman, 1994; Baker, Levy, & Grewal, 1992; Boyce, Lloyd, Eklund, &Brandston, 1996; Rea, 1999; Schlosser, 1998). In shopping centres and traditional retailing areas, lighting renders a direct relationship with customer's emotions (Luisa et al, 2006).

Lighting impacts a person's mood and emotional stateand has the ability to arouse customers (Mehrabian,1976). In-store illumination has an effect on shoppers' cognition, value, and consumption behaviour, which is evident in consumers' arousal and vision. It has the ability to create excitement and give athematic appreciation to the store image. To create an appropriate atmosphere, shop owners have the find the right mix of 'image'and 'function' (Areni& Kim ,1994). This leads to store customers reacting to various color and light combinations (Barry et al, 2003).

Apart from lighting influencing emotions, mood and cognition, it also has an impact on atmosphere and spatial impressions (Custers et al, 2010). In the Indian retail context, customers choose and are attracted to a retail store based on its lighting and make use of this visibility to evaluate products' features, price, ingredients, labels, etc (Butler &Bitner, 1987).

Lighting conditions at stores, affect consumers' time perception, visibility, and primarily, the store image through associations created in the consumer memory at a post-purchase stage. This is used to pull customer's attention to strategic pockets in the store or help in downplaying less attractive areas (Ishwar et al, 2010).

The use of light-level manipulations in retail display areas renders in customers having approach or avoidance behaviours (Teresa & Paulette, 1999).

To highlight perceptual clarity, spaciousness, relaxing impressions and private impressions, retailers make use of different intensities of light in their stores. Bright, peripheral lighting is used for perceptual clarity. To portray spaciousness, uniform and peripheral lighting is used. Use of peripheral and non-uniform lighting is done for pleasant and relaxing impressions and the designer can select non-uniform and dimmed lighting, to establish a 'private' impression (Flynn, 1992). Rooms are made to appear more spacious by use of higher ratios of indirect lighting, whereas, rooms with relatively high levels of indirect lighting are favoured over rooms with less than 60% indirect lighting (Houser et al, 2002).

Shop owners need to constantly renew their lighting with new lighting conditions in order to elicit positive responses and create desired ambiances for customers (Custers et al, 2010). They must make use of good quality lighting, consisting of biological, psychological, and aesthetic components to create a mood that is consistent with the function of each space so that it provides clarity and promotes productivity (Rea, 1999; Steffy, 2002). These different patterns of light and color qualities aid in eliciting various subjective responses, which also appear to influence task performance, human comfort, and a sense of well-being (Flynn & Spencer, 1977; Karlen&Benya, 2004; Knez, 2001; Narendran, Vasconez, Boyce, & Eklund, 2000; Quellman& Boyce, 2002; Steffy, 2002). Hence, while selecting a retail store lighting system, factors of color rendition, cost, and lamp life must be kept in mind(Diamond & Diamond, 2006; Rea, 1999).

Customer mobility based on Layout

Layout has a major impact on customer's store experience. Retailers have to pay keen attention to this and accordingly plan the layout of their facility so as to expose their goods in such a way to make it visible to customers and simulate their purchases. To aid in this, Systematic Layout Planning could be utilised by retailers to appropriately position their products and differentiate them from their competitors (Inglay&Dhalla, 2010). This is a complex task, that aims to maximize sales and minimise overall costs. There are many factors that affect the store layout planning, namely arrival pattern of customers, building design, desired service level, merchandise-mix and adjacency requirements. These factors when considered lead to the customers approaching or avoiding the store (Pucinelli et al, 2009). Store layout planning seeks to enhance the overall customer experience of search, purchase, consumption and after sales by making it convenient and suitably planned (Verhoef et al, 2009).

Customers are able to move through easily in stores and locate things easily if store layout and design is done taken into account, service consideration (Baker et al, 1994). Customers are then able to get in quickly, search their desired merchandise and exit the store within no time, thus saving a lot of their time (Seiders et al, 2000).

Store layout planning is as important in online retailing as it is in brick and mortar retailing. Store layout in an online setting refers to the underlying website structure that navigates customers from exiting the platform by a click away (Griffith, 2002). There are two types of online store layouts, tree structured and tunnel structures. While a tunnel structured online layout constricts user's movements to their predetermined path, a tree structured layout, allows customers to move freely and access information easily (Poruban, 2002).

Online retailers must make use of such layouts so that customers believe retailer's information of the web site structure and acquire necessary information required to form purchase intentions as well as potentially develop a more favorable attitude toward the retailer, most notably if the information recalled positively relates to the retailer's products/brands (Celsi& Olson, 1988).

Customer interaction based on Music

Music is capable of evoking affective and behavioral responses in consumers (Bruner, 1990; McGrath, 1989; Milliman, 1982; Yalch and Spangenberg, 1990).

Music decides the level of interaction that buyers have with their sellers (Dube' et al, 1995). As per an experiment in a supermarket, shoppers spent more time and money in a slow tempo retail environment (Milliman, 1982), and as shown in another study, guests take longer to eat in a slow music restaurant rather than in a fast music restaurant (Milliman, 1986). Beverage revenue was also higher in the slow-music restaurant as guests took to spending more time in the facility. Supermarket shoppers shopped longer, moved slower, and purchased more when slow tempo music was played compared to fast tempo music (Mattila & Wirtz, 2001). Shoppers shopped for a shorter period of time when loud music was played compared to soft music (Smith & Curnow ,1966)

Music could be used to differentiate a retail store from its competing stores. It is a particularly attractive atmospheric variable because it is relatively inexpensive to provide, is easily changed, and is thought to have predictable appeals to individuals based on their ages and life styles. For example, teenagers usually listen to rock music, older professional adults may prefer classical music, and middle-aged, blue collar adults may prefer country and western. These preferences are expected to result in shoppers spending more time and money in stores playing liked music and less time and money in stores playing disliked music. Larger stores often differentiate areas by varying the music played in one or more departments, a practice referred to as zoning by the environmental music industry. Retailers ensure that store music is effective, by tailoring it to the listening preferences of the targeted demographic segment of customers in a particular department, as compared to when the same type of music is played in all departments (Yalch&Spangenberg, 1993).

Results and Conclusions

Dividing the broad topic of Store Atmosphere into elements of color, lighting, layout and music helped draw parallels between the importance of each of these atmospheric elements. Initial research findings had been limited only to one or few atmospheric elements and their effects on consumer behaviour. In recent times, focus of role of atmospheric elements on consumer behaviour has now shifted to study the impact of various elements on consumer behaviour and also studies the impact of these elements together in a service or physical environment setting. It is now upto the retailer to create differentiation strategies that influence the approach or avoidance behaviors of customers. Retailer can make use of Stimulus-Organism-Response Model of consumer retail purchase behaviour (Thang & Tan 2003), to become the preferred retailer and position themselves in the minds of the customers. Atmospherics such as noises, sizes, shapes, scents and colors could help create attention, convey messages, and create feelings that might increase purchase probability(Kotler, 1973). Such physical environments trigger emotional retorts and behavioural intentions. (Alpert and Alpert, 1986). For instance, color is related to feelings about retail environment (Bellizzi et al., 1983), it also affects distraction (Gerard, 1957) and influences anxiety (Jacobs and Suess, 1975).

Use of the right, light intensities must be done to highlight certain areas or departments of the store or to divert human traffic. Customers can then examine their products in detail and spend more time at the facility. Similarly layout and music have to be chosen at the design stage to ensure ease of access and attracting the right target market, respectively.

Retailers have to include the appropriate mix of internal and external variables to increase footfall and generate an increase in revenue.

Hence, it is necessary that thorough market area and trade area analysis be done prior to entering a market so that retailers know what pointers to keep in mind, right from the design stage. While deciding and creating the ambience at the retail store, the target group has to be kept in mind at all times so that each element is tailor made to suit the needs of that particular target segment. By doing this, customers have a lasting and distinct impression of the store in their minds.

Further Research

Most existing literatures have focused on the role of atmospheric elements on consumer behaviour. However, in most of the literatures 'products' or 'items' of the retail store are used as a generic term and do not pin point any certain type of product. Each product when purchased, has different levels of impact during shopping and may not even matter in some cases.

Retail industry includes a vast classification of store retailing, non- store retailing and food retailing. Each of these sub categories have to be studied separately in future, by looking into the different impacts of the elements in each of these categories.

In addition to this, several literature that exists focuses on individual elements of store atmosphere and does not consider all the elements under one study. By considering more that one element, a relationship between these factors can be chalked out and retailers would be able to rank these elements in order of their importance. This way, shop owners can channelize their resources and time only to those elements that actually do have a positive influence on their target market.

In future, more experimental researches on this topic must be done so that customers can be assessed in the right manner and their shopping intentions could be gauged. Primary, first hand collected data always serves as a more reliable and consistent source of information. Researchers must adapt this method so that there is less bias and minimum scope of errors, thus generating dependable results.

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