Factors influencing store environment perception (evidence from Iranian chain stores)

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Abstract: Extant literature suggests that retail environmental characteristics or store atmospherics influence consumers' current store behavior, and future store patronage decisions. Store environment has been found to influence consumers' perceived image of and attitude toward a store. So, the objective of this study was to investigate factors influencing store environment perception in chain stores of Iran. Model was developed and tested with structural equation model (SEM) using data collected from 310 chain store customers. The results show that music, light, layout, color and sales persons have a positive impact on positive effect of the store environment. And among these factors sales person factor has greater impact on positive effect of the customers than other factors.

Key words: Music; Light; Layout; Color; Sales person

1. Introduction

According to McGoldrick and Pieros (1998), "The designed environment has been the focus of considerable attention within the marketing strategies of shopping centers, retailers and other service providers". Using the strategy of designing the in-store environment for shoppers, marketers hope to create a positive mood in them while they shop, thereby producing favorable in-store behavior such as time spent, money spent, re-purchase intention and positive communication. Thus, in-store elements such as color, lighting, style or music may have more immediate effects on decision-making than other marketing inputs that are not present at the point of purchase (e.g. advertising). In other words, the store environment has the potential to be an effective and powerful marketing tool if retailers can better understand how to utilize it.

Prior research shows the positive connection between perceptional factors and their positive effects. Mohan et al., 2013, explored the process by which four store environment (music, light, employee, and layout) and two individual characteristics (shopping enjoyment tendency (SET) and impulse buying tendency (IBT)) influence impulse buying behavior through positive and negative effect, and urge to buy impulsively. Juin-Sheng and Haw-Yi, 2011, confirmed the positive effect of employee displayed emotion, ambient factors and design factors on customer emotion and service satisfaction.

Also, Mirabi and Khazaei, 2015, investigated the effect of ambient, design and social characteristic on customer emotional responses in store environment and had confirmed the effects. Osman et al., 2014 examined the influence of atmospherics on in-store behavior among Malay Muslim shoppers in Malaysia. The effect of age on shopping behavior was tested using two age groups: 18-25 years and 50 years or older. Results of their study show that positive perceptions of atmospherics exerted a positive influence on mood, which, in turn, affected in-store behavior. Based on stimulus– organism– response theory, Muslim shoppers who were positive about the atmospherics tend to spend more time and money, and they exhibited intention to patronize the store again.

Recent research in the domain straddling retail store environment (and its correlates) and consumer behavior finds that store environment is positively related to store trust and leads to more positive evaluations of merchandise (Guenzi et al., 2009). A store perceived high on hedonic attributes provided excitement to shoppers (Ashley et al., 2010). Customers look for fast and efficient billing systems, visual merchandizing, and informative signage within the store and prompt staff (Ghosh et al., 2010). Arousal induced by music and aroma results in increased pleasure levels, which in turn positively influences approach behavior, and satisfaction with the shopping experience (Morrison et al., 2011). In store marketing has a noticeable effect on visual attention (Chandon et al., 2009).

So, the main concern of this study is to explore factors that influencing store environment perception in Iranian chain stores. We used structural equation model (SEM) to test proposed model among 310 customers of stores in Iran. The remainder of this article is organized as follows: First, we review the theoretical background and conceptual framework. We then develop several

hypotheses to be tested and describe the empirical approach and the data collection. The last section presents the findings, results and conclusion.

2. Background and hypotheses

From retailers' point of view, store atmosphere is designed to create a buying environment that produces specific psychological effects on buyers to enhance the probability of purchasing (Kotler, 1973). Viewed from shoppers' perspective, store atmosphere represents bases on which consumers form their perception of the store surroundings (Tai and Fung, 1997). Baker (1986) classifies the environment into three components:
(1) Ambient factors, which refer to background features that may or may not be consciously perceived but that affect human senses (e.g. scent and music);
(2) Design factors representing features that are directly perceptible by consumers; and
(3) Social factors, that is, people in the environment.

Ambient characteristics are non-visual conditions in the apparel retail environment, such as lighting and cleanliness (Baker et al., 1994). For example, lighting can influence both store image and examination of merchandise (Areni and Kim, 1994). However, lighting levels did not influence consumers' buying behavior. The authors proposed that clean stores and painted ceilings affect consumer response positively.

Ambient conditions are found to influence consumers' emotional responses (Tai and Fung, 1997). Consumers' cognitive (beliefs or symbolic meaning), emotional (mood or attitude), and physiological (pain or comfort) responses might be affected by ambient characteristic of a retail store.

Design characteristics are visual and physical elements of retail environments that include architecture, color, materials, and style and may differentiate one retailer from another (Baker et al., 1994). Design characteristics, which influence consumers' emotional states and buying decisions, may be particularly crucial when product and price differences are small or when the product mix is aimed at distinct social classes or lifestyle consumer groups (Tai and Fung, 1997).

Social characteristics include density, privacy, types of customers, and appearance of retail employees (Turley and Milliman, 2000). The social interaction between a salesperson and a consumer is reported to be one of the most influential factors in the retail environment.

According to Turley and Milliman (2000), music is the element that is the most widely examined in past research. Garlin and Owen (2006) review 157 papers on music, from which 150 papers explicitly discuss background music effects (p. 756). Among the conclusions drawn, they find that:
• Music has a positive effect on patronage as well as felt pleasure;
• Familiarity/liking for the background music has a positive effect on patronage;

• Slower tempo, lower volume and familiar music results in shoppers staying marginally longer than when the tempo or volume are high; or
• The music is less familiar.

The effects of colour have been widely studied (Turley and Milliman, 2000). The first study on the role of colour in retail store design was conducted by Bellizzi et al. (1983). They manipulated the background colour of a photograph of a furniture store and measured consumers' perceptions of the store as well as other store attributes. They find that colour create certain emotional responses including attention from subjects. The results indicate that warm colours, such as red and yellow, are more exciting, while cool colours, such as blue and green, are more calming. This means that the background colours in the shopping environment can also affect consumers' mood: blue calms and red cause's tension (Bellizzi and Hite, 1992). Crowley's (1993) review of the literature on colour concludes that colour influences both consumers' evaluation-related affect (affective tone) and activation-related (arousal) state.

Hopkinson et al. (1966) found that the level of comfort increased at relatively low levels of light, while comfort decreased with high levels of light. Kumari and Venkatramaiah (1974) also reported that illumination is directly associated with the changes in physiological arousal. In addition, the type of lighting could influence an individual's perception of the quality of space, changing his or her awareness of physical, emotional, and psychological aspects of the space (Kurtich and Eakin, 1993).

Layout means the way in which objects (e.g., machinery, equipment, and furnishings) are arranged within the environment. Just as the layout in discount stores facilitates the fulfillment of functional needs, a well-designed layout can also facilitate fulfillment of hedonic or pleasure needs (Wakefield and Blodgett, 1994). A layout may have a direct effect on customers' quality perceptions, excitement levels, and indirectly on the desire to return (Wakefield and Blodgett, 1994).

Retail salesperson often serves as a critical nexus between retailers and their customers, as a salesperson can provide information and services that assist customers during the purchase process (Lee and Dubinsky, 2003). Through this buyer–seller interaction, a salesperson conceivably will influence how customers feel when shopping; in essence, a salesperson is likely to have an impact on the customers' mood.

Also, the consumer may feel reassured because the salesperson is a likable person whose tastes are similar and who is perceived as trustworthy. Researchers have found that fairly warm personal relationships between consumers and salespeople are similar to other friendships, which involve affection, intimacy, social support, loyalty, and reciprocal gift giving. The relationships may also support marketing objectives such as satisfaction,

loyalty, and positive word of mouth among consumers (Hu and Jasper, 2006).

Research on emotional contagion suggests that service employees' expression of emotions can produce a corresponding emotional state in customers (Hatfield et al., 1994; Pugh, 2001; Tsai and Huang, 2002). McHugo et al. (1985), for example, reported that exposure to smiling or frowning images produced corresponding changes in the facial expressions of viewers. Pugh (2001) found that when service employees smile, increase eye contact, display gratitude, and extend greetings, customers experience more positive emotion.

Employees, who are deeply associated with social environment, refer to service people in the service setting. Employees here mean employees' appearance (professional appearance and attractiveness) and number of employees (Ryu and Jang, 2005). Baker et al. (1992) studied the effects of social cues (number and/or friendliness of

employees) and reported that the more social cues present in the store environment, the higher the customers' arousal. Tombs and McColl-Kennedy (2003) also argued that employees are related to the desired social density, which influences customer affective and cognitive responses as well as repurchase intentions.

According to the above explanation, bellowing hypotheses can be followed:

H1. Music has a positive effect on positive effect of the store environment perception.

H2: light has a positive effect on positive effect of the store environment perception.

H3: layout has a positive effect on positive effect of the store environment perception.

H4: color has a positive effect on positive effect of the store environment perception.

H5: salesperson has a positive effect on positive effect of the store environment perception.
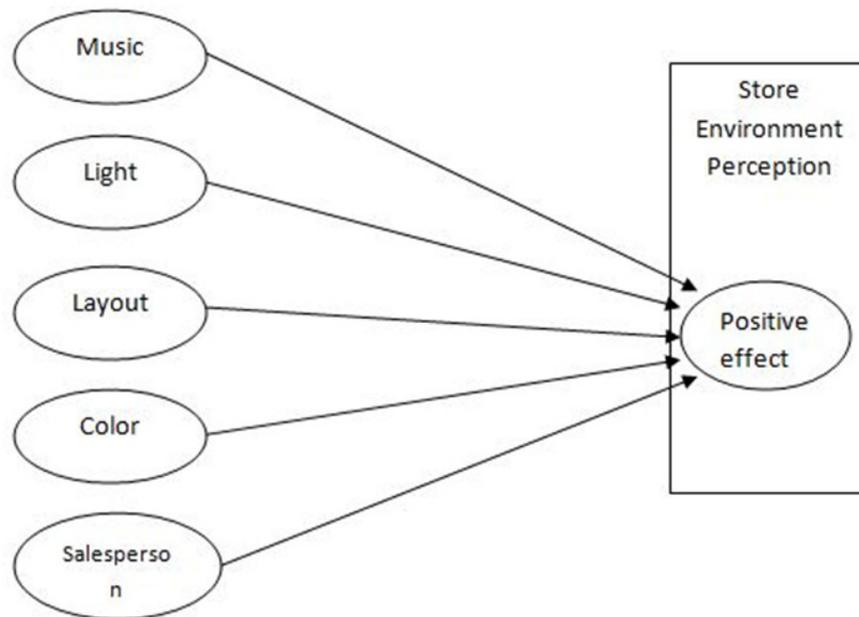

Fig. 1: Model of the study (Mohan et al., 2013; Osman et al., 2014)

3. Research methodology

We used a single-stage mall-intercept survey method to collect data using a process similar to previous studies (e.g. Beatty and Ferrell, 1998) in Iran. A leading Iranian supermarket chain gave us permission to conduct our survey in its outlets in different shopping locations within Iran, to provide a fair representation of different segments of shoppers. A total of 323 shoppers were approached out of which 310 agreed to participate in the study. The samples of 310 respondents were 54.5 percent male and 45.5 percent female, and 48.1 percent were between 30 to 50 year of age; 48.7 percent had diploma degree and 52.3 percent had income

between 6000000 Rials – 12000000 Rials. The items in the questionnaire were designed to collect data on the variables related to store atmospherics. To investigate factors influencing the store environment perception, in this research we used 22 questions of music, light, layout and positive effect adapted from Mohan et al. (2013); color and salesperson from Osman et al. (2014) that shown in table (1). Consequently, nineteen items scale was taken into account, for music factor (3-items), light factor (3-items), layout factor (3-items), color factor (5-items) and salesperson factor (5-items), construct with a five point scale ranging from 1 (strongly disagree) to 5 (strongly agree). For internal reliability, Cronbach's alpha coefficients were calculated for all

items of each construct. Results indicated that all the scales were considered to be reliable.

4. Data analysis and results

For determining reliability of the questionnaire in this research, we used Cronbach's alpha for constructs has shown in Table 2 which is acceptable

so the questionnaire reliability is acceptable. For determining validity we used convergent validity. All factor loadings ranged from 0.4 to 0.9 and all AVE coefficient ranged from 0.4 to 0.6 were statistically significant that has been shown in Table 2.

Table 1: Measurement model items and estimate coefficients

construct	Measurement items	Factor Loading
music factor	1. The store had pleasant music.	0.568
	2. The store had appropriate music.	0.847
	3. The store had terrible music.	0.851
light factor	4. The store is well lit.	0.406
	5. The store is correctly lit (neither too bright nor dull).	0.452
	6. Lighting in the store is pleasant.	0.976
layout factor	7. It was easy to move about in the store.	0.454
	8. It was easy to locate products/merchandise in the store.	0.702
	9. The store had attractive displays.	0.977
color factor	10. I think the interior wall and floor color schemes of this store were attractive.	0.534
	11. I feel very calm with the color scheme of the store.	0.334
	12. I think the colors used in the store appeared to be currently fashionable.	0.374
	13. I feel pleasant in this store because of its color.	0.496
	14. Combinations of color in the store make me feel refresh.	0.731
sales person factor	15. I think the employees in the store are well dressed and appeared neat.	0.657
	16. The way that the salesperson in this store dressed seems very professional and presentable.	0.481
	17. I think the employees in the store are very friendly.	0.873
	18. The salesperson guides me through the store and shows me the location of products.	0.800
	19. The salesperson is ready to answer any questions that I may have.	0.629
positive effect	20. I felt excited on this shopping trip.	0.661
	21. I felt enthusiastic while shopping today.	0.852
	22. I felt happy during this shopping trip.	0.906

To determine whether the hypotheses were supported, each structural path coefficient was examined with fit indices of the proposed model. The fit index of internal model or structural model is

Construct Cross validated Redundancy (Q2) that must be positive and shown in table (2) which was acceptable. So model displayed reasonably good fit to the data.

Table 2: Fit indices of model

constructs	AVE	Cronbach alfa	Q2
positive effect	0.661419	0.741867	0.231890
music	0.588307	0.747813	
light	0.493417	0.781111	
layout	0.551035	0.806243	
color	0.436518	0.723262	
salesperson	0.492014	0.775396	

In Model, the music – positive effect path is positive and statistically significant and support H1. Light factor positively affects positive effect (H2). The effect of layout factor on positive effect is positive and is statistically significant (H3). Color and salesperson have positive impact on positive effect of the customer (H4 and H5), so, all hypotheses were supported in the predicted direction that has been shown in Table 3.

5. Discussion and conclusion

The aim of this study was to investigate factors influencing the customer environment perception in chain stores. The proposed hypotheses were tested using SEM with Smart PLS software. path coefficients of all hypotheses were statistically significant in the predicted direction and all hypotheses were

supported. The results supported the literature (Osman et al., 2014; Mohan et al., 2013).
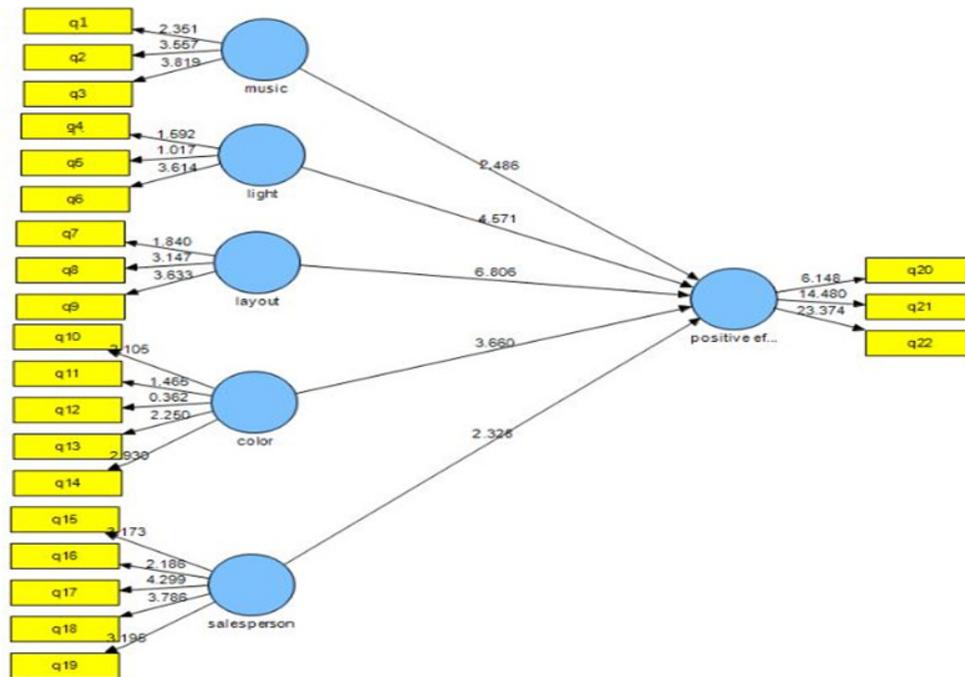

Fig. 2: Ultimate model with t-value

Table 3: Hypotheses testing

path	Path coefficients	t-value	Results
H1: music – positive effect	0.227	2.486	supported
H2: light – positive effect	0.232	4.571	supported
H3: layout – positive effect	0.249	6.806	supported
H4: color - positive effect	0.169	3.660	supported
H5: sales person - positive effect	0.364	2.326	supported

When customers enter the dining area of an upscale restaurant, they often spend hours observing (consciously or subconsciously) the interior of the dining area, which is likely to affect their attitudes toward the restaurant (Baker, Berry, and Parasuraman, 1988). In addition to the appeal of the architectural design, customers may be influenced by the color schemes of the dining area. Different colors lead to different moods, emotions, and feelings (Bellizzi and Hite, 1992; Crowley, 1993; Mikellides, 1990). Other aspects of interior design, such as furniture, pictures and/or paintings, plants and/or flowers, or wall decorations may also serve to enhance the perceived quality of dining environments, creating emotions (pleasure and arousal) in a customer.

As customers often interpret a service employee's affective delivery as part of the service itself, customers hold expectations about service employee's display of positive emotion. Given the impact of employee displayed emotion on customer emotion and perceptions, such social element requires increased managerial emphasis on hiring talented and qualified frontline employees with lively, courteous, cheerful, and extroverted personalities, which should be included as criteria within the employee selection process (Tan et al., 2003).

Results show positive emotions evoked during consumption have an important relationship to customer satisfaction. This is consistent with past research, suggesting positive consumption emotions will exert a positive influence on satisfaction (Mano and Oliver, 1993; Oliver, 1993; Oliver et al., 1997). Findings also support the existence of positive links among customers' positive emotions and their behavioral intentions. An increase in customer positive affect is related to customer behavioral intentions. Overall, current results support our assertions that service environments, including both social and physical environments, play important roles in service encounters and impact customer emotion and service outcomes.

Therefore, it is important for retailers to offer consumers the appropriate store environments and to develop strategies to better understand consumers' situations. Managers need to recognize the overwhelming benefits derived from paying particular attention to service environments in differentiating themselves from competitors. Competitive advantage can be gained by building on the relationship between service environments and

customer emotional states/perceptions. As these environmental elements lie largely within the area of management control and can be manipulated to affect customer emotions, perceptions, and behaviors, managers should actively promote desired social and physical environments with a positive impact on customers. The current study is not free from limitations. The data were collected using convenience-sampling method in some chain stores in Iran so; the limitation in generalizability of the results is not deniable. The sample, which seemed appropriate for this particular study, was customers from Gilan-Iran. It would be more meaningful if the same findings hold consistent in different types of customers from other province across the country. Future research could investigate among customers of other sections to compare the results.

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