THE ROLE OF STORE ENVIRONMENT CUES ON STORE PERSONALITY AND STORE IMAGE

ULOGA ELEMENATA OKRUŽENJA NA OSOBNOST I IMIDŽ PRODAVAONICE

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Abstract

Purpose – This paper aims to explain the effects of color, lighting, and music as store environment cues on the perceptions among consumers of store personality, store image, and on their own store preferences.

Design/Methodology/Approach – An experimental approach was employed to determine these effects, using a between-subjects factorial design including two levels of color, lighting, and music. The data were collected from 600 participants through face-to-face surveys. A video design of a fictional store environment was shown to the subjects and survey questions were applied to eight different experimental groups by providing manipulation control.

Results and implications – The results demonstrate that consumer perceptions of store image, store personality, and store preferences differ with changing color, lighting, and music variables. Additionally, these variables differ in their interactions with each other and in their total interactions.

Limitations – While the present study sheds light on the influence of color, lighting, and music cues of the fashion store environment on consumer perceptions of store personality and image, as well as their store preferences, interactions between store environment cues and other attributes in stores should also be explored.

Sažetak

Svrha – Cilj je rada objasniti utjecaj boje, osvjetljenja i glazbe kao elemenata okruženja u prodavaonici na percepcije potrošača o njezinoj osobnosti, imidžu i preferencijama.

Metodološki pristup – Korišten je eksperimentalni dizajn za utvrđivanje ovih učinaka. Proveden je eksperimentalni faktorski dizajn između subjekata s dvjema razinama boja, osvjetljenja i glazbe. Ispitanicima je prikazan video o dizajnu izmišljenog okruženja prodavaonice. Anketna pitanja primijenjena su na osam različitih eksperimentalnih skupina osiguravajući kontrolu manipulacije. Podaci su prikupljeni od 600 ispitanika anketiranjem licem u lice.

Rezultati i implikacije – Rezultati pokazuju da se percepcije potrošača o imidžu, osobnosti i preferencijama prodavaonice razlikuju s promjenom varijabli boje, osvjetljenja i glazbe. Osim toga, ove se varijable razlikuju u međusobnim i ukupnim interakcijama.

Ograničenja – lako istraživanje daje uvid u razumijevanje utjecaja boje, osvjetljenja i glazbenih elemenata okruženja kod modnih prodavaonica na potrošačevu percepciju osobnosti i imidža prodavaonice, kao i na njihove preferencije prodavaonice, potrebno je istražiti interakcije između elemenata okruženja i drugih atributa prodavaonice.



Originality – This study examines the impact of store environment variables in their different aspects on consumer perceptions of store image and store personality, as well as consumer store preferences, by focusing on Mehrabian and Russell's (1974) Stimulus-Organism-Response (SOR) model as its theoretical background.

Keywords – store environment, store personality, store image, store preference, Stimulus-Organism-Response (SOR) model **Doprinos** – Istraživanje otkriva utjecaj razine varijabli okruženja prodavaonice na potrošačeve percepcije njezina imidža i osobnosti, te njihove preferencije prodavaonice usmjeravajući se u teorijskom dijelu na Mehrabianov i Russellov (1974.) model podražaj-organizam-odgovor (SOR).

Ključne riječi – okruženje prodavaonice, osobnost prodavaonice, imidž prodavaonice, preferencije prodavaonice, model podražaj-organizam-odgovor (SOR)

1. INTRODUCTION

The store environment is a critical aspect of retailing that has been examined from different perspectives. In the literature, the terms "store physical characteristics," "product display area," "shopping environment," "service environment," and "environmental psychology" are used interchangeably with the term "store environment" (Ayadi & Cao, 2016). The effect of the store environment on the perceptions among consumers and consumer behavior drew attention after Kotler (1974) introduced the concept of "atmospherics", as a stimulating factor that attracts customers to the shopping environment (Baker, Grewal & Levy, 1992). The store itself can offer a unique atmosphere or environment that can influence a consumer's decision to become a customer, at which point the store environment gives some clues to the consumer about the product and service quality. The store environment is said to be one of the inputs relevant for the global image of a store or the general attitude of consumers toward the store. Furthermore, the store image is an important phenomenon when it comes to the in-store selection process (Baker, Grewal & Parasuraman, 1994).

In the literature, there is a number of studies supporting the idea that the physical elements of the store environment function as important complements to the store image (Lindquist, 1974; Baker et al., 1994; Sirgy, Grewal & Mangleburg, 2000). The main features complement the image of a store are its store layout, design, colors, as well as advertising team and sales staff. In terms of the store personality or image, the store is defined by perceptions in the minds of consumers created partly by its functional features and partly by the effect of psychological symbols (Martineau, 1958). Moreover, selected cues help consumers achieve harmony between their self-image and store image, thus strengthening their self-image (Chebat, Sirgy & St-James, 2006). As a result, consumers are able to develop an attitude toward the store that will help them achieve a certain shopping experience. According to the results of the studies

conducted to date, store environment variables and consumer perceptions about a store are interrelated. The result of this relationship affects consumers' store preferences.

In light of the above, this research aims to explore the effects of color, lighting, and music cues of the store environment on the perceptions among consumers of store personality and store image, as well as on their own store preferences. With this purpose in mind, the results of the experimental study are considered to provide a theoretical contribution to the literature by explaining how different levels of color, lighting, and music cues affect customer perceptions of a fashion store's personality and image, as well as their store preferences. In addition, the study is centered around the SOR model as its theoretical background, with stimulus, organism, and response factors forming the basis of research model variables. In previous studies, the SOR model was generally used to analyze different environmental cue effects directly on the perception and emotions of consumers, or indirectly on their behaviors (Garrouch, Mzoughi & Chaieb, 2020). The literature available to date has provided limited insight into or understanding of the manner in which store environment cues can affect customer perceptions and evaluations of a particular store or of the extent of the effects of such cues. To fill this research gap, the present study investigates the role that different levels of store environment cues have in terms of store personality and store image perceptions, as well as store preferences.

2. CONCEPTS AND THEORETICAL BACKGROUND

The literature review below focuses mainly on the store environment, store personality, store image, and store preference. Before turning to those individual topics, however, a brief explanation is provided on the model forming the theoretical basis of this study.

2.1. Stimulus-Organism-Response (SOR) Model

The environmental psychology model was created by Mehrabian and Russell (1974) to examine the effects of a store environment on in-store purchasing behaviors of its consumers. Their model is based on the stimulus-organism-response paradigm consisting of the store environment characteristics in relation to approach-avoidance behavior in the store (Tai & Fung, 1997). The approach behavior refers to the positive behaviors related to store environments, such as staying longer in the store and discovering its various offers. In contrast, avoidance behaviors include, for instance, a desire to leave the store or reluctant glances at the products in the store (Spangenberg, Crowley & Henderson, 1996).

Mehrabian and Russell (1974) presented their theoretical model to describe the effect of the store environment on consumer behavior. The Mehrabian-Russell model showed that environmental stimuli (S) intervene in pleasure and arousal states (O), ultimately leading to approach or avoidance behavior (R) in a store setting (Koo & Kim, 2013). The model is widely used in research on environmental psychology, particularly in the retail context to explain an individual's perception, affection, and behavioral response to their environment (Nguyen & Nham, 2021). Mehrabian and Russell (1974) argued that individual differences in the reactions of people, sensory variables, and the amount of information in the environment encourage individuals to either stay in or move away from a certain area. In other words, a stimulus that turns into a positive emotional response in the store also causes approach behavior. On the contrary, a stimulus that turns into a negative emotional response causes avoidance behavior (Farias, Aguiar & Melo, 2014).

Stimulating factors in the model are physical properties such as the color in the environment, store layout, and lighting. Emotional states promoted by the physical environment are referred to as "pleasure and arousal." Pleasure means

feeling well in an environment, whereas arousal is the state of feeling excited or stimulated. The feeling of pleasure and the approach behavior that occurs after arousal include the intention of being in the environment and exploring it (Baker et al., 1992). The environmental stimulating factors examined in this study according to the model are color, lighting, and music. The organism factor of the study relates to customer perceptions of store personality and store image. The concept of an organism refers to the internal process that intervenes between the stimulus and the customer response. Lastly, the emotional response factor of this study is store preference. The concept of response relates to the final reaction or movement in this direction.

2.2. Store Environment

The store environment refers to the physical environment of a store, which includes color, lighting, store layout, and design (Hu & Jasper, 2006). The environment of a store can influence consumers' decisions through in-store elements such as color, lighting, style, or music. In such an environment, the combination of store elements or a multitude of stimuli offered can be evaluated as a cue for customers (Baker et al., 1994). Following the study conducted by Kotler (1974), which focused on the relationship between the store environment and consumer behavior, the store environment has been examined from different perspectives (Ayadi & Cao, 2016).

Baker (1987) categorized store environment elements into three different groups: ambient factors, design factors, and social factors. Store ambient factors are non-visual, contributing sensory stimuli in the environment, namely temperature, lighting, music, and scent. Store design factors are more visual in nature than ambient factors. Design factors are classified as the functional and aesthetic elements of a store. Functional design elements include the layout, comfort, and privacy of the store, while aesthetic design elements refer to the architecture, colors, materials, and style (Baker et al., 1994). Design factors represent the visual elements of an environment in the consumer's mind. As such, design elements affect the individual's assessment of the objects in the environment (Kumar & Kim, 2014). Lastly, social factors refer to the consumers and sales staff in a store's environment (Baker et al., 1994). Social elements indicate how employees appear to consumers and how they interact with consumers while assisting them (Nguyen & Nham, 2021).

According to Bellizzi and Hite (1992), the environment of a store is a significant and influential part of the total product, which can strongly affect both the product image and consumer behavior. Mohtar, Taha, Ghazali, and Radzi (2020) investigated the influence of store environment cues, store personality, and attitude toward products on store evaluations. They noted that the store environment is a multidimensional construct involving social, design, and ambient elements. Raggiotto, Mason, Moretti, and Paggiaro (2020) considered the impact of emotional responses and shopping outcomes within a luxury retail setting in terms of their relationship with the perceptions of store environment cues. Moreover, Hashmi, Shu, and Haider (2020) explained the effect of emotional states and hedonic shopping motives on the relationship between the store environment and impulsive buying behavior.

2.3. Store Personality

Martineau (1958) posited that stores also have a personality, which can be defined in part by its functional qualities and in part by the environment formed from its psychological characteristics. The image of a store is a mental definition that includes all the dimensions related to that store (value for money spent, product selection, service quality, etc.), and store personality is limited to these mental dimensions corresponding to human characteristics (D'Astous & Levesque, 2003). D'Astous and Levesque (2003) proposed a general framework consisting of five store personality dimensions (sophistication, solidity, enthusiasm, genuineness, and unpleasantness) (Willems, 2022).

Store personality is formed and affected by factors such as the store name, store environment, service quality, store personnel, merchandise guality, and brand names (Baker et al., 1994). A store's personality can function as an interface between the customer and the store. Both customers and retailers can benefit from the unique and permanent personalities of stores. Specifically, customers are likely to choose brands or products whose personalities are similar to their own. Additionally, store personality is important in determining consumers' retailer choices when competitors are similar to each other (Das, 2014). From the consumers' perspective, a store's personality should be favorable and distinguishable to influence their decisions. An original store personality can help overcome the interference effects in the market and might create a special feature of in-store patronage decisions (Willems, 2022).

According to Brengman and Willems (2009), the store environment and design are important factors in determining the personality of fashion stores. Based on the general store personality scale, Willems, Swinnen, Janssen, and Brengman (2011) developed a fashion store personality scale specifically for fashion retail stores. Additionally, Willems and Brengman (2019) studied the relationship between brand personality and self-congruity. When it comes to the relationship between store personality and consumer perceptions, Ventura, Kazançoğlu, Üstündağlı, and Tatlıdil (2012) also indicated the importance of positioning a store in the evaluation and creation of the store's personality. In this context, their aim was to explore and compare the determinants of store personality in electronic chain stores, while identifying store personality factors.

Bellizi and Hite (1992) investigated the effects of color in retail store design, concluding that red (warm) colors are perceived as less cheesy, negative, and less interesting than blue (cold) colors in the store environment. In this direction, hypotheses have been developed postulating that these two colors may affect the mood and

emotions of people, consequently also affecting their behaviors or behavioral tendencies. Baker et al. (1994) used a peach and green (fashionable) color scheme for a prestigious image environment. On the other hand, a neutral beige and white (dated) color scheme was used in an environment relating to a lower-prestige image. Based on these findings, the hypotheses about the effect of color on store personality perceptions are as follows:

H1: Vivid (peach-green) colors used in the store environment have a more positive effect on consumers' store personality perceptions than pale (gray) colors.

H1a: Vivid (peach-green) colors used in the store environment have a more positive effect on consumers' perceptions of the chaos dimension of store personality than pale (gray) colors.

H1b: Vivid (peach-green) colors used in the store environment have a more positive effect on consumers' perceptions of the sophistication dimension of store personality than pale (gray) colors.

H1c: Vivid (peach-green) colors used in the store environment have a more positive effect on consumers' perceptions of the innovativeness dimension of store personality than pale (gray) colors.

H1d: Vivid (peach-green) colors used in the store environment have a more positive effect on consumers' perceptions of the agreeableness dimension of store personality than pale (gray) colors.

H1e: Vivid (peach-green) colors used in the store environment have a more positive effect on consumers' perceptions of the conspicuousness dimension of store personality than pale (gray) colors.

Baker et al. (1994) used soft lighting for a prestige-image environment and bright lighting for a discount-image environment. In particular, Marques, Cardoso, and Palma (2013) found that lighting not only affects the image and evaluation of a store, but also has an impact on decisions to purchase products. Based on these findings, the hypotheses about the effect of lighting on store personality perceptions are as follows: H2: Soft lighting used in the store environment has a more positive effect on consumers' store personality perceptions than bright lighting.

H2a: Soft lighting used in the store environment has a more positive effect on consumers' perceptions of the chaos dimension of store personality than bright lighting.

H2b: Soft lighting used in the store environment has a more positive effect on consumers' perceptions of the sophistication dimension of store personality than bright lighting.

H2c: Soft lighting used in the store environment has a more positive effect on consumers' perceptions of the innovativeness dimension of store personality than bright lighting.

H2d: Soft lighting used in the store environment has a more positive effect on consumers' perceptions of the agreeableness dimension of store personality than bright lighting.

H2e: Soft lighting used in the store environment has a more positive effect on consumers' perceptions of the conspicuousness dimension of store personality than bright lighting.

As noted by Baker et al. (1992), studies conducted especially on the types of music played in stores showed that calm classical music has a positive effect on customers' moods. While Baker et al. (1994) used classical music for prestige-image stores, popular top-list music was used for discount-image stores. Based on these findings, the hypotheses about the effect of music on store personality perceptions are as follows:

H3: Slow (classical) music used in the store environment has a more positive effect on consumers' store personality perceptions than fast (popular) music.

H3a: Slow (classical) music used in the store environment has a more positive effect on consumers' perceptions of the chaos dimension of store personality than fast (popular) music.

H3b: Slow (classical) music used in the store environment has a more positive effect on consumers' perceptions of the sophistication dimension of store personality than fast (popular) music. H3c: Slow (classical) music used in the store environment has a more positive effect on consumers' perceptions of the innovativeness dimension of store personality than fast (popular) music.

H3d: Slow (classical) music used in the store environment has a more positive effect on consumers' perceptions of the agreeableness dimension of store personality than fast (popular) music.

H3e: Slow (classical) music used in the store environment has a more positive effect on consumers' perceptions of the conspicuousness dimension of store personality than fast (popular) music.

2.4. Store Image

Image is obtained through experiences, and for this reason, it is a learned concept and the sum of perceptions. It is important to guide the development of the image through experiences, showing how the image changes over time in dependence on the level of reinforcement of the image concept dimensions or the consumers' criteria. Several studies have shown that this structure is complex in nature and is a combination of functional and psychological factors (Lindquist, 1974). Store image refers to an arrangement of consumer perceptions of a store based on assumptions or a set of dimensions that make up that image (Graciola, De Toni, Milan & Eberle, 2020). Store image is the overall impression of a customer's thoughts about a store, which is based on store attributes. For example, consumers' favorable attitudes toward store attributes form a positive image in consumers' minds (Balaji & Maheswari, 2021). The store image is shaped by the combination of different elements of the marketing mix, and a distinct image can be formed in consumers' minds depending on the most important elements of the marketing mix for each store. Indeed, store image dimensions that express store characteristics are the perceptions of consumers deriving from marketing mix activities (Wu & Tian, 2008).

An earlier comprehensive study by Lindquist (1974) highlighted nine features in the store image subdimensions based on an examina-

tion and classification of the dimensions of store image. These features contribute to the positive or negative form of certain attitudes of consumers toward retail image formation. Furthermore, Du Preez, Visser, and Noordwyk (2008) analyzed the eight basic dimensions that constitute the dimensions of the store image scale, namely atmosphere, convenience (physical features), facilities, institutionalism, product, promotion, sales staff, and service. Prediger, Huertas-Garcia, and Gazquez-Abad (2019) investigated the purchase intention of consumers with respect to a store brand and studied how the diversity of retailer assortment and consumers' perceived store image affect these decisions. According to its results, shorter flyers used by retailers have the strongest impact on consumers' decisions. Perceived store variety and perceived image positively affect the relationship between flver design and purchase decisions. In another study, Graciola et al. (2020) investigated the effect of store image on purchase intention and the mediating effect of perceived value and brand awareness. The results showed that store image positively impacted customer purchase intentions, and indirectly perceived value and brand awareness.

Baker et al. (1994) examined the effects of the store environment on both product and service quality perceptions and the mediation effect of the store environment on store image. In the relationship between store image and the store environment, the characteristics of the environment relate to its interaction as a whole. In line with the results of that experimental study, the combination of white and brown colors, bright lighting, and popular music contribute to customers' perception of a discount-image store environment. On the other hand, the combination of green and peach colors, soft lighting, and classical music support a high-level image perception of the store environment. Based on these findings, the hypotheses about the effect of color, lighting, and music on store image are as follows:

H4: Vivid (peach-green) colors used in the store environment have a more positive effect on consumers' store image perceptions than pale (gray) colors. Vol. 35, No. 1, 2023, pp. 23-40

H5: Soft lighting used in the store environment has a more positive effect on consumers' store image perceptions than bright lighting.

H6: Slow (classical) music used in the store environment has a more positive effect on consumers' store image perceptions than fast (popular) music.

2.5. Store Preference

Store preference is a function of four variables: evaluation criteria, perceived features of the store, comparison process, and the decision of whether or not to choose a corresponding store (Yeniçeri, 2005). Store preference is expected to be a continuation and result of approach and avoidance decisions. Approach behavior includes a willingness to explore the environment of the store and interact with others, while avoidance behavior means that a person will remain disengaged and avoid interaction with others (Donovan & Rossiter, 1982). According to studies on retailing, store features are effective when it comes to in-store selection. Yoo, Park, and MacIniss (1998) found that perceived store characteristics affect attitudes toward a store and its evaluations. In particular, product type, price, and quality, as well as the location of the store, service quality, and store atmosphere have an effect on consumers' evaluations of the store and their store preference (Yeniçeri, 2005).

In a study by Saha, Sharma, and Kumar (2019), five dimensions – store ambience, product options, services, sales support, and availability – are described as factors that determine store preferences. Their study found store ambience, which had the highest total variance explanation among the five factors, to be the most important variable, followed by the product options, services, sales support, and availability variables. Store ambience, store design, location, and convenience of facilities all include features related to lighting, sound, and smell. Cho and Lee (2017) evaluated store preference as an output of approach/avoidance behavior based on emotions. The behavior of approaching or avoiding the environment also includes the following: physical manner, interaction with others, staff, and satisfaction level.

A store's identity expressed in the store image provides some useful information for consumers, assisting them in their buying decisions. For this reason, cues relating to store image affect the decision-making processes of the consumers and result in changes in their store preferences. Cues relating to store image and positioning in the store affect store preferences and ultimately the success of the store (Baker, Parasuraman, Grewal & Voss, 2002). As a result, this encourages retailers to make changes and adjustments in line with the desired store image to make their stores stand out among all others. Bhukya and Singh (2016) examined the effect of store ambience, location, and layout, its parking facilities, and the service quality of sales personnel on store preferences. According to the results of that study, all factors had significant effects on shoppers' store preferences. In light of this, store managers should give strategic consideration and importance to the five store factors in order to increase the preference for their stores among consumers. In their study, Bellizzi and Hite (1992) reported that music and color help to draw attention and create feelings that may increase the probability of consumer purchase decisions. Moreover, music influences store traffic, product choice, and behavioral intentions. Based on these findings, the hypotheses about the effect of color, lighting, and music on store preference are as follows:

H7: Vivid (peach-green) colors used in the store environment have a more positive effect on consumers' store preferences than pale (gray) colors.

H8: Soft lighting used in the store environment has a more positive effect on consumers' store preferences than bright lighting.

H9: Slow (classical) music used in the store environment has a more positive effect on consumers' store preferences than fast (popular) music.

3. METHODOLOGY

3.1. Experimental Design

The main purpose of this experimental study is to explain the effects of color, lighting, and music on store personalities, store image perceptions, and store preferences of consumers. Experimental groups were formed by constructing a 2x2x2 between-subjects design (store design element, color: vivid (peach-green) vs. pale (gray) x store ambient element, lighting: soft vs. bright x store ambient element, music: slow (classical) vs. fast (popular)). Store environment cues (color, lighting, and music) were established as independent variables, whereas store image perception, store personality, and store preference were used as dependent variables. Figure 1 shows the research model of the experimental design. (strongly disagree) to 5 (strongly agree). The hypotheses were tested in an experiment in which the color, music, and lighting cues of the fashion store environment were manipulated to evaluate store personalities, store image perceptions, and store preferences of consumers. For this purpose, experimental designs were created with 2 color (vivid-pale) × 2 lighting (soft-bright), and 2 music (slow-fast) variables.

3.3. Sample

The sample for this study was drawn from a target population of consumers over the age of 18 who visit fashion stores and buy their products, with the sample size for the field experiment determined at 600 people in total. The experimental study was conducted on 75 people in each of the eight groups within the scope of

FIGURE 1: Research Model



3.2. Measurement

All scales used in this study were adapted from previous research, and in some cases, modified to fit the fashion store context. The store personality scale was adapted from the scale developed by Willems et al. (2011). The store image scale was adapted from Baker et al. (1992), and the store preference scale from Bellizzi and Hite (1992). Moreover, scales for manipulation checks of color, lighting, and music were adapted from Baker et al. (1994). All the constructs were measured using a 5-point Likert scale ranging from 1 the experimental design. The experiments were carried out with individuals one by one in each group, who were independent of each other and each group. To ensure similarity between the experimental groups, the gender and income status of the participants were distributed accordingly. The data collection process of the study was completed in a period of approximately four weeks, with the final sample of 600 valid responses received in the town of Balıkesir. Table 1 shows the store environments and information used for different experimental groups.



TABLE 1: Store Environments and Information Used in the Measurement Process

4. RESULTS

The reliability and validity of the scales were checked before testing the hypotheses. The reliability of three multiple-item scales used to check internal consistency was evaluated by calculating Cronbach's alpha values (Hair, Black, Babin & Anderson, 2010) – store image =.671 without any item deletion; store personality =.824 after deleting four items, and store preference =.729 after deleting three items. In this study, scales were adapted and modified for the fashion store context; therefore, exploratory factor analysis (EFA) (with principal component analysis and varimax rotation settings) was carried out to test validity. The results are presented in Table 2.

TABLE 2: EFA Results

Store Image Scale	λ
This store would be a pleasant place	.800
to shop.	
l evaluate this store design as	.718
attractive.	
This store has a pleasant atmosphere.	.707
I evaluate this store as clean.	.627
TVE = 51.22%, α =.671, KMO =.684, Bart	ett's
sig. =.000	
Store Personality Scale	
Factor 1: Sophistication	λ
If this store was a person, I would	.766
consider it an elite person.	
If this store was a person, I would	.765
consider it a distinguished person.	

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Store Image Scale	λ
If this store was a person, I would consider it an elegant person.	.763
If this store was a person, I would	.700
If this store was a person, I would	.650
Factor 2: Agreeableness	
I think this store has a friendly	793
atmosphere.	., , , , ,
l consider this store environment to	.671
I consider this store environment to be approachable.	.661
l consider this store environment to be reliable.	.553
Factor 3: Conspicuousness	
l think this store is an extravagant	.803
I think this store is a striking place.	.631
I think this store is a special place.	.498
Factor 4: Innovativeness	
I think this store is youthful.	.823
I think this store has a modern	.684
Factor 5: Chaos	
I think this store is a tidy place	803
I think this store is a calm place	716
TVE = 59.77%, α =.824, KMO =.847, Bart	lett's
Store Preference Scale	λ
I would enjoy shopping in this store	809
Like this store's environment	747
I would like to spend time browsing in this store	.699
If I came to this store in real life, I	.647
This is a place where I would feel	.588
TVE= 49.31%, α =.729, KMO =.786, Bartle sig. =.000	ett's
Note: $\lambda = 1$ oadings: TVE=Total Variance Explained: K	MO-Kai-

Note: λ =Loadings; TVE=Total Variance Explained; KMO=Kai ser-Meyer-Olkin; α =Cronbach's alpha

According to the EFA results, a single factor was created for store image, five factors were created

for store personality, with a single factor created for store preference. The store personality factors were named sophistication, conspicuousness, innovativeness, agreeableness, and chaos, as in the original scale. The factor loadings of all scales were above 0.50, which is considered acceptable (Hair et al., 2010).

Multivariate analysis of variance (MANOVA) was applied to investigate and determine the effects of color, lighting, and music as experimental variables on customers' perceptions of store image and store personality and their store preferences. Additionally, the basic assumptions of MANO-VA were examined. In checking the assumption of normality, the p-value was found to be below 0.05, indicating that the distribution of data was not normal. However, the skewness and kurtosis values were at acceptable levels (in the range of +- 1) (George & Mallery, 2010; Hair et al., 2010). When using Box's M results for the assumption of homogeneity of covariance matrices, it was decided to use Pillai's trace values, which are least sensitive to the case of not meeting the assumption of homogeneity of covariance matrices (Olson, 1974; Olson, 1979; Finch, 2005; Hair et al., 2010), as mentioned in Table 3.

TABLE 3: MANOVA Results

	Pillai's Trace								
Effect	Value	F	Hypo df	df	р				
Intercept	.988	6891.140	7	586	.000				
Music	.051	4.464	7	586	.000				
Color	.058	5.175	7	586	.000				
Lighting	.038	3.262	7	586	.002				
Music*- Color	.018	1.507	7	586	.162				
Music* Lighting	.047	4.149	7	586	.000				
Color* Lighting	.007	.615	7	586	.744				
Mu- sic*Col- or*Light- ing	.043	3.806	7	586	.000				

MARKET T R Z I S T E As a result of MANOVA, the main effects of music [F(7,586)=4.464, p<.05, Pillai's Trace=.051], color [F(7,586)=5.175, p<.05, Pillai's Trace=.058], and lighting [F(7,586)=3.262, p<.05, Pillai's Trace=.038] on the dependent variables were statistically significant. Additionally, the combination of music and lighting variables [F(7,586)=4.149, p<.05, Pillai's Trace=.047] and the combination of mu-

sic, color, and lighting variables [F(7,586)=3.806, p<.05, Pillai's Trace=.043] were also found to be statistically significant with respect to the dependent variables. Among the experimental groups, at least one of the music, color, and lighting variables had a significant effect on store image, store personality perceptions, and store preferences.

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig	Partial Eta Square
Adjusted Model	Store Image	9.008ª	7	1.287	3.691	.001	.042
	Store Preference	14.383 ^b	7	2.055	6.217	.000	.068
	SP_Sophistication	10.925°	7	1.561	4.100	.000	.046
	SP_Agreeableness	11.121 ^d	7	1.589	4.458	.000	.050
	SP_Conspicuousness	9.615 ^e	7	1.374	3.551	.001	.040
	SP_Innovativeness	11.413 ^f	7	1.630	3.521	.001	.040
	SP_Chaos	15.803 ^g	7	2.258	4.703	.000	.053
	Store Image	8061.168	1	8061.168	23122.672	.000	.975
	Store Preference	6963.227	1	6963.227	21067.214	.000	.973
	SP_Sophistication	7428.609	1	7428.609	19515.474	.000	.971
Intercept	SP_Agreeableness	7250.588	1	7250.588	20344.972	.000	.972
	SP_Conspicuousness	4075.089	1	4075.089	10536.432	.000	.947
	SP_Innovativeness	7589.927	1	7589.927	16389.103	.000	.965
	SP_Chaos	8759.260	1	8759.260	18246.747	.000	.969
	Store Image	3.263	1	3.263	9.361	.002	.016
	Store Preference	5.530	1	5.530	16.730	.000	.027
	SP_Sophistication	2.829	1	2.829	7.432	.007	.012
Music	SP_Agreeableness	3.961	1	3.961	11.114	.001	.018
	SP_Conspicuousness	.000	1	.000	.000	.983	.000
	SP_Innovativeness	.015	1	.015	.0	.857	.000
	SP_Chaos	5.900	1	5.900	12.291	.000	.020
	Store Image	1.283	1	1.283	3.681	.056	.006
	Store Preference	5.920	1	5.920	17.912	.000	.029
	SP_Sophistication	2.407	1	2.407	6.322	.012	.011
Color	SP_Agreeableness	1.378	1	1.378	3.866	.050	.006
	SP_Conspicuousness	.254	1	.254	.655	.418	.001
	SP_Innovativeness	9.127	1	9.127	19.707	.000	.032
	SP_Chaos	2.344	1	2.344	4.882	.028	.008

TABLE 4: Variance Analysis Results

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig	Partial Eta Square
	Store Image	.586	1	.586	1.681	.195	.003
	Store Preference	.240	1	.240	.726	.394	.001
	SP_Sophistication	.749	1	.749	1.968	.161	.003
Lighting	SP_Agreeableness	.586	1	.586	1.644	.200	.003
	SP_Conspicuousness	.520	1	.520	1.345	.247	.002
	SP_Innovativeness	.042	1	.042	.090	.764	.000
	SP_Chaos	5.320	1	5.320	11.083	.001	.018
	Store Image	1.955	1	1.955	5.608	.018	.009
	Store Preference	1.058	1	1.058	3.202	.074	.005
	SP_Sophistication	.564	1	.564	1.482	.224	.002
	SP_Agreeableness	3.413	1	3.413	9.576	.002	.016
Music*-	SP_Conspicuousness	.135	1	.135	.349	.555	.001
Color	SP_Innovativeness	.482	1	.482	1.040	.308	.002
	SP_Chaos	.094	1	.094	.195	.659	.000
	Store Image	1.238	1	1.238	3.550	.060	.006
	Store Preference	.038	1	.038	.116	.733	.000
	SP_Sophistication	.001	1	.001	.003	.958	.000
MUSIC [*]	SP_Agreeableness	1.576	1	1.576	4.422	.036	.007
Lighting	SP_Conspicuousness	6.756	1	6.756	17.467	.000	.029
	SP_Innovativeness	.240	1	.240	.518	.472	.001
	SP_Chaos	.350	1	.350	.730	.393	.001
	Store Image	.555	1	.555	1.592	.208	.003
	Store Preference	.096	1	.096	.291	.590	.000
Calar*	SP_Sophistication	.470	1	.470	1.236	.267	.002
Liahtina	SP_Agreeableness	.065	1	.065	.183	.669	.000
	SP_Conspicuousness	.135	1	.135	.349	.555	.001
	SP_Innovativeness	1.402	1	1.402	3.027	.082	.005
	SP_Chaos	.034	1	.034	.070	.791	.000
	Store Image	.128	1	.128	.366	.545	.001
	Store Preference	1.500	1	1.500	4.538	.034	.008
Music*-	SP_Sophistication	3.904	1	3.904	10.257	.001	.017
Color	SP_Agreeableness	.143	1	.143	.400	.527	.001
*Lighting	SP_Conspicuousness	1.815	1	1.815	4.693	.031	.008
	SP_Innovativeness	.107	1	.107	.230	.631	.000
	SP_Chaos	1.760	1	1.760	3.667	.056	.006

a. R Square = .042 (Adjusted R Square = .030) e. R Square = .040 (Adjusted R Square = .029)

b. R Square = .068 (Adjusted R Square = .057) f. R Square = .040 (Adjusted R Square = .029)

c. R Square = .046 (Adjusted R Square = .035) g. R Square = .053 (Adjusted R Square = .041)

d. R Square = .050 (Adjusted R Square = .039)

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The results show that each independent variable has a significant effect on at least some of the dependent variables. Moreover, the interaction of music, lighting, and color has a significant effect on store preference and on the sophistication and conspicuousness dimensions of store personality. After examining the total effect of the independent variables, this experimental study analyzed the level of their effects on the dependent variables using change graphs. Depending on whether the lighting is soft or bright, the color tone is vivid (peach-green) or pale (gray), and the music is fast or slow, the state of the dependent variables was analyzed based on the change graphs. More remarkable change graphs are shown under Figure 2 below.

The effect of the changes in all independent variables on the dependent variables was analyzed using change graphs. The graphs indicate that, when soft lighting, vivid colors, and slow music are used in the store environment, participants' store preferences and their store personality perceptions of the sophistication and chaos dimensions are higher.





TABLE 5:	Summary of Hypotheses
INDLE J.	Summary of Hypotheses

Нуро	theses	Supported or not
H1	Vivid colors used in the store environment have a more positive effect on consumers' store personality perceptions than pale colors.	Partially supported
H2	Soft lighting used in the store environment has a more positive effect on consumers' store personality perceptions than bright lighting.	Partially supported
H3	Slow music used in the store environment has a more positive effect on consumers' store personality perceptions than fast music.	Partially supported
H4	Vivid colors used in the store environment have a more positive effect on consumers' store image perceptions than pale colors.	Supported
H5	Soft lighting used in the store environment has a more positive effect on consumers' store image perceptions than bright lighting.	Supported
H6	Slow music used in the store environment has a more positive effect on consumers' store image perceptions than fast music.	Not supported
H7	Vivid colors used in the store environment have a more positive effect on consumers' store preferences than pale colors.	Supported
H8	Soft lighting used in the store environment has a more positive effect on consumers' store preferences than bright lighting.	Supported
H9	Slow music used in the store environment has a more positive effect on consumers' store preferences than fast music.	Supported

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5. DISCUSSION

Although the conceptual infrastructure of this study is associated with the SOR model, the findings are consistent with the general literature on the store environment. In line with previous studies, the results of this study show that store environment cues have significant effects on perceptions and/or attitudes about stores, such as store image, store personality, and store preference variables. There are significant differences between store image, store personality perceptions, and store preferences of consumers according to the role of the colors, lighting, and music levels used in those stores. Moreover, these variables show significant differences in their interaction with one another, in their binary combinations, and as a triple combination.

5.1. Theoretical Implications

From a theoretical point of view, the most important contribution of this study consists in providing a more comprehensive view necessary for understanding the influence of store environment variables on store image, store personality perceptions, and preferences regarding fashion stores. From the perspective of innovation, the research shows how changing levels of store environment variables, and their interactions affect customer perceptions of the store image and store personality, as well as their store preferences.

5.2. Managerial Implications

From a managerial perspective, as all three cues of the store environment affect store personality, store image perceptions, and store preferences, it is recommended that fashion stores carefully attend to and improve their store environment ambience and design factors to enhance positive effects on consumer behavior and decision-making. First, similar to what has been found in the literature, classical music positively contributes to people's emotional state and has a supporting effect on their behavior. Based on the results obtained, classical music is recommended in the fashion store environment to influence customers' store preferences and store personality perceptions, except for the innovativeness dimension. Second, color selection in the store environment is important as it is used to attract the attention of consumers and positively affect their emotional state while shopping. In line with the results of the research conducted, it is suggested that vivid colors be given preference in the fashion store environment for improving consumers' perceptions of chaos, sophistication, and innovativeness, as well as store image perceptions and store preferences. In addition, it is recommended to use peach and green colors as vivid colors, especially in the design of fashion stores. Lastly, in the literature, soft lighting in the store environment has been found to have a positive effect on consumers' evaluations regarding their store preferences when compared to bright lighting. Lighting can positively affect not only store personality and image perceptions but also buying behavior.

Marketing practitioners suggest that an innovative, sophisticated, and unchaotic store personality and a high-level store image positively contribute to consumers' fashion store preferences. However, some studies in the literature show that dim lighting creates a calmer and more pleasant mood. An exciting atmosphere with a well-designed lighting system will motivate consumers to have a positive attitude and behavioral intention toward buying a product in the store concerned.

5.3. Limitations and Recommendations for Future Studies

Within the scope of this study, there are several limitations that suggest directions for future research. For instance, it is not sufficient to only consider fashion stores in testing the impact of store environment variables on store perceptions and preferences. Therefore, future research should also explore additional types of stores. Furthermore, the model should be expanded to include the social dimension of the store environment alongside ambience and design dimensions. Moreover, other store environment cues than color, lighting, and music should also be examined or expanded in future studies. It is recommended for future research to focus on and analyze different store types and product categories as well. A further suggestion would be to include other variables, such as the personal characteristics or self-image of consumers.

6. CONCLUSION

By evaluating the results of this study as a whole, it can be concluded that the manipulated store environment variables and their interactions have significant effects on store personality, store image, and store preferences. The interaction of music, color, and lighting has a significant effect mostly on the sophistication dimension of the store personality, followed by a similar effect on the conspicuousness dimension and store preference. Music in the store environment significantly affects consumers' perceptions and preferences regarding stores. The results of this study show that slow music has a more positive effect on consumers' perceptions of the chaos, sophistication, agreeableness, and conspicuousness dimensions of store personality and their store preferences when it comes to fashion stores. While the color in a store environment has a significant effect on consumers' store preferences and partly on their store personality perceptions, it does not have a significant effect on store image. As the results of the study have shown, using vivid colors in the store environment is more effective than using pale colors in terms of consumers' store image perceptions, store preferences, and partly their store personality perceptions. On the other hand, lighting in the store environment has a significant effect only on the chaos dimension of the store personality. The results support the different perceptions of lighting levels in the environment and the fact that lighting is not perceived as primarily important. According to the change graphs, soft lighting is preferred in a fashion store environment as it affects the chaos, sophistication, and innovativeness dimensions of store personality, as well as store image perceptions and store preferences.

In today's competitive environment, the importance of creating a pleasant and suitable instore environment for consumers is crucial. The effect of an environment with vivid colors, slow music, and soft lighting can be observed at the highest level with respect to the chaos and sophistication dimensions of store personality perceptions, as well as store preferences. The literature suggests that the important independent variables according to the results of the research may affect consumers' attitudes toward a store, which is directly or indirectly combined with instore evaluations and consumers' perceptions of the features in the store environment (Baker et al., 2002; Turley & Miliman, 2000; Yoo et al., 1998). The interpretations of the results are supportive of the studies in the literature.

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