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Enhancing Consumer Purchases through Store Design: Does Atmospheric Alchemy Matter?

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Research Article

Abstract

Purpose: *This study explores the impact of store atmospherics—specifically music, aroma, lighting & color, and texture & feel—on consumer purchasing decisions in the shop setting. It aims to determine which sensory elements most significantly influence buying behavior, thereby guiding businesses in designing more effective in-store environments.*

Methods: *The study employed SmartPLS 3.2.3 and Partial Least Squares Structural Equation Modeling (PLS-SEM) to conduct a two-step analysis process. First, the measurement model was checked to ensure the reliability and validity of the constructs. Then, the structural model was evaluated to test the hypothesized relationships among the variables. To conduct the survey, a self-administered questionnaire was distributed among the customers. A total of 350 responses were obtained from participants selected using convenience sampling.*

Results: *All four atmospheric variables were found to have a statistically significant influence on purchasing decisions. Lighting and color emerged as the strongest predictors ($\beta = 0.404$, $p < 0.001$), followed by texture and feel ($\beta = 0.341$, $p < 0.001$), music ($\beta = 0.140$, $p = 0.021$), and aroma ($\beta = 0.111$, $p = 0.037$).*

Implications: *The findings highlight the strategic value of sensory design in retail environments. Retailers and marketers can leverage these insights to craft immersive in-store experiences that enhance customer engagement and drive sales.*

Originality: *This research contributes to the limited empirical literature on sensory marketing in developing countries, particularly by quantifying the comparative effects of different atmospheric cues in a single model.*

Limitations: *The study is limited by its focus on only four sensory dimensions and a relatively small sample size, which may constrain the generalizability of the findings. Future research should consider broader sensory inputs and a more diverse consumer population.*

Keywords: Atmospheric Alchemy, Aroma, Music, Feel, Texture, Purchase Decision, Store Design

1. Introduction

In today's competitive retail landscape, the business environment plays a crucial role in shaping consumer buying decisions. The concept of store atmospherics refers to the deliberate design of space to create specific effects on buyers (Kotler, 1973), encompassing elements such as color, brightness, texture, tactile sensation, music, and aroma. Businesses must create a captivating atmosphere to attract customers. Several factors influence the overall shopping experience. Some of these factors include color, brightness, tactile

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sensation, texture, music, and aroma. These sensory cues form the basis of sensory marketing, which aims to enhance the overall shopping experience by engaging consumers' senses. (Bitner, 1992).

Empirical evidence suggests that if businesses can align these environmental qualities with consumer preferences, they have a higher chance of increasing sales and improving customer satisfaction (Kotler, 1973). The Stimulus-Organism-Response (S-O-R) model, initially proposed by Mehrabian and Russell (1974), provides a widely accepted theoretical framework for understanding how environmental factors influence consumer behavior. According to the model, external stimuli (S) from the environment influence the internal states or evaluations (O) of individuals—such as emotions, moods, or sensory perceptions—which, in turn, lead to behavioral responses (R), including approach or avoidance behavior. In the context of retailing, this model has been extensively applied to explain how atmospheric cues—including lighting, color, music, scent, and texture—act as stimuli that shape consumers' internal experiences and drive their purchasing behaviors. To understand how retail atmospherics act as environmental stimuli that affect the cognitive and emotional processing of consumers (organism), which then lead to behavioral outcomes (response), the SOR model provides a structured way for this analysis. In marketing studies, this framework has been widely applied to investigate the psychological mechanisms behind consumer behavior in physical store environments.

Traditionally, people often overlook the setting in which a product is acquired or used. In certain instances, environmental factors may be more influential than product qualities in determining the decisions that consumers make. Consumers frequently acquire essential commodities, such as food, clothing, and electronics, primarily motivated by the utilitarian attributes of these products or the fundamental need to satisfy their basic needs. It is usually assumed that these decisions are based on tangible product characteristics. Recent insights suggest that factors beyond tangible goods or services influence purchasing decisions. The product is merely part of the user experience. Regarding the entire offering, customers frequently respond to various aspects, including after-sales support, guarantees, packaging, marketing, brand image, and more. Sometimes, the environment may even influence the decision you make to buy something. Businesses can enhance the in-store experience (Liaw, 2007) by creating a welcoming physical space that meets customers' needs and makes shopping a pleasure. As a result, shoppers feel more confident and may even be compelled to make an immediate purchase. If marketers want to create environments that attract customers and boost sales, they need to optimize these atmospheric aspects so that they complement their brand and products.

Berman and Evans (1995) define "atmospherics" as the comprehensive impression a store seeks to convey to prospective customers. In the current competitive retail sector, it is imperative to enhance consumer expenditure, differentiate your business from competitors, and augment foot traffic; all of these factors substantially influence the customer experience. Atmospherics, which was first used to enhance visual marketing, encompasses aspects such as lighting, color, aroma, and sound that captivate the senses and elevate the overall ambiance of the space (Bell, 2022). A direct association has been shown between store atmosphere and buying behavior, with customers being more likely to make a purchase the longer they stay. Stores cannot afford to ignore ambient visual merchandising. According to Pradhan (2006), visual merchandising in outlet design primarily aims to increase consumer spending, differentiate the business from its rivals, and enhance foot traffic. Customer attitudes, preferences, and choices are among the key factors that influence purchasing behavior. According to research by Kardes (2011), the typical buying process consists of the following steps: need recognition, information search, alternative evaluation, purchasing choice, and post-purchase evaluation. The psychological, intellectual, and behavioral reactions of target audiences must be considered in order for marketing campaigns to achieve their goals (Cant et al., 2011). If retailers want to increase customer engagement and profitability, they must also consider atmospherics, or the behavioral and emotional responses of their customers.

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Previous research has primarily focused on individual meteorological variables, shedding light on the effects of these separate factors. However, the combined or interactive effects of many environmental elements within outlets have received minimal research (Koo & Kim, 2013). In niche settings, such as high-end shops, extensive research has been conducted. However, there has been limited research on the atmosphere changes in general store settings.

To address this gap, this study, utilizing the SOR model, will examine the influence of diverse combinations of light, color, texture, music, and aroma on purchasing decisions in various store contexts. This study will elucidate the role of retail contexts in shaping consumer behavior by examining the cumulative effects of these environmental factors. The primary objective of this research is to empirically investigate the relationship between store atmospherics and consumers' purchasing decisions.

This research significantly advances both theory and practice by analyzing how stores are organized, how products are classified, and how consumers perceive different brands. Prior studies have primarily focused on the effects of single atmospheric stimuli on a store's environment (Russell, 1974; Turley & Milliman, 2000). However, this study adopts a distinct approach by examining the interaction between auditory and olfactory congruent cues. Lighting, music, and aroma are just a few of the environmental factors at outlets that have been the subject of extensive research on their independent effects on customer behavior. However, little is known about how these elements interact to impact purchasing decisions.

2. Literature review

2.1 Concept of Atmospheric:

The study explores a fundamental concept in environmental psychology, the Stimulus-Organism-Response (SOR) model, initially proposed by Russell and Mehrabian (1974). Store environments facilitate the application of the SOR model to analyze the influence of surroundings on consumer purchasing behavior. This paradigm posits that emotions elicited by external stimuli (S) influence user behavior. Based on the SOR model, consumers' emotional reactions to environmental stimuli can be categorized into three primary states: joy, arousal, and dominance. These emotional responses elicit two contrasting behaviors: approach, characterized by consumer attraction to the surroundings, and avoidance, marked by disengagement. This study examines various atmospheric stimuli, including visual elements (such as color and lighting), auditory components (such as music), olfactory cues (such as fragrances), and tactile sensations (such as texture and feel). The subsequent characteristics of emotional responses to these stimuli comprise: Pleasure, which is the extent to which customers perceive the environment as delightful. The level of enthusiasm or stimulation elicited by the surroundings is referred to as arousal. Dominance refers to the extent to which customers perceive themselves as having control over their surroundings. Emotional states significantly impact consumer behavior. Russell (1974) states that avoidance stems from negative emotions, whereas positive emotions generally provoke approach behaviors, including engagement and purchasing. This conceptual framework emphasizes the significance of environmental stimuli in shaping client emotions and, subsequently, their buying choices.

2.2 Impact of music on consumer purchase decisions

Musical elements are an essential component in the design of retail spaces. The music in the background can significantly impact customers' moods and purchasing decisions, according to recent studies. For example, research has shown that shoppers spend more time perusing products when listening to slow-tempo music, which may be explained by the music's ability to create a relaxing atmosphere (Milliman, 1982). On the other hand, venues that aim to create an impression of excitement and urgency may benefit from using fast-tempo music, as it is associated with higher energy levels (Oakes, 2003). Because different musical styles tend to be more strongly associated with specific demographics or lifestyles, the genres played at a given establishment can significantly impact how those audiences perceive the establishment as a whole (Garlin & Owen, 2006).

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According to the concept of music as a sensory dimension by Banat and Wandebori (2012), music is characterized as an enjoyable sound that influences both conscious and unconscious consumer choices. The type of music played in retail spaces has a significant influence on customers' propensity to make a purchase. The researchers (Basera et al., 2013) state that music influences customer behavior by shaping the store's image, drawing attention to the store, and directing the flow of customers through it. Considering that sound plays a significant role in determining the overall experience a client has when consuming a product or service, Krishna (2011) emphasizes that shopkeepers should give special consideration to this aspect. Hearing is something that furnishes consumers with substantial information, potentially affecting their judgments similarly to the influence of vision on decision-making. A study indicates that around sixty-five percent of mood swings can be attributed to auditory stimuli (Kuczamer Kłopotowska, 2017). Unlike visual stimuli that consumers may control, individuals often possess minimal power over the auditory stimuli to which they are subjected. Elder et al. (2010) posit that this involuntary auditory awareness might result in sounds, such as music, aligning either harmoniously with the environment (e.g., a store establishment) or with other auditory inputs (e.g., the subsequent track). Music is a versatile instrument that can be easily customized for the outlet setting (Roschk et al., 2017). Studies show that music in store settings can affect a range of outcomes, such as feelings and evaluations of the experience (Cameron et al., 2003), the chance of returning and total spending (Harrington et al., 2015), spontaneous buying (Morrin & Chebat, 2005), and other consumer behaviors (Michel et al., 2017).

H1: Music has a positive and significant effect on consumer purchasing decisions.

2.3 Impact of Aroma on Purchase Decision

Aroma is a potent influencer of consumer behavior, despite its often unconsciously perceived nature. Consumers' perceptions of product quality are enhanced, and they are more likely to remain in an outlet for an extended period when greeted by pleasant scents (Spangenberg et al., 1996). A limited number of smells are associated with specific feelings or attitudes, which can also evoke emotional responses in those who smell them. Lavender, for example, is commonly associated with a state of relaxation, whilst citrus smells are thought to be energizing and invigorating (Herrmann et al., 2013). According to Mattila and Wirtz (2001), retail establishments that use carefully selected fragrances can enhance the overall shopping experience and encourage customers to make purchases. This is because these smells create a more inviting atmosphere. Research is scarce with actual clients in authentic settings. Spangenberg et al. (2006) investigated the impact of ambient odors on customer perceptions and behaviors in clothing stores. Their findings indicated a correlation between gender and aroma associations related to the product, which favorably influenced consumer responses. In 2005, Morrin and Chebat conducted a study in a mall where they observed customers as the smell changed over time. According to their research, smell cues enhance consumer responses, particularly when the cues align with the buyer's impulsive or contemplative nature. Utama (2022) found that olfactory stimuli enhance the long-term viability of coffee shop franchisees, resulting in increased customer satisfaction. In the food and beverage industry, marketing agencies have increasingly incorporated exterior olfactory stimuli into their products to enhance consumer behavior (Vilela et al., 2019). By learning from olfactory stimuli, consumers expand the range of experiences they can extract importance from (Luca et al., 2018). According to studies, a customer's decision to buy can be significantly influenced by the scent in the room (Pezoldt et al., 2014). According to Chatterjee (2022), olfactory stimuli play a crucial role in brand uniqueness by influencing customer purchase behavior.

H2: Aroma has a positive and significant effect on consumer purchasing decisions

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2.4 Impact of Lighting and color on purchase decision

Light and color make an outlet look good. Light affects consumers' moods and perceptions. Bright lighting increases the perceived vitality of the space and highlights specific products, making them more visible and appealing (Custers et al., 2010). Dim lighting, on the other hand, can create a cozy atmosphere that keeps customers longer and increases the likelihood of purchase (Summers & Hebert, 2001). Consumer emotions are also influenced by color. Warm colors, such as red and yellow, inspire urgency and passion, making them ideal for impulse purchases (Bellizzi & Hite, 1992). In addition, cold colors, such as blue and green, foster a sense of tranquilly and confidence, rendering them an optimal choice for environments that promote deliberate decision-making (Babin et al., 2003). The emotional tone, product ratings, and brand image of an outlet are influenced by its colors. Previous research suggests that colors like blue, along with other attributes associated with prestige, can enhance the desirability of products (Baker et al., 1994). The bright colors are associated with positive emotions such as happiness, joy, and hope. Brighter colors are often perceived as friendlier, more cultured, pleasant, and beautiful. In contrast, undesirable emotions induced by dark colors, like boredom and sadness (Camgöz et al., 2002). Lighting, on the other hand, can be understood in various ways. It can be used to enhance or accentuate the lighting settings, creating a special effect. The arrangement and the way light interacts with objects, products, or people can influence perceptions in different contexts (Elliot, 2015). According to Maheshwari (2017), color also plays a significant part in the way that consumers perceive the products they purchase. Consequently, selecting appropriate colors for a store or outlet can effectively attract customers' attention and have a favorable impact on how they perceive the products being sold.

In this context, the atmosphere can, in turn, have an impact on the store's performance (Webber et al., 2018). Schielke and Leudesdorff (2015) investigated how lighting in fashion retail stores affects brand classification in terms of social status, while Biswas et al. (2017) explored how store managers can utilize lighting to enhance consumers' mental alertness and guide their behavior toward specific food choices. Additionally, Bilgili et al. (2020) found that lighting affects customers' perceptions of waiting times. Store studies have also investigated the combined effects of color and lighting on consumer behavior.

H3: Lighting and color have a positive and significant effect on consumer purchasing decisions.

2.5 Impact of Texture and feel on consumer purchasing decisions

Buyer perceptions are also influenced by the feel and texture of the materials in an outlet. Customers engage with textured objects, furniture, and product displays. Touch enhances consumers' perceptions of a product's quality, as noted by Peck and Childers (2003). Although coarser textures may suggest a more informal, natural image, surfaces can suggest sophistication and richness. A multi-sensory experience that increases sales is provided by businesses that employ a variety of textures. For businesses that sell clothing and furniture, texture is a crucial factor in the purchasing process, as buyers often handle the items before making a purchase. Studies show that "feel good" products are more likely to be purchased, and textures have an impact on customers' perceptions of the store's quality (Peck & Wiggins, 2006). Tactile satisfaction enhances faith in the product's quality and brand appeal. From various sources, textures and tactile sensations are widely available and can be obtained, including natural elements, material innovations, processes, virtual reality, creativity, and social interactions (Zuo, Jones, & Hope, 2005). Texture stimulates consumer senses, influencing their decision-making process (Dubenova & Koch, 2019). Despite this, tactile sensation may render a product's other sensory attributes inadequate (Abaidi & Vernette, 2018). In the words of Dodamgoda and Amarasinghe (2019), consumers are strongly attracted to tactile contact, which has a substantial effect on their emotional assessment, attachment, and overall experience with a product (Overmars & Poels, 2015). Individual and product differences are the primary motivators for consumers to interact with a product and utilize haptic information during evaluation (Peck & Childers, 2003). Klatzky et al. (2003) state that people are both quick and accurate at recognizing objects by touch. Due to the importance of the tactile sense, many products encourage touch, with the tactile experience directly

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influencing purchasing decisions (Choi & Jun, 2007). Tactile interaction fosters emotional bonds between consumers and products. Mizuhara et al. (2013) emphasize the significance of texture in product categories such as touchpads, where it is essential. Tactile input via the hands can augment food-related sensations, enhancing the perception of texture in foods (Szczesniak, 2002).

H4: Texture and feel have a positive and significant effect on consumer purchasing decisions

3. Research Methodology

3.1 Sample and Sampling Technique

Data were collected through an empirical analysis conducted in Bangladesh. The target respondents were customers who had recently had an in-store shopping experience at local superstores**.** A self-administered questionnaire was utilized, following the guidelines of Zikmund (2000). To ensure face validity, a pilot test was conducted with 50 participants. To conduct the survey, a self-administered questionnaire was distributed using convenience sampling. Out of the 350 questionnaires distributed, only 300 were completed and deemed accurate after 50 were discarded due to inadequate responses to screening questions or incomplete data. Following the general rule that 10 people should answer each question (Hair et al., 2006), the needed sample size was found to be 300. To make the results more reliable, the study followed the rule that "the higher, the better" when it came to group size.

Of the responders (67%), single individuals were the majority, and the majority (78%) were men. From this, 4% of respondents earned less than Taka 50,000, and 40% earned between Taka 50,000 and Taka 100,000; a sizeable number of the respondents fell into lower to middle-income groups. From this data, it is evident that ninety percent of the respondents reside in urban regions, where they are likely to encounter a diverse assortment of outlet sites. The sample predominantly consists of students (45%), signifying a youthful demographic with unique buying habits. The sample exhibits a high level of educational achievement, with 71% having obtained a degree or higher. These characteristics may affect how respondents perceive and respond to atmospheric cues in retail environments.

Table 1: Characteristics of the Sample

	Factor	Counts	% of Total	Cumulative %
Gender	Male	234	78.0 %	78.0 %
	Female	66	22.0 %	100.0 %
Marital Status	Married	99	33.0 %	33.0 %
	Single	201	67.0 %	100.0 %
Lives In	Urban Area	270	90.0 %	90.0 %
	Rural Area	30	10.0 %	100.0 %
Occupation	Students	135	45.0 %	45.0 %
	Govt. Organization	36	12.0 %	57.0 %
	Private Company	48	16.0 %	73.0 %
	Business Person	51	17.0 %	90.0 %
	Housewife	30	10.0 %	100.0 %
Education	Under Graduation Completed	87	29.0 %	29.0 %
	Graduation Completed	117	39.0 %	68.0 %
	Post-Graduation Completed	96	32.0 %	100.0 %
Age	20 years to less than 30 years	171	57.0 %	57.0 %
	30 years to less than 40 years	54	18.0 %	75.0 %
	40 years to less than 50 years	48	16.0 %	91.0 %
	50 years to less than 60 years	27	9.0 %	100.0 %

3.2 Item measurement

Based on an analysis of earlier research on atmospheric and purchase decisions, a questionnaire was created to investigate these variables. The original survey instrument was developed in English and was translated

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into the local language (Bangla). The questionnaire consists of two sections. Respondents were asked to provide demographic data in the first section, including their gender, age, employment position, number of visits, and source of income.

Using a 5-point Likert scale, where 1 signifies strong disagreement and 5 signifies strong agreement, the second component, which has 25 items, assesses atmospheric impacts and purchase decision. The independent variables "Music" from Santos & Freire (2013), "Aroma," based on Çolak & Çengel (2023); " Lighting and color," assessed according to Khan et al. (2022); and "Texture and feel," as measured by Pramudya & Seo (2019). Five items from Mulyani et al. (2019) are used to rate the dependent variable, purchase decision. All the scales were modified to fit the study's needs, ensuring they were clear and valid for the participants who completed them.

3.3 Data Analysis and Results

To test the hypothesized relationships, this study adopts Partial Least Squares Structural Equation Modeling (PLS-SEM) and employs SmartPLS 3.2.3 software (Hair et al., 2014). For suitability, PLS-SEM was chosen in prediction-oriented research, particularly for models involving the assessment of causal relationships across multiple constructs.

Using the "two-stage approach," the proposed model was evaluated as recommended by Hair et al. (2014). The outer model in the first stage (measurement model) was estimated to assess the reliability and validity of the items. This includes evaluating the reliability of indicators, internal consistency, convergent validity, and discriminant validity. The second stage involved estimating the path coefficients to examine the structural relationships between the constructs, providing insights into the significance and strength of the hypothesized paths.

3.4 The Assessment of Measurement Model

Factor loadings on constructs were used to verify the adequacy of the measures and the reliability of the items in the measurement model. All items had factor loadings above 0.7 (Table 2), confirming reliability. All constructs had Cronbach's alpha values above 0.7, while composite reliability (CR) values exceeded 0.8, indicating good internal consistency.

Table 2: Psychometric properties of the construct

Constructs	Items	Item Loading	Cronbach alpha	CR	AVE
Aroma (AR)	AR_01	0.917	0.905	0.906	0.840
	AR_02	0.912			
	AR_03	0.920			
Light and Color (LC)	LC_01	0.877	0.931	0.932	0.746
	LC_02	0.869			
	LC_03	0.865			
	LC_04	0.890			
	LC_05	0.875			
	LC_06	0.802			
Music (MU)	MU_01	0.899	0.951	0.951	0.835
	MU_02	0.914			
	MU_03	0.924			
	MU_04	0.924			
	MU_05	0.907			
Texture and Feel (TF)	TF_01	0.852	0.930	0.933	0.740
	TF_02	0.885			
	TF_03	0.889			
	TF_04	0.835			
	TF_05	0.821			
	TF_06	0.878			
Purchase Decision (PD)	PD_01	0.816	0.889	0.894	0.694
	PD_02	0.899			
	PD_03	0.877			
	PD_04	0.766			
	PD_05	0.801			

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Each construct's composite reliability index (CRI) exceeded 0.7 (Hair et al., 2014), confirming their reliability. All items had strong factor loadings and Average Variance Extracted (AVE) values above 0.5, confirming convergence.

Discriminant validity shows how a construct differs. The three most frequently used discriminant validity criteria are HTMT, cross-loading, and the Fornell-Larcker criterion. The Fornell-Larcker criteria and HTMT ratios are the most reliable structural equation modelling discriminant validity assessments. To achieve the Fornell–Larcker criterion, diagonal values must surpass columns and rows. By showing that all diagonal values are greater than the column and row values, Table 3 demonstrates data convergence. HTMT is the second metric of discriminant validity. The HTMT threshold is 0.85 or lower. Table 5 shows that all HTMT levels are below the threshold. The values of both measures verified the convergent validity of the initial data gathering scales.

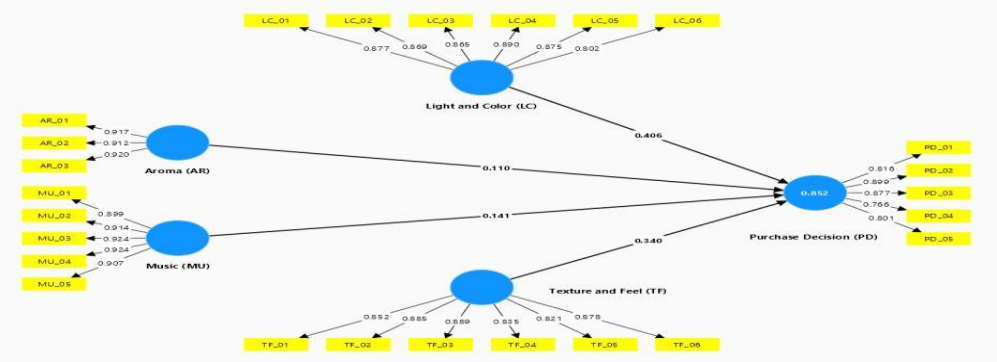

Fig.1: The Measurement Model

Table 3: Discriminant Validity (Fornell-Larcker Criterion)

Cues	(AR)	(LC)	(MU)	(TF)	(PD)
Aroma (AR)	0.916				
Light and Color (LC)	0.679	0.863			
Music (MU)	0.836	0.777	0.914		
Texture and Feel (TF)	0.781	0.855	0.860	0.876	
Purchase Decision (PD)	0.817	0.780	0.904	0.821	0.860

Table 4: HTMT Ratios Heterotrait-monotrait ratio (HTMT) - Matrix

Cues	(AR)	(LC)	(MU)	(TF)	(PD)
Aroma (AR)					
Light and Color (LC)	0.740				
Music (MU)	0.801	0.825			
Texture and Feel (TF)	0.861	0.844	0.832		
Purchase Decision (PD)	0.889	0.837	0.875	0.857	

3.5 The Assessment of Structural Model

3.5.1 Model Fitness

Several tests, including the SRMR, Chi-square, NFI, and others, are available in the PLS-SEM for examining model fitness. However, most researchers advise using the SRMR as the primary indicator of

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model fitness in the PLS-SEM. When using PLS-SEM, a result of less than 0.08 is typically regarded as a satisfactory value. Table 5 demonstrates that the model is fit because the SRMR value is 0.064, which is less than the 0.08 threshold value.

Table 5: Model Fitness

	Saturated model	Estimated model
SRMR	0.064	0.064
d_ULS	1.350	1.350
d_G	1.413	1.413
Chi-square	2107.110	2107.110
NFI	0.771	0.771

3.5.2 Hypothesis Testing

According to the theories, Table 6 of the study presents the levels of significance for the relationships examined. Four direct ties make it up. To determine the statistical significance of these links, beta values, t-statistics, and p-values are utilized. For p-values, the number must be 0.05 or less, while for t-statistics, it must be 1.96 or more. The mathematical results of hypothesis testing are shown in Table 6.

The beta values indicate the strength of the relationship between each pair. There is a strong link between music (MU) and purchase decisions (PD), as shown by the beta value of 0.140, the t-statistic of 2.303, and the p-value of 0.021. This supports the null hypothesis (H1).

To support H2, Aroma (AR) also has a positive effect on Purchase Decision (PD), as indicated by the beta value of 0.111, the t-statistic of 2.091, and the p-value of 0.037. There is a strong positive link between Light and Color (LC) and Purchase Decision (PD). This is shown by a beta value of 0.404, a t-statistic of 11.054, and a p-value of 0.000. This strongly supports H3. Finally, Texture and Feel (TF) has a significant effect on Purchase Decision (PD), as indicated by a beta value of 0.341, a t-statistic of 4.888, and a p-value of 0.000, which supports H4. In Figures 2 and 3, the framework that was employed is illustrated, along with the t-statistics and beta values for each hypothesis. Overall, the study demonstrates that these sensory factors have a positive and significant impact on people's purchasing decisions.

Table 6: Hypothesis Testing

Hypothesis	Beta	T statistics (|O/STDEV|)	P values
H1:Music (MU) -> Purchase Decision (PD)	0.140	2.303	0.021
H2:Aroma (AR) -> Purchase Decision (PD)	0.111	2.091	0.037
H3:Light and Color (LC) -> Purchase Decision (PD)	0.404	11.054	0.000
H4:Texture and Feel (TF) -> Purchase Decision (PD)	0.341	4.888	0.000

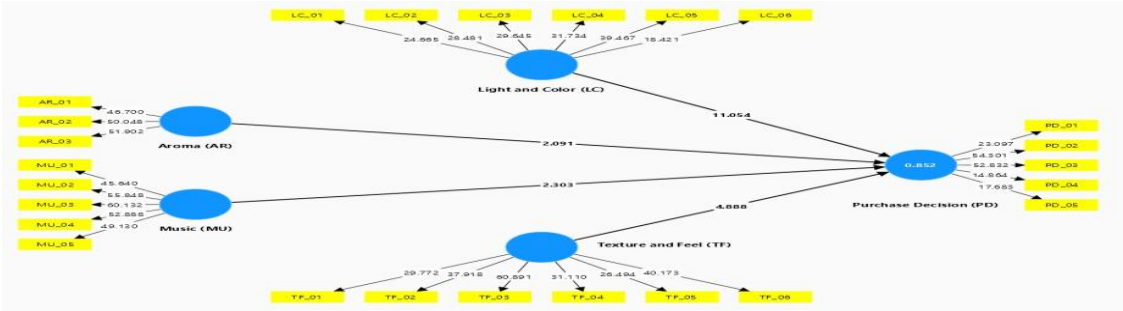

Fig. 2: Hypothesis Testing (t-statistics)

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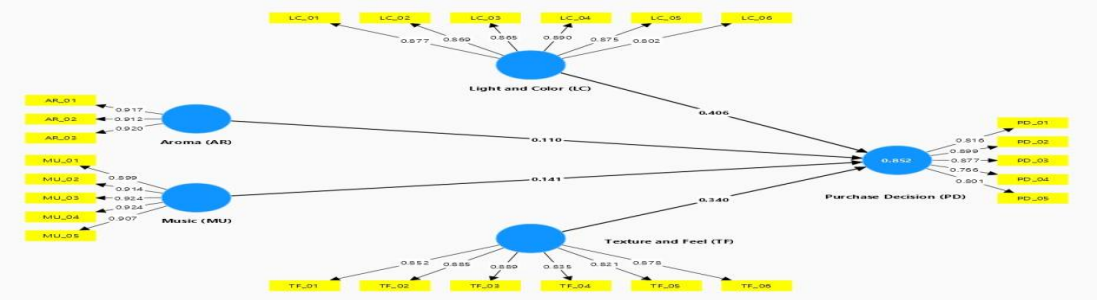

Fig. 3: Hypothesis Testing (beta statistics)

3.5.3 Coefficient of Determination

The coefficient of determination explains the cumulative influence of the variables on the dependent variable. With an R-squared value of 0.852 in Table 7, the independent variables in the model account for 85.2% of the variation in sustainability within the given scenario.

Table 7: Coefficient of Determination

	R-square	R-square adjusted
Purchase Decision (PD)	0.852	0.850

4. Discussion and Managerial Implications

The goal of this study was (1) to conceptualize the atmosphere of the outlet of the marketplace and (2) to measure the impact of store atmosphere on the purchase decision of the consumer. The results from this empirical effort, based on surveys of customers from different marketplaces in Bangladesh, provide some notable findings. After developing the construct of atmospheric conditions at the outlets, the researcher then developed items to assess the impact of these conditions on purchase decisions. However, conceptualizing the concept of atmosphere and measuring its effect on purchase decisions has recently become an interesting issue for academics and professionals.

According to the author's hypothesis, store ambient variables —such as color, lighting, scent, feel, texture, and music —have a significant influence on customers' purchasing decisions. This theory is supported by Mattila and Wirtz's (2001) research, which demonstrates that the congruence between music and fragrance can significantly influence customer evaluations and purchase behavior. Similarly, these findings support the work of Morrin and Chebat (2005), which highlights the idea that a pleasing combination of stimuli, such as music and scent, can influence consumer behavior.

Furthermore, consistent with prior research (Crowley, 1993; Bellizi et al., 1992; Gajanayake et al., 2011), consumers tended to respond more favorably to cool store interiors. Banat and Wandebori (2012) highlighted the importance of lighting, while the current study's findings indicate that colors can stimulate interest and enhance the desire to purchase, aligning with Elliot's (2015) conclusions. This finding is in direct opposition to the research conducted by Bhol (2012) and Lam (2001), which also emphasized the influence of temperature on intent to purchase.

Similarly, consumers' perceptions of value and ownership are influenced by imagery that encourages sensory or tactile experiences. In addition, Peck and Shu (2009) demonstrate that after interacting with an object, individuals are more likely to imagine taking it home, thereby strengthening their connection to it. Finally, this study's findings align with those of Altamore et al. (2017), who found that aroma, appearance, and flavor have a substantial impact on customers' purchase decisions.

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5. Conclusion

Through this study, several helpful contributions can be made. It offers insightful information to professionals who are trying to define and use the idea of atmosphere in outlet settings. To increase sales, marketers should prioritize establishing the right atmosphere in their establishments. To create a more engaging shopping experience, specific attention should be paid to factors like lighting and color, aroma, texture and feel, and music.

6. Limitations and Directions for Future Research

Although this study yields intriguing results, it has several drawbacks. Firstly, the study only examined four aspects of the atmosphere. Businesses continually adapt their strategies to meet consumer needs in a rapidly changing environment; therefore, incorporating additional atmospheric dimensions employed by various businesses in diverse circumstances may yield more comprehensive insights. Second, the study's limited participant pool restricts the extent to which the findings can be applied. Future research with a larger sample size may yield more reliable results. Thirdly, the primary objective of this study was to quantify the impact of atmospheric elements on financial performance by analyzing buying behavior and conceptualizing and operationalizing it from a marketing perspective.

In further studies, it is recommended that the effects of certain atmospheric elements be investigated in greater depth, with consideration given to the various outlet environments as well as the demographics of the customers. More importantly, a longitudinal study may help evaluate how customers' perceptions of the atmosphere evolve.

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