

# Investigation of Atmospheric Variables and Consumer Behavior in the Presence of Sensory Marketing

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**Abstract:** *This essay centers on sensory marketing, a strategic approach aimed at exerting influence on consumer behavior and emotions. The buyer desires a profound and unique experience associated with his purchases, rather than simply acquiring a product or service. Consistent with previous research, our survey study demonstrates how diners evaluated the atmosphere of restaurants by considering their cognitive and emotional reactions. The combination of environmental stimulus with the four senses has a synergistic effect, leading to an internal cognitive and/or emotional response in customer-facing employees. These senses include sound, sight, touch, and scent. Based on the results of our study, this research highlights the importance of comprehending the impact of sensory marketing on the customer's emotional (experiencing increased pleasure) and cognitive (perceiving higher quality) reactions.*

**Keywords:** clientele, dining establishments, advertising

## I. INTRODUCTION

Businesses are compelled to allocate funds on sensory marketing because to the prevailing economic conditions. The significance of human senses has historically been overlooked, or at best considered as a domain separate from marketing. Every individual perceives their environment by utilizing all five of their senses. The efficacy of a firm's marketing plan and the personalized nature of a customer's sensory experience can be enhanced by having knowledge about the individual's sensory faculties.

In order to distinguish themselves in the current or target market, organizations primarily employ sensory marketing methods. Historically, organizations have mostly relied on visual elements such as color schemes, graphics, and logos to conduct their operations (Dosquet 2015). Consequently, sensory marketing has been utilized to offer the customer a unique and memorable encounter. According to Daucé and Rieunier (2002), retail atmospherics is the deliberate use of elements in the point-of-sale environment to elicit emotional, cognitive, and behavioral reactions from consumers, with the aim of motivating them to make purchases. The authors identified several components that contribute to the atmosphere of selling points. These include tactile elements such as materials and temperature, gustatory elements such as gourmand scents and product smells, visual elements such as colors, lights, and design, auditory elements such as background music and ambient sounds, and social elements such as the category of customers and sellers. Sensory marketing is a component of marketing that aims to connect with customers by targeting their subconscious mind, including their feelings, memories, perception, and emotions, which are personal aspects of each individual. The objective of sensory marketing is to leverage customers' emotions and behavior as a strategic marketing strategy. Individuals exhibit varying responses to environmental signals at the moment of sale, hence influencing their unique perceptions.

Companies face significant challenges in creating a consistent and cohesive experience for all their customers in terms of tone and touch. Nevertheless, several studies, such as those conducted by Schiffman et al. (1995) and Villemure et al. (2003), have shown the positive impact of sensory stimuli on mood and purchasing behavior. These studies have demonstrated, through experiments, that a pleasant scent can enhance mood and alleviate certain symptoms, such as physical discomfort. The role of the customer in business and marketing has transformed over time, progressing from a largely indifferent individual to an engaged participant in the company process, possessing thoughts, emotions, and a

sense of connection. He possesses keen perception and experiences emotions. The distinction between perception and experience is the fundamental factor that empowers sensory marketing. The correlation between perception and mood can be utilized to illustrate how consumers' emotions and cognitive processes are impacted by their mood.

The consumer is provided with a customized experience through sensory marketing, in addition to a service. The consumer's sensory faculties, encompassing their tactile, visual, auditory, olfactory, and gustatory faculties, are subsequently leveraged as a marketing tactic through the implementation of sensory marketing (Rieunier 2006). The gustatory and tactile senses, which are integral to traditional marketing, have emerged more recently compared to the olfactory sense (smell) and the auditory sense (sound). Sensory marketing originated with the use of aroma and sound into the marketing process. Sensory marketing aims to leverage the five human senses (sight, hearing, taste, touch, and smell) to influence consumers to make purchases that align with their expectations.

The first inquiry regarding client behavior is why this business sells a greater quantity of same items compared to another business with similar merchandise. The rationale for the shop's appeal to clients lies in the experiential offerings it provides. Consumers are inclined to compensate for a delightful encounter. Sensory marketing, as defined by Rieunier and Jallais (2013), refers to the use of ambient variables in close proximity to the selling point, such as music, scent, color, touch, and taste sensations, to promote a favorable psychological reaction in the buyer towards the act of making a purchase. Environmental psychology, as defined by Moch and Moser (1997), is the study of how individuals or groups develop attitudes, perceptions, representations, and behaviors in relation to their physical and social surroundings. Experiments, such as those inspired by Maslow's theory of the hierarchy of needs, have shown that an individual's environment or atmosphere can influence their emotional, cognitive, and behavioral responses. The study problem might be formulated as follows: What is the impact of sensory marketing, specifically through the ambiance at the point of sale, on consumer response? Due to a scarcity of comprehensive literature on the systematic documentation of the impact of sensory marketing on customer response, there is a dearth of generalized material available. The essay aims to examine the impact of sensory marketing on consumer behavior through its influence on the sales environment.

### **Theoretical framework**

Sensory marketing aims to influence a customer's behavior towards a specific product, service, or selling point by appealing to their senses and enhancing their overall well-being (Daucé, Rieunier 2002). In today's market, individuals that recognize the significance of sensory perception in marketing and business as a whole have a distinct advantage. Implementing sensory marketing as a strategy offers firms the opportunity to enhance the profitability of their products. The food industry has already made some use of sensory marketing, with many restaurants, bars, and bakeries trying to enhance and stimulate specific senses by artificial means, such as utilizing synthetic scents to create the illusion of freshly baked bread. Lindström (2005) argues that considering an individual's sensory experiences is crucial for creating a favorable shopping experience, stimulating their imagination, enhancing product development, and fostering customer loyalty. Delivering a customized stimulation that is relevant to the brand's specific target audience.

In addition, Lindström (2010) contends that brands that utilize several senses will achieve more success compared to those that focus on only a limited number. An essential aspect of a brand's advertising can be a distinct feature, such as a specific color (like Coca-Cola's red or Pepsi's blue), a recognizable logo, a memorable catchphrase, or other similar elements. Alternatively, it can also be a characteristic inherent to the product itself, such as the unique design of Lamborghini automobiles, the distinctive perfume of fragrances, or the unmistakable flavor of products like Nutella.

Marketers now recognize the significance of the senses in both the marketing and purchase processes of clients. The impact of a brand's message and the subsequent internal reaction are heightened when the brand appeals to a greater number of senses, whether positively or negatively. Several academics, such as Daucé and Rieunier (2002) and Krishna (2012), have focused on a specific aspect of sensory marketing, which is the physical setting of the retail location, based on the studies conducted by Kotler (1973).

Based on the theoretical analysis, we may deduce that the "atmospheric factors," as defined by Daucé and Rieunier (2002), are responsible for people's perception and experience of the point of purchase environment. An effective method to define the field of sensory marketing is through the correlation between perception and sensation. Upon receiving sensory input, the subject's brain will generate an internal response that is influenced by the manner and

context in which the inputs are received. The internal response refers to the emotional and cognitive reactions that determine whether an individual's attitude towards the brand or product is positive or unfavorable. This posture is essential as it decides whether the answer would be favorable or unfavorable.

Indeed, the atmospheric components have a direct correlation with Daucé and Rieunier's (2002) investigation on the ambiance of the selling point. The environmental variables were defined using scent, vision, sound, and touch, and all of these factors were integrated into the sensory marketing process. Yoo, Park, and MacInnis (1998) defined the environment as a combination of auditory, olfactory, and visual influences. These atmospheric conditions excite the sense organs. Through stimulation, the brain receives transmissions of sensations (the experiences perceived through sensory organs) and perceptions (the brain's processing and interpretation of sensations), which are then analyzed to generate an internal response in individuals. According to Krishna (2012), the internal response consists of two components: the cognitive reaction, which can impact the perception of quality, and the emotional reaction, which can influence consumer satisfaction. Sensory marketing, as described by Krishna (2012), refers to the strategic use of sensory stimuli to engage customers' senses and impact their perception, judgement, and behavior (citation needed) (Krishna 2012: 333). Atmospheric conditions actually influence the internal responses of customers. These cues have the potential to impact individuals' impression of the quality and their overall judgment, behavior, attitude, and even the experience they may have during the point of sale. Several hypotheses were formulated based on theories related to sensory marketing, specifically focusing on the influence of the sales environment on consumers' internal reactions. These hypotheses were developed by considering previous studies, conceptual frameworks, and the research conducted by Mehrabian and Russell in 1974, Bitner in 1992, Yalch and Spangenberg in 2000, Lindström in 2005, and Krishna in 2012.

Sensory marketing primarily influences customer behavior, namely their level of preparedness to make a purchase. Daucé and Rieunier (2002) argue that the atmosphere in which a sale takes place has the potential to significantly influence clients' sentiments. Several studies undertaken by researchers such as Hui, Dube, and Chebat (1997) have demonstrated that environmental variables, including music, can have a positive impact on mood and behavior. Typically, sounds and music have the ability to evoke positive emotions and enhance memory retention in individuals, hence potentially increasing their inclination to make additional purchases or prolong their stay at the point of sale. Due to its ability to evoke strong emotional responses, the smell exerts a significant impact on the consumers' recollections, whether positive or negative. (Lindström, 2005) The researchers discuss the concept of sensory memory. The aroma may evoke a longing from the sensory recall or induce a soothing state of mind. Previous research indicates that researchers in the field of sensory marketing universally agree that the environment, as well as sensory marketing as a whole, has an impact on customers' behavior and views. In his study, Krishna (2012) proposed that when a consumer is influenced by their surroundings, it leads to two distinct internal responses: a cognitive response and an emotional response.

The cognitive response primarily concerns the consumer's perception of quality, whereas the emotional response can be described as the pleasure and contentment that the customer feels through the stimulation of their sensory organs. The brand often seeks to enhance the customer's satisfaction, well-being, and excitement by managing the environment at the point of sale. According to Bitner's (1992) paradigm, the emotional reactivity of individuals is influenced by two factors: their mood and attitude. Bitner (1992) defines the environment as a compilation of external stimuli, whether they be real or intangible, that have an impact on individuals' perception and behavior. These stimuli converge to create a global climate that would elicit a beneficial response from clients. Emotional state, as described by Mehrabian and Russell (1974), refers to an individual's reaction to their environment. The PAD idea, developed by Mehrabian and Russell in 1974, is a framework used to describe and assess emotional states based on the surrounding climate and surroundings. It serves as a reference for understanding the emotional responses of both employees and consumers. Several studies have investigated the impact of a specific dimension on customers' emotional reactions. Lemoine (2002) illustrated the impact of light on the customer's level of enthusiasm and pleasure during the time of purchase. Unfavorable lighting causes customers to feel more active and anxious, while pleasant lighting significantly affects an individual's degree of satisfaction. Multiple studies, including those centered around ambient music, have demonstrated that the various components of an environment can influence individuals' emotional states. The research findings indicate that a business can influence a customer's mood by playing a diverse selection of lively and dynamic music.

The results indicated that the customer's level of satisfaction could be influenced by the manner in which the music is handled. When clients are able to appreciate the music being played, their mood enhances. Furthermore, the diffusion of the surrounding scent impacts the level of satisfaction that buyers experience at the point of sale. Certain pleasant fragrances stimulate a positive emotional response, whereas exposure to an unpleasant smell can lead to dissatisfaction and a decrease in mood. Lemoine (2002) has shown that the social and design aspects of the environment influence the customer's pleasure and their level of excitement at the point of sale. This was achieved by using a comprehensive approach to creating the mood. Research in the fields of psychology and sensory marketing has shown that individuals have physiological responses to environmental stimuli. These physiological responses may include elevated heart rate, increased skin sweat, or heightened muscular tension. Lemoine's (2002) research suggests that the arrangement of the business, music, and lighting might collectively enhance a customer's satisfaction and enjoyment. The correlation between the music and the staff's helpfulness will have an impact on the customer's ability to experience tranquility, relaxation, and increased energy levels.

**Methodology:**

The objective of the essay was to analyze the impact of sensory marketing on consumer behavior through its influence on the sales environment. The empirical inquiry in sensory marketing was built upon the methodological foundation of several scientific investigations, including those conducted by Kareklas et al. (2014), Labrecque et al. (2013), Krishna (2012), Krishna and Elder (2009), Balaji et al. (2011), Hulten (2011), and Lindstrom (2010).

Research approaches often fall into two distinct categories: quantitative or qualitative. These two words are commonly employed in business studies to differentiate between the methods used to collect data and the procedures used to analyze it (Saunders et al., 2003). According to Saunders et al. (2003), the qualitative data are presented in a non-quantified and non-numerical manner. The main objective is to collect data by means of discussions and observations regarding the matter under investigation. A qualitative methodology facilitates the assessment of the viewpoints of a limited number of individuals (such as consumers), businesses, products, etc. It enables the collection of comprehensive data by analyzing emotions, motivations, ideas, purchasing behaviors, and other relevant factors. The main objective of quantitative techniques is to establish the causal relationship, typically between two or more variables. The qualitative technique involves analyzing statistical data to uncover consistent trends or repeating patterns. The objective is to develop and utilize mathematical models, theories, and/or hypotheses related to events, as well as to standardize the data by collecting numerical information (Saunders et al. 2003).

The secondary data was analysed using several statistical techniques. Frequency counts were employed to describe and discuss the characteristics of the sample. The Chi-Square test, a nonparametric statistical technique, was used to examine the relationship between the variables. Symmetric measures, specifically Phi coefficients, were utilized to assess the strength of these relationships.

**Findings:**

Based on the review of literature conducted by Kotler (1973), Daucé and Rieunier (2002), and Krishna (2012), it has been found that the environment has a significant influence on the emotional response of customers, which in turn affects their attitude and behavior.

Additional investigation has been conducted to determine if there is a correlation between the participants' initial sensitivity upon entering a restaurant and their level of satisfaction with the atmosphere. There is no relationship between the percentage of respondents who derive enjoyment from the ambiance and the specific characteristics they are sensitive to while entering a restaurant.

The study suggests that there is a correlation between the percentage of respondents who experience enjoyment from the atmosphere and the elements they are sensitive to while entering a restaurant. Put simply, the enjoyment derived from the surroundings is contingent upon its ability to captivate individuals as they approach a restaurant, and this enjoyment is the driving force behind their decision to visit the establishment.

The analysis of secondary data allows researchers to ascertain the statistical significance of the relationship between the variables "primary sensitive factor" and "pleasure generated by atmosphere. There is a significant association between respondents' key factor selections and their estimate of the atmosphere's propensity to induce positive emotions. The

inference that can be drawn is that there exists a correlation between the ambiance of the restaurant, which attracts guests, and their internal state of enjoyment. Consequently, there is a significant yet moderately robust correlation between the main factor that the participants are sensitive to and the variable "pleasure provided by the atmosphere."

When the consumer is unable to determine the true value of the things or rely on their past experiences with the brand or product, they make inferences based on the external qualities of the product, which are related to the environment. Put simply, the purchaser evaluates the goods, such as its quality, by utilizing the atmospheric data.

A Chi-Square test was performed to determine if there was a relationship between the variable "primary sensitive factor" and the observation that the environment affects the perception of something. The variable "atmosphere perception quality" has been measured for the purpose of this test.

## II. CONCLUSION

This study aims to build upon and duplicate previous research conducted on sensory marketing. This study, like previous research, illustrates how customers' cognitive and emotional reactions to the atmosphere of a restaurant impact their actions. Consumer behavior is influenced by rational and emotional factors. The combination and overlay of the five senses generate the internal response (cognitive and/or emotional) of customers to environmental inputs. Recent research have shown that individuals often make rapid decisions based on their past experiences and recollections. However, for a significant period of time, marketers and psychologists held the belief that people made judgments and decisions in a logical manner. The sensory organs detect information from the surrounding environment, and both the sense of touch and perception are activated by air stimuli (sensations). Subsequently, these sensations are transmitted from the nervous system to the brain, where they are scrutinized, interpreted, and transformed into perceptions. Consequently, the brain generates an internal response based on these perceptions and experiences. Internal response refers to the manner in which individuals react, either emotionally or cognitively, to stimuli from their surroundings.

This study provides a theoretical addition by placing a greater emphasis on the intricacies of sensory marketing. The investigation findings indicate that environmental cues exert a direct influence on individuals' emotions, behaviors, and cognitive processes. Research has demonstrated a correlation between the customer's perception of quality and the level of enjoyment or sensation they may derive. To effectively respond to evolving needs, trends, and consumer behavior and exert a stronger impact on the customer experience, it is advisable to choose, integrate, and enhance different sensory stimuli. The study found that the emotional response triggers the pleasure experienced by customers during their engagement with sensory marketing, while the cognitive response influences the perceived quality of the point of sale (the process of drawing conclusions). It has been found that environmental factors such as visual, auditory, and olfactory stimuli activate consumers' sensory organs.

Undoubtedly, there are further areas to investigate within the realm of sensory marketing. Gaining insight into the correlation between the senses, the environment, the brain, and behavior can greatly advantage organizations and marketers as they anticipate the rise in companies utilizing digital marketing. Furthermore, when technologies like as augmented reality, virtual helmets, and touch displays in stores grow more widespread, it is reasonable to consider doing a study that demonstrates a correlation between these novel advancements and human sensory perception. More precisely, this pertains to utilizing digital technology to offer clients a unique and immersive encounter during the purchase process, but also maintaining the influence that sensory stimuli can have on customer behavior. Examples include implementing virtual tables in restaurants or incorporating virtual noises and scents.

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