

IMPACT OF SENSORY CUES ON CUSTOMER'S BUYING BEHAVIOR IN MULTI-CUISINE RESTAURANTS AND CAFÉS IN DELHI/NCR

Neha

Research Scholar, Bhagat Phool Singh Mahila Vishwavidyalaya, Sonipat, Haryana, India

Email ID: nehagulia30@gmail.com

Dr. Meenakshi Katyal

Assistant Professor, Bhagat Phool Singh Mahila Vishwavidyalaya, Sonipat, Haryana, India

ABSTRACT

In today's competitive food and beverage segment, businesses are constantly seeking innovative strategies to differentiate themselves from competitors. A key trend in this segment is sensory marketing, which engages all five senses—sound, smell, touch, sight, and taste—to influence customer's emotions, perceptions, and purchasing decisions. This approach has the potential to form a deep connection with customers, influencing their hearts, minds, and wallets. The goal of this study is to look into how sensory cues influence customer buying behavior in restaurants and cafes in the Delhi/NCR area. To achieve this aim, a quantitative approach was employed; involving a sample of 500 customers who frequently visit restaurants and cafes in the region. Convenience sampling was used to select participants. Data was collected through a well-structured questionnaire and analyzed using descriptive statistics, correlation, and regression techniques with the help of SPSS. It was found the sensory cues significantly influence the customer behavior and their decision making and these cues also contribute in creation of holistic customer experience in food and beverage segment.

Keywords: Food & Beverage segment, Sensory Marketing, Customer Buying Behavior, Sensory Cues, Holistic customer experience.

INTRODUCTION

The hospitality sector in India is a dynamic and multifaceted sector with a rich and fascinating history. This sector, deeply rooted in India's cultural heritage, has evolved significantly over the centuries, reflecting the country's diverse traditions and historical legacy. Ancient Indian hospitality was marked by a profound reverence for guests, often considered divine, and this tradition was upheld through various dynasties, including the Mauryas, Guptas, and Mughals, who established elaborate rest houses and inns along major trade routes to accommodate travelers. The British colonial era introduced a new dimension to Indian hospitality with the construction of grand hotels like the Taj Mahal Palace in Mumbai and the Imperial in Delhi. These establishments set new standards in luxury and service, contributing to the development of India's hospitality infrastructure. Post-independence, the sector saw significant transformation with the emergence of homegrown hotel chains, culinary innovations, and extensive tourism infrastructure development. Today, the hospitality sector in India is diverse

and rapidly evolving, comprising a wide array of services and businesses that cater to travelers seeking accommodation, dining, entertainment, and memorable experiences. The sector is broadly categorized into three major segments: accommodation, tourism and travel, and food and beverages.

In the current scenario, sensory marketing is pivotal in driving the growth of the Food and Beverage (F&B) segment. This approach enhances dining experiences and customer engagement by leveraging human senses to create memorable brand experiences. Post-COVID-19, there's a heightened emphasis on safety and hygiene, with restaurants using QR code-based menus, pleasant aromas, and curated music to reassure and engage customers. Chef-led experiences and multisensory strategies elevate dining, build trust, and encourage repeat visits. By engaging multiple senses—sight, sound, smell, taste, and touch—F&B establishments create unique connections with diners, setting themselves apart from competitors.

Review of Literature

Sensory marketing, first introduced by Schmitt in 1999, focuses on evoking consumer emotions by engaging the five human senses—sight, smell, sound, taste, and touch—rather than relying on rational judgments. Krishna expanded this concept in 2012, emphasizing its influence on emotions, perceptions, judgments, and behavior. Lindstrom (2006) highlighted that sensory stimuli engage all five senses, with sight being the most influential, shaping initial impressions of products and brands (Ebster, 2011). Research often focuses on specific senses, such as sight and smell in fashion (Wade Clarke et al., 2012), but comprehensive studies on all five senses in the food and beverage sector are limited. Studies like those by Helmefalk and Hultén (2017) show that sensory factors significantly impact retail customer emotions. In the marketplace, sensory engagement enriches product evaluation and fulfillment of needs and desires. Elements like color, lighting, music, and scents within store environments positively affect customer reactions, as shown by Spangenberg et al. (1996) and Turley and Milliman (2000). Sensory marketing aims to optimize these stimuli to enhance the overall shopping experience.

Scent

Several studies highlight the significant role of scent in influencing consumer behavior, particularly in food-related contexts. Kivioja (2017) notes that natural or synthetic scents impact consumer shopping motivation, emotional responses, and purchasing decisions. Mitchell, Kahn, and Knasko (1995) explore how variety-seeking behavior is influenced by scents. Herrmann et al. (2013) found that simple, pleasant fragrances increase store spending due to easier processing by consumers. Studies by Spangenberg et al. (2006) show that pleasant ambient scents positively influence product and store evaluations and consumer spending, especially under congruent conditions. Fiore and Kimle (1997) define scent pleasantness as a positively assessed stimulation of the olfactory senses, which influences mood and mild affective states. Chebat and Michon (2003) found that positive mood isn't solely attributed to ambient scents and that pleasure doesn't solely mediate the effects of environmental cues on perceptions and behaviors. Additionally, Bone and Ellen (1999) and Mitchell, Kahn, and Knasko (1995) found that scents prolong the time individuals spend on decision-making tasks.

These studies collectively underscore the importance of scent in shaping consumer behavior, especially in food-related environments.

Sound

Several studies highlight the significant role of auditory cues, particularly music, in influencing consumer behavior in food-related contexts. Research by Demoulin (2011), Dube and Morin (2001), and Jacob et al. (2009) revealed how these musical attributes affect factors like movement pace, time spent in stores, and purchasing tendencies. Dube and Morin's 2001 field experiments demonstrated that pleasant music positively shapes attitudes toward the shopping environment and store personnel, mediating the relationship between pleasant music and overall store evaluation. Studies by Smith and Curnow (1966) and Milliman (1982) highlighted that customers spend less time with loud music and more with slower music, affecting sales volume and customer satisfaction. Soh et al. (2015) noted that slow music increases the duration of stay, leading to more time spent in stores compared to louder music. Yalch (1990) found that familiar music leads to less time spent, while unfamiliar music results in more time spent in stores. Broekemier et al. (2008) showed that customers are more likely to visit new service locations playing music they like. North and Hargreaves (1996) linked music preference with the likelihood of returning to an environment. Specific music types also influence food consumption and spending. Lindmman et al. (1987) linked rock music to increased alcohol consumption, while Hussain et al. (2020) found classical music reduces savory food consumption. North et al. (2003) noted that classical or jazz music leads to higher spending in restaurants compared to pop music or no music. Tempo also affects food consumption rates and spending.

Sight

According to a well-known Nigerian proverb, "the eyes will eat before the mouth," underscoring the pivotal role of our senses, especially sight, in experiencing food. Vision, with its ability to capture attention, foster awareness, and shape lasting impressions, is crucial in distinguishing and identifying products. Visual elements like colors and shapes are often the first cues we use to recognize products, playing a vital role in establishing robust brand identities within stores. Messaris (1997) emphasizes that visual stimuli not only capture attention but also evoke emotional responses towards products, significantly affecting consumer behavior. The impact of color on consumer perception is profound, as demonstrated by Song and Yang (2022), who found that the color of restaurant signage influences how consumers perceive the healthiness of the food and their purchase intentions. Similarly, lighting plays a significant role in shaping the retail environment. Rieunier (2002) explained that natural light or gently diffused artificial lighting enhances well-being and prolongs time spent in retail settings, while high-intensity artificial lighting stimulates dynamism and energy. Elements such as color, light, and theme transcend the boundaries between goods and services, enhancing the overall sensory experience. Visual expressions, including graphics, exterior design, and interior aesthetics, play a crucial role in creating a compelling brand image and fostering brand awareness (Hulten et al., 2009). Research by Jang et al. (2018), Tilburg et al. (2015), and Vieira (2010) highlights the importance of visual cues in retail environments. These cues, ranging from basic elements like color and lighting to more intricate aspects like aesthetics and form,

significantly impact consumer cognition, emotions, and behaviors. In food-related contexts, visual aspects such as color, shape, and texture are often the first to catch consumers' attention (Adebowale et al., 2020; Galmarini, 2020). Visually appealing food tends to enhance enjoyment and elevate the overall dining experience (Ammann et al., 2020; Baria et al., 2021; Foroni et al., 2016). Despite the importance of visual sensory aspects, limited attention has been directed towards them. Sensory evaluation involves the interplay of sight, hearing, smell, taste, and touch in assessing food products, with vision accounting for approximately 70% of all sensory input (Ray, 2021; Petit et al., 2021). In food consumption, the visual preview often precedes smell or taste, playing a crucial role in discerning freshness and quality (Cowan and Ketron, 2019; Martindale, 2021). Visual perception aids in making dietary decisions, enhances enjoyment, and helps recognize and remember food items. Therefore, it is crucial to acknowledge the significance of the visual sensory aspect in our perception of food

Taste

Taste, a primary sensory experience, involves a range of sensations such as sweetness, bitterness, sourness, saltiness, and savoriness. The tongue, our specialized sense organ, interprets these flavors and exerts a potent influence on our sensory experience. According to Hoch and Ha (1986), taste perception is highly malleable and subject to various external influences, including the physical attributes of a food item, its brand name, product information, and nutritional details. Even brand names can affect our taste perceptions. In the fast-food industry, the taste of food is crucial for customer retention, as noted by Epstein, Temple, Roemmich, and Bouton (2009). They introduce the concept of habituation, where the psychological and behavioral responses to a stimulus diminish with prolonged or repeated exposure. This phenomenon implies that the initial taste of food is often more satisfying than subsequent bites, leading to diminishing returns as we continue eating.

Pettigrew and Charters (2008) highlighted that tasting offers valuable insights into customer engagement with a product, revealing disparities between confident claims and genuine uncertainties, as well as distinctions between stated and actual preferences. Our chemical senses, encompassing taste and smell, are intricately connected, with smell significantly influencing our taste experiences. When we cannot detect the aroma of food, our perceived taste experience can diminish by as much as 80% (Lindstrom, 2005). In competitive food markets, leveraging good taste is an effective way to influence consumer behavior. Businesses utilizing palate marketing must craft compelling and persuasive taste experiences for consumers. Coca-Cola, for instance, has successfully forged a distinct identity by harnessing the power of taste (Jayakrishnan, 2013). Restaurant owners and marketing experts can attract more customers by using vivid names to describe food or meals. Studies have shown that this strategy can increase restaurant sales by 27% (Wansink et al., 2004). In the restaurant industry, Costa et al. (2012) concluded that sensory marketing, as a marketing experience, is a strategy designed to foster customer loyalty.

Touch

The sense of touch, represented through physical contact experienced via the skin, plays a significant role in brand building and consumer behavior. According to Kotler and Lindstrom (2005), touch accounts for a 25% share in the realm of brand building. Interacting with products

through touch positively influences customer behavior and shopping attitudes, as demonstrated by Peck and Wiggins (2006). For instance, they found that physical interaction with touch-screen electronic products encourages customers to engage more actively with these items. This principle extends to evaluating products where visual assessment alone is often inadequate, such as with computers or mobile phones, as noted by Hulten (2013). Research underscores the importance of touch from early human development, continuing into adulthood. Touch is the earliest sense to develop in the womb and the last to diminish with age (Krishna, 2010). This sense is crucial for communication and emotional bonding, evident when infants instinctively seek tactile contact for comfort. Peck and Childers (2003) assert that physically touching a product is the true test of its worthiness. This tangible interaction can significantly impact consumer perceptions and purchase decisions. However, applying this principle to fast food restaurants, with their service-oriented nature, raises questions about its effectiveness. Kotler and Armstrong (2010) emphasize the critical significance of physical and tangible evidence or cues in services, such as the restaurant environment and waitstaff demeanor. Touch also influences consumer behavior in restaurant settings. Crusco and Wetzel (1984) discovered that a waitress's physical touch on a customer in the United States often results in a larger tip. The Igbo story of people touching different parts of an elephant and describing it differently illustrates how perceptions are shaped by touch. Peck and Childers (2010) elaborate that touch can boost impulse buying and unplanned purchases. Consumers prefer store environments that allow them to physically examine products (Krishna and Morrin, 2008).

Research Gap

The present study aims to address research gaps identified in the literature on the food and beverage segment. Firstly, while it is widely acknowledged that sensory marketing influences customer behavior, there are only a few studies that have empirically verified its impact on customer behavior within the food and beverage segment of the hospitality sector. Secondly, most researchers focus on one or two senses at a time, rather than considering all five senses in their studies. This study examines the impact of all five senses on customer behavior and their decision-making and how these senses contribute in creation of holistic customer experience.

Objective of the study

The study has been conducted on the following objective:-

- To examine the impact of sensory cues on customer behavior & their decision making in Hospitality Sector.
- To explore the contribution of sensory cues in creation of holistic customer experience in Hospitality Sector.

Research Hypotheses

Ha1 There is a significant impact of sensory cues on customer behavior & their decision making in Hospitality Sector.

Ha2 There is a significant contribution of sensory cues in creation of Holistic customer experience in Hospitality Sector.

Research Methodology

A total of 650 questionnaires were distributed out of which 500 duly filed responses were considered for the study. A reliability test was also performed on the collected data. The study's hypotheses were tested using descriptive statistics, correlation and regression using SPSS. The current study uses a descriptive research design with data collected through convenience sampling.

Analysis of Data

Demographic Profile of Respondents

This section provides information about the respondents' demographic profiles. Participants were asked to report their gender, age, marital status, education level, occupation, monthly income, and location.

Table 1: Demographic profile of respondents

Variables	Demographics	Frequency	Percent
Age	20-30	221	44.2
	30-40	159	31.8
	40- 50	80	16
	50 and above	40	8
Gender	Male	261	52.2
	Female	239	47.8
Marital status	Married	265	52.7
	Unmarried	239	47.8
Employment status	Employed	312	62.4
	Unemployed	188	37.6

Source: Primary Survey

Interpretation: With a sample of 500 respondents, the age distribution is as follows: 20-30 (44.2%), 30-40 (13.8%), 40-50 (34%), and 50-60 (8%). Males constituted 52.2% and females 47.8% of the respondents. Regarding marital status, 52.7% were married and 46.7% unmarried. Employment status showed 62.4% employed and 37.6% unemployed.

Inferential Analysis

Reliability Analysis

Table 2: Reliability of items

Cronbach Alpha	No. of Items
.864	11

Source: Primary Survey

Interpretation: The data for the study should be reliable and good fit to test the hypothesis framed. The Cronbach alpha value considered the data reliable is 0.7 and above. The above table shows the value of .864, i.e. the data collected is said to be reliable.

Sensory cues and Customer’s behavior & their decision making

Table 3: Pearson correlation with all the senses (combined) and customer behaviour and their decision making

Dependent Variable	Independent Variable	Pearson Correlation	Sig. (2-tailed)
Consumer Behavior and Decision Making	Combined Sensory Cues	0.875	0.022

Source: Primary Survey

Interpretation: A Pearson correlation coefficient of 0.875 reveals a strong positive link between sensory cues and customer behavior, with a significant p-value of 0.022, indicating that sensory experiences notably influence decision-making in the hospitality sector.

Table 4: Model summary – Sensory Cues v/s Customer behaviour and their decision making

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Combined	.950 ^a	0.903	0.895	0.250
Predictors – (Constant), Smell, Sight, Sound, Touch, Feel				

Source: Primary Survey

Interpretation: Table shows the value of adjusted R square is 0.895. it suggest that 89.5 % of the variance in customer behaviour can be explained by independent variable sensory cues.

Table 5: Model fit using ANOVA – Combined sensory cues v/s Customer behaviour

Model	Sum of Squares	Degrees of Freedom	Mean Square	F Statistic
Regression	56.453	6	9.409	138.30
Residual	33.611	494	0.068	
Total	90.064	500		

Source: Primary Survey

Interpretation: The ANOVA results indicate that the model with combined sensory cues explains a substantial portion of the variability in customer behavior, with an F statistic of 138.30. This high F value suggests that the model is statistically significant and provides a good fit for the data. The regression explains 56.453 units of variability, while the residual variability is 33.611 units, indicating that the model accounts for a large proportion of the total variability (90.064 units). The Mean Square for Regression (9.409) is significantly larger than the Mean Square for Residual (0.068), further confirming the model's effectiveness in explaining customer behavior.

Table 6: Regression Coefficients: Sensory Cues v/s Customer buying behaviour

Coefficients								
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
(Constant)	.500	.182		4.812	.000			
Smell	.754	.201	.305	3.987	.002	.643	1.311	
Sight	.602	.156	.255	3.859	.060	.359	1.452	
Sound	.803	.255	.355	3.243	.004	.735	1.361	
Touch	.858	.301	.405	2.879	.040	.700	1.429	
Taste	.709	.183	.325	1.582	.0100	.801	1.249	

a. Dependent Variable: Impact on customer behavior & their decision making

Source: Primary Survey

Interpretation: The multiple regression analysis presented in the table aims to evaluate the impact of different sensory experiences—Smell, Sight, Sound, Touch, and Taste—on consumer behavior and decision-making in the hospitality industry. Each predictor is examined in terms of its unstandardized and standardized coefficients, t-values, significance values, and collinearity statistics. The constant term in the model has an unstandardized coefficient (B) of 0.500, which is statistically significant with a p-value of 0.000. This indicates that when all the predictors are at zero, the baseline level of the dependent variable, which is the impact on consumer behavior and decision-making, is significantly different from zero. The significance of the constant suggests that there are baseline effects on consumer behavior independent of the sensory variables considered. For the predictor "Smell," the analysis shows an unstandardized coefficient of 0.754 and a standardized coefficient (Beta) of 0.305. With a t-value of 3.987 and a p-value of 0.002, the results indicate that Smell has a significant positive impact on customer behavior and decision-making. The collinearity statistics, with a Tolerance of 0.643 and a VIF of 1.311, suggest that Smell does not suffer from multicollinearity issues, meaning it is not highly correlated with the other predictors in the model.

Contribution of sensory cues in creation of Holistic customer’s experience in Hospitality Sector.

It was measured using a five-point likert scale (1-strongly agree, 5-strongly disagree). These statements allow us to investigate whether sensory elements or cues significantly contribute to the overall customer experience. The table below describes the contribution of the five senses with the help of mean and standard deviation for each statement.

Table 7: Contribution of Senses

Sr.	Statements	Mean	SD
	Sound		
A	It helps to forget the negatives in the day	2.06	1.037
B	It rectifies my stress	2.20	.800
C	Music catches me and takes me away from the premises	2.22	.857
D	It is key for making good mood for full day	2.26	.927
E	Music helps to make me more affectionate to companion	2.20	.804
	Smell		
F	Feel energetic while breathing good scent	2.10	1.030
G	Scent makes me fresh, from work stress	2.18	.762
H	Eager to smell same scent while leaving the store	2.31	.803
I	Scent makes me humble with my beloved one	2.29	.993
J	It makes me irritated, if it is not good	2.30	.902
	Touch		
K	The furniture/equipments meet my social status	2.05	1.035
L	Feel active for some hours due to store temperature	2.21	.799
M	Wish the same furniture to be placed at my own office/home	2.15	.844
N	Feel proud, for providing the right place to my companion	2.14	.901
O	Satisfied with myself when provided items are luxury to my cost	2.09	.864
	Sight		
P	Colors motivates me to do work better	2.07	1.036
Q	Store designs help to relieve my stress/hang	2.22	.779
R	Painting makes me think positively	2.13	.816
S	Colors gives good mood for full day	2.25	.912
T	Picture/visuals stimulate me to remember my life’s happiness	2.17	.906
	Taste		
U	Taste take a long conversation even after consumption	2.06	1.054
V	Feeling healthy when I consumed quality food	2.12	.819
W	Repeat the same food every time when visiting the restaurant	2.21	.863
X	Sometimes try to prepare/push the same dist in my home	2.27	.884
Y	Wherever I go, remember it and eager to eat same item	2.22	.885

Source: Primary Survey

Interpretation:

Sound: According to the survey, listening to music helped respondents forget about negative experiences and reduce stress. The majority of respondents agree that music helps them remember things, improves their mood throughout the day, and enhances their relationship with their partner. These effects always occur indirectly and contribute to the customer experience.

Smell: Customers will never tolerate a smell that is inappropriate for the surroundings; they always prefer a pleasant scent. The majority of respondents concur that they feel energised by the restaurant's pleasant aroma, which also relieves stress from work. Furthermore, respondents concur that the scent makes them feel humble when they are with a companion and that they can't wait to smell it even after leaving the store. Respondents also concur that when a scent is unpleasant, they become agitated.

Touch: When measuring the restaurant's sensory components, the sense of touch is crucial. It always appears alongside or in place of sight. The majority of respondents concur with every statement, expressing satisfaction with the items offered by the restaurant, including furnishings and equipment, which they would like to arrange in their home or place of business. If the store has good ventilation, they also feel more energized.

Sight: It always has a significant impact on psychological feelings. The majority of respondents concur that bold colors encourage better work and that well-designed spaces help to reduce stress. Additionally, it improves customer perception of the store and fosters a stronger bond with friend. The paintings and photos serve as a source of nostalgia for the good times in their lives. The ability to see benefits from keeping customer's longer.

Taste: A restaurant's service revolves around taste, which is connected to the company's goodwill. The majority of them concur that food makes them feel good and that flavor sparks lengthy discussions about it even after consumption. Additionally, they want to eat the same meal every time they visit, and occasionally they even try making the same dish at home. They are also eager to eat it and want to carry the taste with them wherever they go.

As per the ratings of the respondents, all the five senses contribute in creation of holistic customer experience in food and beverage segment of Hospitality Sector.

Summary of Hypotheses

	Hypothesis	Result
Ha1	There is a significant impact of sensory cues on customer's buying behavior in Hospitality Sector.	Significant
Ha2	There is a significant contribution of sensory cues in creation of Holistic customer experience in Hospitality Sector.	Significant

Results and Findings

Sensory cues significantly impact customer behavior and their decision-making in the hospitality sector. The combined mean scores for sensory elements—sound, scent, feel, sight, and taste—among 500 individuals in a restaurant context range from 2.12 to 2.90. Scent and feel have the most significant impact, with a Pearson correlation coefficient of 0.875 indicating a strong positive link between sensory cues and customer behavior. The ANOVA results indicate that sensory experiences notably influence decision-making in the hospitality sector. Sound and smell have the most significant effects, with other cues contributing to varying degrees.

The study also reveals that sensory cues significantly contribute to the holistic customer experience in the hospitality sector. The five senses are sound, smell, touch, sight, taste, and touch. Sound helps customers forget negative experiences, reduces stress, and enhances their mood. Smell makes customers feel energetic and humble, while touch motivates them to work better and enjoy the store's offerings. Touch is crucial for satisfaction with the items offered, and well-designed spaces help reduce stress and foster a stronger bond with friends. Taste is linked to the company's goodwill, and customers want to eat the same meal every time they visit and try making the same dish at home.

CONCLUSION

Building and maintaining a strong and competitive market position, as well as achieving success, is not easy for restaurants in the food and beverage segment. As a result, the entire marketing industry is concerned with customer experiences and emotional connections with customers. Sensory marketing is critical in the food and beverage segment because it improves the overall customer experience and satisfaction by engaging all five senses—sight, sound, smell, touch, and taste. Research has shown that the five human senses significantly influence customer behavior and decision-making. Various sensory cues such as sound, smell, taste, touch, and sight help create a holistic experience and enhance customer satisfaction in the food and beverage segment. Therefore, food and beverage segment should pay attention to the presentation of food, the taste of food, interior and exterior decoration of outlets, and materials used in dining areas that support the concept and theme of the food and beverage store.

In conclusion, the importance of sensory marketing in the food and beverage segment cannot be overstated. By engaging all five senses, businesses can enhance the overall customer experience, build emotional connections, and establish a strong, competitive market position. Sensory cues play a vital role in influencing customer behavior, satisfaction, and decision-making, making them an essential component of successful marketing strategies in this segment.

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