

# Factors That Influence Purchase Decisions Through Olfactory Marketing

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**Abstract:** In the ever-evolving landscape of marketing, the power of sensory experiences has come to the forefront, with olfactory marketing emerging as a particularly captivating and effective strategy. Olfactory marketing, the art of leveraging the sense of smell to influence consumer behaviour, has been the subject of growing academic and industry interest in recent years. The investigation focuses on identifying the factors related to scent marketing which generate purchase intention among consumers. The target population was from Ernakulam district in Kerala, India. Cross-sectional research design was used with structured questionnaire to collect the responses from a sample of 319 respondents. The demographic characteristics and interest in scent marketing was surveyed as the first part of the questionnaire followed by focus on the factors that influence scent marketing from the consumers point of view. Exploratory factor analysis used to reduce the variables into factors.

**Keywords:** Olfactory marketing, Scent marketing, Purchase decision, Exploratory factor analysis, Multisensory appeals.

## I. INTRODUCTION

The human sense of smell, often overlooked in comparison to our visual and auditory counterparts, is a remarkably powerful tool in the realm of marketing. Studies have shown that olfactory cues can elicit strong emotional responses, trigger nostalgic memories, and even subconsciously influence our perceptions and behaviours.

The context of consumer decision-making, the strategic use of scents can create a lasting impression, enhance product appeal, and ultimately sway the decisions of potential buyers. Scent marketing is a powerful tool used by businesses to create memorable brand experiences and influence consumer behaviour. By strategically incorporating scents into their marketing efforts, companies can evoke positive emotions, enhance brand recognition, and increase customer engagement.

Scent marketing is particularly effective in retail environments, hospitality settings, and experiential marketing campaigns where the sense of smell can trigger strong emotional responses and influence purchasing decisions. Previous research highlights the importance of perceived product purity and safety in shaping consumer attitudes (Hsu et al., 2016). Olfactory marketing, with its ability to convey a sense of natural, organic qualities, can capitalize on this consumer preference for natural and safe products. Literature has mentioned the relevance of Olfactory marketing in generating revenue for companies as part of their short-term and long term goals (Chatterjee & Bryla, 2022).

### I.A OBJECTIVES

To investigate the factors that influence purchase decisions by consumers based on olfactory marketing

### I.B SCOPE

This research will delve into the multifaceted impact of olfactory marketing on consumer behavior, focusing on how scents influence purchasing decisions. It will examine the psychological mechanisms through which scents evoke emotional responses and enhance product appeal, particularly in retail, hospitality, and experiential marketing settings. By analyzing existing literature, conducting surveys, and exploring case studies, the study aims to uncover the correlation between olfactory cues and consumer attitudes towards product purity and safety.

Additionally, it will offer strategic recommendations for businesses to effectively incorporate scents into their marketing efforts, while addressing potential challenges and ethical considerations. The research will also explore emerging trends and technological advancements in scent marketing, providing insights into future developments in the field.



II. LITERATURE REVIEW

Multisensory appeals in marketing have been extensively studied, as sensory stimuli play a crucial role in shaping consumer decision-making processes through the creation of strong mental connections that enhance brand and product recall. Scent plays a crucial role in sensory marketing and is recognized as a fundamental component of the physical environment within service settings (Hultén et al., 2009). Odors can take on the characteristics of associated emotions and provoke corresponding emotional, cognitive, behavioural, and physiological responses. Previous literature has emphasized the power of smell in creating a memorable and immersive consumer experience, noting its ability to evoke emotional responses and influence purchase decisions (Peck & Childers, 2005).

Sensory marketing is a strategy that engages consumers' senses to influence their perception, decision-making, and actions. By leveraging nonconscious stimuli through the senses, this approach aims to avoid consumer resistance as they do not consciously perceive it as a marketing ploy (Krishna, Cian, & Sokolova, 2016). Olfactory marketing, a current trend in sensory and neuromarketing, utilizes scents to influence consumer behaviour and brand association (Chatterjee & Bryła, 2022; Alexandra Paca Quispillo et al., 2022). This practice directly stimulates emotions through the limbic system, creating memorable experiences and enhancing brand awareness and customer satisfaction. Many brands are increasingly prioritizing the consumer experience, emphasizing customer engagement at various levels and the interaction between them and the products (e.g. emotional, rational, and physical) (Moreira, Fortes, & Santiago, 2017).

Some research suggests the significance of sensory stimuli in print advertisements, providing evidence for the impact of touch, store scent, and background music on consumer behaviour (Labenz et al., 2018). These insights underscore the importance of a multisensory approach in marketing, with olfactory cues playing a crucial role in differentiating products and brands. Consumer purchasing patterns are the activities involved in seeking, choosing, acquiring, using, assessing and discarding goods and/or services to fulfil a desire or requirement (Schiffman & Wisenblit, 2019). Consumer behaviour goes beyond simply buying a product; it encompasses the process that precedes the purchase (Schiffman & Wisenblit, 2019). Psychological factors like motivation, perception, learning, personality, attitudes, and emotions also play a role in shaping their needs. Consumers' experiences can influence their decision to purchase and evaluate the product afterwards.

III. RESEARCH METHODOLOGY

The research used cross-sectional study to the factors that impact consumers to purchase products based on olfactory marketing. The target group included 314 respondents from Ernakulam district in Kerala. Ernakulam is the commercial and IT hub of the State of Kerala, India which is also well known for its tourism destinations. Convenience sampling was used in data collection from the respondents.

The survey instrument was a self-administered questionnaire. The first part of the questionnaire focused on the demographics of the population and the awareness of olfactory marketing. The second part of the survey was aimed at filtering the factors that influence purchase decision through olfactory marketing. Google Forms were used to circulate and collect data from the target group. Statistical techniques used included proportionate analysis and Exploratory factor analysis using IBM SPSS v.23.

IV. RESULTS AND DISCUSSION

IV. A DEMOGRAPHICS CHARACTERISTICS AND SURVEY ON OLFACTORY MARKETING

Data was collected from the target population through structured questionnaires. The demographic characteristics was shown below in Table 1.

Table 1: Demographic characteristic

Age Group	n	%
19- 23 yrs	243	77.5
24-29 yrs	55	17.5
30 yrs and above	16	5
<b>Gender</b>		
Male	138	43.9

Female	176	56.1
<b>Occupation</b>		
Student	217	68.9
Salaried	66	21.1
Business	31	10
<b>Domicile</b>		
Rural	245	78
Urban	69	22

*Note:* Sample size, N= 314

The survey participants were young, with over three-quarters falling between 19 and 23 years old. There was a nearly even split between genders, with slightly more females participating. Interestingly, the majority of respondents were students, with a smaller portion being salaried employees and the least being business owners. Finally, the survey seems to have captured a more rural perspective, with nearly 80% of participants residing in those areas compared to urban dwellers. It's important to remember that this might not represent the entire population interested in olfactory marketing, given the focus on younger demographics and non-business professionals.

#### IV.B. Preference for scents in public places

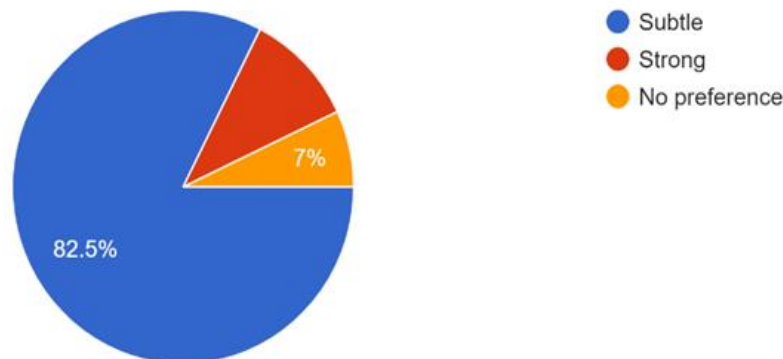


Fig 1: Scent preference

The analysis of scent preference in public places, a clear majority (82.5%) favored subtle scents. This suggests most people prefer a light and unobtrusive aroma in these settings. Only a small portion (7%) indicated a preference for strong scents, implying bold fragrances are not widely desired. Interestingly, a moderate number (10.5%) expressed no particular preference, suggesting some individuals may be indifferent to the presence or intensity of scents in public spaces.

#### IV.C. Influence of scents on your mood

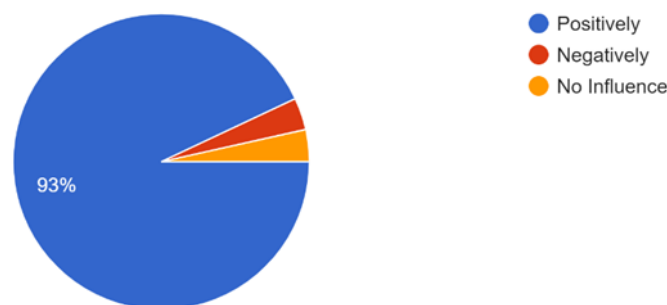


Fig 2: Influence of Scents on mood

This pie chart depicts the perceived influence of scents on mood. Nearly all respondents (99.3%) indicated that scents have either a positive or negative influence on their mood. Only a negligible portion (0.7%) reported no influence of scents on their mood.

**IV.D. Do you find Olfactory or Scent marketing as Appealing or Intrusive?**

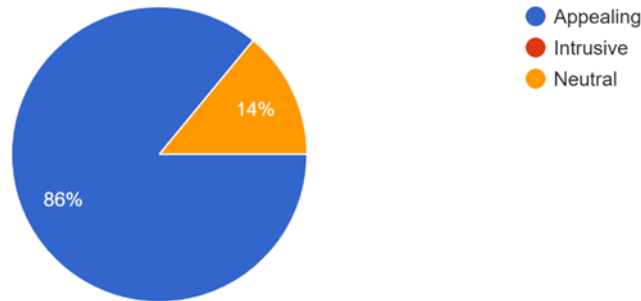


Fig 3: Olfactory marketing Scent impact

Figure 3 explores public perception of scent marketing, categorized as appealing or intrusive. A substantial majority of respondents (86%) found scent marketing appealing, suggesting a positive association with the use of scents in commercial settings. Conversely, a smaller portion (14%) perceived it as intrusive, indicating potential negative reactions from some individuals.

**IV E. Types of Scents associated with relaxation.**

Table 2: What types of scents do you associate with relaxation and comfort

Frequency	n	%
Floral	126	40
Citrus	44	14
Woody	31	10
Fresh	88	28
Fruity/Oriental	6	2
Spicy	19	6

From table 2, it was evident that majority of the respondents were having a positive response to floral scents(40%) followed by fresh scents(28%).Fruity or Oriental scents had the less preference among the list.

**IV.F. Scents that create discomfort for consumers.**

Table 3: Which types of scents makes you irritated?

No. of Children	n	%
Burnt fragrance	79	25
Sewage or waste	119	38
Dark fragrance of some perfumes	69	22
Smell of certain materials like cardboards or other items	47	15

The most disturbing smell was for waste related scents (38%) which had negative feeling among the respondents. The smell of certain materials like cardboards or other items had some level impact (15%) as well. Burnt fragrances was the second highest (25%) which had a distorted response in the mind of the consumers reminding of maybe a tragic incident or scenario.

**IV. G. RECOMMENDING BRAND OR LOCATION DUE TO IMPACT OF SCENT MARKETING**

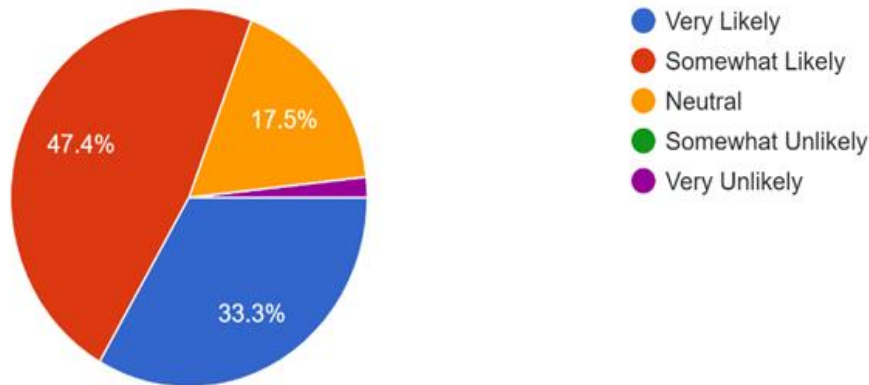


Fig 4: Brand or location recommendation due to Scent marketing

Majority of the respondents found scent marketing had a positive appeal (84%) in associating with a brand or location while a few had other opinions.

**IV.H. In which of locations would you think that Scent marketing is effective?**

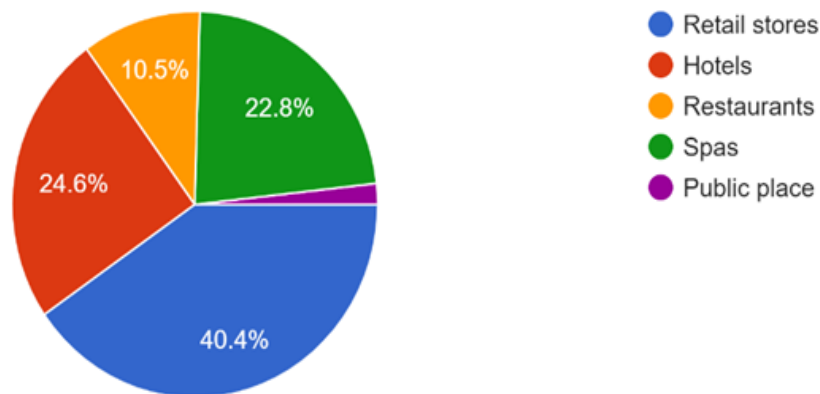


Fig 5: Most influenced business by Scent marketing

From the above Fig, it was found that Retail stores (40.4%) are the most benefitted from Scent Marketing from the perspective of the target population. Hotels are sought to be the next in-line with twenty four percent.

Restaurants and Public places were rated as the least impacted by Scent marketing from the point of view of the respondents.

**IV.I. Have you purchased a product or service because of pleasant scent associated with the brand or location?**

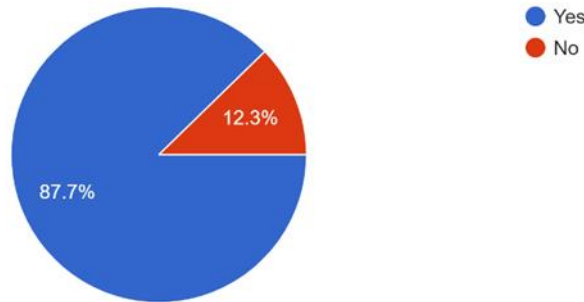


Fig 6: Pleasant Scent lead to purchase of product

Most of the respondents(87.7%) agree that Scent marketing had resulted in purchases associated with a brand or place where the scent influenced their decision-making in their shopping experiences.

**IV.J. Exploratory Factor Analysis: Factors that influence sent marketing and lead to purchase the products.**

Table 4: Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.633
	Approx. Chi-Square	285.733
Bartlett's Test of Sphericity	df	249
	Sig	<.05

The KMO value is 0.633 , and Bartlett’s Test of Sphericity chi-square is 285.733 with a degree of freedom of 249 and a significance less than 0.05, according to the table. This showed that the data was suitable for factor analysis and the sample size was sufficient.

Table 5: Rotated Component Matrix, Eigen Values, and Total Variance Percentage for Components obtained by Principal Component Analysis with Varimax Rotation Method

Statement: "Would the presence of a pleasant scent influence your likelihood to....."	Component			
	1	2	3	4
Feel Nostalgic	0.874			
Recommend a business to others?	0.662			
Affects my emotional state	0.653		0.522	
Try to define the type of the store through the smell	0.596			
Return to a specific establishment?		0.869		
Make a purchase?		0.658		
Spend more time in a retail store?		0.56		0.532
Try to understand what type of smell it is			0.775	
Question myself about the purpose of the smell			0.736	
Stay indifferent				0.84
<b>Eigenvalues</b>	3.027	1.469	1.105	1.041
<b>Percentage of total variance</b>	30.272	14.694	11.046	10.411

Note: Factors loadings less than 0.44 were omitted.

Table 5, shows the results summary for factor loading generated through varimax rotation for exploratory factor analysis using principal component analysis which resulted in four factors with eigenvalues greater than one. Loading less than 0.44 was excluded from the structure.

Factor 1 extracted was named as ‘Emotional Influence and Memory (EIM)’, which consists of variables ‘Feel Nostalgic’, ‘Recommend a business to others?’, ‘Affects my emotional state’ and ‘Try to define the type of the store through the smell’. Among these, the highest factor loading was for variable ‘Feel Nostalgic’ (.874) which shows the emotional influence among the consumers created by Scent or olfactory sensations. Previous literature has cited that emotional factors do impact purchase intention among consumers (Singh & Rajya Lakshmi, 2023). Similar to the highest factor loadings obtained in this study, literature has stated that nostalgia has the influence on scent marketing and customers' shopping experiences (Dortyol, 2020).

Factor 2 extracted was named as ‘Purchase Behavior (PB)’, which consists of variables ‘Return to a specific establishment?’, ‘Make a purchase?’ and ‘Spend more time in a retail store?’. ‘Return to a specific establishment?’ has the highest factor loading (.869) in this group which points to the consumer's purchase behaviour impacted by Scent Marketing. There has been studies which provide similar result that return to the same establishment due to scent marketing which resulted in more purchases and spending more time in the store or establishment (Van Niekerk & Goldberg, 2021; Anguera-Torrell et al., 2021).

Factor 3 extracted was named as ‘Scent Exploration (SE)’, which consists of variables ‘Try to understand what type of smell it is’ and ‘Question myself about the purpose of the smell’. People have the tendency to explore a scent which attracts them more, which was event through the high factor loading for ‘Try to understand what type of smell it is’ (.775). Some literature has mentioned that scent marketing has resulted in consumer shift in the approach towards products which can be considered to part of scent exploration (Van Niekerk & Goldberg, 2021).

Factor 4 extracted was named as ‘Inert Response (IR)’, which consists of variables ‘Stay indifferent’. Some Scent does not influence any response on the consumers and creates an inert effect which was found to have a factor loading of .84. Most of the studies do show that scent marketing has some outcome on the sales although there might be differences in the results based on the industry like hotels, fashion etc. (Yarosh & Kalkova, 2022). Some literature mention that there is need for further research on scent marketing and purchase intentions among consumers (Rao & Jetti, 2020).

## V. CONCLUSION

Olfactory marketing has become one of the influential methods to generate sales among consumers. This being a part of neuromarketing, has proven to increase sales in industries like food and fashion as sighted in the literature (Moraleda & Cullel, 2021). This research investigated the awareness of olfactory marketing among the target group and focused on the factors that influence olfactory marketing. The demographic showed that more young people were involved in the survey.

The survey showed that people were influenced by subtle fragrances and also it had positive impact on the consumers. Some of the scents also created negative feelings towards that location as per the survey. Many respondents would recommend a brand or location based on the scent marketing and believer that retail stores would be able to leverage scent marketing more than any other business. Most of the respondents had revisited or recurred purchase under the scent marketing experience of a brand or location. Exploratory factor analysis generated four factors which included emotional influence and memory, purchase behaviour, return to the establishment and inert response. Further studies should be able to look deeper into the neuromarketing channels of multisensory perceptions related to a brand or location which may negatively or positively result in business growth or decline.

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