

Understanding the Impact of Sensory Cues on Consumer Behaviour in the FMCG Sector

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Abstract

This study investigates the influence of sensory cues—visual, auditory, olfactory, taste, and touch—on consumer behaviour within the Indian Fast-Moving Consumer Goods (FMCG) sector. Understanding the growing relevance of multisensory marketing, particularly in markets with cultural diversity like India, the study seeks to find how various sensory cues affect consumer impressions, preferences, and purchase behaviour. The study uses regression analysis to investigate the individual and combined effects of sensory modalities by means of an extensive literature review and empirical data gathered from Indian consumers via structured surveys. While taste cues have no statistically significant effect in this context, results show that visual, auditory, olfactory, and tactile cues greatly influence consumer behaviour. The results show how strategically important sensory marketing is for producing unique and emotionally compelling brand experiences. For FMCG companies looking to use sensory techniques to improve consumer involvement and brand loyalty, practical ramifications are provided. Focusing on the Indian FMCG market, the study closes a significant knowledge vacuum in sensory marketing literature and offers ideas for both academics and business practitioners.

Keywords: Sensory Cues, Consumer Behaviour, FMCG, Olfactory, Brand Loyalty

Introduction

Sensory marketing is a strategic approach that utilizes sensory cues, such as aroma, colour, touch, and sound, to influence consumer behaviour and enhance the overall

brand experience. Sensory marketing, a dynamic and captivating realm of marketing, has gained substantial recognition for its potential to shape consumer perceptions and influence purchasing decisions. In the Indian context, where the Fast-Moving Consumer Goods (FMCG) sector is a prominent player in the market, delving into sensory marketing strategies becomes imperative (Singh, 2021). This introduction section serves as a mental road map for our research paper, addressing four fundamental questions that guide our exploration of sensory marketing in Indian FMCG brands.

Our primary focus is to delve into the application and impact of sensory marketing in the Indian FMCG sector. Sensory marketing extends beyond the visual and auditory elements of advertising. It encompasses the utilization of taste, touch, and smell to create profound and lasting impressions on consumers. By studying this, we aim to unravel how Indian FMCG brands employ sensory marketing techniques and understand the consequences on consumer preferences, choices, and brand loyalty.

Sensory marketing is becoming more and more important in Indian FMCG brands since consumers are growing more discriminating and there is intense rivalry. These brands that want to provide interesting and unique brand experiences must first understand how sensory marketing might affect consumer behaviour. Furthermore, since India is a culturally varied country with different sensory preferences, understanding the subtleties of sensory marketing in this setting is essential for good market penetration (Singhal, 2015).

The body of current research on sensory marketing has mostly concentrated on Western markets, so creating a clear knowledge vacuum about its relevance and

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effectiveness in the Indian FMCG sector. Although some research have focused on sensory aspects in marketing, a thorough study of how Indian FMCG brands use all five senses and the consequent effect on consumer behaviour is lacking. This research thus goes beyond present knowledge to offer fresh ideas.

By bridging the knowledge gap in the body of current research and illuminating the uncharted ground of sensory marketing in Indian FMCG companies, this study will forward our knowledge. It will provide useful consequences for companies functioning in this dynamic market as well as help to clarify the scholarly knowledge of sensory marketing. This study intends to offer practical insights that can direct FMCG brands in developing more successful and interesting marketing campaigns by spotting successful sensory marketing strategies and their results.

The dynamic and fiercely competitive character of the Indian FMCG market emphasizes the relevance of this study. Brands that want to keep ahead of the curve and apply creative ideas must grab the interest and loyalty of consumers. A modern way to reach this is with sensory marketing. Appealing to consumers' senses helps brands to create unforgettable and emotionally powerful experiences, so strengthening brand loyalty and impacting purchase decisions (Krishna, 2012).

Although sensory marketing has attracted interest all around, its use in the Indian FMCG industry is quite unexplored. This research niche results from the necessity to comprehend the contextual and cultural elements affecting the efficacy of sensory marketing in India. This will help us to develop a research question that directs our investigation and adds to both scholarly and useful knowledge.

This paper aims to look at how Indian FMCG companies use sensory marketing techniques to affect consumer behaviour. It will list the main features of the research, including the sensory aspects these companies use and the consequent effect on consumers. Moreover, this work will show important findings obtained from empirical research, so offering ideas both for academics and practitioners. At last, the framework of this paper will be briefly discussed, showing how every component advances the whole knowledge of sensory marketing in Indian FMCG companies.

The main goal of this work is to assess consumer behaviour under individual and combined influence of sensory cues—visual, auditory, olfactory, taste, and touch. By means of an analysis of the relevance of every sensory modality, the study seeks to shed light on how companies might deliberately use these cues in marketing and product development to improve customer experiences and influence purchase decisions. The research specifically aims to:

- Understand the role of visual cues, including color, design, and layout, in influencing consumer decisions.
- Examine the impact of auditory elements, such as background music and soundscapes, on consumer mood and behaviour.
- Assess the significance of olfactory cues in creating positive impressions and encouraging consumer engagement.
- Investigate the relatively less-explored role of taste cues and their interplay with other sensory modalities.
- Evaluate the effect of touch cues, focusing on the tactile qualities of products and their influence on consumer perceptions.

Literature Review

The Impact and Evolution of Sensory Marketing

Sensory marketing, defined as the strategic use of sensory stimuli to influence consumer perception, behaviour, and decision-making, has emerged as a critical area of research in understanding consumer interactions with brands. This literature review synthesizes recent findings and theoretical advancements in the field, drawing from diverse studies that explore various dimensions of sensory marketing.

Theoretical Foundations and Evolving Perspectives

Farhadi (2017) highlights how increasingly important sensory marketing is to consumer behaviour shaping. This paper emphasizes the change from conventional decision-

making models to those including sensory experiences, so stressing the need of using several senses—taste, touch, smell, and hearing—in building emotional connections and improving marketing effectiveness. This point of view fits Singh's (2020) investigation of how sensory marketing might produce subconscious triggers influencing customer impressions and purchase behaviour. Both studies help to clarify how more solid emotional ties between consumers and brands can result from multi-sensory interaction.

Extensively discussing these ideas, Kataria (2021) offers a bibliometric study of sensory marketing research spanning 1979 to 2020. This paper highlights important trends, eminent writers, and thematic clusters, so suggesting a conceptual framework that emphasizes the growing complexity and integration of sensory marketing in academic research. Likewise, Bhatia (2021) provides a comprehensive view.

Bibliometric analysis, grouping studies under cross-modality, multi-sensory marketing, and emotional impact of sensory marketing. These studies highlight the development of the field and provide future directions for study that might improve our knowledge of the function of sensory marketing in consumer behaviour.

Sensory Marketing in Action

Empirical research highlight even more the useful applications of sensory marketing. In 2019 Hamilton looks at how sensory cues affect consumer behaviour in point-of-purchase (POP) retail displays. This study questions the conventional wisdom regarding rational decision-making by demonstrating how olfactory and visual aspects might arouse strong emotions and influence consumer behaviour. Sokolov (2016) also supports this result by looking at how sensory marketing uses several senses to shape consumer responses, so improving the efficacy of advertising.

Likewise, Randhir (2016) uses a case study of KFC to investigate how sensory marketing affects customer behaviour. This study shows how including sensory experiences—such as sight, scent, touch, taste, and sound—may strengthen brand loyalty, create emotional

ties, and propel product success. Değermen Erenkol (2015) also emphasizes how consumer perception is influenced by sensory experiences, especially in upscale restaurants, implying that sensory marketing greatly influences buying decisions.

Integrative Models and Theoretical Advances

Introducing the multi-sensory brand-experience idea, Hultén (2009) suggests a sensory marketing model combining several sensory interactions to improve brand perception and value development. This model emphasizes the part sensory experiences play in forming brand images and separating companies in the consumer's mind, so bridging gaps in conventional marketing techniques.

Krishna (2012) links sensory experiences to consumer perception and judgment so helping to contribute to the theoretical knowledge of sensory marketing. From a managerial standpoint, he investigates how sensory cues might result in self-generated brand attributes, so guiding the use of sensory marketing to more successfully interact with consumers. Challenging conventional wisdom on information processing models and stressing the need of more complex theories in sensory marketing, Krishna and Schwarz (2014) probe the interaction between sensory experiences and cognition.

More general consequences and future directions: The studies' findings show how transforming sensory marketing could be in modern marketing techniques. Engaging several senses allows companies to create distinctive and unforgettable experiences that emotionally connect with customers. According to the studies taken together, sensory marketing not only improves consumer involvement but also provides insightful analysis for besting marketing strategies in many environments. Finally, the changing field of sensory marketing shows increasing awareness of the part sensory experiences contribute to shape consumer behaviour and decision-making. Future studies should concentrate on combining sensory marketing techniques with developing technologies and investigating the complex interactions between several sensory modalities as the field keeps changing.

Conceptual Model

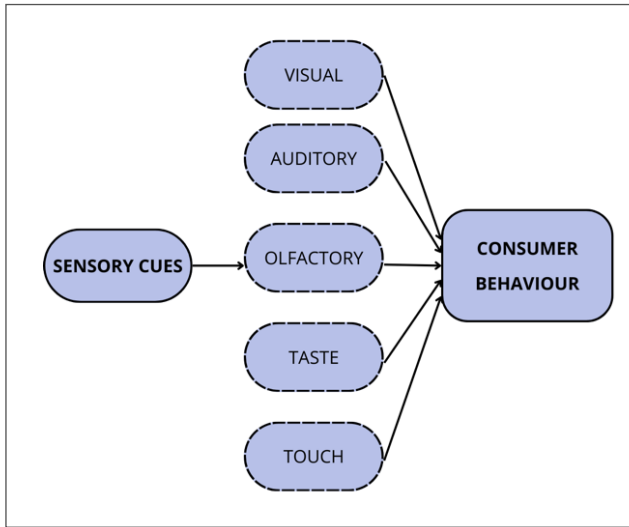


Fig. 1: Sensory Cues and Decision-Making

Research Methodology

The research methodology for this project is designed to investigate the influence of Sensory Cues on Customer Behaviour. The study utilizes a structured approach to examine the psychological factors that may sway the investment choices of individuals. The conceptual framework, as illustrated in the provided diagram, identifies 5 sensory cues: Visual, Auditory, Olfactory, Taste & Touch sensory cues. These traits are hypothesized to have a direct impact on the decision-making of consumers. This framework serves as the foundation for the research, with Visual, Auditory, Olfactory, Taste & Touch sensory cues representing a predictor variable and Consumer Behaviour indicating the outcome variable. The directional arrows imply a presumed influence of each Sensory Cue on Consumer behaviour processes.

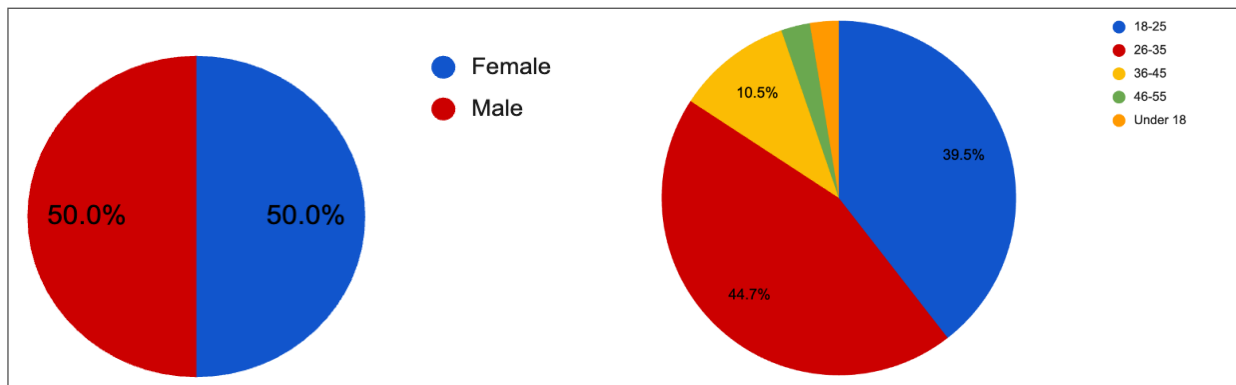
The methodology encompasses data collection through surveys and subsequent statistical analyses to validate the relationships depicted in the conceptual model. The aim is to quantify the extent to which these traits, individually or in combination, predict consumer behaviour, providing a comprehensive understanding of the psychological underpinnings of sensory cues in the marketing context. The quantitative approach employed involves the application of various statistical methods, such as Regression Analysis to identify patterns and correlations within the data, and inferential statistics like ANOVA and t-tests to test hypotheses regarding the impact of these traits.

The study initiated data collection through a comprehensive online survey, targeting FMCG consumers across various demographics in India. The survey instrument was a Google Form comprising 23 statements reflecting key consumer decisions, administered to a sample size of 76 participants. The data were stratified by gender and age of the sample population.

Data Analysis

Gender Demographics

The survey revealed that 50% of respondents were male and 50% were female, with a total of 76 participants. This gender distribution potentially mirrors societal norms and consumer behaviour in the FMCG Indian market, Such insights are valuable for recognizing diversity within the consumers and tailoring Marketing efforts to accommodate the distinct needs and tendencies of both genders. Assessing the gender demographic is crucial for gauging the inclusivity and relevance of the findings to a broader population.



Age Demographics

The survey predominantly featured an even age distribution, with 42.1% of the respondents being under 25 years old. The next notable age group, comprising 26-35-year-olds, accounted for 44.7% of the sample. Participants aged 36-45 and those above 45 years constituted smaller proportions. This youthful demographic suggests that the survey might capture buying behaviours that are more often associated with younger consumers. These findings have significant implications for the study, hinting at a generational shift in buying behaviour and potential behavioural biases that may differ from older, potentially more conservative buyers.

Instrumentation and Measures

The questionnaire employed a five-point Likert scale to measure agreement with statements related to Visual, Auditory, Olfactory, Taste & Touch sensory cues. These constructs were operationalized based on established scales from the literature, ensuring content validity.

Testing of Hypotheses Through Questionnaires

The study utilized a dataset comprising 76 cases, each representing individual consumer responses to various sensory cues. The dataset was specifically designed to assess the impact of five sensory cues (visual, auditory, olfactory, taste, and touch) on consumer behaviour. To investigate how sensory cues impact consumer behaviour, we collected data from a diverse group of participants. Here's a deeper look at our data collection process:

Visual Cues

We circulated a Google form with two questions to understand the Impact of visual cues specifically on consumer behaviour:

- The visual design of a product's packaging makes me more likely to consider buying it.
- The colour scheme of a website affects how easy and enjoyable I find it to browse.

Auditory Cues

We circulated a Google form with two questions to understand the Impact of visual cues specifically on consumer behaviour:

- Background music in a store can influence my mood buying decisions and decision to re-visit the store.
- The tone and friendliness of a salesperson's voice affect my perception of their service.

Olfactory Cues

We circulated a Google form with two questions to understand the Impact of visual cues specifically on consumer behaviour:

- A pleasant scent in a store creates a positive impression and makes me want to stay.
- The smell of a product can affect my perception of its quality and value and my decision to purchase.

Taste Tests

We circulated a Google form with two questions to understand the Impact of visual cues specifically on consumer behaviour:

- Offering free samples of food or drinks in a store can increase my likelihood of purchase.
- The freshness and quality of ingredients used in a product influence my perception of its taste.

Touch Sensory

We circulated a Google form with two questions to understand the Impact of visual cues specifically on consumer behaviour:

- The comfort and fit of clothing are more important to me than its visual appearance.
- The texture and feel of a product's packaging influence my perception of its quality.

Hypothesis Testing

Six separate regression analyses were conducted to test the hypotheses regarding the impact of each sensory

cue on consumer behaviour, plus an additional analysis assessing the cumulative effect of all sensory cues. This analysis underscores the nuanced impact of sensory cues on consumer behaviour, providing a comprehensive understanding of how each sensory modality influences consumer decisions.

Visual Cues

Null Hypothesis (Ho) - Visual sensory cues have no effect on consumer behaviour.

Alternate Hypothesis (Ha) - Visual sensory cues have an effect on consumer behaviour.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.502 ^a	.252	.242	.797

a. Predictors: (Constant), Visual sensory cue

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.890	1	15.890	24.987	<.001 ^b
	Residual	47.058	74	.636		
	Total	62.947	75			

a. Dependent Variable: Consumer behaviour
b. Predictors: (Constant), Visual sensory cue

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.899	.338		5.617	<.001
	Visual sensory cue	.440	.088	.502	4.999	<.001

a. Dependent Variable: Consumer behaviour

The regression analysis for visual sensory cues demonstrated a significant positive effect on consumer behaviour ($R^2 = .252$, $F(1, 74) = 24.987$, $p < .001$). This result indicates that variations in visual cues explain approximately 25.2% of the variance observed in consumer behaviour. The p-value is less than 0.001 suggests that the relationship between visual cues and consumer behaviour is highly statistically significant. Therefore, we reject the null hypothesis, indicating that Visual sensory cues do indeed influence consumer behaviour.

Auditory Cues

Null Hypothesis (Ho) - Auditory sensory cues have no effect on consumer behaviour.

Alternate Hypothesis (Ha) - Auditory sensory cues have an effect on consumer behaviour.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.468 ^a	.219	.209	.815

a. Predictors: (Constant), Auditory sensory cue

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.796	1	13.796	20.771	<.001 ^b
	Residual	49.151	74	.664		
	Total	62.947	75			

a. Dependent Variable: Consumer behaviour
b. Predictors: (Constant), Auditory sensory cue

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.554	.443		3.512	<.001
	Auditory sensory cue	.530	.116	.468	4.558	<.001

a. Dependent Variable: Consumer behaviour

Similarly, the regression analysis for auditory sensory cues revealed a significant positive impact on consumer behaviour ($R^2 = .219$, $F(1, 74) = 20.771$, $p < .001$). About 21.9% of the variance in the consumer behaviour can be explained by variations in auditory cues. With a p-value less than 0.001, we reject the null hypothesis, concluding that Auditory sensory cues significantly affect consumer behaviour.

Olfactory Cues

Null Hypothesis (Ho) - Olfactory sensory cues have no effect on consumer behaviour.

Alternate Hypothesis (Ha) - Olfactory sensory cues have an effect on consumer behaviour.

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.327 ^a	.107	.095	.872		

a. Predictors: (Constant), Olfactory sensory cue

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.733	1	6.733	8.863	.004 ^b
	Residual	56.215	74	.760		
Total		62.947	75			

a. Dependent Variable: Consumer behaviour

b. Predictors: (Constant), Olfactory sensory cue

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.324	.416		5.586	<.001
	Olfactory sensory cue	.338	.114	.327	2.977	.004

a. Dependent Variable: Consumer behaviour

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.114 ^a	.013	.000	.916		

a. Predictors: (Constant), Taste sensory cue

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.825	1	.825	.982	.325 ^b
	Residual	62.123	74	.839		
Total		62.947	75			

a. Dependent Variable: Consumer behaviour

b. Predictors: (Constant), Taste sensory cue

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.111	.432		7.203	<.001
	Taste sensory cue	.110	.111	.114	.991	.325

a. Dependent Variable: Consumer behaviour

The analysis for olfactory sensory cues also showed a statistically significant effect on consumer behaviour ($R^2 = .107$, $F(1, 74) = 8.863$, $p = .004$). While the effect size is smaller compared to visual and auditory cues, it is still significant. Approximately 10.7% of the variance in consumer behaviour can be attributed to variations in olfactory cues. With a p-value of 0.004, we reject the null hypothesis, indicating that Olfactory sensory cues have a significant impact on consumer behaviour.

Taste Tests

Null Hypothesis (Ho) - Taste sensory cues have no effect on consumer behaviour.

Alternate Hypothesis (Ha) - Taste sensory cues have an effect on consumer behaviour.

Contrary to the other sensory cues, the regression analysis for taste sensory cues did not reveal a statistically significant effect on consumer behaviour ($R^2 = .013$, $F(1, 74) = .982$, $p = .325$). The low R^2 value (1.3%) suggests that taste cues explain very little variance in consumer behaviour. Moreover, the p-value of 0.325 is greater than the typical significance level of 0.05, indicating that taste sensory cues do not significantly influence consumer behaviour. Thus, we fail to reject the null hypothesis, suggesting that Taste cues may not play a significant role in shaping consumer behaviour in this context.

Touch Sensory

Null Hypothesis (Ho) - Touch sensory cues have no effect on consumer behaviour.

Alternate Hypothesis (Ha) - Touch sensory cues have an effect on consumer behaviour.

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.322 ^a	.103	.091	.873		

a. Predictors: (Constant), Touch sensory cue

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.509	1	6.509	8.535	.005 ^b
	Residual	56.438	74	.763		
Total		62.947	75			

a. Dependent Variable: Consumer behaviour

b. Predictors: (Constant), Touch sensory cue

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.178	.472		4.611	<.001
	Touch sensory cue	.347	.119	.322	2.921	.005

a. Dependent Variable: Consumer behaviour

The regression analysis for touch sensory cues demonstrated a significant positive impact on

consumer behaviour ($R^2 = .103$, $F(1, 74) = 8.535$, $p = .005$). Approximately 10.3% of the variance in the consumer behaviour can be explained by variations in touch cues. With a p-value of 0.005, we reject the null hypothesis, indicating that Touch sensory cues significantly influence consumer behaviour.

Sensory Cues

Null Hypothesis (Ho) - Sensory cues have no effect on consumer behaviour.

Alternate Hypothesis (Ha) - At least one sensory cues have an effect on consumer behaviour.

five sensory cues studied—visual, auditory, olfactory, taste, and touch—four were found to have a significant effect on consumer behaviour, while one did not yield statistically significant results.

Visual Sensory Cues: The regression analysis indicated a significant positive effect of visual cues on consumer behaviour ($R^2 = .252$, $F(1, 74) = 24.987$, $p < .001$).

Auditory Sensory Cues: Auditory cues also showed a significant positive impact ($R^2 = .219$, $F(1, 74) = 20.771$, $p < .001$).

Olfactory Sensory Cues: Olfactory cues were found to significantly affect consumer behaviour ($R^2 = .107$, $F(1, 74) = 8.863$, $p = .004$).

Taste Sensory Cues: The effect of taste cues was not statistically significant ($R^2 = .013$, $F(1, 74) = .982$, $p = .325$).

Touch Sensory Cues: Touch cues had a significant positive impact ($R^2 = .103$, $F(1, 74) = 8.535$, $p = .005$).

Overall Sensory Cues: An analysis incorporating an overall sensory cue score revealed a significant effect on consumer behaviour ($R^2 = .091$, $F(1, 74) = 7.393$, $p = .008$), suggesting that the cumulative effect of sensory cues is significant.

Model Summary ^a					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.301 ^a	.091	.079	.879	

a. Predictors: (Constant), Overall sensory cue score
b. Dependent Variable: Consumer behaviour

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.718	1	5.718	7.393	.008 ^b
	Residual	57.230	74	.773		
	Total	62.947	75			

a. Dependent Variable: Consumer behaviour
b. Predictors: (Constant), Overall sensory cue score

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.148	.517		4.154	<.001
	Overall sensory cue score	.385	.142	.301	2.719	.008

a. Dependent Variable: Consumer behaviour

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.92	4.07	3.53	.276	76
Residual	-2.074	1.697	.000	.874	76
Std. Predicted Value	-2.203	1.983	.000	1.000	76
Std. Residual	-2.358	1.929	.000	.993	76

a. Dependent Variable: Consumer behaviour

Finally, the analysis incorporating an overall sensory cue score revealed a significant effect on consumer behaviour ($R^2 = .091$, $F(1, 74) = 7.393$, $p = .008$). Approximately 9.1% of the variance in the consumer behaviour can be attributed to overall sensory cues. With a p-value of 0.008, we reject the null hypothesis, suggesting that The cumulative effect of sensory cues is significant in influencing consumer behaviour.

The regression analyses conducted on the dataset revealed significant findings regarding the impact of various sensory cues on consumer behaviour. Out of the

Discussion

The outcome of the regression studies offer insightful analysis of how sensory cues affect consumer behaviour. The importance of visual, auditory, olfactory, and touch cues in marketing and product design is underlined by their found to be major influence on consumer choices. These results fit earlier studies stressing the part sensory stimuli play in forming consumer preferences and impressions. The notable good results for visual and auditory signals highlight the need of aesthetics and sound in marketing communication and product presentation. These sensory signals allow companies to improve the attractiveness of their goods and provide unforgettable consumer experiences. The great impact of olfactory signals implies that scent can be quite important in affecting customer behaviour. Retailers and marketers can investigate scent marketing techniques to design appealing surroundings that appeal to customers and influence buying decisions.

Fascinatingly, in this study consumer behaviour was not much affected by taste cues. Although taste is clearly a fundamental component of the whole consumer experience, in this specific situation other sensory signals may have taken front stage. To better grasp their combined effects on consumer behaviour, more study could investigate how taste interacts with other sensory modalities. The great positive impact of touch cues emphasizes the need of tactile experiences in customer decision-making. Products with pleasing tactile qualities and textures can arouse good emotional reactions and improve perceived value, so affecting buy intentions and brand loyalty. Given the combined influence of several sensory stimuli on consumer behaviour, the cumulative effect of sensory cues points businesses toward a comprehensive approach to sensory marketing. Companies can create striking brand experiences that appeal to consumers on several levels by carefully including visual, auditory, olfactory, taste, and touch cues into their marketing plans and product designs.

Findings

Though their influence varies depending on the sense, the results of the study show that consumer behaviour is much influenced by sensory cues. Important understanding from the study consist in:

- *Visual Cues:* One could say Attracting consumer attention and influencing purchase decisions depends much on visual cues including color, design, and product packaging. The research revealed that visual signals accounted for almost 25.2% of the variance in consumer behaviour, so stressing the need of aesthetic attractiveness in marketing communication. For example, well-designed ads and appealing packaging can help to build a memorable brand image, so boosting customer involvement and sales.
- *Auditory Cues:* Consumer moods and shopping experiences are much influenced by background music and the tone of salespeople, especially. The study found that around 21.9% of the variance in consumer behaviour could be ascribed to auditory cues. Well chosen soundscapes can be used by retailers to create positive shopping environments that boost customer satisfaction and support longer store visits. Particularly the kind and speed of music seemed to influence consumers' shopping behaviour and general impressions of the retail surroundings.
- *Olfactory Cues:* This study supports the theory that good scents can establish good links with a brand or shopping environment since their effect on consumer behaviour is well-documented. Ten percent or so of consumer behaviour variance could be attributed to olfactory cues, so underscoring the possibility of scent marketing techniques to increase consumer interaction. For instance, a nice scent in a store can inspire consumers to stay longer, so raising their chances of purchase. The research advises companies to gain from developing signature smells that arouse desired feelings and brand associations.
- *Taste Cues:* In this study, taste cues did not show statistically significant results unlike other sensory modalities, suggesting their impact may be context dependent. Taste is clearly important in food and beverage contexts, but its influence seems limited in non-food retail settings. Future studies could look at how taste signals interact with other senses to produce coherent and engaging consumer experiences.
- *Touch Cues:* The qualities—such as texture, weight, and material—have a big impact on consumer impressions and purchase intent. Emphasizing the need of haptic feedback in forming consumer experiences, the study found that touch cues explained 10.3% of the variance in consumer behaviour. For instance, the texture of clothes materials or the way a product's packaging feels might inspire good emotional reactions, so strengthening the perceived value and brand loyalty. Implications of the results highlight the need of a multisensory marketing approach in which companies include visual, aural, olfactory, taste, and touch cues into their marketing plans. Companies can thus design immersive brand experiences that appeal to consumers on several levels, so fostering stronger brand loyalty and competitive differentiation. Retailers can improve the whole shopping experience, for example, by harmonizing visual and auditory aspects and then using scent and touch signals to support brand identification.

The research also emphasizes the possibility for creativity in sensory marketing, especially by means of newly developed technologies like virtual and augmented reality. These technologies allow interactive and

immersive surroundings that engage several senses, so improving consumer experiences. Furthermore, when developing sensory marketing plans, companies should take demographic and cultural aspects into account since sensory tastes can differ greatly among customer groups.

Implications

The findings underscore the importance of a multisensory marketing approach, wherein businesses integrate visual, auditory, olfactory, taste, and touch cues into their marketing strategies. By doing so, companies can create immersive brand experiences that resonate with consumers on multiple levels, leading to stronger brand loyalty and competitive differentiation. For instance, retailers can enhance the overall shopping experience by harmonizing visual and auditory elements, while simultaneously leveraging scent and touch cues to reinforce brand identity.

The study also highlights the potential for innovation in sensory marketing, particularly through the use of emerging technologies such as virtual and augmented reality. These technologies can be employed to create interactive and immersive environments that engage multiple senses, further enhancing consumer experiences. Additionally, businesses should consider cultural and demographic factors when designing sensory marketing strategies, as sensory preferences can vary significantly across different consumer segments.

Conclusion

Ultimately, the results of this research highlight the important influence sensory cues have on consumer behaviour. Consumer decisions were found to be much influenced by visual, auditory, olfactory, and touch cues, so stressing the need of multisensory marketing techniques in increasing consumer involvement and brand loyalty. Although in this study taste cues did not show statistically significant findings, companies should not ignore the part taste plays in the whole consumer experience and take its interaction with other sensory modalities into account. All things considered, using a comprehensive approach to sensory marketing will enable companies to produce unforgettable brand experiences that appeal to consumers and generate competitive advantage on the market. More thorough understanding of the intricate interaction between sensory cues and consumer behaviour will

come from additional study in this field, so guiding the creation of more successful marketing plans and product developments.

References

- Farhadi, S., Slambolchi, A., & Alhosseini Hamedani, S. E. (2017). Sensory marketing: A review and introduction. *Sensory Marketing: A Review and Introduction*, 3(3), 103-107.
- Singh, S., Chandrakar, P., Jamsandekar, S., Ranjan, A., & Wanjari, S. (2020). A review on the impact of sensory marketing on consumer buying behaviour. *Global Scientific Journals*, 8(6), 1308-1318.
- Bhati, R., Garg, R., Kataria, A., Malviya, & Talwar, V. (2021). Sensory marketing: A review and research agenda. *Journal of Marketing Research*, 25(4).
- Hamilton, A., & Bahnan, N. (2019). *The power of sensory marketing in controlled consumer sales* (Thesis).
- Turner, S. F., & Fern, M. J. (2012). Examining the stability and variability of routine performances: The effects of experience and context change. *Journal of Management Studies*, 49(8), 1407-1434.
- Hernandez-Llamas, A., Cabanillas-Ramos, J., & Magallon-Barajas, F. J. (2014). Estimating impact of white spot disease on economic risk in semi-intensive shrimp farms in Mexico: The case of the State of Sinaloa. *Reviews in Aquaculture*, 8(2), 111-120.
- Krishna, A., Cian, L., & Sokolov, T. (2016). The power of sensory marketing in advertising. *Current Opinion in Psychology*, 10.
- Randhir, R., Latasha, K., Tooraiven, P., & Monishan, B. (2016). *Analyzing the impact of sensory marketing on consumers: A case study of KFC*.
- Krishna, A., & Schwarz, N. (2014). *Sensory marketing, embodiment, and grounded cognition: A review and introduction*.
- Değermen Erenkol, A., & AK, M. (2015). Sensory marketing.
- Raz, C., Piper, D., Haller, R., Nicod, H., Dusart, N., & Giboreau, A. (2008). From sensory marketing to sensory design: How to drive formulation using consumers' input. *Food Quality and Preference*, 19(8), 719-726.
- Garg, R., Bhatia, R., Chhikara, R., & Kataria, A. (2021). Sensory marketing - A review and research agenda. *Academy of Marketing Studies Journal*, 25.

Singhal, S., & Khare, K. (2015). Does sense react for marketing: Sensory marketing? *International Journal of Management, IT and Engineering (IJMIE)*, 5(5).

Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect

perception, judgment, and behaviour. *Journal of Consumer Psychology*, 22(3), 332-351.

Hultén, B. (2009). Sensory marketing: The multi-sensory brand-experience concept. *European Business Review*, 23(3).