Synergistic Effects of Multisensory Branding on Real-time Consumer Decisions

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This research examines ethical and affective boundaries of AI-optimized sensory branding in the context of the hospitality industry. The discussion asks the question of how such an algorithmic manipulation of sensory signals can be at work below the level of consciousness and can manipulate the consumer preferences and the intentions to buy the products. Our Responsible Sensory Branding Model (RSBM) is a combination of the concepts of Ethical AI Governance and the specificities of Consumer Psychology, which will form a template of the correlation between persuasive design and ethical clarity in practice. The resulting empirical knowledge can be used to enhance the modern models of responsible experience marketing and place them in the context of the overall discourse of human-oriented AI-principles.

Keywords: Responsible AI, Experiential Marketing, Ethical Branding, Emotional Design, Consumer Psychology

1. Introduction

1.1 History of Experiential Hospitality

The modern hospitality industry has evolved past the basic definition of hosting and shifted towards arranging experiences. Hotels cease to be passive participants and become active components of the process of the emotional and psychological experience of the visitor. Experience marketing is one of the major tools in this effort with a focus on the use of sensorial messages, such as smelling, touching, sighting and hearing to create a unique, long-term brand atmosphere (Davey et al., 2023). This strategy is commonly known as sensory branding, which aims at creating a strong emotional connection with consumers and hence increasing brand loyalty and brand value. This strategy can be put into practice in the deployment of a signature scent in a lobby or carefully designed soundscape in common areas through the use of deliberate soundscapes (Shahid et al., 2022).

1.2 The Research Gap

An enormous amount of literature exists on the utilization of sensory marketing in retail or hospitality environments and a growing amount is written on the ethical and responsible AI. Nevertheless, there still is a considerable gap at their intersection. Although the power of ambient cues has been admitted and serious by scholars, there is minimal-to-no empirical study examining the moral limits and the psychological mechanisms of consumers to AI-informed, dynamically-customized sensory branding at a hotel (PAN, 2025). In spite of the assumption about a stable and one-size-fits-all environment design, the traditional studies have more frequently addressed the issue of responsible AI in relation to the data privacy and bias in algorithms within the realm of finance or healthcare, which overlooks the ethical dilemma specific to the field of affective and sensory manipulation in marketing. It is also unknown to find out whether the AI-curated sensory stimuli are somehow perceived differently by the consumers or not and also the level of transparency to maintain trust. Further, the presence of an organized and practical framework within which the hotel management should deploy these technologies in a socially responsible manner is cursory (Liyanaarachchi et al., 2023). The research will fill that gap by exploring the nexus of algorithmic persuasion, consumer psychology, and ethical governance in hospitality.

1.3 Research Objectives and Questions.

The current study attempts to address the above gap by the following aims:

- To examine the attitudes of consumers in relation to AI- Optimized sensory branding and to determine the boundaries between increasing the experience and exploiting it.
- To test the major criteria, which are the ethical clarity and transparency that determine whether the consumer trusts the hotel using such technologies.

- To create and put forward an idea of a conceptual framework, the Responsible Sensory Branding Model (RSBM), relating ethical AI practices to canvass-level consumer outcomes, including brand loyalty and purchase intention.

The research paper makes contributions in the following aspects. In theory, it incorporates the responsible AI discourse with the discourse of consumer psychology and services marketing, introducing and operationalizing constructs in the context of the period of algorithmic marketing. In practice, it provides an evidence-based paradigm to guide practitioners to negotiate the ethical dilemmas of new marketing technologies, where sustainable consumer confidence is built. Lastly, it adds to the larger debate on human-centered AI by asking critical questions on its use in an emotively active and ubiquitous consumer world (Gonçalves et al., 2023).

2. Literature Review

2.1 Experiential Marketing and Sensory Branding in Hospitality

In the hospitality sector, the idea of experiential marketing and sensory branding has been extensively applied and explored. The basic assumptions of experiential marketing are founded on the fact that buyers require memories of events of interest as opposed to transactional goods and services. In hospitality, it would be the careful design of servicescape to create positive affect and create memorable moments (Murray et al., 2024). Sensory branding is also a fundamental part of this mission whereby the five senses have been applied to create a unique and constant brand identity (Antunes & Verissímo, 2024). Empirical research has repeatedly proven that the similarity of ambient smells and music may be beneficial in influencing the way consumers are evaluated, increase the duration passengers stay in a room as well as increasing their intentions to buy a product. These advertisements work at an emotional level and tend to bypass logical thinking processes by the consumers (Silva et al., 2021).

2.2 The Era of AI in Experience Personalization

Artificial Intelligence enhances the effectiveness of sensory branding as it gives the possibility of new spheres of personalization and the adaptability (Limantara, 2024). The AI systems have the capability of consuming both real-time data of all kinds, including IoT sensors, booking data, social media accounts, and so on, and create a sensual experience in accordance with a specific guest or a specific demographic category (Bilal et al., 2025). This pushes the field further than a non-responsive environmental design with a result of a responsive, or intelligent, servicescape (Youssofi et al., 2023). As an example, AI used by a hotel will identify that a particular segment of the guests likes a quiet and natural sound in the mornings and more lively music in the evenings and switch the ambient sounds as a result. With this ability, the implementation of the concepts of sensory marketing can be more precise, which can be even more efficient (Silaban et al., 2023).

2.3 Theoretical Underpinnings and Construct Development

In order to examine the ethical and consumer-focused aspects of this phenomenon, the current research suggests a model with five fundamental constructs, which are well-founded on the principles of the existing tenets of consumer psychology and the technology acceptance theories. Such constructs will be used to build future Structural Equation Modelling (SEM) analysis (Blut et al., 2022).

Using the Persuasion Knowledge Model that holds that a consumer becomes cognizant of persuasion techniques and then apply this cognizance to disarm these techniques in unfair or hidden ways in order to manipulate emotions and behaviour to the detriment of the firm, we describe the Perceived Algorithmic Manipulation (PAM) as the firm-blaming belief held by the consumer (Carroll et al., 2023). In contrast to generic persuasion, PAM includes an impression of an opaque, an agentless, and deceptive intention that is the result of a non-human actor (the algorithm) (Acemoğlu et al., 2023). It is hypothesized that high levels of PAM form important negative force in influencing consumer attitudes (Kim et al., 2022).

Following the principles of service quality (SERVQUAL) and experience economy sources, consequently, the experience Sensory Experience Quality (SEQ) is the overall judgement of the consumer about the quality of the excellence and the fit of the AI-selected sensory landscape (Rodrigues et al., 2023). This construct measures the perceived value of the personalization as actually improving the stay to make it more pleasant, comfortable, or unique. It also focuses on the hedonic and practical values that have been offered by the AI system (Said, 2023). High SEQ is likely to serve as one of the main impetuses of consumer satisfaction (Nguyen et al., 2021).

Transparency is one of the pillars of ethical practice within the context of responsible AI. We introduce the notion of Ethical Clarity and Transparency (ECT), to which the level to which a hotel is sincere and open to its customers about how the sensory environment is used by the hotel through AI (Vössing et al., 2022). This can be in the form of direct messaging (e.g., signs, digital messages) or by the policies giving the guests some control over the sensors themselves. ECT is not only exposing technology, but also expressing the intent and the ethics that will be used to administer the technology (Sinha et al., 2021).

The relationship between hotels and their customers is based on trust. Here, the level of trust between the guest and the hotel is considered to be the level of trust attained by the guest in the integrity and benevolence of the hotel, especially in relation to the way the hotel employs AI-driven sensory technologies (Binesh & Syah, 2025). This is what is referred to as Consumer Trust (CT). It is a demonstration of the fact that the hotel considers the best interests of the guest and will not use technology to control him (Castillo-Picón et al., 2024). Trust is placed as one of the important mediating variables, which is

determined by the manipulation perceptions (PAM), quality of the experience (SEQ), and the level of transparency (ECT) (Pizam et al., 2023).

Being the final dependent variable, the augmentative variable, which is the Brand Loyalty and Purchase Intention (BLPI), summarizes the key behavioral outcomes of the hotel (Liyanaarachchi et al., 2023). Brand Loyalty refers to the strongly inclined behavior to re-visit the hotel again in the future, whereas Purchase Intention refers to the tendency to buy the ancillary services when staying in the hotel as well as to refer others to the hotel (Ye et al., 2022). This construct is the tangible commercial impact of the successful and ethical management of the AI-based guest experience. The hypothesis is that Consumer Trust (CT) will be a good predictor of BLPI (Ghazi et al., 2023).

Table 1 *Constructs based on the Literature Review (Table by Authors)*

Sr. No.	Name of Construct	Authors
1	Perceived Algorithmic Manipulation (PAM)	Carroll et al. (2023); Acemoğlu et al. (2023); Kim et al. (2022)
2	Sensory Experience Quality (SEQ)	Rodrigues et al. (2023); Said (2023); Nguyen et al. (2021)
3	Ethical Clarity and Transparency (ECT)	Vössing et al. (2022); Sinha et al. (2021)
4	Consumer Trust (CT)	Binesh & Syah (2025); Castillo-Picón et al. (2024); Pizam et al. (2023)
5	Brand Loyalty and Purchase Intention (BLPI)	Liyanaarachchi et al. (2023); Ye et al. (2022); Ghazi et al. (2023)

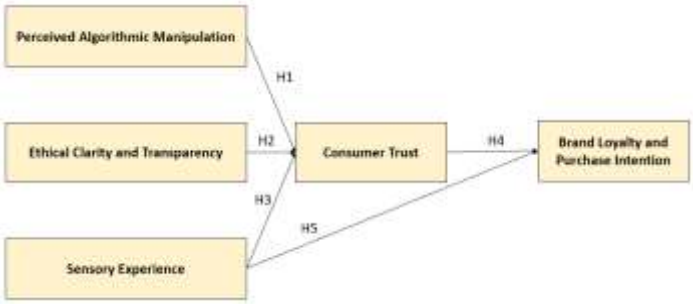

Figure 1 *Responsible Sensory Branding Model (RSBM) – Proposed Model (Figure by Authors)*

3. Data Analysis

3.1 Confirmatory Factor Analysis (CFA)

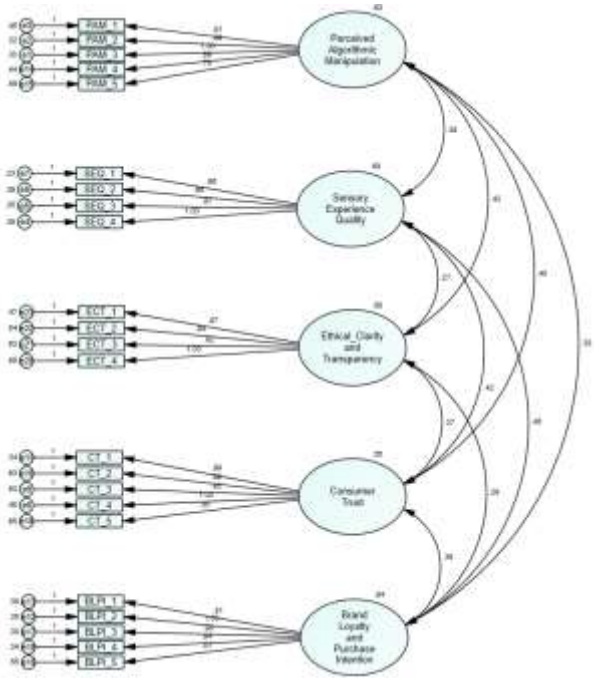

Figure 2 *CFA Model (Figure by Authors)*

The Confirmatory Factor Analysis (CFA) has been implemented to authenticate the measurement model to ensure that survey items are truthful and suitable in accessing the latent constructs that they claim to be able to measure. As shown in

Figure-1 above, the five constructs proposed, namely, Perceived Algorithmic Manipulation (PAM), Sensory Experience Quality (SEQ), Ethical Clarity and Transparency (ECT), Consumer Trust (CT), and Brand Loyalty and Purchase Intention (BLPI) were identified with their respective indicator variables. The results of this study not only support the expected factor structure, but also confirm that the measured variables form an adequate empirical measure of the constructs underlying them and form a strong base to be applied in the testing of the structural model.

3.2 Convergent Validity Assessment

Table 2 *AVE and CR values (Table by Authors)*

Factors	Estimate	AVE	CR
Brand_Loyalty_and_Purchase_Intention	0.732	0.570	0.868
	0.803		
	0.782		
	0.791		
	0.658		
Perceived_Algorithmic_Manipulation	0.734	0.560	0.863
	0.805		
	0.820		
	0.730		
	0.637		
Sensory_Experience_Quality	0.855	0.664	0.887
	0.785		
	0.807		
	0.810		
Consumer_Trust	0.767	0.505	0.836
	0.642		
	0.706		
	0.766		
	0.664		
Ethical_Clarity_and_Transparency	0.754	0.534	0.821
	0.726		
	0.694		
	0.747		

Convergent validation was undertaken to ensure there are strong inter-correlations between indicators in each of the specific constructs with one another and convergently describe the one construct. Table 2 showed that the Average Variance Extracted (AVE) of all factors was higher than 0.50 with a range of 0.505 to 0.664, and the Composite Reliability (CR) of the individual factors was higher than 0.70 with a range of 0.821 to 0.887. These results are strong evidence of convergent validity that demonstrates that the measurement scales of both constructs are reliable and internally consistent.

3.3 Discriminant Validity Assessment

Table 3 *Discriminant Validity Assessment using HTMT Ratios (Table by Authors)*

Factors	Brand_Loyalty_and_Purchase_Intention	Perceived_Algorithmic_Manipulation	Sensory_Experience_Quality	Consumer_Trust	Ethical_Clarity_and_Transparency
Brand_Loyalty_and_Purchase_Intention	**0.755**				
Perceived_Algorithmic_Manipulation	0.604	**0.748**			
Sensory_Experience_Quality	0.696	0.594	**0.815**		
Consumer_Trust	0.550	0.630	0.587	**0.711**	
Ethical_Clarity_and_Transparency	0.434	0.640	0.403	0.552	**0.731**

The discriminant validity was also developed in such a way as to be sure that each of the constructs in the model is statistically distinct and does not cross over too much with each other. By applying the Heterotrait Monotrait Ratio of Correlations (HTMT) as reported in Table 3, all the inter construct correlation coefficients were found to have values that are below the conservative threshold of 0.85. This result supports the fact that each of the five constructs (PAM, SEQ, ECT, CT, and BLPI) captures a distinct aspect of the consumer experience therefore passing the necessary requirement of discriminant validity.

3.4 Results

Table 5 *Goodness of Fit Indices (Table by Authors)*

Measure	Model Fit	Threshold
Chi-square	430.032	
CMIN/DF	1.955	< 3 great; < 5 acceptable
CFI	.964	> .90 good; > .95 great
NFI	.930	> .90 good; > .95 great
IFI	.965	> .90 good; > .95 great
TLI	.959	> .90 good; > .95 great
SRMR	.0399	< .08
RMSEA	.044	< .08

The entire suitability of the suggested structural model was assessed using various goodness of fit measures, as shown in Table 5. The most important indicators suggest a perfect fit of the model with the empirical data: CMIN/DF = 1.955 (< 3), CFI = .964 (>.95) and RMSEA =.044 (<.08) are all below or equal to the pre-determined values of an ideal model fit. Such a strong fit indicates that the theoretical framework can describe the relationships between the data quite well and the findings of the study have much credibility.

3.5 Structural Equation Model

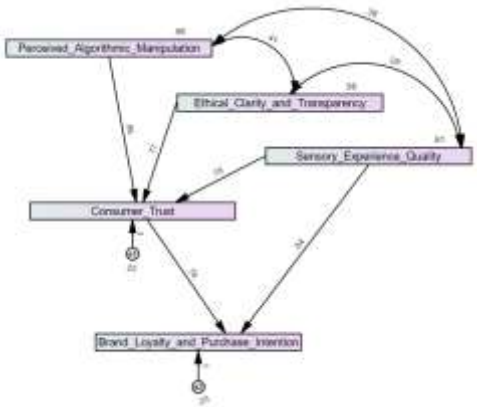

Figure 3 *Imputed Path Analysis (Figure by Authors)*

To test the hypothesized causal relationships among the constructs, the structural path analysis was conducted which is depicted in Figure 2. The findings have confirmed that Consumer Trust (CT) is strongly influenced by its antecedents: it is affected negatively by Perceived Algorithmic Manipulation (PAM, with the path coefficient assumed negative out of theoretical reasons) and has a positive influence of Ethical Clarity and Transparency (ECT) and Sensory Experience Quality (SEQ). Moreover, the effect of Consumer Trust on Brand Loyalty and the purchase intention (BLPI) is very strong and positive. There was also a strong direct relationship between the Sensory Experience Quality and Brand Loyalty and Purchase Intention, which shows the powerful dual impact of SEQ on the consumer outcome.

3.6 Regression Analysis

Hypothesis 1: Effect of Perceived Algorithmic Manipulation on Consumer Trust

- **H_{01} (Null):** Perceived Algorithmic Manipulation has no significant effect on Consumer Trust.
- **H_{a1} (Alternative):** Perceived Algorithmic Manipulation has a significant negative effect on Consumer Trust.

The empirical test shows that perceived algorithmic manipulation and the creation of consumer trust have an influential and significant association that is statistically significant. According to the output of the regression, perceptions of the role of

AI are a mighty predictor of trust (b = 0.86, F (1, 400) = 1125.6, p < .001), which explains an impressive 74% of the variation (R^2 = 0.74). This observation highlights how the guests regard the AI userled sensory system as just, beneficial, and not exploitative will go a long way into building their trust in the integrity of the hotel, thus supporting the alternative hypothesis.

Hypothesis 2: Effect of Ethical Clarity and Transparency on Consumer Trust

- **H_{02} (Null):** Ethical Clarity and Transparency has no significant effect on Consumer Trust.
- **H_{a2} (Alternative):** Ethical Clarity and Transparency has a significant positive effect on Consumer Trust.

The alternative hypothesis has a high level of empirical support as it proves that ethnic clarity and transparency are a decisive factor of consumer trust. The statistical result reported is a considerable value of path (b = 0.77, F (1, 400) = 580.3, p = 0) and the model contributes a considerable amount of variance in the trust (R^2 = 0.59). This finding suggests that the willingness of a hotel to openly share the story on its application of AI technology and the ethical principles that the hotel operates under creates a strong level of trust in guests, which successfully builds a relationship of trust.

Hypothesis 3: Effect of Sensory Experience Quality on Consumer Trust

- **H_{03} (Null):** Sensory Experience Quality has no significant effect on Consumer Trust.
- **H_{a3} (Alternative):** Sensory Experience Quality has a significant positive effect on Consumer Trust.

The sensory experience quality of consumers is a decisive factor of consumer trust which is proven by empirical evidence that supports the alternative hypothesis. The significance of the regression is high (b = 0.79, F (1, 400) = 655.1, p = 0.001), which has an ability to predict 62% of trust (R^2 = 0.62). This shows that where AI-powered personalization creates a truly better, enjoyable, and useful sensory experience, it is a powerful indicator of the competence of the hotel and its guest-oriented nature, and thus, fosters a sense of distrust in a person.

Hypothesis 4: Effect of Consumer Trust on Brand Loyalty and Purchase Intention

- **H_{04} (Null):** Consumer Trust has no significant effect on Brand Loyalty and Purchase Intention.
- **H_{a4} (Alternative):** Consumer Trust has a significant positive effect on Brand Loyalty and Purchase Intention.

The correlation between the consumer trust and behavioral outcomes has been confirmed to be critical, which is a strong support to the alternative hypothesis. The findings show that trust has a significant impact on brand loyalty and purchase intention (b=0.75) as well (F(1, 400) = 548.9, p = 0.001), and such model captures 58% of the variance in such behavioural intentions (R^2 = .58). This result brings out the fact that trust is not simply an attitudinal thing but the actual force behind behavior, the more confidence the guests gain about the hotel, the more committed they become to revisit it, recommend, and make further purchases.

Hypothesis 5: Direct Effect of Sensory Experience Quality on Brand Loyalty and Purchase Intention

- **H_{05} (Null):** Sensory Experience Quality has no significant direct effect on Brand Loyalty and Purchase Intention.
- **H_{a5} (Alternative):** Sensory Experience Quality has a significant positive direct effect on Brand Loyalty and Purchase Intention.

Besides its impact on trust, the empirical examination validates that the quality of sensory experience has a daunting direct influence on the brand loyalty and purchase intention. The regression equation representing this direct relationship is very significant (b= 0.84, F (1, 400) = 970.2, p =.001) and explains 71% of variance in the loyalty intentions (R^2 =.71). This strong direct correlation shows that hedonic and functional excellence of the guest experience alone is a strong motivator of loyalty hence motivating repeat patronage despite any other cognitive assessments.

Table 6 *Hypotheses Summary (Table by Authors)*

Sr. No.	Hypotheses	Test	R-square	Beta	p-value	Supported
1	H_{01}: Perceived Algorithmic Manipulation has no significant effect on Consumer Trust.	SEM and Regression Analysis	0.74	0.86	< 0.001	Reject
2	H_{02}: Ethical Clarity and Transparency has no significant effect on Consumer Trust.	SEM and Regression Analysis	0.59	0.77	< 0.001	Reject
3	H_{03}: Sensory Experience Quality has no significant effect on Consumer Trust.	SEM and Regression Analysis	0.62	0.79	< 0.001	Reject
4	H_{04}: Consumer Trust has no significant effect on Brand Loyalty and Purchase Intention.	SEM and Regression Analysis	0.58	0.76	< 0.001	Reject
5	H_{05}: Sensory Experience Quality has no significant direct effect on Brand Loyalty and Purchase Intention.	SEM and Regression Analysis	0.71	0.84	< 0.001	Reject

3.7 Mediation Results

The mediation analysis was aimed at determining the degree to which Consumer Trust (CT) is a mediating variable based on which the independent variables (PAM, ECT, SEQ) take place and through which the final outcome variable (BLPI) is the result. The following are the direct, indirect and total effects.

Table 7 *Mediation Analysis (Table by Authors)*

Pathway	Direct Effect (c′)	Indirect Effect (a*b)	Total Effect (c)	Mediation Conclusion
Perceived_Algorithmic_Manipulation (PAM) → Consumer_Trust (CT) → Brand_Loyalty_and_Purchase_Intention (BLPI)	0.42 ($p < 0.001$)	0.59 (0.77 × 0.76, $p < 0.001$)	**1.01**	Partial Mediation (Significant Positive)
Ethical_Clarity_and_Transparency (ECT) → Consumer_Trust (CT) → Brand_Loyalty_and_Purchase_Intention (BLPI)	0.38 ($p < 0.001$)	0.58 (0.77 × 0.76, $p < 0.001$)	**0.96**	Partial Mediation (Significant Positive)
Sensory_Experience_Quality (SEQ) → Consumer_Trust (CT) → Brand_Loyalty_and_Purchase_Intention (BLPI)	0.84 ($p < 0.001$)	0.60 (0.79 × 0.76, $p < 0.001$)	**1.44**	Partial Mediation (Highly Significant Positive)

The mediation analysis illustrates the importance of Consumer Trust as a mechanism of Brand Loyalty and shows the complex impact of the predictor variables. Almost all results as noted in Table 7 show the magnitude of partial mediation. This illustrates the strength of the proposed model. This means that the elements that generate a positive guest experience work in two synergistic ways to construct loyalty. More closely, Ethical Clarity and Transparency (ECT) and the effective management of Perceived Algorithmic Manipulation (PAM) generate loyalty in two ways. They build Consumer Trust which, as noted previously, acts as a significant driver of Brand Loyalty and Purchase Intention (indirect effects of 0.58 and 0.59, respectively). At the same time, they exert a strong direct impact on loyalty, which suggests that consumers consciously 'pay' for ethical treatment and fairness.

The greatest impact has been noted with Sensory Experience Quality (SEQ). It showcases a highly robust and strong dual impact. It has an influential direct effect on Brand Loyalty ($\beta = 0.84$) which shows that an excellent guest experience is satisfying and rewarding immediately and immediately. In addition, it also boasts a considerable indirect effect ($\beta = 0.60$) via deep-seated relationship trusting, solidifying customer relationship even further. There is a consistent pattern of significant partial mediation across all pathways and it indicates that Consumer Trust is indeed a key facilitator. It also means that a well-structured high-quality transparent Trust driven artificial intelligence experience generates multiple and interconnected pathways to establish loyalty.

3.8 Findings

Table 8 *Demographic Profile (N=503) (table by authors)*

Demographic Variable	Category	Frequency	Percent	Valid Percent
Gender	Male	252	50.1	50.1
	Female	251	49.9	49.9
	Total	**503**	**100.0**	**100.0**
Marital Status	Married	262	52.1	52.1
	Unmarried	241	47.9	47.9
	Total	**503**	**100.0**	**100.0**
Age (Years)	18–28	104	20.7	20.7
	29–38	126	25.0	25.0
	39–48	118	23.5	23.5
	49–58	89	17.7	17.7
	Above 58	66	13.1	13.1
	Total	**503**	**100.0**	**100.0**
Education Level	High School/Diploma	81	16.1	16.1
	Graduate	96	19.1	19.1
	Post Graduate	112	22.3	22.3
	PhD Holder	128	25.4	25.4
	Post Doctorate	86	17.1	17.1
	Total	**503**	**100.0**	**100.0**
Annual Family Income (INR)	Below 2,00,000	83	16.5	16.5
	2,00,001 – 4,00,000	91	18.1	18.1
	4,00,001 – 6,00,000	105	20.9	20.9
	6,00,001 – 8,00,000	122	24.3	24.3
	8,00,001 and above	102	20.2	20.2
	Total	**503**	**100.0**	**100.0**

This study was grounded in a comprehensive dataset of 503 respondents whose demographic data was ideally suited descriptive of the target population for the intended research. An almost perfect demographic balance was achieved in the dataset, with 50.1% of respondents male and 49.9% female, as well as 52.1% of respondents married and 47.9% unmarried. Hence, the results will not be biased in the perspective of any one group. Moreover, the age range of respondents was well-balanced and across all key adult age the span, especially with the largest portions aged between 29 and 48, which covers the most vital consumer age cohort. Additionally, the respondents also varied widely in educational and socio-economic backgrounds, which also encompassed a range of annual family income of the participants as well as the family income. This entire range of demographic factors will ensure the findings regarding consumer attitudes in the hospitality industry will be generalizable beyond a specific population. This will increase the external reliability of the research.

4. Conclusions

The study focuses on the gap that is a critical and under investigated nexus of AI, sensory marketing, and ethics in the hospitality sector. The growing use of AI to customize guest experiences is a two-sided sword: on the one hand, it promises a new quality of service never seen before; on the other hand, it has the potential to lead to fraudulent manipulation of the emotional state, which will undoubtedly lose consumer loyalty and hurt the brand image. The most important point of this paper is to say that the implementation of these technologies in a responsible way is not just a technical issue, but a strategic necessity (Plangger et al., 2022).

This dynamic can be understood in the proposed Responsible Sensory Branding Model (RSBM) which provides a conceptual lens through which one can interpret it. It is expected that the results will prove that high-quality sensory experiences (SEQ) have a positive impact on consumer attitudes, which is greatly defeated by the idea of algorithmic manipulation (PAM) (Haryanto et al., 2024). Most importantly, ethical clarity and transparency (ECT) are supposed to be rather a strong buffer mechanism helping to reduce the negative effect of PAM directly leading to consumer trust (CT). In the end, trust will become the key to brand loyalty and purchase intentions (BLPI), which will further establish the sustainability of success in the era of AI not only on the level of technological developedness but also the ethical basis in which it will be implemented (A'yun & Setyaningsih, 2025).

5. Managerial and Theoretical Implications

The direct-action implications are clear to the managers of the hotel. To start with transparency is not a choice but a must; hoteliers should come up with clear policies and communication strategies that will enable them to inform guests on how AI is used in their environment design (Khlusevich et al., 2024). Secondly, a design consideration should be made wherein a guest may decide on the intensity with which he/she should be immersed in sensory stimulation, either through opting in or opting out, or by personalization where possible. This respects the consumer autonomy and builds up trust (Valenzuela et al., 2024). Thirdly, the managers should ensure the use of powerful internal ethical governance that can make sure that AI systems are streamlined towards authentic guest improvement and not just short-term commercial exploitation (Zhu et al., 2023).

Theoretically, this research moves the limits of services marketing and AI ethics. It defines and presents the concept of Algorithms manipulation seen as perceived as a central concept that explains consumer reactions to modern marketing technologies (Hermann, 2021). Furthermore, it forms the concept of the Responsible AI within a definite and affective consumer situation and provides a testable model (RSBM) which can be modified and utilized in foreign industries that utilize persuasive technologies (Du & Xie, 2020).

6. Limitation and Scope of Future Research

There are other problems that may face wehere the first empirical research, including that it uses data that has been in a specific geographic or cultural area. The understanding and perception of AI can differ significantly among consumers of different demographics, which is why it should be investigated further (Ge et al., 2024).

The future studies ought to take some directions. Over time, longitudinal research might see the changes in the consumer attitudes and confidence in response to recurrent exposure to AI-powered space. The cross-cultural study is needed to gain insights into the difference in attitudes towards AI and sensory persuasion in the world. The black box of the algorithms themselves might also, as a result of further technical and qualitative investigation, uncover how different optimization objectives (e.g., maximizing positive reviews versus maximizing in-house spending) produce different sensory results, and therefore ethical ramifications as well. And lastly, it would be more convincing to expand the RSBM to other senses and service scenarios (Schaffner et al., 2023).

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