

Impact of Multisensory Marketing on Consumer Engagement and Brand Loyalty in Coffee Brands¹S. Sangeetha, Research Scholar, PG and Research Department of Commerce CA, Kaamadhenu Arts and Science College, Sathyamangalam - 638503²Dr. A.Gurumoorthi, Associate Professor, Department of Commerce, Kaamadhenu Arts and Science College, Sathyamangalam - 638503**ABSTRACT**

Daybreak beverage consumers are the persons who purchase and consume beverages like coffee, tea, health drinks, or juices at the early hours of the day. Sensory marketing has become the most popular research topic for scholars as many company products got promoted through marketing based on the human senses (i.e., sight, hear, smell, taste and touch). The consumer perception and buying behavior of any products are based on the packaging appearance, branding and pricing of particular products. The multisensory attributes of packaging plays an important role for the success of any food and beverage products. However, the detailed explanation how the multisensory strategies affect consumer perception and purchase decisions remains unaddressed. The purpose of the article is to present the multisensory marketing model on hypothesis of customer perception and brand loyalty experience among daybreak beverages consumers particularly coffee brands. This study improves the performance of multisensory marketing strategies in enhancing the consumer perception and purchase behavior toward coffee brand products. Coffee consumption is essential one as it deals with aroma and taste sensory attributes. This study investigates how the sensory attributes influence consumer purchase behavior and coffee brand loyalty. This study analyzes the five sensory attributes lead to brand loyalty through customer decision on buying product. This study develops the statistical framework linking multisensory attributes to consumer perception and purchase behavior. A quantitative analysis is carried out with 38 different questionnaires from 150 respondents. Data is collected from coffee consumers and analyzed using Multivariate Analysis of Variance (MANOVA) to test the hypothesized relationship among multisensory strategy and purchase behavioral outcomes. MANOVA is a statistical method used to test the variations in multiple dependent variables across different groups through considering one or more independent variables. This study reveals that positive association of sensory branding and brand loyalty. The qualitative study is carried out on primary and secondary data sources through questionnaires. Results show that multi-sensory marketing has a positive impact on consumer perception and buying behavior.

Keywords: Daybreak beverage consumers, sensory marketing, buying behavior, Multivariate Analysis of Variance, multisensory strategy

1. INTRODUCTION

Sensory marketing is the process functioned based on emotional and behavioral actions for selling products and services. Sensory marketing creates positive emotions and experiences for consumers who associate sight, smell, taste, hearing and touch. Multi-sensory marketing employs more than one consumer senses to attract them to buy the product. Multisensory marketing computes the relationship between independent variables of sensory branding and dependent variables of consumer buying behavior. Multisensory Marketing is a strategic approach with multiple senses to influence the consumer perception, emotional response and buying behavior. Multisensory marketing strategy is considered as the long-term management of sensory elements to support brand loyalty. The coffee industry is considered a growing segment of food and beverage service. The coffee consumption increases in national and global markets. The coffee consumption trend has shifted from the branded coffee market to the evolutionary third-wave coffee termed special coffee. The coffee provides new coffee consumption trends based on different qualities like product fragrance/aroma, flavor, acidity, body, balance, uniformity, sweetness and other value-added characteristics. Coffee allows the consumers to perceive the superior and distinctive type with unique intrinsic and extrinsic qualities, advantages and coffee consumption experiences. The coffee aligned with social preferences satisfied the consumer demands for foods and beverages. The coffee consumer behavior increased the coffee shop productivity in delivering a variety of customer segments in society.

1.1 Paper Organization

The paper organization is arranged into different sections as: Section 2 reviews the literature and provides research gaps, objectives and hypotheses of the study. Section 3 describes the research methodology of multisensory marketing on emotional engagement and brand loyalty in daybreak beverage consumers with data collection and data sampling. Section 4 shows the experimental evaluation with detailed dataset description. Section 5 portrays the comparative analysis of results using different tests like percentage analysis, rank analysis MANOVA statistical tests and T-test. Finally, Section 6 concludes the paper with final remarks.

2. LITERATURE REVIEW

Multisensory marketing generates a positive experience for users through different senses. The impact of emotional advertisement was studied in [1] during the pandemic on consumer behavior. The consumers were interested in fast-food chains due to contradiction between unhealthy offerings and empathetic marketing. The relationship of sensory marketing dimension of sense and its importance was discussed in [2] for a chain of restaurants in Baghdad. The impact of sensory cues was discussed in [3] based on consumer buying behavior in retail settings. The retail store managers make valuable decisions and select suitable retail stores for creating shopping experience.

The relationship between multi-sensory marketing, customer moods, impulsive buying traits and impulsive buying behavior was introduced in [4] through Stimulus-Organism-Response (S-O-R) model. Thirty-six participants were used in [5] with color, texture, scent, and unboxing interaction to influence quality, taste experience, emotional engagement, and economic valuation. The impact of sensory branding was studied in [6] on consumer buying behavior within fast-food franchises. In [7], the study examined the impacts on sensory marketing and advertisements. The marketing business prioritized the marketing skills of clients. The concept of multisensory marketing was discussed in [8] with sensory elements. The concept played an essential role in shaping consumer preferences and purchase intention for food products.

The impact of sixteen coffee packaging colour varying in hue and saturation was discussed in [9] on coffee consumer expectations. The sensory marketing was discussed in [10] with patterns in the marketing field focused on sight, smell, hearing, taste and touch. The sensory marketing created the strong relationship between brands and consumers. In [11], the influence level of sensory branding on brand attitude was computed.

In [12], the five sensory cues were influenced by sensory brand experience resulting in brand loyalty through customer satisfaction and brand attachment. The descriptive correlational research design study was carried out in [14] to determine the respondent assessment of factors influencing consumer brand loyalty in terms of product quality and service quality. An online questionnaire and structural equation modelling (SEM) was carried out in [15] with AMOS software. The independent variables were based on brand experience and brand love. The relationship and influence between marketing activities and brand awareness was discussed in [16]. An intricate mechanism was introduced in [17] where sensory stimuli influence consumer perception and behaviors in digital environments. The practical guidance was provided for marketers to differentiate their brands. Data analysis was carried out in [18] through Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The data analysis combined sensory, emotional and social elements for constructing customer loyalty.

The structural relationships among customer experience, customer satisfaction, advocacy and repurchase intentions was discussed in [18] with the mediating effect of tourist satisfaction. A multilayer Partial Least Squares Structural Equation Modeling (PLSSEM) was carried out in [19] to examine the relationships between experiential marketing, emotional marketing, customer satisfaction and customer loyalty. A phenomenological approach was introduced in [20] to determine the consumer's emotional connections. The designed approach influenced purchasing decisions in the food sector.

A conceptual model was designed in [21] to compute a strong relationship between coffee-like scent, emotional brand attachment, brand loyalty and store loyalty. Structural equation modeling was carried out in [22] to identify the impacts on customer satisfaction, emotional

well-being, and consumer behavior. The brand experience effects on customer engagement was discussed in [23] with service quality mediator variables. The coffee brand service quality and customer experience was discussed in [24] on equity, personality and reputation. The structural equation modeling of coffee brands was carried out using R. The brand personality and brand reputation was computed through customer experience and service quality.

The evolution of analytical methods was introduced in [25] with spectroscopic, chromatographic and AI-driven models for accurate, consistent and quality assessment in coffee production. The different factors affecting growth of coffee sensory attributes is discussed in [26]. The cultural heritage and regional tradition factors contribute to the processing technology. The relationship between sensory marketing and purchase behavior was discussed in [27] through assessing consumer requirements and characteristics for purchasing the product in coffee shops.

An advanced chemometric modeling was introduced in [28] to forecast the coffee sensory attributes depending on near-infrared (NIR) spectra of ground coffee samples. The conceptual design of the coffee roasting factory was discussed in [29]. The design combined the visual, auditory, tactile, olfactory and gustatory elements for improving the spatial perception through multi-sensory coordination. A machine learning technique was designed in [30] for time-series data to forecast the temporal variations based on temporal evolution of sensations.

2.1 Research Gap

Competition in marketing has increased exponentially and compelled companies to stand out from the crowd by offering unique products and creating memorable experiences for consumers. Marketers use marketing strategies to stimulate their consumer senses for creating pleasant experiences to provide brand perceptions. Researchers use one or two senses together into their research investigations for emotional engagement and brand loyalty identification. Thus, this study addresses the research gap that exists in literature on this topic. In addition, the brief description is given on how multi-sensory branding has potential to influence the consumer behavior in India. This study helps different marketers for developing more effective branding strategies for future researchers.

2.2 Objective of the Study

The objective of the research work is given as:

- To find out the relationship between brand loyalty behavior and demographic variables, buying decision and consumer perception towards coffee brands
- To assess the impact of multisensory branding elements on consumer emotional engagement towards coffee brand
- To examine whether multisensory branding improves the customer satisfaction for buying same coffee brand

2.3 Research Hypothesis

In the study area, there are three research hypotheses analyzed. They are:

- There is a significant relation between demographic factors and brand loyalty factors among Daybreak beverage consumers in multisensory marketing
- There is a significant relation between brand loyalty factors and consumer perception among coffee consumers in multisensory marketing.
- There is a significant relation between brand loyalty factors and buying decisions of coffee brands in multisensory marketing.
- There is a significant relation between brand loyalty factors and marital status as well as gender

2.4 Limitations of the Study

The limitations of the study is given as

- The sample size is limited to the 500 respondents.
- Data is collected in short time period
- Validity and reliability of the data depend on response from the respondents

3. RESEARCH METHODOLOGY

Sensory marketing played an essential role in shaping customer experiences in coffee brand environments. The sensory engagement is an essential one for finding the coffee brand identity. Multi-sensory branding uses the aroma of coffee, ambient music, taste, texture and appearance to generate an immersive environment for consumers. There is limited research on gender-related responses to identify the coffee brands. This study shows whether men and women respond to multi-sensory inputs for enhancing overall coffee brand experience. Multivariate Analysis of Variance (MANOVA) is introduced with the primary and secondary data. For performing primary data collection, the online survey is conducted with a different number of questionnaires. Different multiple choice questions are distributed among the people belonging to different gender, age group, occupation and income levels to know the consumer perception with regard to sensory branding effects. The data collected is analyzed with help of different graphs and statistical analysis tools to arrive at conclusions.

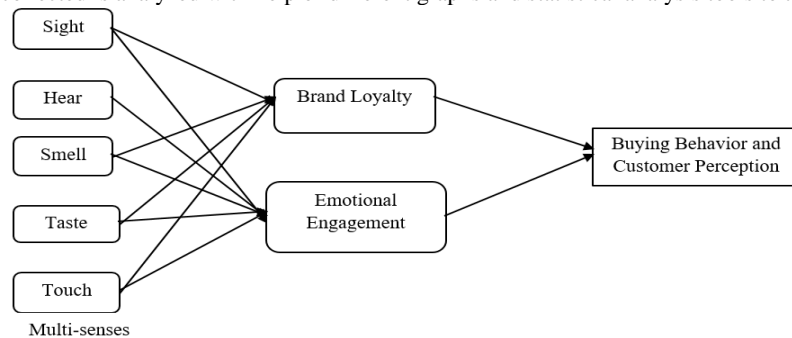


Figure 1 Diagrammatic representation of Multisensory Marketing on Emotional Engagement and Brand Loyalty

Figure 1 illustrates the diagrammatic representation of multisensory marketing on emotional engagement and brand loyalty of coffee brands. The customer buying behavior and their perception is based on multisensory attributes such as sight, hear, smell, taste and touch. The multisensory attributes connect with the customer behavior based on brand loyalty and emotional engagement.

3.1 Data Collection: Respondents are selected and primary data is collected from the 200 respondents. Primary data in structured format is gathered through providing the questionnaires to the respondents. The primary data is collected through conducting survey method. The questionnaire consisted of two sections. The first section comprised the necessary demographic information, age, gender, and respondents had to indicate their favorite coffee brand. The second section comprised the questions relating to the multisensory attributes of coffee brands, brand attitude and purchase intention. The questionnaires are framed with different scales (i.e., strongly disagree, strongly agree, agree, disagree, neutral). The data is analyzed with help of percentage analysis, rank analysis, MANOVA and T-test.

3.2 Data Sampling: The key aim of the study is to know the brand loyalty among the respondents for purchase of daily beverages. The study sample comprised 200 participants selected through convenience sampling. The study is carried out to find the best coffee brand from a diverse range of coffee brands. The sample included the respondents with different age, gender and coffee consumption frequencies to guarantee representative overview of consumer preferences and consumed behaviors related to the multisensory marketing

Table 1 Research Methodology Table

Research Design	Exploratory & Descriptive
Sampling Technique	Convenience Sampling
Sample Size	600 respondents (500 respondents are given their responses)
Data Collection	Questionnaires
Testing of Hypothesis	Percentage analysis, Ranking test, MANOVA and T-test

The present study is conducted based on the customer perceptions, buying behavior and emotional engagement in the Indian market.

3.3 Data Analysis: Quantitative data from surveys were analyzed using descriptive statistics (i.e., mean and median) and inferential statistics (i.e., t-tests, MANOVA) to identify significant differences in multisensory preferences. Qualitative data from interviews were analyzed to uncover common insights. Observational data were reviewed to identify correlations between multisensory cues and consumer buying behavior.

4. RESULT ANALYSIS

After collecting the data from respondents with a structured questionnaire, the results are analyzed and interpreted. The different questions are raised to the respondents on age, monthly income and profession for realizing the preferred coffee brands. The table 2 below is explained based on the responses.

4.1 Percentage Analysis

Percentage analysis is carried out with the statistical data gathered from the respondents. The percentage analysis is carried out to compute the percentage value (i.e., true value). The percentage value is formulated as,

$$PA = \frac{\text{Number of respondents}}{200} * 100 \quad (1)$$

From (1), 'PA' represents the percentage analysis. The percentage analysis is computed for all questionnaires as illustrated in table 2.

Table 2 Socio-Demographic Profile of Respondents

S.No	Questionnaires	Category	No. of Respondents	Percentage of Respondents
1.	Age	0-15	10	5
		16-30	50	25
		31-45	85	42.5
		46-60	25	12.5
		61-75	15	7.5
		76-90	10	5
		Above 90	5	2.5
2.	Gender	Male		47.5
		Female		45
		Not willing to say		7.5
3.	Education	SSLC	20	10
		HSC	30	15
		Diploma	20	9.5
		.UG	80	40
		PG	50	25
4.	Marital Status	Married	120	60
		Unmarried	80	40
5.	Family Members	2 Members	35	17.5
		3 Members	25	12.5
		4 Members	70	35
		5 Members	45	22.5
		6 Members	25	12.5
6.	Occupation	Student	20	10
		Professional	30	15
		Business	50	25
		Private	30	15
		Government	40	20
		Retired	30	15
7.	Monthly income	0- 50000	20	10
		50000 – 100000	40	20
		1 – 2 Lakhs	75	37.5
		Above 2 lakhs	65	32.5
8.	What type of daily beverage do you like to have?	Coffee	140	70
		Tea	30	15
		Health drink	20	10
		Others	10	5
		Strongly Like	90	45
9.	Do you like coffee?	Like	65	32.5
		Neutral	20	10
		Dislike	20	10
		Strongly dislike	15	7.5
		Strongly Agree	80	40
10.	I drink coffee when I feel stressed or tired	Agree	55	27.5
		Neutral	30	15
		Disagree	15	7.5
		Strongly disagree	20	10
		Strongly Agree	95	47.5
11.	I drink coffee for energy and refreshment	Agree	40	20
		Neutral	35	17.5
		Disagree	10	5
		Strongly disagree	20	10
		Strongly Agree	110	55
12.	Where do you prefer to drink coffee?	Home	110	55
		Branded Stores	40	20
		Small shops	50	25

13.	At what time would you prefer to drink coffee?	Morning	90	45
		Afternoon	20	10
		Evening	50	25
		Night	30	15
		Others	10	5
14.	How many times do you drink coffee per day?	1 time	80	40
		2 times	75	37.5
		3 times	20	10
		4 times	15	7.5
		Above 4	10	5
15.	What type of coffee would you like to have?	Black coffee	45	22.5
		Milk coffee	60	30
		Filter Coffee	35	17.5
		Cold coffee	20	10
		Instant Coffee	30	15
		Others	10	5
16.	What brand comes to mind when you think of coffee?	Bru	40	20
		Nescafe	45	22.5
		Narasus	30	15
		Levista	25	12.5
		Continental	15	7.5
		Starbucks	40	20
17.	What are the loyalty score for the factors influencing reason in purchasing your preferred brand? (i.e., Score 1 denotes strongly disagree and Score 5 denotes strongly agree)	Taste	35	17.5
		Appearance	20	10
		Blend	10	5
		Flavor	30	15
		Package	20	10
		Price	45	22.5
		Caffeine Level	32	16
18.	How do you think a coffee brand differentiates itself from other brands in the same industry?	Taste	30	15
		Appearance	25	12.5
		Blend	15	7.5
		Flavor	25	12.5
		Package	15	7.5
		Price	60	30
		Caffeine Level	23	11.5
19.	The taste of coffee brand is satisfied	Strongly Agree	59	29.5
		Agree	66	33
		Neutral	26	13
		Disagree	25	12.5
		Strongly disagree	24	12
20.	Are you satisfied with their prices on coffees and other beverages?	Very reasonable	64	32
		Reasonable	75	37.5
		Expensive	35	17.5
		Very expensive	26	13
21.	Would you recommend this coffee brand to your friends?	Definitely yes	75	37.5
		Probably yes	60	30
		Not sure	25	12.5
		Probably not	22	11
		Definitely not	18	9
22.	Do I change the choice of coffee brand from time to time?	Strongly Agree	28	14
		Agree	35	17.5
		Neutral	45	22.5
		Disagree	42	21
		Strongly disagree	50	25
23.	Does the price of a coffee brand influence my buying decision?	Strongly Agree	20	10
		Agree	45	22.5
		Neutral	35	17.5
		Disagree	40	20
		Strongly disagree	60	30
24.	Does this coffee brand make a strong impression on my visual sense or other senses?	Strongly Agree	62	31
		Agree	45	22.5
		Neutral	33	16.5
		Disagree	25	12.5
		Strongly disagree	35	17.5
25.	Does the coffee brand provide consistent quality?	Strongly Agree	65	32.5
		Agree	50	25
		Neutral	35	17.5
		Disagree	30	15
		Strongly disagree	20	10
26.	I feel emotionally connected to the coffee brand?	Strongly Agree	70	35

		Agree	60	30
		Neutral	30	15
		Disagree	20	10
		Strongly disagree	20	10
27.	Does the smell of coffee increase my desire to buy it?	Strongly Agree	80	40
		Agree	58	29
		Neutral	22	11
		Disagree	30	15
		Strongly disagree	10	5
28.	On a scale of 1 to 10, How satisfied are you with the customer support services provided by the coffee brand?	1	5	2.5
		2	8	4
		3	10	5
		4	15	7.5
		5	18	9
		6	20	10
		7	25	12.5
		8	30	15
		9	32	16
		10	37	18.5
29.	On a scale of 1 to 10, how do you feel the coffee brand understands your needs?	1	8	4
		2	10	5
		3	12	6
		4	14	7
		5	16	8
		6	19	9.5
		7	23	11.5
		8	30	15
		9	33	16.5
		10	35	17.5
30.	On a scale of 1 to 10, how would you rate the trustworthiness of coffee brands?	1	7	3.5
		2	11	5.5
		3	13	6.5
		4	15	7.5
		5	17	8.5
		6	19	9.5
		7	21	10.5
		8	24	12
		9	35	17.5
		10	38	19
31.	Coffee brand products are appropriately priced for their value	Strongly Agree	65	32.5
		Agree	55	27.5
		Neutral	40	20
		Disagree	25	12.5
		Strongly disagree	15	7.5
32.	How does your perception of coffee brands compare to other brands you have used?	Excellent	95	47.5
		Good	70	35
		Average	20	10
		Below Average	15	7.5
		Poor	10	5
		Very poor	5	2.5
33.	In what areas do you think coffee brands could improve to better compete with other brands?	Taste	55	27.5
		Appearance	35	17.5
		Blend	15	7.5
		Flavor	50	25
		Package	12	6
		Price	18	9
		Caffeine Level	10	5
		Others	5	2.5
34.	Even if another brand has the same sensory features as this brand, I would prefer to buy this brand?	Strongly Agree	25	12.5
		Agree	30	15
		Neutral	25	12.5
		Disagree	45	22.5
		Strongly disagree	75	37.5
35.	If I have to select among different brands offering the same type of service, I would choose this brand?	Strongly Agree	102	51
		Agree	68	34
		Neutral	15	7.5
		Disagree	10	5
		Strongly disagree	5	2.5
36.	Even if another top brand has the same price as this brand, I would still buy this brand?	Strongly Agree	85	42.5
		Agree	68	34
		Neutral	25	12.5
		Disagree	14	7
		Strongly disagree	8	4
37.	Promotions and advertisements influence my coffee brand choice	Strongly Agree	54	27

		Agree	45	22.5
		Neutral	41	20.5
		Disagree	32	16
		Strongly disagree	28	14
38.	Discounts and offers influence my coffee purchase	Strongly Agree	60	30
		Agree	55	27.5
		Neutral	40	20
		Disagree	30	15
		Strongly disagree	15	7.5
39.	I am willing to pay more for high-quality coffee	Strongly Agree	60	30
		Agree	45	22.5
		Neutral	35	17.5
		Disagree	28	14
		Strongly disagree	32	16
40.	Social media promotions influence my coffee brand choice.	Strongly Agree	65	32.5
		Agree	40	20
		Neutral	51	25.5
		Disagree	25	12.5
		Strongly disagree	19	9.5

Table 2 describes the socio-demographic profile of respondents. Out of 200 respondents, the male respondents (47.5%) exceeded female respondents (45%). Among them, 7.5% are not willing to say their gender. Most of the respondents (42.5%) are 31 to 45 years old. The majority of respondents held bachelor degrees (40%). About 37.5% of the participants had a monthly income of Rs. 1,00,000-2,00,000 and 32.5% earned above two lakhs. 25% of respondents are doing their own business.

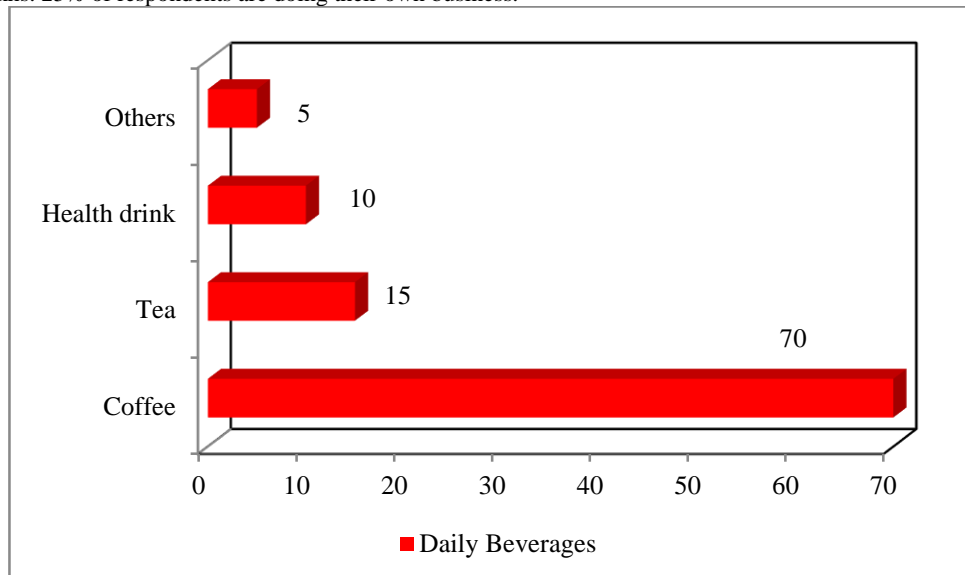


Figure 2 Daily Beverages Consumption

Figure 2 illustrates the types of daily beverage of different peoples. Among 200 different respondents, 70% of the respondents consume coffee than other beverages. 45% of the respondents strongly like drink coffee. 40% of the respondents like to drink coffee when they are stressed or tired. 47.5% of the respondents drink coffee for energy and refreshment. 55% of the respondents consumed coffee at home. 45% of the respondents drink coffee at the morning time. 40% of the respondents drink coffee one time per day and 30% of respondents drink milk coffee.

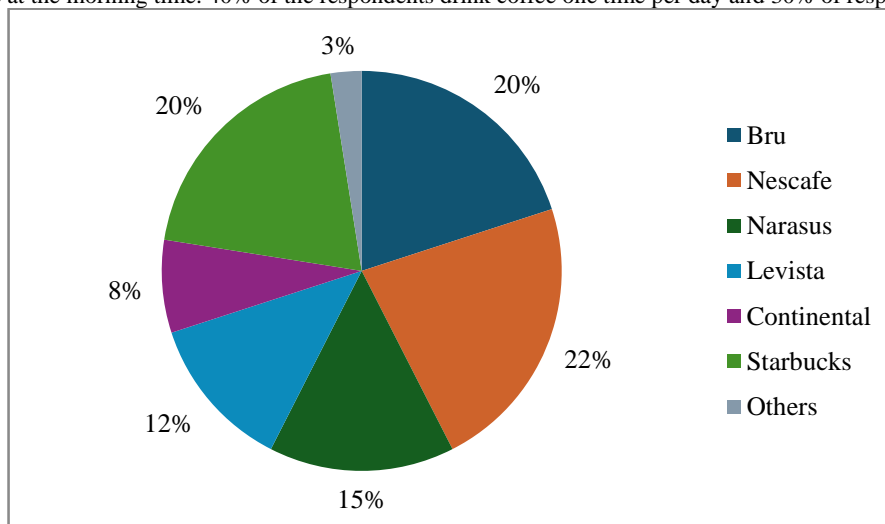


Figure 3 Coffee Brand Related Information

Figure 3 illustrates the brand related information. The different coffee brands are discussed namely bru, nescafe, narasus, levista, continental, starbucks. 22.5% of the respondents drink Nescafe coffee.

4.2 Rank Analysis

Rank-based statistical analysis is the process used to convert the raw data points into their ranks (1st, 2nd, 3rd...., 8th) to categorize the significant difference, pattern or correlation. Rank-based statistical analysis is a non-parametric method employed for ordinal data to reduce the impact of outliers.

Table 3 Coffee Brand Loyalty Factors using Rank Analysis

Brand Loyalty Factors	N	Minimum	Maximum	Mean	Standard Deviation	Rank
Taste	200	1.00	5.00	4.541	0.798	2
Appearance	200	1.00	5.00	3.989	0.984	5
Blend	200	1.00	5.00	3.984	1.021	6
Flavor	200	1.00	5.00	4.325	0.845	4
Package	200	1.00	5.00	3.971	1.078	7
Price	200	1.00	5.00	4.654	0.787	1
Caffeine Level	200	1.00	5.00	4.458	0.812	3
Others	200	1.00	5.00	3.847	1.124	8

Table 3 discusses the coffee brand loyalty factors using rank analysis. In the above mentioned table, eight different factors identified have strong influence over consumer brand loyalty. The respondents are requested to rate the loyalty factors on a five-point scale ranging from Strongly Disagree to Strongly Agree. For 4 different factors, namely price, taste, caffeine level and flavor, the average ratings fall between four and five (i.e., agree to strongly agree). For the next 4 statements, namely package, blend, appearance and others, the average ratings fall between three and four. The results indicate that the respondent decision is Neutral to Agree level. Among the eight different factors, the respondents strongly agree reasonable price is an essential factor considered when related to Brand Loyalty with mean rating of 4.654 and followed by taste factor with mean rating of 4.541. The least mean score is for others with a mean rating of 3.847.

4.3 Multivariate Analysis of Variance

MANOVA is used to examine how multiple sensory marketing cues (i.e., independent variables) simultaneously influence multiple consumer responses (i.e., dependent variables). The independent variables considered are visual, aroma, auditory, taste and texture. The dependent variables considered are brand loyalty and emotional engagement.

$$Y = \alpha + \beta_1\delta_1 + \beta_2\delta_2 + \beta_3\delta_3 + \beta_4\delta_4 + \beta_5\delta_5 + \epsilon \quad (2)$$

From (2), 'Y' represent the dependent variable results. 'α' denotes the mean term. 'β_i' symbolizes the effect of sensory stimuli. 'ε' represents the error term. 'δ₁' symbolizes the visual sense. 'δ₂' represent the aroma sense, 'δ₃' symbolizes the auditory sense. 'δ₄' symbolizes the taste sense. 'δ₅' symbolizes the texture sense.

Table 4 MANOVA test for Brand Loyalty Behavior and Demographic Factors

Brand Loyalty Score		Sum of Square	DF	Mean Square	Box's M test	Significant
Age	Between groups	81.251	4	27.854	1.258	Not Significant
	Within Groups	6418.87	195	22.971		
Family Members	Between groups	154.28	3	26.287	1.358	Not Significant
	Within Groups	6789.11	196	21.589		
Education	Between groups	304.98	5	25.687	1.214	Not Significant
	Within Groups	6981.28	194	22.587		
Occupation	Between groups	157.39	4	71.745	3.985	Significant at 1%
	Within Groups	6945.84	195	21.589		
Monthly Income	Between groups	225.9	3	36.371	1.579	Not Significant
	Within Groups	6741.89	196	22.378		

Table 4 discusses the MANOVA test for brand loyalty behavior and demographic factors. The brand loyalty factor score discusses significance results among the group based on demographic variables, namely age, family members, education, occupation and monthly income of the respondents. The results show that the Box's M test values of age, family members, education qualification and monthly income are not significant. Therefore, the hypothesis is accepted. Box's M test comparing the mean scores of occupation status of the respondents is significant at 1% level. Consequently, it is clear that the brand loyalty scores differ significantly between groups based on occupation status of the respondents and the hypothesis is rejected.

Table 5 MANOVA test for Brand Loyalty Behavior and Consumer Perceptions

Brand Loyalty Score		Sum of Square	DF	Mean Square	Box's M test	Significant
Customer Services	Between groups	78.125	2	23.581	1.268	Not Significant
	Within Groups	6587.65	197	24.998		
Advertisement	Between groups	149.29	4	23.185	1.458	Not Significant
	Within Groups	6654.44	195	22.398		
Social Media Promotions	Between groups	324.68	6	24.614	1.368	Not Significant
	Within Groups	6528.17	193	21.369		
Trustworthiness	Between groups	184.95	5	65.278	3.687	Significant at 1%
	Within Groups	6862.75	194	22.589		
Discount	Between groups	248.25	4	67.632	3.984	Significant at 1%
	Within Groups	6579.33	195	21.892		
Consistent Quality	Between groups	218.22	2	76.635	1.297	Not Significant
	Within Groups	6589.44	197	24.125		
Smell	Between groups	287.85	4	75.968	3.496	Significant at 1%
	Within Groups	6481.23	195	24.741		
Satisfaction	Between groups	215.52	2	22.235	1.458	Not Significant
	Within Groups	6379.98	197	27.879		

Table 5 discusses the MANOVA test for brand loyalty behavior and consumer perceptions. The brand loyalty factor score discusses the significance results among the group based on consumer perception, namely customer services, advertisement, social media promotions, trustworthiness, discount, consistent quality, smell and satisfaction of the respondents. The results show that the Box's M test values of customer services, advertisement, social media promotions, consistent quality and satisfaction are not significant. Consequently, the hypothesis is accepted. Box's M test comparing the mean scores of trustworthiness, discount and smell of the respondents is significant at 1% level. Accordingly, it is observed that the brand loyalty scores differ significantly between groups based on trustworthiness, discount and smell of the respondents and the hypothesis is rejected.

Table 6 MANOVA test for Brand Loyalty Behavior and Brand Buying Decision

Brand Loyalty Score		Sum of Square	DF	Mean Square	Box's M test	Significant
Bru	Between groups	98.72	4	22.863	1.178	Not Significant
	Within Groups	6817.45	195	21.874		
Nescafe	Between groups	135.98	3	74.352	4.351	Significant at 1%
	Within Groups	6654.4	196	26.987		
Narasus	Between groups	287.87	5	21.115	1.233	Not Significant
	Within Groups	6417.96	194	22.228		
Levista	Between groups	234.96	3	25.389	1.374	Not Significant
	Within Groups	6156.75	196	23.915		
Continental	Between groups	197.78	5	21.147	1.214	Not Significant
	Within Groups	6517.98	194	22.852		
Starbucks	Between groups	159.74	3	32.748	1.454	Not Significant
	Within Groups	6425.65	196	20.365		
Others	Between groups	259.47	5	23.274	1.247	Not Significant
	Within Groups	6598.87	194	21.654		

Table 6 discusses the MANOVA test for Brand Loyalty Behavior and Brand Buying Decision. The brand loyalty factor score discusses the significance results among the group based on coffee brands, namely bru, nescafe, starbucks, continental, levista, narasus and others of the respondents. The results show that the Box's M test values of bru, starbucks, continental, levista, narasus and others of the respondents are not significant. Box's M test compares the Nescafe mean score of respondents is significant at 1% level. Thus, it is clear that the brand loyalty score differs significantly between groups based on the Nescafe brand of the respondents and their hypothesis is rejected.

4.4 T-Test. T-test is a type of statistical method used to determine whether there is a significant difference between means of two groups. T-test is computed through comparing variation between group means to the variability within the groups using t-distribution.

Table 7 T-test for Brand Loyalty based on Gender and Marital Status

Brand Loyalty Score		Mean	SD	Number of respondents	T- test	Significant
Gender	Male	41.25	4.24	95	1.087	Not Significant
	Female	39.58	4.92	90		
	Not willing to say	38.57	4.52	15		
Marital Status	Married	40.98	5.02	120	2.518	Significant at 1%
	Unmarried	39.57	4.35	80		

The above table 7 discusses the brand loyalty for gender and marital status analysis. T-test values obtained are 1.087 with no significant difference between male and female in the brand loyalty score. Therefore, the hypothesis is accepted. Marital status of respondents is significant at 1% level. Consequently, it is inferred that the brand loyalty score differs significantly among the group depending on the marital status of the respondents that resulted in hypothesis rejection.

Table 8 T-test for Same Brand Preferences

Brand Preferences	Mean	SD	T-test	Significant
Taste	40.35	4.02	2.01	Significant at 1%
Appearance	42.89	4.36	1.24	Not Significant
Blend	38.41	4.65	1.15	Not Significant
Flavor	39.94	5.87	3.58	Significant at 1%
Package	41.65	4.69	1.38	Not Significant
Price	40.26	4.69	3.25	Significant at 1%
Caffeine Level	41.55	4.32	1.24	Not Significant
Others	39.87	4.68	1.35	Not Significant

The above table 8 discusses brand loyalty for the same brand preference analysis. T-test values obtained with no significant difference and significant at 1% in the brand loyalty score. The taste, price and flavor attained significant at 1% depending on the same brand preferences. The remaining preferences, namely appearance, blend, flavor, package, caffeine level and others are not significant. Consequently, it is inferred that the brand loyalty score differs significantly among the group depending on the same brand preferences.

Table 9 T-test for Switching of Brand Analysis

Brand Preferences	Mean	SD	T-test	Significant
Lack of Health	41.68	4.12	1.51	Significant at 1%
Price	43.71	5.64	1.24	Not Significant
Dissatisfaction	39.66	4.65	1.65	Not Significant
Lack of brand loyalty	40.87	5.47	1.45	Significant at 1%
Mind to other taste	40.68	3.98	3.58	Not Significant
Lack of availability	41.87	4.28	2.65	Significant at 1%
Offers from other brands	38.58	5.58	1.24	Not Significant

The above table 9 discusses brand loyalty for brand switching analysis. T-test values attained with no significant difference and significant at 1% in brand loyalty score. The lack of health, lack of availability and lack of brand loyalty has attained significance at 1% based on switching of brand preferences. The remaining preferences, namely price, dis-satisfaction, mind to other taste and offers from other brands are not significant. As a result, it is clear that the brand loyalty score differs significantly among the group depending on switching of brand analysis.

5. FINDINGS & SUGGESTIONS

The study states that multi-sensory marketing on emotional engagement and brand loyalty in daybreak beverage consumers. The research discusses the major findings with collected respondent data.

- 47.5% of respondents are male and 45% of respondents are female. 42.5% of respondent lies between the age group 31 to 45 years. About 37.5% of the participants had monthly income between one lakh and two lakhs. 25% of respondents are doing their own business.
- After brand analysis study, it clearly shows that consumers preferred coffee as the most followed by tea and health drinks.
- Ranking analysis plays key role in finding the best brand loyalty factor for purchasing the coffee brand
- According to the study, it is clear that price and taste of the brand product occupies the first and second rank in multi-sensory marketing of daybreak beverage consumer
- It is clear that there is a significant relation between brand loyalty and consumer buying decision
- It is clear that there is a significant relation between taste and emotional engagement towards coffee brand
- The number of family members decides the duration of purchasing a coffee brand. No other factor makes the decision about the purchasing duration of a coffee brand.
- When the brand is fulfilling their needs and expectations of the consumers, same brand is purchased again and recommended to their friends.
- Multisensory marketing have a greater impact on emotional engagement and brand loyalty
- According to the Same Brand Analysis, the brand has to maintain the same taste, price and caffeine level at every time.
- The purpose of the coffee consumption plays an essential role in buying the coffee brands.
- Lack of brand loyalty, dis-satisfaction and lack of availability are three important factors for switching brands. The other Factors are Price, Offers from Other Brands, Lack of Health etc.,

6. CONCLUSION

Multisensory marketing is coordination of sensory attributes across diverse modalities to identify the consumer choice and behavioral outcomes. The consumer choice findings and making them buy the same brand again in today's competitive world is not easy. Brand Loyalty on daily beverage products is based on customer mindset that builds a strong relationship. This study paper helps to understand the preference factors towards coffee beverages and loyalty dimensions. Brand loyalty plays a very important role in multisensory marketing. The price, taste and caffeine level of the coffee brand are the most important preferable factors to the consumers. These factors help to create the consumer awareness in building the brands that influence consumer's response towards brands for establishment of consumer-brand relationship. Five point scaling techniques are used for rating from strongly agree to strongly disagree. Based on the above analysis, it is clear that the most preferred product is coffee. The findings of study show that the most influencing factor that has a positive effect on consumers is brand loyalty followed by quality of beverages. Rank analysis, MANOVA and T-test results shows that there is significant relation between brand loyalty score among the groups based on demographic variables buying decision, marital status and gender. Reasonable price and taste of the coffee brands are considered most influencing factors for purchasing the same brand of beverages. Hence, the brand producers have to concentrate on preferred factors to keep going in the market and to preserve consumers' brand loyalty for beverages.

REFERENCES

- [1] Rana Bou Saada, Imad Bou—Hamad and Dunia Harajli, "Influence of emotional marketing on consumer behavior towards food and beverage brands during the COVID-19 pandemic: a study from Lebanon", *Journal of Marketing Communications*, Taylor & Francis, Volume 29, Issue 3, June 2022, Pages 1-18
- [2] Mohamad Kheireddine and Hassan Saleh, "The Impact of Sensory Marketing on Consumer Buying Behavior: Primary Study -Starbucks – Lebanon", *Journal of Logistics Management*, Volume 13, Issue 1, 2025, Pages 20-28
- [3] Mubashra Saman, Abdul Ghafoor, Shanza Shafique and Khadija Yasen, "Towards Sensory Marketing: Impact of Multi-Sensory Cues on Consumer Buying Behavior Mediated by Emotional Response and Moderated by Store Environment Attributes", *Journal of Logistics Management*, Volume 13, Issue 1, 2025, Pages 20-28
- [4] Nguyen Le, Ngoc Thi Bich Mai, Nhu Y Thi Nguyen and Huyen Ngoc Thi Vu, "Multi-Sensory Marketing and Impulsive Buying Behavior: The Role of Impulsive Buying Traits", *Emerging Science Journal*, Volume 8, Issue 5, October 2024, Pages 1-15
- [5] Shuangshuang Xiao, Li Yang Yu, Yuwen Meng, Roope Raisamo and Mounia Ziat, "Effects of multisensory packaging on taste perception, emotional responses, and willingness to pay for chocolate", *Scientific Reports*, Volume 15, Issue 39085, 2025, Pages 1-18
- [6] Basit Ali Gilani and Afreen Ahsaan, "Reflecting Sensory Branding on Consumer Buying Behavior", *Journal of Marketing Strategies*, Volume 5, Issue 1, January 2023, Pages 1-14
- [7] Rogen.K. Panicker and V. Siddharthan, "Influence of Sensory Branding on Consumer Behavior in Supermarkets", *Educational Administration: Theory and Practice*, Volume 30, Issue 5, 2024, Pages 1-15

- [8] Basheer Ahamed, "Role of Multisensory Marketing in Shopping Consumer Preferences and Purchase Intention for Food Products", *International Journal on Economics and Business*, Volume XV, Issue 50, January 2026, Pages 91-95
- [9] Fabiana M Carvalho, Renata A S Forner, Eric B Ferreira and Jorge H Behrens, "Packaging colour and consumer expectations: Insights from specialty coffee", *Food Research International*, Elsevier, Volume 208, May 2025, Pages 1-15
- [10] Aditi Pareek and Ankita Jain, "Role of Sensory Marketing in Influencing Purchase Behavior of Consumers", *International Journal of Food and Nutritional Sciences (IJFANS)*, Volume 11, Issue 10, December 2022, Pages 126-136
- [11] Shah Suraj Manojkumar, Maurvi Vasavada and Mahendra S. Sharma, "Influence of Sensory Branding on Consumer Buying Behavior: Empirical Evidence with Reference to Coffee Outlets of India", *International Journal of Management (IJM)*, Volume 12, Issue 3, March 2021, Pages 654-668
- [12] Dongmei Zha, Pantea Foroudi, T. C. Melewar and Zhongqi Jin, "Examining the Impact of Sensory Brand Experience on Brand Loyalty", *Corporate Reputation Review*, Volume 28, Issue 1, February 2024, Pages 1-29
- [13] Samia Adly El Sheikh, Khaled Hisham and Zeinab Nafez, "The Effect of Sensory Marketing on Brand Loyalty: The Mediating Role of Customer Experience Applied to Cafés", *Management Science Journal*, Volume 4, Issue 3, 2025, Pages 114-130
- [14] Di Yue, "Analysis of Factors Influencing Consumer Brand Loyalty to Coffee Shops in Daqing City, China towards Improved Brand Management", *Journal of Information Systems Engineering & Management*, Volume 10, Issue 54, June 2025, Pages 821-829
- [15] Fine Isnadia Adji and Sabar Sabar, "The Influence of Brand Experience Dimensions On Brand Loyalty of Coffee X with Age Moderation", *Journal Research of Social Science, Economics, and Management*, Volume 4, Issue 12, 2025, Pages 2402-2417
- [16] M. Favian Zhavir and Anas Hidayat, "The Investigation of Young Indonesian Consumer Loyalty toward Coffee Shops", *Journal of Economics, Management and Trade*, Volume 29, Issue 9, 2023, Page 1-9
- [17] Aneesh J R, and Dr. S Jayadev, "The Evolution of Engagement: Leveraging Digital Sensory Marketing for Enhanced Consumer Connections", *Management Researcher*, Volume 30, Issue 2 April -June 2024, Pages 66-73
- [18] Supawat Meeprom and Akkhaporn Kokkhangplu, "Customer experience and satisfaction in coffee consumption: an experiential marketing perspective", *Cogent Business & Management*, Taylors and Francis, Volume 12, Issue 1, 2025, Pages 1-15
- [19] Rifqi Nur Fakhrurozi, Nyoman Indah Kusuma Dewi, Putu Adriani Prayustika, Ida Ayu Putri Widiasuari and Riyasa Binus, "Exploring the Role of Experiential and Emotional Marketing in Building Customer Satisfaction and Loyalty in Coffee Shop", *Business Review*, Volume 16, Issue 3, November 2025, Pages 275-289
- [20] Abdur Razak, "Brand Awareness and Consumer Preferences in the Food and Beverage Industry: An Interpretative Phenomenological Analysis", *Journal of Business, Management, and Accounting*, Volume 1, Issue 5, 2025, Pages 1-15
- [21] Ragu Prasad Rajendran, "The Mediating Role of Emotional Brand Attachment: Exploring the Coffee-like Scent Application in Building the Store Brand Loyalty and Store Loyalty", *Economic Annals*, Volume 211, Issue 9-10, December 2024, Pages 46-51
- [22] Lanji Quan, Heesup Han, Antonio Ariza-Montes, Hyungseo Bobby Ryu and Jongsik Yu, "Emerging nature café: Boosting customer quality of life, emotional well-being, and positive approach behavior", *Acta Psychologica*, Elsevier, Volume 254, April 2025, Pages 1-15
- [23] Netty Merdiaty and Neil Aldrin, "Effect of Brand Experience on Customer Engagement through Quality Services of Online Sellers to Students in Bekasi", *Frontiers in Psychology*, Volume 12, Issue 801439, 2022, Pages 1-15
- [24] Yu Xuan Ren, Yunseon Choe and Hak Jun Song, "Antecedents and consequences of brand equity: Evidence from Starbucks coffee brand", *International Journal of Hospitality Management*, Elsevier, Volume 108, January 2023, Pages 1-18
- [25] Markos Makiso Urugo, Mohammed Worku, Tessema Astatkie, Pascal Boeckx, Yetenayet B. Tola and Paulos Getachew, "The prospects of replacing the sensory coffee quality assessment methods with objective, instrument-based approaches: A review", *Trends in Food Science & Technology*, Elsevier, Volume 163, September 2025, Pages 1-15
- [26] Thanh Ba Nguyen, Mai Sao Dam, László Baranyai and Lien Le Phuong Nguyen, "Review of Factors Affecting Development of Sensory Attributes of Coffee", *Journal of Sensory Studies*, Wiley Publications, Volume 40, Issue 6, December 2025, Pages 1-15
- [27] Geraldine Toribio-Tamayo, Jackelin Brigitte Rojas-Rosales, Diana Carolina Martínez-Torres, Daniel Amadeo Robles-Fabian and Franklin Cordova-Buiza, "Sensory Marketing and Purchasing Behavior Linking Coffee Family Culture with the Consumer", *Geojournal of Tourism and Geosites*, Volume 54, Issue 2, 2024, Pages 896 - 905
- [28] Rodrigo Nogueira Martins, Francisco de Assis de Carvalho Pinto, Daniel Marçal de Queiroz, Lucas de Paula Wilson Júnior Cardoso, Marcelo Fagundes Portes, Domingos Sárvio Magalhães Valente and Reinaldo Francisco Teófilo, "Prediction of coffee sensory attributes using near-infrared spectroscopy", *Continuous Publication*, Volume 20, 2025, Pages 1-15
- [29] Haochen Xu, Jinxiang Zhao, Changjiang Jin, Ning Zhu and Ye Chai, "Research on the Multi-Sensory Experience Design of Interior Spaces from the Perspective of Spatial Perception: A Case Study of Suzhou Coffee Roasting Factory", *Buildings*, Volume 15, Issue 8, 2025, Pages 1-15
- [30] Hiroharu Natsume and Shogo Okamoto, "Cross-Brand Machine Learning of Coffee's Temporal Liking from Temporal Dominance of Sensations Curves", *Applied Science*, Volume 15, Issue 2, 2025, Pages 1-15