

Impact of Brand Loyalty on Consumer Satisfaction, Special Reference to Oral-Care Products in Nanded City (MH)

Dr Pravin Hiranman Tamgadge

Associate Professor, SSBES's ITM, Nanded, SRTM University Nanded

Abstract—This research paper examines various marketing strategies adopted by companies to build strong brand loyalty among consumers, with a specific focus on two key components: brand loyalty and consumer satisfaction in the oral care product category. The primary objective of the study is to identify the factors that influence the development of loyalty toward oral care products from the consumers' perspective. In today's competitive market, numerous brands compete for consumer attention. Despite the recognized importance of brand loyalty in driving repeat purchases and customer retention, many oral care companies continue to face challenges in building and sustaining a loyal customer base.

The study is based on both primary and secondary data. Descriptive and exploratory research designs are employed to examine the impact of brand loyalty on consumer satisfaction, with special reference to oral care products in Nanded City, Maharashtra. The data are analyzed using statistical tools such as correlation analysis, regression analysis, t-tests, and chi-square tests to compare and evaluate levels of customer brand loyalty.

Index Terms—Brand loyalty, Brand Image, Perceived Value, Hygiene.

I. INTRODUCTION

One major factor driving the growth of the oral care market is the rising awareness among consumers about the significance of dental care products and treatments for maintaining good health and hygiene. Today, products like cosmetic teeth-whitening solutions, which used to be less popular, are now widely bought and used. This change in consumer preferences and the growing demand suggest a strong compound annual growth rate for the upcoming years. Moreover, trends such as the diverse range of toothpaste and toothbrush

options, along with the increasing use of dental floss and other oral care treatments, continue to propel the expansion of the oral care market.

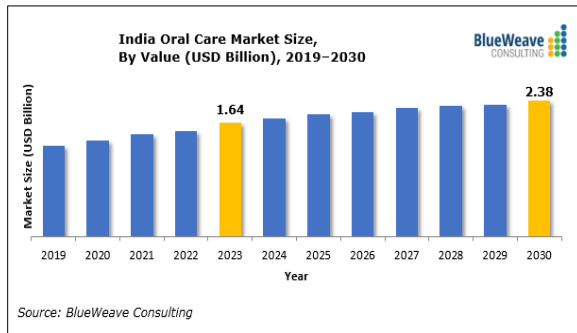
1.1 Problem Statement:

There is a gap in understanding the specific dynamics of this relationship within the oral care market in a tier-2 city like Nanded. This study aims to bridge this gap by investigating how consumers' loyalty to specific oral care brands influences their overall satisfaction. There is a need for greater understanding of the parameters that influence brand loyalty in oral care products. This study aims to address this research gap by investigating the key drivers of brand loyalty in Oral care products.

II. ORAL CARE MARKET IN INDIA

One of the key factors driving the growth of the oral care market is the increasing awareness among consumers about the importance of dental care products and treatments that promote good health and hygiene. Nowadays, items like cosmetic teeth-whitening products, which once had limited use, are now commonly purchased and utilized. This shift in preferences and the rising demand indicate a robust compound annual growth rate during the forecast period. Additionally, trends in the market, including a wide variety of toothpaste and toothbrush options, as well as the escalating use of dental floss and other oral care treatments, continue to fuel the expansion of the oral care market.

Table No 1

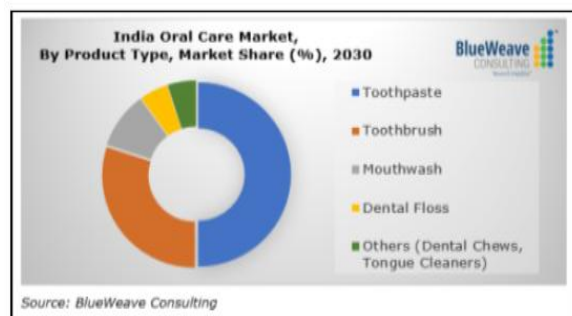


Source: Blueweave consulting

2.1. Oral Care– Overview

Oral care is all about keeping our mouths, teeth, and gums healthy and clean. This includes a variety of practices such as brushing and flossing regularly, using mouthwash, and visiting the dentist for professional cleanings and treatments. Good oral hygiene helps prevent problems like cavities, gum disease, and bad breath, and it also involves making wise dietary choices that support our dental health. In India, there's a growing awareness of the importance of oral hygiene, which is driving significant growth in the oral care market. Unfortunately, many adults in rural areas face serious dental issues—over 95% struggle with cavities, and more than half deal with gum disease, largely because of limited knowledge about proper oral care and preventive measures. The Indian oral care market is categorized into segments such as toothpaste, toothbrushes, mouthwash, and dental floss, with toothpaste leading the pack in terms of market share.

Table No 2



Source: Blueweave consulting

III. BRAND LOYALTY

Brand loyalty means a customer's satisfaction and commitment to buy the same brand again and again

within a product category. It develops when consumers feel a brand offers the right quality, features and price. This positive perception encourages repeat purchases, thereby fostering loyalty. Brand loyalty is closely linked to a customer's preference and emotional attachment to a brand. It often develops over time through regular use of the product and the trust built from consistent and satisfactory experiences.

3.1 Brand Loyalty Factors: Brand loyalty develops through several key factors, such as the quality of the product, positive customer experiences, including good service, convenience, and trust, and the emotional bond a customer feels with a brand. A strong brand image and good reputation also influence loyalty, along with the customer's perception of value, including price and benefits. Loyalty programs further encourage repeat purchases. In addition, personal beliefs and social influences affect buying decisions. Together, these factors lead customers to choose and stay connected to a particular brand repeatedly.

a) **Product Quality:** High product quality leads to greater consumer satisfaction, which in turn helps to build and strengthen brand loyalty among customers.

b) **Brand Image:** A positive and customer-oriented brand image, supported by consistent brand identity and equity, plays a significant role in encouraging consumers to remain loyal to a brand.

c) **Perceived Value:** Perceived value refers to a consumer's subjective evaluation of a product's benefits in relation to its cost. When consumers believe that a product offers good value for money, it increases their willingness to repurchase and enhances brand loyalty. Companies can further improve perceived value through loyalty programs, discounts, and additional benefits.

d) **Switching Cost:** Switching cost refers to the time, effort, or financial loss a customer may face when changing from one brand to another. If similar quality products are available at a lower price, customers may switch brands, making switching cost an important factor influencing brand loyalty.

e) **Availability and Service:** Product availability at the right time and place is essential for maintaining customer loyalty. In addition, efficient after-sales

service helps create positive customer experiences and strengthens long-term loyalty.

f) Customer Psychology: In some cases, brand loyalty is strongly influenced by customer psychology. Even when products are of good quality, psychological factors such as personal preferences, habits, and perceptions may determine whether customers remain loyal to a brand.

IV. OBJECTIVES OF THE STUDY

1. To examine the relationship between brand loyalty and consumer satisfaction in the oral care products in Nanded City.
2. To identify the key factors influencing brand loyalty in Oral care products in Nanded City.
3. To find the Satisfaction level of consumers towards Oral care brands in Nanded City.
4. To study the influence of sales promotion techniques on customer Oral care brand loyalty in Nanded City.
5. To give recommendation for future-oriented research in the area of the impact of sales promotion on consumer satisfaction in the Oral care Product in Nanded City

V. HYPOTHESIS

- H₁: Brand loyalty has a significant positive impact on consumer satisfaction with oral care products.
- H₀: Brand loyalty does not have a significant impact on consumer satisfaction with oral care products.
- H₂: There is a significant association between brand loyalty and consumer satisfaction for oral care products.
- H₀:- There is no significant association between brand loyalty and consumer satisfaction for oral care products.

VI. RESEARCH DESIGN

The research design explains the research methods and procedures the researcher opted to use. It is the overarching structure of the research study. This research aimed to investigate the relationship between customer satisfaction with oral care products and loyalty to specific brands in Nanded city. For this research study, an exploratory research methodology

helps us understand the topic more deeply, and a descriptive research methodology helps us test the hypothesis using one of the methods of observation, namely a questionnaire.

VII. LITERATURE REVIEW

Anjali Sharma et al. (2013) attempted to investigate the impact of brand loyalty on consumer buying behavior for beauty products and the aspects involved in purchasing cosmetic products. The majority of respondents opined that quality is the most important factor when purchasing beauty products, followed by brand and price. However, a small group of women feel packaging is the key factor for decision-making. Researchers concluded that these factors are generally responsible for switching to other brands, and friends are the most powerful reference group.

Sondoh Jr., Stephen L. et al. (2007) Research investigated how brand image benefits affect satisfaction and loyalty intentions specifically for colour cosmetic products. The findings indicated that aspects of brand image, such as functional, social, experiential, and appearance enhancements, have a positive correlation with overall satisfaction. Moreover, it's evident that functional and appearance enhancements play a significant role in influencing loyalty intentions.

Suchmitt, "A study on brand experience and brand loyalty" (2011), In his research, the marketing expert has come to understand that grasping how consumers perceive brands—and how to create a compelling brand experience—is crucial for fostering loyalty in today's competitive landscape. With companies constantly striving to secure brand loyalty, offering distinctive brand experiences may serve as a key differentiator.

Awan Abdul Ghafoor et al., In "Impact of brand loyalty on consumer buying behaviour" (2019), The authors observed that customer satisfaction and brand loyalty are two key marketing goals for most organizations. Brand loyalty is viewed as a multidimensional concept. The study analysed how customer satisfaction influences brand loyalty in the case of durable goods."

VIII. RESEARCH METHODOLOGY

Research methodology is a way of explicate how a researcher intends to carry out their investigation. This section presents a logical, systematic plan to address the research question. It outlines the methods and procedures used to explore and investigate the impact of brand loyalty on Consumer satisfaction with oral care products. The study is based on both primary and secondary data.

The possible insights into the study were investigated using primary and Secondary data. Descriptive research is used to obtain information concerning "Impact brand on consumer satisfaction and Brand Loyalty towards Oral care products in Nanded City" review of literature and other available information from various sources.

8.1 Sampling Plan: A sampling plan is an outline based on which research is conducted. A sampling plan specifies the individuals chosen to represent the target population for research purposes.

8.2 Sample methods: It involves administering questionnaires or interviews to collect information about consumer attitudes, opinions, and behavior. Surveys furnish a systematic approach to data collection, enabling researchers to analyse and interpret findings. This method is crucial across various fields, including the social sciences, market research, and public opinion studies. Respondents: Residents of Nanded using oral-care products (toothpaste, toothbrush, mouthwash, etc.)

8.3. Sampling Technique: In this research paper, a non-probability sampling technique has been used. Among these techniques, convenience sampling has been selected. In convenience sampling, Respondents were chosen using convenience sampling, based on accessibility and willingness to participate.

8.4. Sample Size: Cochran's formula is used to calculate the necessary sample size for a study, particularly for large or infinite populations, by considering the desired confidence level, margin of error, and estimated proportion of an attribute in the population.

The formula is
$$N = \frac{Z^2 \times P(1-P)}{E^2}$$

$Z = 1.96$ (95% confidence) $p = 0.5$ (maximum variability) $E = 0.07$ (7% margin of error)

$N = \frac{(1.96)^2 \times (0.5) \times (1-0.5)}{(0.07)^2}$ The required sample size is approximately 196 = (200)

Population of Nanded City - 800000

Infinite Population Sample size: $N = N \times n_0 \div n_0 + (N-1)$

$80,000 \times 196 \div 196 + 799999 = 196$ (200)

IX. DATA ANALYSIS

Data analysis is the process of applying statistical and logical techniques to describe, summarize, and evaluate data in order to answer research questions and test hypotheses.

9.1 Data Collection Methods: Common data collection methods include surveys, interviews, observations, focus groups, and experiments. These methods can be used to gather either primary or secondary.

a) **Primary data:** refers to original data that are collected first-hand by the researcher specifically for the purpose of the study. These data are obtained directly from respondents through methods such as questionnaires, interviews, surveys, observations, or experiments. Primary data are considered more reliable and relevant, as they are collected to address the specific research objectives. Refers to original data that are collected first-hand by the researcher specifically for the purpose of the study. These data are obtained directly from respondents through methods such as questionnaires, interviews, surveys, observations, or experiments. Primary data are considered more reliable and relevant, as they are collected to address the specific research objectives.

b) **Secondary data:** Secondary data was obtained through related works of literature of sales promotion and data obtained from the library or on the internet or other sources that are published in magazines, journal, s economic times, bulletin, annual report, trade report researcher has to verify secondary data carefully as it may be unsuitable or insufficient of his study in the context.

9.2. Data Collection Instruments: Common data collection instruments used to gather information include an online survey, a Google form, or a questionnaire. The rating scale used in the present study is a 5-point Likert scale, ranging from strongly agree to disagree strongly, with neutral and agree in between.

9.3. Statistical Tools: Descriptive statistics, correlation analysis, regression analysis, and chi-square. To compare the brand loyalty levels of customers who have received oral care products, data will be analyzed. SPSS, Python, and other statistical software can be used to perform these tests.

9.4. Variables: In research methodology, variables are the key factors or concepts that are measured, controlled, or manipulated in a study to examine relationships and test hypotheses.

Types of variables

1.Independent Variable: The variable that is changed or controlled in an experiment to test its effects on the dependent variable - Brand Loyalty

2. Dependent Variable: The variable being tested and measured in an experiment. Its value is expected to change in response to independent variables such as Consumer satisfaction, Sales promotions, Advertising, Price, Brand image, perceived quality, and Emotional connection.

3.Moderating/Control Variables: A variable that is kept constant throughout an experiment to prevent it from affecting the outcome. Demographic factors (age, income, education), product involvement, and brand awareness.

X. DATA ANALYSIS

Table No 3 Demographic Profile of Respondents

Gender	Frequency	Percentage
Male	82	41
Female	118	59

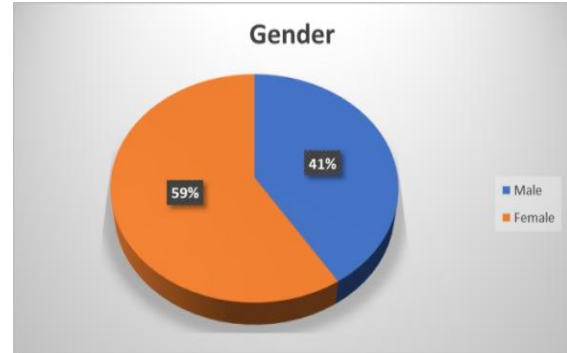


Table (3) Shows that the sex wise classification of the sample. Accordingly, there are 82(41%), male respondents and 118 (59%), female respondents in the sample.

Table No. 4. Marital Status

Marital status	Frequency	Percentage
Married	123	61
Unmarried	77	39

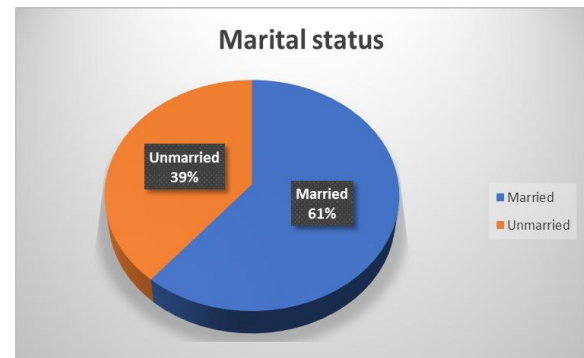
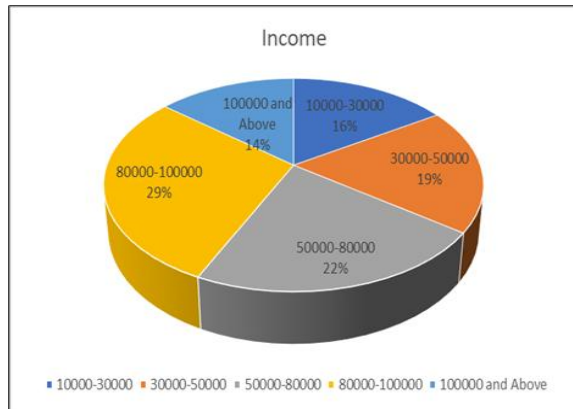


Table (4) gives an account of the marital status wise classification of the sample accordingly there are 123 (61%) respondents are married and 77 (39%) respondents are single and there are no widow respondents in the sample

Table No. 5. Income

Income	Frequency	Percentage
10000-30000	32	16
30000-50000	39	19.
50000-80000	44	22
80000-100000	58	29
100000 and above	27	14



According to survey the Table (5) shows that 27 respondents (14 %) belong to high monthly income above 1,00,000 group; 39 (19%) respondents belong to income group have 30,000 – 50,000 and 44 (22%) respondents belong to have 50,000-80,000 monthly middle-income group and 58 (29%) respondents have 80,00- 100,000 income and 32 (16%) respondents have less than 10,000-30,000 monthly incomes.

Table No 6. Profession

Profession	Frequency	Percentage
Govt. Service	42	21
Private Service	22	11
Professional	38	19
Business man	27	13
Household	57	29
Farmer/Labour	14	07

(Sources: Primary Data)

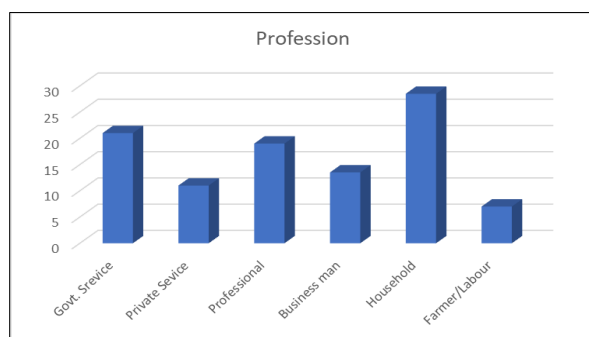


Table (6) reveals that out of 200 there are 57 (29%) respondents are housewives; 42(21%) respondents belong to govt. employee; 38(19) respondents are professional people; 27 (13%) respondents are business peoples; 22(11%) respondents are private employees.

Table 07. How satisfied are you with your preferred oral care brand

S No.	Factors of Consumer Satisfaction	Strongly Dissatisfied	Dissatisfied	Neutral	Satisfied	Strongly Satisfied	Total
1	Price	20	30	03	63	84	200
2	Quality	12	23	00	71	94	200
3	Sale promotion	11	32	12	68	77	200
4	Advertisement	17	23	18	74	68	200
5	Packaging and design	25	19	05	68	83	200

1. It is observed from the above table that Price Strongly Satisfied (84) and Satisfied (63) together form 147 out of 200 respondents (73.5%). Very few respondents are dissatisfied ($20 + 30 = 50$). Most consumers are satisfied with the price of the oral care products. Price is not a major barrier; rather, it positively contributes to consumer satisfaction.

2. The above table figure indicates that quality has the highest satisfaction level among all factors. A large proportion of consumers are highly satisfied with the product quality, making it the strongest determinant of consumer satisfaction. Strongly Satisfied (94) and Satisfied (71) account for 165 respondents (82.5%). Only $12 + 23 = 35$ respondents are dissatisfied.

3. From the survey table, describe that Sales Promotion Consumers respond positively to sales promotional activities. Promotions appear effective, but some remain neutral or dissatisfied, indicating scope for improvement. Satisfied (68) and Strongly Satisfied (77) = 145 respondents (72.5%) Moderate dissatisfaction ($11 + 32 = 43$).

4. It is observed from the above table that advertisements positively influence satisfaction. However, compared to Quality and Price, the impact is slightly lower. Improving the appeal of advertisements may further increase satisfaction. Satisfied (74) and Strongly Satisfied (68) = 142 respondents (71%). $17 + 23 = 40$ respondents are dissatisfied.

5. It is clear from the table that Packaging and design are well-received by consumers. Good packaging

enhances the overall product experience and contributes significantly to satisfaction. Strongly

Satisfied (83) and Satisfied (68) = 151 respondents (75.5%) Only 25 + 19 = 44 dissatisfied responses.

Table 08. Brand loyalty (Rating scale)

Factors for brand loyalty	1Very poor/Low	2Poor	3Ok /Good	4Very Good	5Excellent	Total
How likely are you to frequently purchasing this brand? (Scale: 1-5)	32	29	37	53	49	200
How is the higher Quality of products/services (Scale: 1-5)	16	23	26	61	74	200
How often would you consistently see the Image of brand equity (Scale: 1-5)	12	36	13	62	77	200
How often do you feel an emotional connection with this brand compared to competitors? (Scale: 1-5)	26	19	05	68	82	200
How often do you have Positive experiences and expectations that build satisfaction and loyalty? (Scale: 1-5)	18	22	20	74	48	200

1.It is observed from the above table that, out of 200 respondents, those who frequently purchased the brand received high ratings (4+5), with $53 + 49 = 102$, and Low ratings (1+2), with $32 + 29 = 61$. A large number of respondents show a strong tendency to repurchase the brand. It indicates high repeat-buying loyalty.

2.It is observed from the above table that respondents who perceived a higher quality of Products /Services (4+5) are $61 + 74 = 135$, and respondents who received a low rating (1+2) are $16 + 23 = 39$; therefore, most customers believe the brand has high product quality. It is a strong contributing factor to brand loyalty.

3. It is discovered from the above table that Consistency with Brand Equity Image High (4+5) respondents are $62 + 77 = 139$, and Low rating (1+2) respondents are $12 + 36 = 48$, so Respondents feel the brand is consistent with its claimed Image (brand equity). High equity consistency strengthens customer trust and loyalty.

4. Emotional Connection with the Brand out of 200 High score (4+5) respondents are $68 + 82 = 150$, and Low score (1+2) respondents are $26 + 19 = 45$. It means more than 70% respondents show a strong emotional attachment to the brand. It is a powerful predictor of long-term brand loyalty.

5.It is depicted in the table Positive Experiences & Expectations of respondents on High rating (4+5) are

$74 + 48 = 122$, whereas Low (1+2) rating respondents are $18 + 22 = 40$ therefore Most customers have positive experiences with the brand. Increases consumer brand loyalty.

Here is the Chi-square table-wise calculation $\chi^2 = \sum \frac{(O-E)^2}{E}$

Where O = Observed frequency E = Expected frequency (Total / 5 = $200/5 = 40$)

Table No.09 Chi-square statistics and p-values:
Critical value:

S No.	Factors of Consumer Satisfaction	Chi-Square Value
1	Price	108.3
2	Quality	163.75
3	Sale promotion	95.86
4	Advertisement	81.06
5	Packaging and design	112.92

Level of Significance = (α) 0.05%

Degree of freedom = $(R-5) \times (C-1)$
= $5-1 \times 1-1$

Df = 4

Table Value for DF is 01 = 9.488

(df = 4, $\alpha = 0.05$) Critical value = 9.488

Since the calculated Chi-Square values for all five factors are greater than the critical value (9.488), the null hypothesis (H_0) is rejected for all factors at 5% significance level. Price (108.30 > 9.488) Quality (163.75 > 9.488) Sales Promotion (95.86 > 9.488) Advertisement (81.06 > 9.488) Packaging & Design (112.92 > 9.488) So the null hypothesis (H_0) is rejected for all satisfaction factors and the alternative hypothesis (H_1) Brand loyalty has a significant positive impact on consumer satisfaction with oral care products is accepted.

Table No.10 Factors for brand loyalty: Chi-square value

S.No	Factors for brand loyalty	Chi-Square Value
1	How likely are you to frequently purchase this brand? (Scale: 1-5)	11.10
2	How are you perceived as having a higher Quality of products/services (Scale: 1-5)	66.45
3	How often would you consistently see the Image of brand equity (Scale: 1-5)	84.55
4	How often do you feel an emotional connection with this brand compared to competitors? (Scale: 1-5)	110.25
5	How often do you have Positive experiences and expectations that build satisfaction and loyalty? (Scale: 1-5)	60.70

Critical Value: $df = 4$ $\alpha = 0.05$ χ^2 critical = 9.488
Interpretation:

Since the calculated Chi-Square values for all five factors are greater than the critical value (9.488), for frequently purchase (11.10 > 9.488) Perceived higher quality of products/services (66.45 > 9.488) image of brand equity (84.55 > 9.488) Emotional connection with this brand (110.25 > 9.488) Positive experiences & expectations (60.70 > 9.488) The Chi-square test show a statistically significant association between brand loyalty and consumer satisfaction. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted. It confirms that brand loyalty significantly influences consumer satisfaction for oral care products.

XI. CONCLUSION

Brand loyalty provides firms with a strong competitive advantage in the marketplace. The present study concludes that consumer satisfaction with oral care products in Nanded City is generally high across all

assessed factors, indicating that brands are largely meeting customer expectations. The results further show that several factors have a significant impact on consumer satisfaction. Customer satisfaction emerges as a key determinant, with strong positive relationships with price and product quality. In addition, sales promotion, advertising, and packaging and design play an important role, suggesting that consumers closely link their satisfaction to product performance and value for money. These findings support the established marketing principle that maintaining customer satisfaction is essential for building and sustaining brand loyalty. As consumers perceive greater value, quality, and positive brand image, their emotional attachment and repeat purchase intentions increase. Overall, the study confirms a significant positive association between consumer satisfaction and brand loyalty.”

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