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Research Article

Consumer Preferences and Perceptions of Ayurveda Toothpaste: A Shift towards Natural Oral Care

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Abstract

Growing demand for natural and holistic personal care products results from consumers of today being more knowledgeable and proactive about their health. In the sphere of oral care, this change has resulted in a new classification— Ayurvedic toothpaste. Ayurvedic toothpaste is made using Ayurvedic principles, an ancient Indian school of medicine stressing natural components to promote whole well-being. Ayurvedic toothpaste is made of plant extracts, essential oils, and naturally occurring minerals recognized for their healing qualities unlike regular toothpaste, which often includes synthetic chemicals and artificial additives. Many customers of contemporary oral care choose Ayurvedic toothpaste as they believe chemical-based toothpaste to be possibly dangerous. While providing good defense against typical dental problems like cavities, plaque buildup, bad breath, and gum disorders, herbal formulations are said to be milder on the teeth and gums. Ayurvedic toothpaste is also popular for those looking for a natural and sustainable method of oral care as it combines elements with antibacterial, anti-inflammatory, and strengthening qualities. Ayurvedic toothpaste is becoming more and more popular as knowledge of the advantages of herbal substitutes keeps growing and as a safer and better way to preserve oral health. The increasing inclination for such goods reflects a larger trend toward natural and organic personal care solutions, therefore supporting the relevance of old knowledge in contemporary medicine. The purpose of the paper is to highlight the core advantage of herbal tooth paste comparing with conventional toothpaste. This paper examine various factors which affect customer buying decision in the category of toothpaste category.

Keywords: Herbal, Ayurvedic, Dental care, Customer preferences.

Introduction: -

Usually defined as a human or organization buying or using goods or services from a supplier, vendor, or seller, a customer—also known as a client, buyer, or purchaser—is usually, consumers who either buy or rent items to use. In more general terms, however, the phrase may also refer to those who interact with a product or service without necessarily making a purchase—such as viewers or consumers who review goods before choosing whether to buy or not.

Examining the marketing mix—which consists of four main components—product, price, price, and promotion—is the main goal of this work. Furthermore, this study intends to pinpoint the many elements affecting buying choices in the market of herbal and Ayurvedic products.

With an annual growth rate of 7%, the worldwide herbal product industry is now worth over \$80 billion. Reflecting a high and continuous demand for herbal and Ayurvedic goods, this market is expected to reach \$6

trillion by 2050 (World Health Organisation [WHO], 2021). With exports of Ayurvedic medications and associated herbal items estimated at ₹440 crores, the herbal sector is valued in India at over ₹4,205 crores.¹ Ayurvedic and herbal goods' anticipated market potential in India by 2020 was expected to be ₹7,000 crores, therefore underlining the sector's explosive growth (Ministry of AYUSH, 2020)². This exponential expansion emphasizes how much consumers in both home and foreign markets are favouring natural and herbal substitutes.

Literature Review:- Sohta et. Al. (2023)³ found that some medicated toothpaste require specific application procedure or minimum set of duration of contract with the teeth, gums and mouth in order to provide a medical benefit. Kumar (2022)⁴ identify factors that motivated consumers to shift from non-herbal toothpaste to herbal toothpaste. Kumar found that various factors like tooth sensitivity, cost, advertisement, taste and dental advice significantly influenced customers to make purchase decision. Durgesh et al. (2020)⁵, compared and evaluated

herbal toothpaste and chemical based toothpaste and he identified in his research that herbal based toothpaste have natural ingredients which takes good care of oral health. Parmar, N. (2019)⁶ studied the consumer ownership pattern with respect to the competitive toothpaste brand in Anand district. Similarly, Singh et al. (2016)⁷, identified in his research that herbal Dantkanti toothpaste is more efficient in maintenance of oral hygiene and gum bleeding as compared to the non-herbal toothpaste.

Dani (2013)⁸ focused on his research about understanding the external factors which influences consumers purchasing decision. He used probability convenience sampling technique survey instrument for gathering information from consumer.

Subrahmanian and Venkatesan (2011)⁹, suggested that awareness level towards ayurvedic products was more among elderly men, they further identified that Lack of facility and availability was a major hindrance in the popularity of herbal products. Hashim et. al. (2011)¹⁰, states that quality control, prevention of adulteration and other harmful chemicals is a challenge. It should be kept in the mind that all that glitters is not gold likewise all herbal products are not safe. Proper information is required before using any herbal medicines and products. Akhtar et al. (2008)¹¹ found that natural cosmetic sales including oral products are increasing with revenues doubling every few year in Europe.

Joshi (2008)¹² in his study observed that the perception of people in traditional medicine is optimistic and emphasised the need to revive the system along the line of prevalent traditions and promote the usage of herbal medicines. Chowdhury et al., (2007)¹³, states that perceived quality has significant impact on customer perceived value, and it is needless to say that consumer perceived value acts as a prerequisite for consumer's buying motive.

Martin and Morich (2011)¹⁴, states that Understanding consumption decision of consumers is a key to success of any business. Business organisations are spending billions of dollars to know consumer's attitudes, motivation to purchase and future behavioural intentions of consumers. Hawkins. et al., (2007)¹⁵, states that information processing model have four major steps/stages. It starts with exposure followed by attention, interpretation and lastly retention. The first three of these establish consumer perception. They also state that all this take place inside the mind or black box of the consumers simultaneously, and it changes from person to person. Perception is highly subjective and therefore easily distorted. Moreover, perception is the meaning that an individual attributes to the incoming stimuli that gathered through the five senses that are taste, smell, touch, hearing and sight. Lakshman and Nigama (2005)¹⁶, focus on their research on segmentation of Indian oral care market with special reference of toothpaste category. Researcher give some idea about STP (Segmentation, Targeting, Positioning) and how to position a new toothpaste brand by positioning map.

Citing health advantages and sustainability, research by Mishra and Singh (2019)¹⁷ claims that 70% of urban Indian customers choose Ayurvedic and herbal alternatives for personal care. Thus, Ayurvedic oral care products, including toothpaste and mouthwash, have become much more in demand, according to another study by Patil et al. (2021)¹⁸ states that consumers believe herbal formulations are safer and more effective in avoiding dental diseases.

Sales of Ayurvedic immune boosters such chyawanprash, herbal teas, and turmeric-based pills jumped by nearly 50% during the epidemic, according to Sharma et al. (2021)¹⁹. They further proclaim that the Ayurvedic market's long-term prospects in India have been strengthened by consumers' more preventative healthcare focus.

Although Ayurvedic companies such as Patanjali, Dabur, and Himalaya have developed customer confidence, studies by Verma and Gupta (2020)²⁰ show that maintaining long-term demand depends critically on regulatory control and quality assurance.

Singh et al (2016)²¹ research findings assess the efficiency of herbal toothpaste as compared to non-herbal toothpaste. In this paper they adopted comparative study dividing the subjects into two groups' i.e. herbal group & non-herbal group and found that herbal toothpaste is more efficient in maintenance of oral care. Kavita Kumar Shukla and Deepika Kumara (2019)²² emphasized that herbal toothpaste play a very important role in preventing dental decay. Herbal toothpaste is much safer as compared to synthetic toothpaste. Kengadaram et al (2022)²³ states that Dental cavity is the biggest problem around the globe. They carried out five clinical studies found that herbal dentifrices and fluoride dentifrices have similar antimicrobial activity against cariogenic microorganism. Parisa Zare (2017)²⁴ claims that Oral hygiene products like toothpaste is necessary for dental care. This paper emphasize on that herbal products as compared to, chemical compounds have less side effects, so using herbal toothpaste more favourable.

Research Methodology:-

Research Purpose: - The toothpaste category has evolved rapidly, influencing and reshaping customer tastes and preferences.

Research Methods: - The research comprises both exploratory and conclusive phases. The qualitative phase includes focus group discussions (FGDs) and in-depth interviews with customers and employees of the telecom service provider in the field. This is followed by a conclusive study conducted through a questionnaire survey. The collected data is then analysed using MS Excel and perceptual mapping to derive meaningful insights.

Research Objectives:- To examine the role of the 4Ps of marketing in the Ayurvedic toothpaste category and analyse the key factors that influence customer purchasing decisions.

Population: The population included all users of toothpaste.

Sampling Method: Random convenient sampling was used

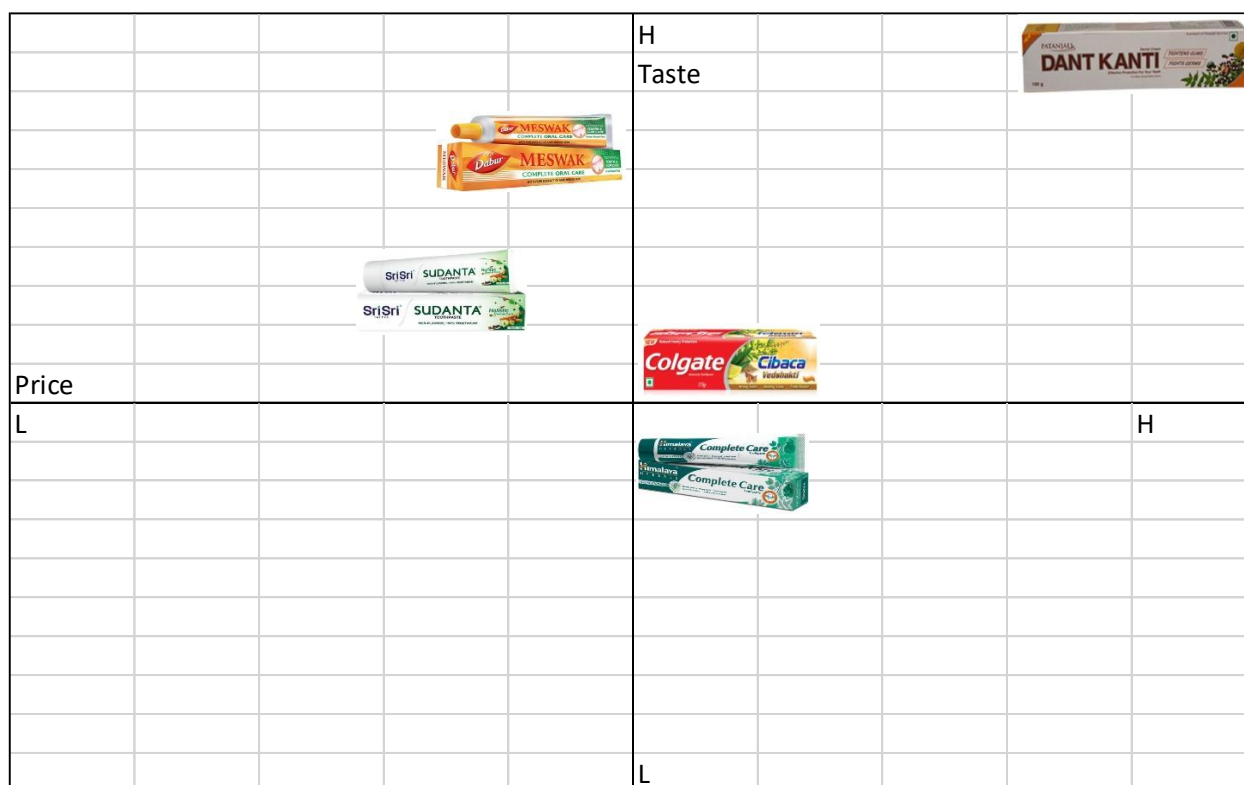
Sample size: A total of 150 participants responded to the survey, out of which 100 provided complete responses to all the survey questions and were included in the analysis.

During the questionnaire preparation, literature from previous studies was referenced. A five-point Likert scale

was used to measure factors such as taste preference, reasonable pricing, content and quality, brand image, promotional offers, availability, packaging, and overall satisfaction. The final statements were structured on a five-point Likert scale, ranging from "highly satisfied" to "highly dissatisfied" (1 to 5). After conducting a pilot study and refining the questionnaire by eliminating certain statements, a total of thirteen statements were included in the final research.

Research used various perceptual map to identify where the toothpaste brand falls, and also take the responses from customer on various parameter.

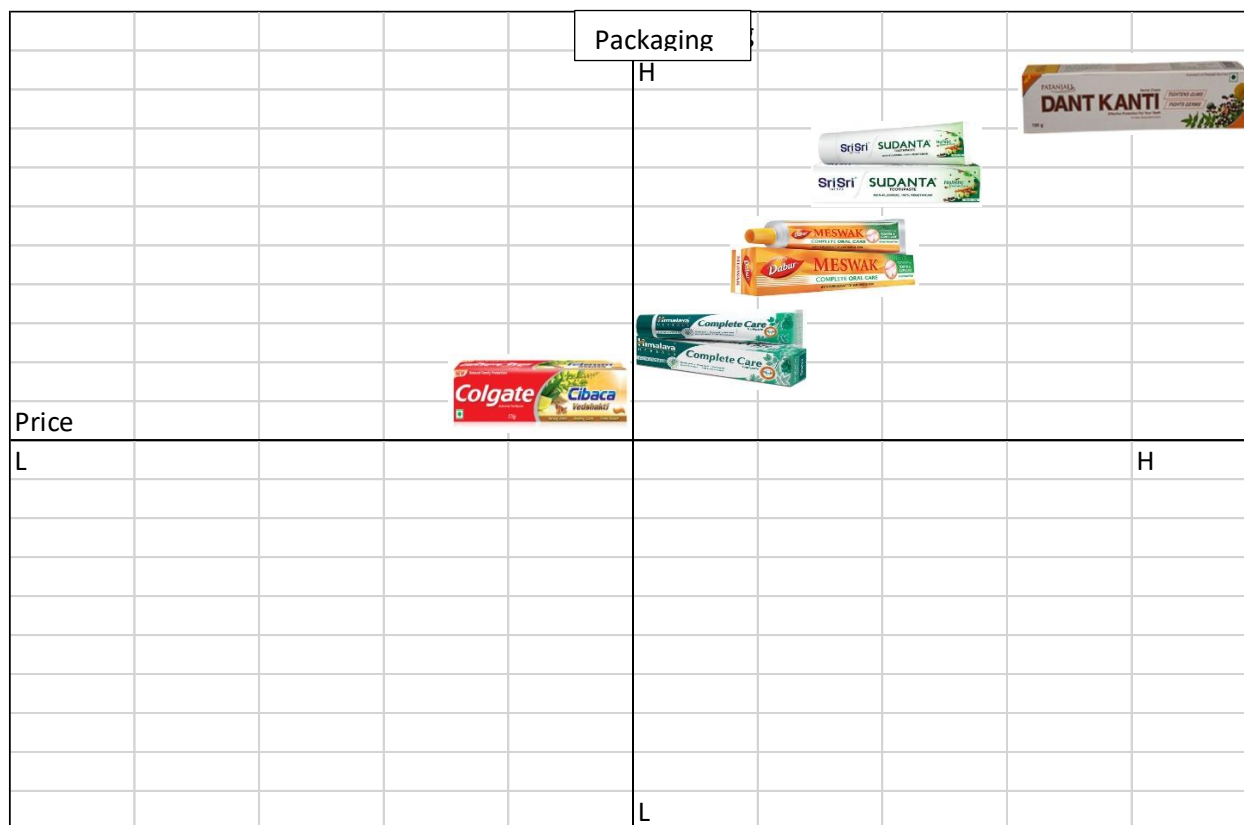
ANALYSIS:- Perceptual Map



					Content & Quality		
					H		
							
							
Price							
L							H
					L		

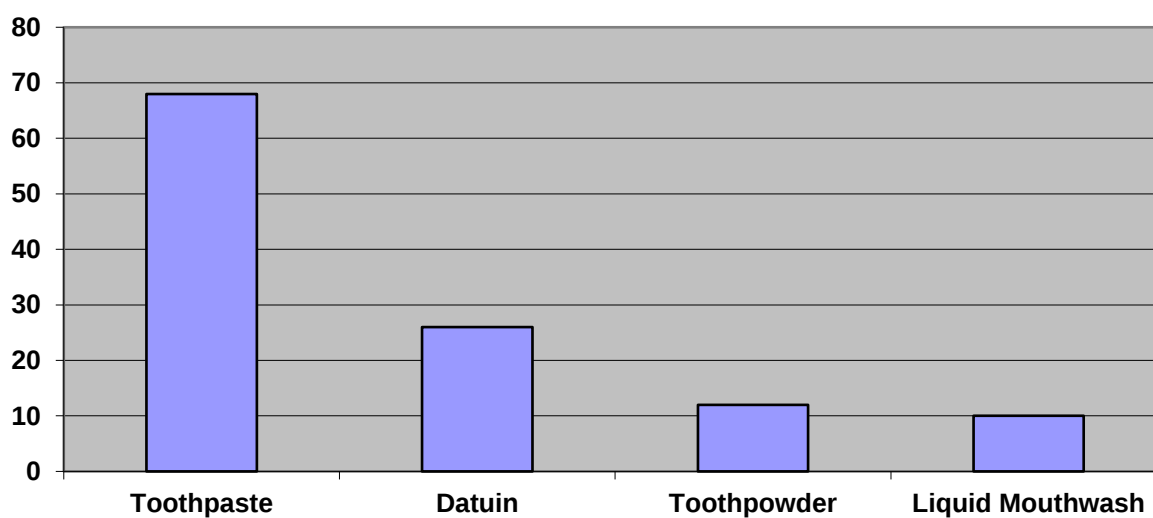
					Brand Image		
					H		
							
							
							
Price							
L							H
					L		

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Q1. What do you prefer to clean your teeth?

Options	Percentage of Respondents
Toothpaste	68
Datuin	26
Toothpowder	12
Liquid Mouthwash	10

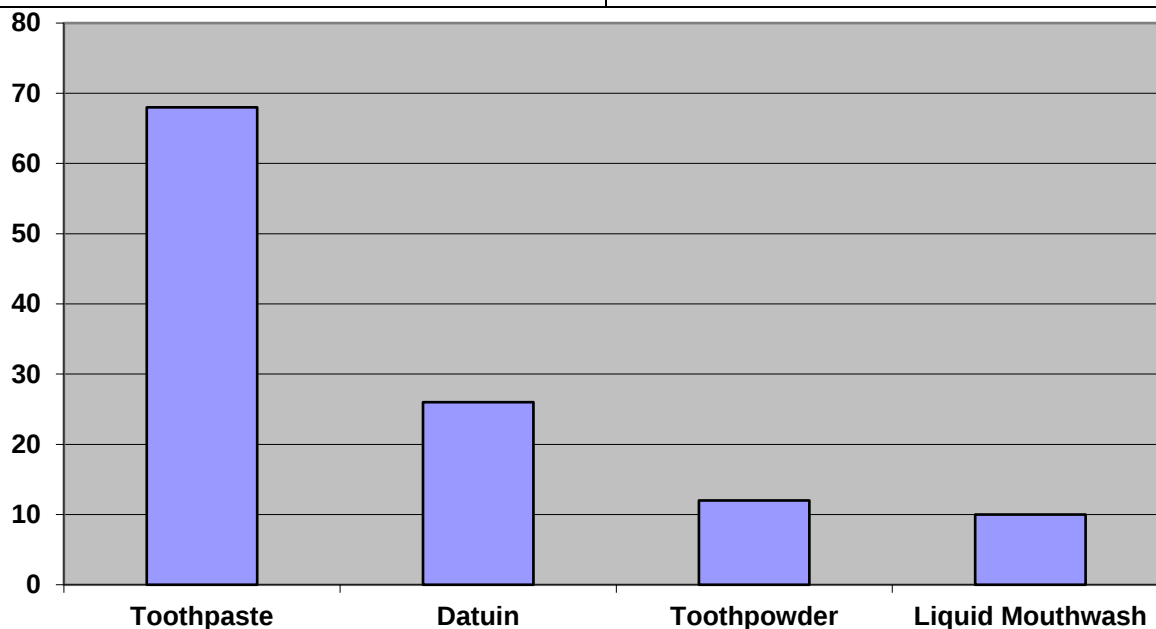


Interpretation:

68% of the respondents say that they prefer toothpaste for cleaning their teeths, 26% of the respondents say that they prefer Datuin , 12% of the respondents say that they prefer Toothpowder to clean their toothpaste and 10% of the respondents say that they prefer Liquid Mouthwash.

Q2. Are you prefer Ayurvedic Toothpaste over Chemically made toothpaste?

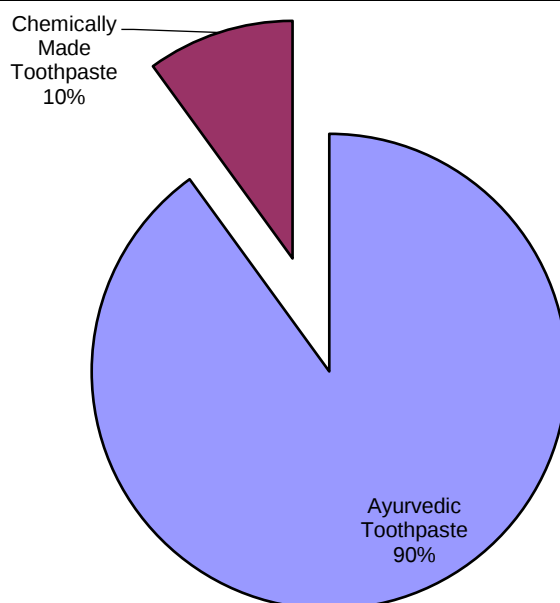
Options	Percentage of Respondents
Ayurvedic Toothpaste	90
Chemically Made Toothpaste	10

**Interpretation:**

90% of the respondents prefer Ayurvedic Toothpaste over Chemically made toothpaste and 10% of the respondents prefer chemically made toothpaste.

Q3. Which toothpaste you are using?

Options	Percentage of Respondents
Normal Toothpaste	68
Gel Based Toothpaste	32

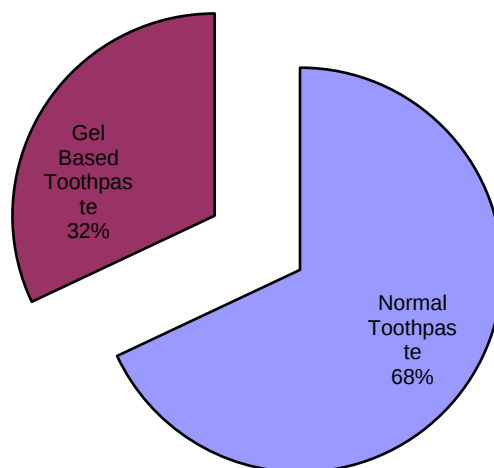


Interpretation:

68% of the respondents say that they are using Normal Toothpaste and 32% of the respondents say that they are using Gel based Toothpaste.

Q4. What do you look for in toothpaste?

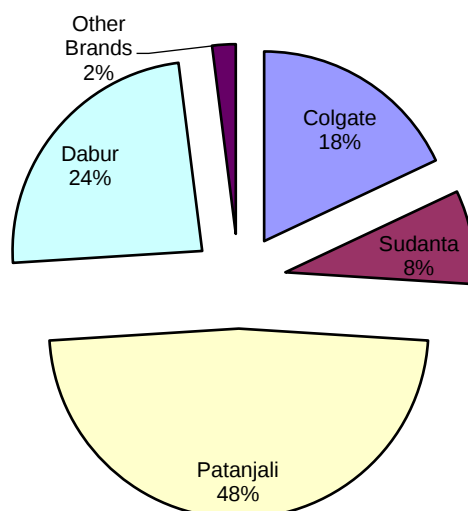
Options	Percentage of Respondents
Brand Name	14
Taste	28
Price	22
Safety for teeth	36

**Interpretation:**

14% of the respondents say that they look for brand name, 28% of the respondents Taste, 22% of the respondents say that they look for Price and 36% of the respondents say that they look for Safety for their teeth.

Q5. Which brand of toothpaste do you prefer?

Options	Percentage of Respondents
Colgate	18
Sudanta	8
Patanjali	48
Dabur	24
Other Brands	2

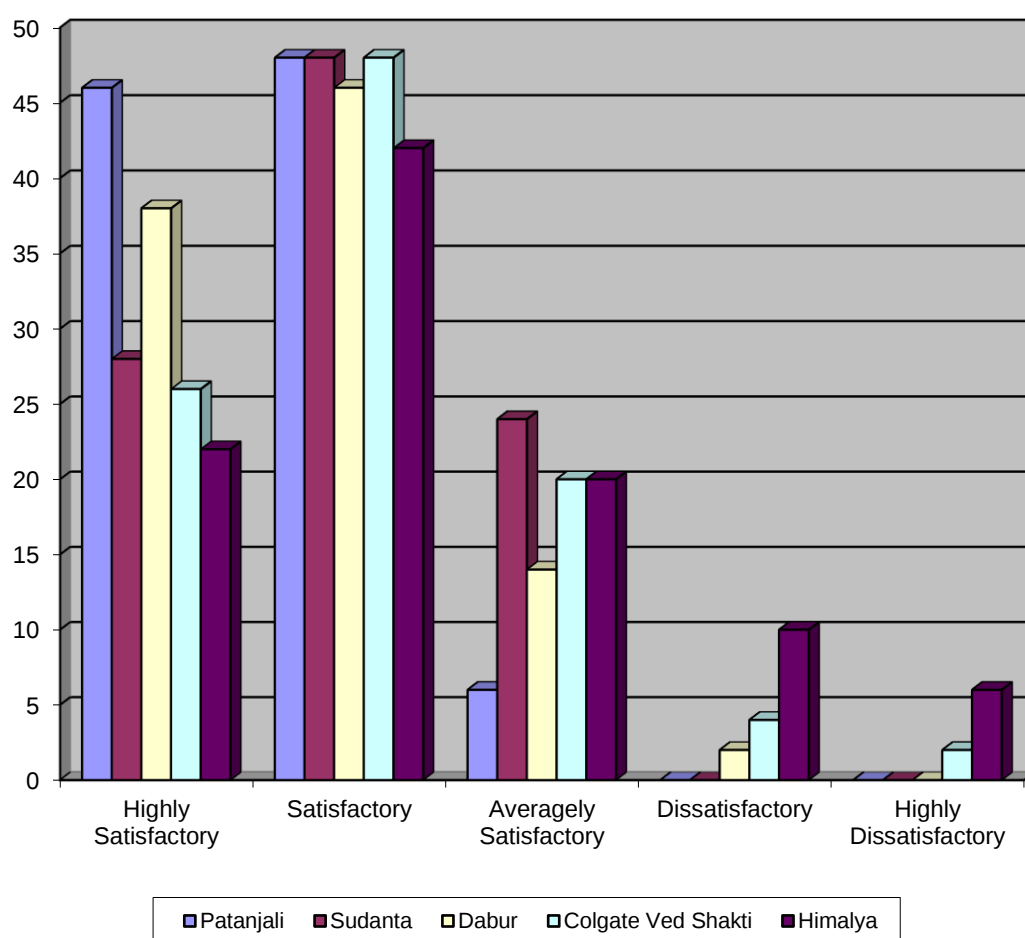


Interpretation:

It was found that market share of Colgate Ved Shakti is 18%, market share of Patanjali is 48%, market share of Dabur is 24%, market share of Sudanta is 8% and market share of other ayurvedic brands of toothpaste is 2%.

Q6. How do you rate the following Ayurvedic toothpaste on the basis of their Taste?

Options	Patanjali	Sudanta	Dabur	Colgate Ved Shakti	Himalya
Highly Satisfactory	46	28	38	26	22
Satisfactory	48	48	46	48	42
Averagely Satisfactory	6	24	14	20	20
Dissatisfactory	0	0	2	4	10
Highly Dissatisfactory	0	0	0	2	6

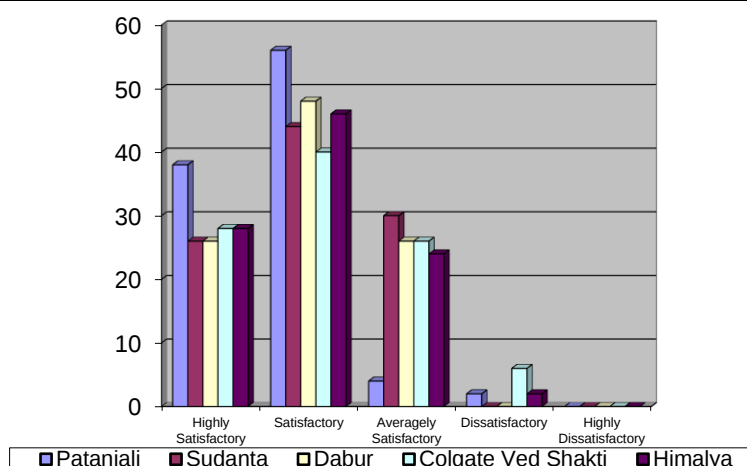


Interpretation:

Most of the respondents say that Taste of Patanjali & Dabur Ayurvedic Toothpaste is highly satisfactory as compared to Colgate Ved Shakti, and Himalaya Toothpaste.

Q7. How do you rate the Price of the following Toothpaste?

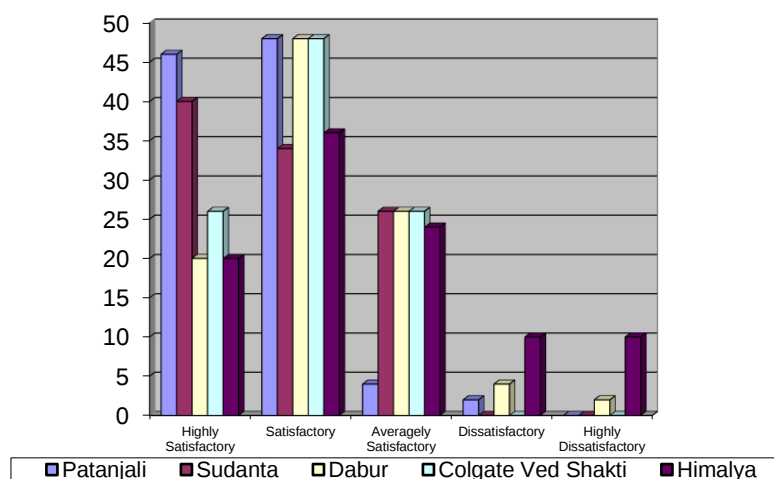
Options	Patanjali	Sudanta	Dabur	Colgate Ved Shakti	Himalya
Highly Satisfactory	38	26	26	28	28
Satisfactory	56	44	48	40	46
Averagely Satisfactory	4	30	26	26	24
Dissatisfactory	2	0	0	6	2
Highly Dissatisfactory	0	0	0	0	0

**Interpretation:**

38% of the respondents say that price of Patanjali Toothpaste is highly satisfactory, 28% of the respondents say that Price of Colgate Ved Shakti and Himalaya Toothpaste is highly satisfactory.

Q8. How do you rate the Contents & quality in the following Toothpaste?

Options	Patanjali	Sudanta	Dabur	Colgate Ved Shakti	Himalya
Highly Satisfactory	46	40	20	26	20
Satisfactory	48	34	48	48	36
Averagely Satisfactory	4	26	26	26	24
Dissatisfactory	2	0	4	0	10
Highly Dissatisfactory	0	0	2	0	10

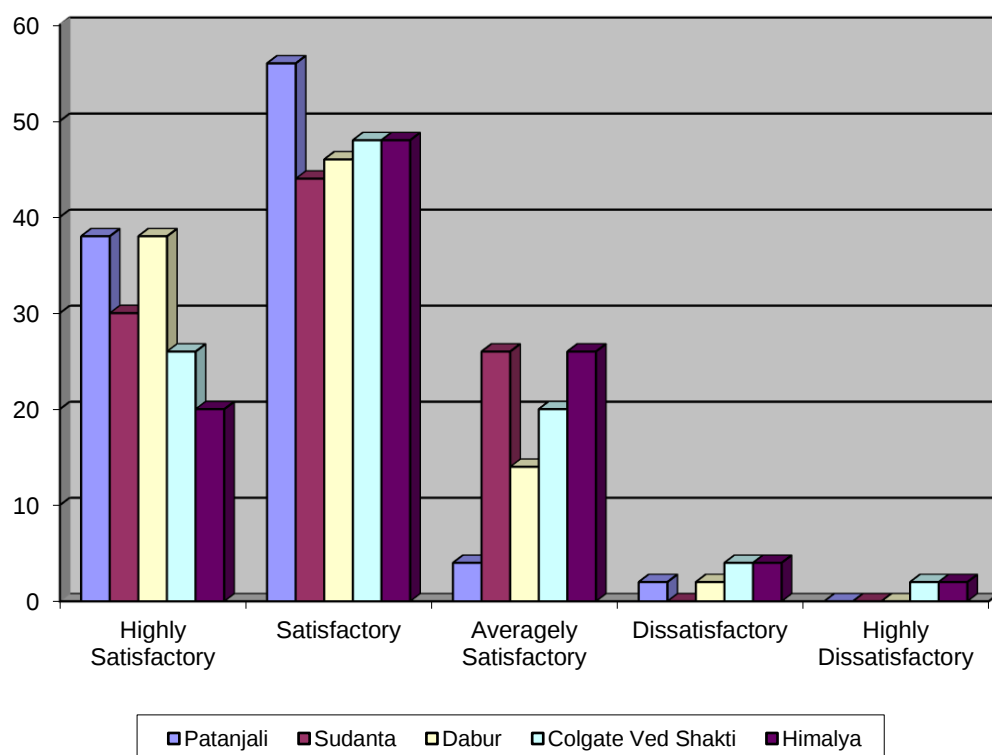


Interpretation:

It was found that contents & Quality of Patanjali Toothpaste are more satisfactory. As ayurvedic contents of Patanjali is more in numbers as compared to all other toothpaste.

Q9. How do you rate the Brand Image of the following Toothpaste?

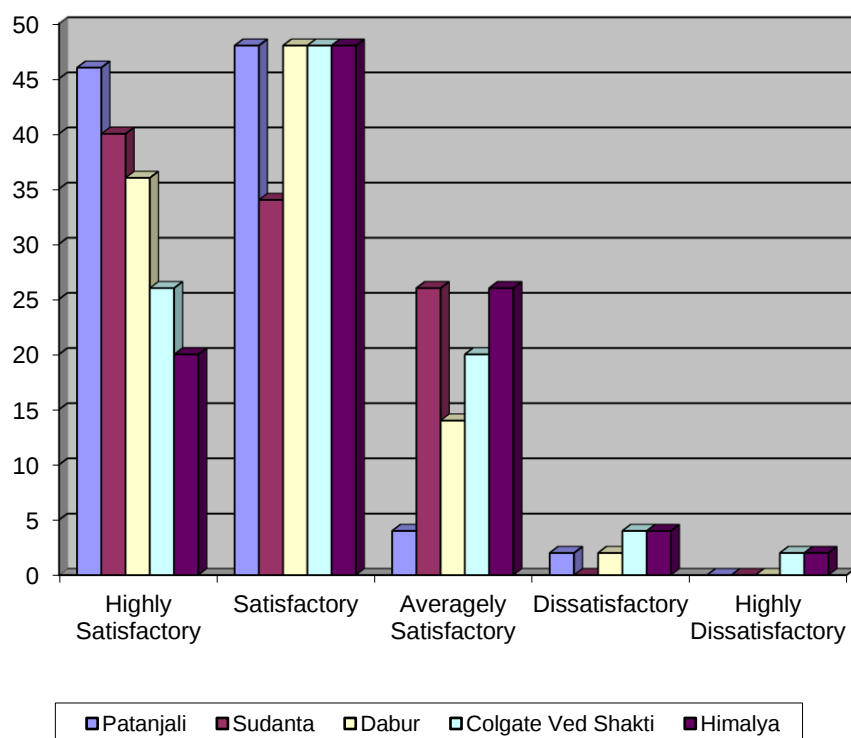
Options	Patanjali	Sudanta	Dabur	Colgate Ved Shakti	Himalya
Highly Satisfactory	38	30	38	26	20
Satisfactory	56	44	46	48	48
Averagely Satisfactory	4	26	14	20	26
Dissatisfactory	2	0	2	4	4
Highly Dissatisfactory	0	0	0	2	2

**Interpretation:**

Brand Image of Patanjali and Dabur is more satisfactory as compared to other ayurvedic brands of Toothpaste.

Q10. How do you rate the Offers on the following ayurvedic toothpaste?

Options	Patanjali	Sudanta	Dabur	Colgate Ved Shakti	Himalya
Highly Satisfactory	46	40	36	26	20
Satisfactory	48	34	48	48	48
Averagely Satisfactory	4	26	14	20	26
Dissatisfactory	2	0	2	4	4
Highly Dissatisfactory	0	0	0	2	2

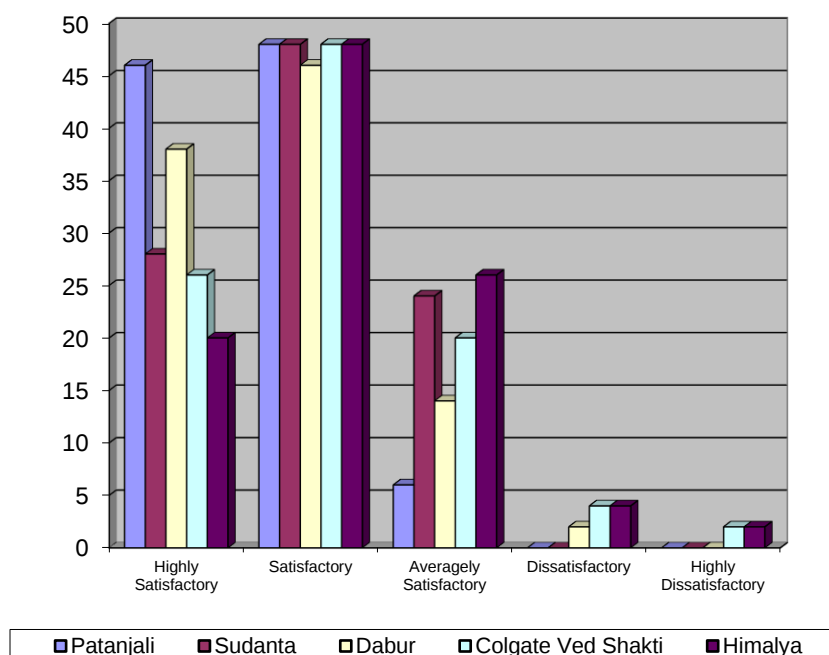


Interpretation:

Patanjali is giving attractive offers like 1+1 and toothbrush free with combo Pack. Offer of Patanjali Toothpaste is more satisfactory.

Q11. Rate the Availability of the following toothpaste?

Options	Patanjali	Sudanta	Dabur	Colgate Ved Shakti	Himalya
Highly Satisfactory	46	28	38	26	20
Satisfactory	48	48	46	48	48
Averagely Satisfactory	6	24	14	20	26
Dissatisfactory	0	0	2	4	4
Highly Dissatisfactory	0	0	0	2	2

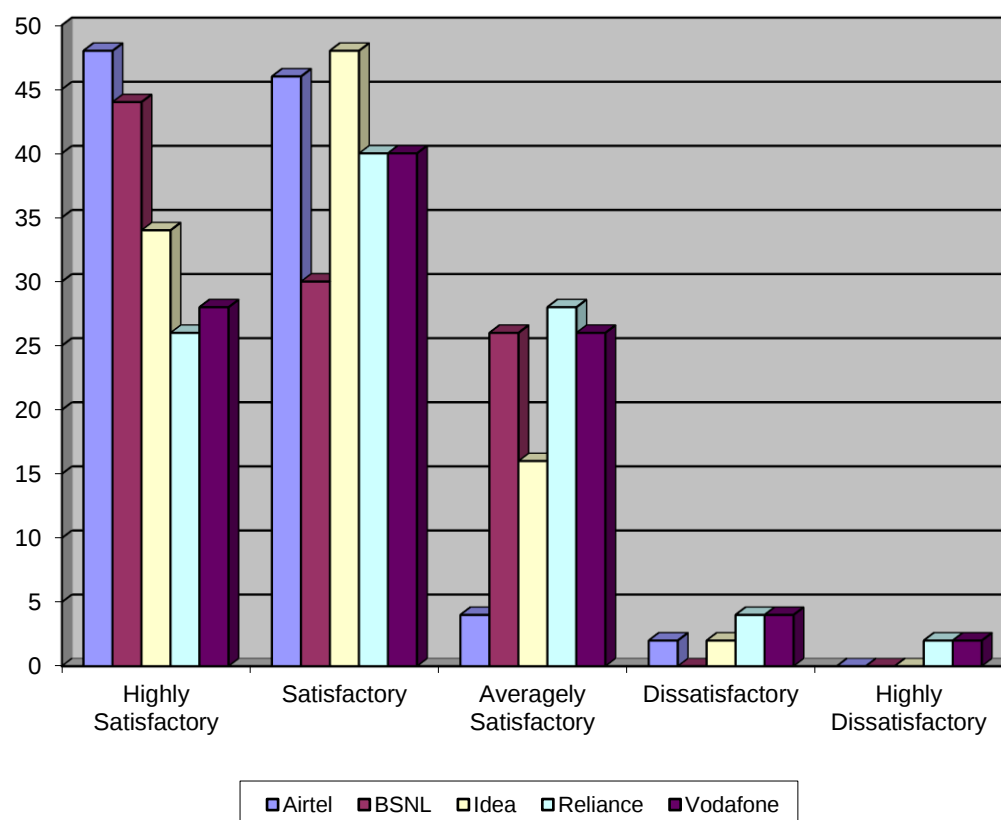


Interpretation:

Patanjali has a good marketing strategy and due to increased number of distributors and outlets Patanjali is able to reach masses as compared to other ayurvedic toothpaste.

Q12. How do you rate the Packing of the following Toothpaste?

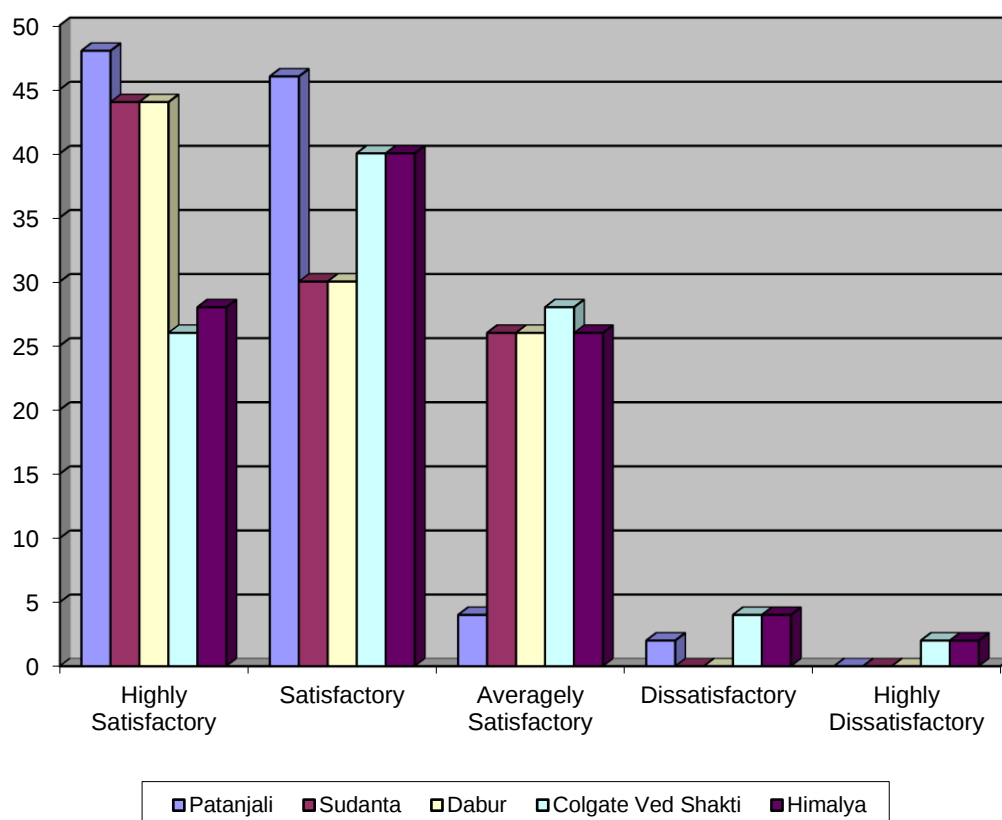
Options	Patanjali	Sudanta	Dabur	Colgate Ved Shakti	Himalya
Highly Satisfactory	48	44	34	26	28
Satisfactory	46	30	48	40	40
Averagely Satisfactory	4	26	16	28	26
Dissatisfactory	2	0	2	4	4
Highly Dissatisfactory	0	0	0	2	2

**Interpretation:**

Packaging of Patanjali Toothpaste is more satisfactory as compared to other brand of toothpastes.

Q13. Overall Satisfaction with the following Ayurvedic Toothpaste?

Options	Patanjali	Sudanta	Dabur	Colgate Ved Shakti	Himalya
Highly Satisfactory	48	44	44	26	28
Satisfactory	46	30	30	40	40
Averagely Satisfactory	4	26	26	28	26
Dissatisfactory	2	0	0	4	4
Highly Dissatisfactory	0	0	0	2	2



Interpretation:

Patanjali Toothpaste is more satisfactory as compared to other brands of toothpastes.

Findings

Oral Care Preferences: 68% of respondents prefer toothpaste for cleaning their teeth, while 26% use Datuin, 12% opt for toothpowder, and 10% prefer liquid mouthwash.

Ayurvedic vs. Chemical Toothpaste: 90% of respondents use Ayurvedic toothpaste, whereas only 10% prefer chemically formulated toothpaste.

Toothpaste Type: 68% of respondents use regular toothpaste, while 32% prefer gel-based toothpaste.

Key Purchase Factors: When choosing toothpaste, 36% of respondents prioritize safety, 28% consider taste, 22% focus on price, and 14% look for a recognized brand name.

Market Share: Patanjali holds the largest market share at 48%, followed by Dabur (24%), Colgate Ved Shakti (18%), Sudanta (8%), and other Ayurvedic brands (2%).

Taste Satisfaction: Most respondents find the taste of Patanjali and Dabur Ayurvedic toothpaste more satisfactory compared to Colgate Ved Shakti and Himalaya toothpaste.

Price Satisfaction: 38% of respondents consider the price of Patanjali toothpaste highly satisfactory, compared to 28% for Colgate Ved Shakti and Himalaya toothpaste.

Product Content: Patanjali toothpaste is perceived as having a higher number of Ayurvedic ingredients, making it the most satisfactory in terms of content.

Brand Image: Patanjali and Dabur enjoy a stronger brand image compared to other Ayurvedic toothpaste brands.

Promotional Offers: Patanjali provides attractive promotions such as "Buy 1 Get 1 Free" and toothbrush combos, making its offers more appealing to consumers.

Market Reach & Distribution: Patanjali's extensive distribution network and increasing number of retail outlets enable it to reach a broader customer base compared to other Ayurvedic toothpaste brands.

Packaging Appeal: The packaging of Patanjali toothpaste is rated more satisfactory than other brands.

Overall Satisfaction: Among all Ayurvedic toothpaste brands, Patanjali toothpaste is rated the most satisfactory by respondents.

Suggestions:-

Customers should be educated about the benefits of using Ayurvedic toothpaste and other related products.

Attractive customer incentive schemes should be introduced to enhance engagement and sales.

A stronger promotional strategy should be developed to effectively compete in the market.

Prices of Ayurvedic products should be reduced to expand market reach and attract more consumers.

Extensive advertising efforts should be implemented to increase brand awareness.

Product availability should be improved, particularly in rural and remote areas.

Companies should actively communicate promotional offers and schemes to customers.

Taste plays a crucial role in influencing purchasing decisions and should be optimized accordingly.

Limitations

Geographical Focus:- The study primarily focuses on consumer data collected from Indore for surveys. While this provides localized insights, it may not fully capture the diversity of consumer behavior across India, particularly in regions with different socio-economic or cultural contexts.

Reliance on Self-Reported Data:- The survey responses and online reviews used as primary data sources are based on self-reported consumer experiences, which may involve biases, inaccuracies, or exaggerations.

Limited Brand Scope:- The research is confined to 4 leading Ayurvedic toothpaste brand, which may not represent the entire market or include emerging brands that could influence consumer behavior.

Dynamic Market Trends:- The tooth care industry is highly dynamic, with trends such as new product launches, evolving consumer preferences, and technological advancements potentially impacting the relevance of findings over time.

Digital vs. Offline Behavior:- The study might underrepresent consumers who primarily purchase toothpaste products from offline retail stores, as the focus on online reviews and e-commerce behavior may skew findings towards digitally active consumers.

Limited Exploration of Psychological Factors:- While the study considers tangible factors like price, quality, and availability, it may not deeply explore psychological or emotional factors such as aspirational buying or brand attachment.

Time Constraints:- The study is conducted within a limited time frame, restricting the ability to track long-term consumer behavior or assess the impact of seasonality on hair care product preferences.

Data Source Variability:- Online reviews, while useful for understanding consumer sentiment, may not always be consistent or verifiable, leading to potential variability in the data quality. The respondents were limited and cannot be treated as the whole population. The respondents may be biased, the accuracy of indications given by the respondents may not be consider adequate, In spite of precautions taken there are certain procedural and technical limitations, Lack of sufficient time to exhaust the detail study of the above topic became a hindering factor in my research.

Conclusion

This study explored consumer preferences for Ayurvedic toothpaste and compared prominent brands through a

customer survey. A structured, closed-ended questionnaire was used to collect responses from 100 individuals.

The results indicate that 68% of respondents prefer using toothpaste for oral hygiene, while 26% prefer Datuin, 12% opt for tooth powder, and 10% use liquid mouthwash. A significant 90% of respondents favor Ayurvedic toothpaste over chemically formulated alternatives, with only 10% preferring chemical-based toothpaste. Furthermore, 68% of participants use regular toothpaste, while 32% use gel-based toothpaste.

In terms of market share, Patanjali leads with 48%, followed by Dabur at 24%, Colgate Ved Shakti at 18%, Sudanta at 8%, and other Ayurvedic toothpaste brands collectively holding 2%. The findings also reveal that Patanjali and Dabur Ayurvedic toothpaste outperform Colgate Ved Shakti and Himalaya toothpaste in key aspects such as taste, price, packaging, and overall quality. Additionally, Patanjali's ingredients and product quality are perceived as more satisfactory, contributing to its strong brand image in the Ayurvedic toothpaste market.

Overall, Patanjali and Dabur have established a stronger brand presence and consumer preference compared to other Ayurvedic toothpaste brands, with Patanjali emerging as the most favored option among respondents.

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Ethical Approval: Not applicable

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