

# An Empirical study of factors affecting brand image of toothpaste of different companies in Indore city

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**Abstract- Purpose** – This study examined the effects of various factors on creating a good brand image of toothpaste in Indore city. Customers decide to purchase toothpaste for their consumption on the basis of these factors. If companies can create better brand image of their toothpaste for the customers on the basis of these factors then they can serve better to customers and also make better profits for themselves also.

**Design/methodology/approach** – Exploratory method is adopted by surveying customers by designed questionnaire. Then data was analyzed by descriptive analysis and factor analysis method.

**Findings** –1. Consumers always like to purchase those brands of toothpaste which have optimum quantity of calcium.

2. The preference of consumer is highly affected by the promotion of brand of toothpaste by TV advertisement.

3. Ayurvedic/natural based toothpastes are now preferred by customers over chemical based toothpastes.

4. Paste form of toothpaste is more popular than gel form of toothpaste.

## I. INTRODUCTION

Brand image of a product or service is depends upon the good quality and performance of the product/service for which customer's purchase the product/service to fulfils his/her need. Brand image of a product is the present image of the product in the mind of the customer. Customers perceive the product's/service ability to fulfill his/her need/desire by performing/delivering the promise made in the form of a brand. Thus creating a brand image is difficult and maintaining good brand image is more difficult. Brand image is the overall impression in consumers' mind that is formed from all sources. Consumers develop various associations with the brand. Based on these associations, they form brand image. An image is formed about the brand on the basis of subjective perceptions of associations' bundle that the consumers have about the brand. The main factors of positive brand image are unique logo reflecting organization's image, slogan describing organization's business in brief and brand identifier supporting the key values.

The toothpaste history in India can be tracked back from 1975. In the last few decades the toothpaste industry in India has shown impressive growth. Now it becomes one of the country's largest consumer markets. Day by day it is becoming very competitive. Also day by day the users of toothpaste are growing at a very rapid pace. A lot of options are available to the consumers today in terms of the toothpastes brands ranging from different variants of Colgate which is designed to cater to the needs of all the segments from youths to the older generation, Pepsodent, Close-up which comes in a gel form used by youngsters to give a long lasting freshness, Anchor which claims itself to be the one vegetarian toothpaste, Dabur, which comes in a

powder form, Sensodyne and other fluoridated toothpastes which are basically used for anti sensitivity purposes. Thus companies are associating different factors to their products to create very good brand image in the minds of their target customers. R.I. Haley, 1968 has developed a market segment description of toothpaste on the basis of brand image. According to him, "the toothpaste market has four types of brand images and these are identified by namely; one particularly concerned with "tooth decay preservation", one with "brightness of teeth", one with flavor and one with price". Besides these some toothpaste companies give importance only upon the hygienic value such as Vicco-Vajordanti, Dabur and Neem and thus try to attract the more health sensitive people. On the other hand, toothpastes like Close-up, Colgate and Pepsodent give emphasis upon the higher class people as well as self esteemed people. So, people using these brands feel higher in status and their performance is more psychological.

The individual toothpaste company associate different factors of brand image in their advertising, either with any special features like better cleaning action ability, good flavor or any special medicinal factor present in their brand. A notable trend started in 2010 was the increasing preference of consumers in India for the herbal and Ayurvedic-based toothpaste. These are perceived to be more "natural" and healthy than standard products.

## II. CONCEPTUAL OVERVIEW

### What is a brand?

"A brand is a name, term, sign, symbol, or design, or a combination of them intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of the competitors"( The American

Marketing Association, 1960) . Thus, a brand identifies the seller or manufacturer of the product. If a company treats a brand only as a good name, then it misses the holistic concept of branding. The challenge in branding is to develop a deep set of meanings for the brand in the minds of customers. A successful brand is an identifiable product (consumer or industrial), service, person or place, augmented in such a way that the buyer or user perceives relevant and unique added values, which match their needs and wants closely. If a brand provides continuously good services for a long period of time, then it acquires added values of familiarity and proven reliability in the minds of customers.

For customers, brands can simplify their choice, promise a particular quality level of the product and reduce risk and uncertainty. Brands are basically built on the product itself, the accompanying marketing activities, and the use (or non-use) by customers as well as others.

### Brand image

Brand image is defined as a “perception of a brand in the minds of persons[...]. It is what people believe about a brand – their thoughts, feelings, expectations” (AMA). Another definitions by two prominent authors are, “set of associations, usually organized in some meaningful way” (Aaker, 1992) and “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller, 1993). From these definitions we can say that Brand image is the current view of the customers about a brand and it is formed by a unique bundle of associations within the minds of target customers. It is a set of beliefs held by customer about a specific brand of a product and signifies what the brand presently stands for. In short, it is nothing but the consumers’ perception about the product. Brand image is the manner in which a specific brand is positioned in the market and also conveys emotional value and not just a mental image. Brand image is nothing but an organization’s overall character in the mind of the customers. It is an accumulation of contact and observation made by customers external to an organization. It should highlight an organization’s mission and vision to all. The main elements of positive brand image are unique logo reflecting organization’s image, slogan describing organization’s business in brief and brand identifier supporting the key values of the organization. Brand image is the overall impression in consumers’ mind that is formed from all sources of information which are available to consumer. Consumers develop various associations with the brand. Based on these associations, they form brand image of a product in their minds. The idea behind brand image is that the consumer is not purchasing just the product/service but also the image associated with that product/service. Brand images should be positive, unique and instant to influence customers in their purchasing decisions.

### Rationale of study

Rational of the study lies in the fact that in India, oral care market offers huge potential as penetration and per capita consumption of oral care products is very low. Rising per capita income and increasing awareness is driving the demand of oral care products. Stronger hygiene awareness, pushed by major brands and government is encouraging more frequent brushing of teeth and growing middle-class consumers are further driving demand for oral care products. Companies constantly innovates their products and brand images are created around these innovations. It is important for us to know the various factors of brand images which are liked by customers for a good brand image of toothpaste. Consumers have started switching to more value-added toothpastes like gels, mouth washes, and teeth whitening products. In rural areas, consumers are switching from toothpowders to toothpastes. A key industry trend is the move towards natural products comprising of herbs, vitamins and minerals. Therefore companies must focus on these factors for creating better brand images of their products.

### III. REVIEW OF LITERATURE

**Anita kumari Panigrahi(2015)** This paper analyses upon awareness and user ship of different toothpaste brand Buyers in behrampur city. It also focuses on understanding the demographic factors of consumers which ultimately impacts on buying toothpaste. Besides that the study has conducted by the researcher to find out various reasons which are influenced by factors of brand choice towards toothpaste. Some important factors are considered by the consumer for decision making while buying toothpaste Brand. Brand image, advertising and offer play an important role in purchasing toothpaste. Sometimes based on the offer the consumer compares with competitor’s product and select the best one. Product attributes are also analyzed by the consumer for deciding a brand. Switching of from one company’s Brand to other company’s Brand is mainly based on advertisement, brand name, packaging, availability, and price rise, etc.

**Dr.T.N.R.KAVITHA, A.VANITHA(2013)** The main objective of to identify the various factor influencing customer in purchase of the toothpaste, to know the customer satisfaction level about the toothpaste. The research design used in this study is descriptive research design. Data was collected from 50 sample respondents. Data was collected by survey method, the survey was collected erode city in Tamilnadu, through structured questionnaire with five point rating scale questions. It was analyzed using factor analysis, percentage analysis and chi square method.

It is found that from the study of majority 40% of the respondents are comes under the age of group below 20years.It is clear from the study of most 36% of the respondents are purchase of the brand image. It is learn the

Colgate brand is the fast moving brand which has a number of product which later the needs of children as well as adults. They are influenced by advertisement mostly.

**Dr. S. Sriram, Dr. S. Pugalanthi(2013)** This study was addressed by Factor analysis to identify the important factors considered by the consumers for taking decision towards purchasing of Toothpaste and the study concluded that the Product Related factors like Colour, Ingredients, Brand name, taste, flavour etc, plays an important role in purchasing toothpaste. So the companies could analyze all these factors and find out the best suitable tools for promoting their toothpastes in India.

**Sandip Sarker, Salahuddin Yousuf, Muhtarim Zubair Monzoor(2013)** This paper has explored the factors that affect the brand selection of toothpaste in the Khulna region. A pilot survey has been conducted to find out the factors regarding the brand selection decision of toothpaste. Then a structured questionnaire has been developed measuring 20 variables. The relative importance of the variables was evaluated by the survey outcomes. Results show that several factors are influential for the toothpaste brand selection e.g. quality, advantages of using product, duration of freshness, Smell, perceived performance, brand awareness, product Attribute etc. The study also reveals the problems and identified probable solutions to overcome these problems.

#### Objectives of study

1. To know the awareness about the various brands of toothpaste in Indore city.
2. To know the taste and preference of consumers about various types of toothpaste.
3. To know the most important factor for creating a good brand image of a toothpaste.
4. To know the effect of various promotion mix on brand image of toothpaste
5. To Know the growing effect of factor of Ayurvedic/natural on brand image of toothpaste.

#### Hypothesis

- H1: All the brands of toothpaste have same level of awareness in the market of Indore.
- H2: Consumers have same level of taste and preference for all types of toothpaste.
- H3: All the factors have same influence on brand image of toothpaste.
- H4: All the factors of promotion have same influence on the brand image of toothpaste.

### IV. RESEARCH METHODOLOGY

This research is exploratory research.

#### Sample Design

**Area of Study:** The study was conducted to ascertain the perception of customers of Indore city, towards the different brands of toothpaste.

**Sample Size:** The determination of sample was 102; it was decided arbitrarily from different areas of Indore city.

**Sources of data collection:** Research data was collected from both primary and secondary sources. The primary data was collected by administering questionnaires to the respondents. Secondary data sources were also used to collect the data for this research study which include journals, industry reports and other publications.

Sample design is a definite plan of obtaining some items from the whole population, which is Indore city in this case. The sample design used in this study is convenience random sampling.

The total sample size is 102

### V. DATA ANALYSIS

Cronbach's Alpha is 0.623 Hence data is reliable because value is more than 0.5. Before proceeding for factor analysis, appropriateness of factor analysis is to be assessed. This can be done by examining adequacy through Kaiser Olkin (KMO) statistic (Table 1). KMO value is greater than 0.5 is considered to be adequate (Kaiser and Rice, 1974). From the table 5 value of KMO is acceptable, indicating that pattern of correlations is relatively compact and factor analysis can yield distinct and reliable results. The items in the individual category subjected to Principal Component Analysis (PCA) with Varimax rotation and Kaiser normalization using SPSS 16.0. The items having factor loading less than 0.5 are to be eliminated. Table 5 gives the initial communalities estimates of variance accounted for all components or factors. Four components are identified totaling cumulative contribution of sixty nine percent.

It can be seen from table 5 that four factors namely good cleansing power, protects from cavity, optimum quantity of calcium and made from natural/ayurvedic products of values 0.721, 0.726, 0.777, 0.751 respectively have more values than other factors. This suggests that these factors are more important than other factors for purchasing toothpaste. Combination of these four variables is the core quality of the toothpaste. Toothpaste is made from calcium and now growing awareness and knowledge help customers to understand that products made from natural products are better for their health. Protecting the teeth from decay till longer part of their life is another concern of customer and fourth concern is cleaning the teeth every day. For factor promotional influenced we see that the value 0.696 which is mostly contributed by celebrity endorsement. It means toothpaste is a product which requires heavy and constant reminder advertising to influence customers to purchase the product. Medicinal value, protect from Bacteria, taste of

toothpaste and good leather/foam have values 0.695, 0.657, 0.651 and 0.643 respectively. Medicinal toothpaste are used by customers when they have a problem in their teeth and also to protect from bacteria. Customers also purchased toothpaste on the basis of taste as evident from the fact that various taste of toothpaste like mint, long, neem etc. are available in the market. If taste is harsh consumers will not buy. The last important factor for customers is leather/foam formation in their mouth. If proper leather/foam is not formed then they feel that their mouth is not cleaned properly.

## VI. TEST OF HYPOTHESIS

H1: All the brands of toothpaste have same level of awareness in the market of Indore.

There are two variables from which we can know the awareness of the brands of toothpaste in our survey, the first is the toothpaste used by the consumers and another is brand known to them but not used by them. If we add these two variables then we can get awareness level of various brands. From the frequency table 1 of present used and table 2 of known toothpaste to the consumers it is evident that CloseUp has highest level of awareness 66(22+44), then Colgate 65(40+15) and Patanjali Dantkranti is on third position 41(32+9). There is close competition between Close Up and Colgate in awareness level but in terms of consumption Colgate is on winning side with 40 numbers of users then close up with 22 users. This is due to the aggressive promotional and catchy advertisement by Close Up. Thus our Hypothesis is rejected and awareness of various brands of toothpaste is different in Indore city.

H2: Consumers have same level of taste and preference for all types of toothpaste.

From the frequency table 3 of types of toothpaste used by the consumers it is evident that paste form of toothpaste is used by 78.4% consumers and gel form is used by 20.6% consumers and other form is used by only 1% consumers. Paste form of toothpaste is used by more customers than the gel form of toothpaste because majority of the customers are still using toothpaste for cleaning their teeth than making their teeth shine and freshness of breath in Indore city. Majority of the customers still not adopted the value added products in Indore city. Thus our hypothesis is rejected and paste form of toothpaste is more popular than gel form of toothpaste.

H3: All the factors have same influence on Brand Image of toothpaste.

From the principal component analysis(PCA) it is found that out of 11 factors of brand image, the factor of 'Optimum quantity of calcium' has highest value of 0.777. Calcium is the core of toothpaste and helps in protecting and maintaining healthy teeth and this also explain why companies claims more and more calcium in their brand of

toothpaste. The second most important factor is 'Made from ayurved/natural products' which has value of 0.751, which means customers are now prefer toothpaste made from natural/Ayurvedic products than the chemical products. This explains the rising share of patanjali brand of toothpaste in the market which is positioned on Ayurvedic based manufacturing. The other factors of Brand Image Protects from cavity, good cleansing power, promotional influenced, Medicinal value, protect from Bacteria, taste of toothpaste and good leather/foam have values 0.726, 0.721, 0.696, 0.695, 0.657, 0.651 and 0.643 respectively. Thus our hypothesis is rejected and customers give different weightage to different factors of brand image in their purchasing decision of toothpaste brand.

H4: All the factors of promotion have same influence on the brand image of toothpaste.

From the table 7 it is found that most important factors of brand promotion is TV advertisement which is 50% in deciding the purchase of a brand of toothpaste. This explains why TV advertisement is most popular in FMCG products and particularly advertisement of toothpaste. People love to watch catchy advertisement of Close Up which has highest awareness among toothpaste brands. The next factor is word of mouth (35.3%) which is most trusted form of promotion and third factor newspaper has value 7.8%. Thus our hypothesis is rejected and different factors of promotion have different influence on the Brand Image of toothpaste.

## VII. FINDINGS

1. Consumers always like to purchase those brands of toothpaste which have optimum quantity of calcium and companies are promoting their brand image on the basis of more and more calcium in their brands of toothpaste.
2. The awareness and preference of consumer for the selection of toothpaste brand is highly affected by the promotion on TV advertisement. Word of mouth also plays important role in creating good brand image of toothpaste.
3. Ayurvedic/natural based toothpastes are now preferred by customers over chemical based toothpaste. Thus Patanjali became leading brand of toothpaste in short period of time.
4. Paste form of toothpaste is more popular than gel form of toothpaste. Most of the Consumers are still in the stage of cleaning their toothpaste than whitening so they used paste form of toothpaste.

### Limitations of Study

The limitation contained in the primary data was that of limited sample size used for study, thus sample cannot be correct representation of the target. Moreover consumer buying is a complex process in which number of factors like economic factors, social status and psychographic factors influence the buying of the consumer, those are not considered for the study.

### VIII. CONCLUSION

We can conclude that Close Up brand of toothpaste is most popular brand of toothpaste in terms of awareness but Colgate brand is leading brand of toothpaste in Indore city. Paste form of toothpaste is more popular than the gel form of toothpaste. We considered 11 factors of brand image of toothpaste in our study and find out that ‘optimum quantity of calcium’ is the most important factor of brand image. The second important factor is ‘made from natural/Ayurvedic products’ and this leads to the rise of Patanjali brand of toothpaste as leading brand of toothpaste in short period of time. The factor of promotion is another important factor of brand image and mostly contributed by TV advertisements. Positive and good Brand image plays an important role when a consumer buys a brand of toothpaste. Companies must analyze all these factors and find out the best suitable tools for creating a good brand image of toothpastes in India so that they can deliver best products to the consumers and can also earn better profit for themselves.

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**Table1**

**Currently used toothpaste**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Close up	22	21.6	21.6	21.6
Pepsodent	4	3.9	3.9	25.5
Colgate	40	39.2	39.2	64.7
Dabur Babool	1	1.0	1.0	65.7
Oral-B	1	1.0	1.0	66.7
Sensodyne	1	1.0	1.0	67.6
Vicco	1	1.0	1.0	68.6
Vajradanti	1	1.0	1.0	68.6
Patanjali	32	31.4	31.4	100.0
Dantkranti				
Total	102	100.0	100.0	

**Table2**

**Toothpaste Known**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Closeup	44	43.1	43.1	43.1
Pepsodent	26	25.5	25.5	68.6
Colgate	15	14.7	14.7	83.3
Dabur Babool	2	2.0	2.0	85.3
Oral-B	1	1.0	1.0	86.3
Sensodyne	2	2.0	2.0	88.2
Vicco	3	2.9	2.9	91.2
vajradanti				
Patanjali	9	8.8	8.8	100.0
Dantkranti				
Total	102	100.0	100.0	

**Table3**

**Type of toothpaste**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Paste	80	78.4	78.4	78.4
Gel	21	20.6	20.6	99.0
Othet	1	1.0	1.0	100.0
Total	102	100.0	100.0	

**Table 4**

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.628
Bartlett's Test of Sphericity	Approx. Chi-Square
	df
	Sig.

**Table5**

**Communalities**

	Initial	Extraction
Good cleansing power	1.000	.721
Protects cavity	1.000	.726
Optomum quantity of calcium	1.000	.777
Made from naural/ayurvedic products	1.000	.751
Good lather/foam	1.000	.643
Protect bad breath	1.000	.634
Protects from Bacteria	1.000	.657
Medicinal value	1.000	.695
Cheaper than other toothpaste	1.000	.640
Taste of toothpaste	1.000	.651
Type of promotion influnced	1.000	.696

Extraction Method: Principal Component Analysis.

**Table6**

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.166	28.779	28.779	3.166	28.779	28.779	2.331	21.191	21.191
2	1.640	14.910	43.690	.640	14.910	43.690	1.955	17.772	38.963
3	1.532	13.925	57.614	1.532	13.925	57.614	1.744	15.855	54.818
4	1.254	11.400	69.014	1.254	11.400	69.014	1.562	14.196	69.014
5	.737	6.696	75.710						
6	.637	5.795	81.506						
7	.577	5.245	86.750						
8	.497	4.514	91.264						
9	.435	3.956	95.220						
10	.288	2.616	97.836						
11	.238	2.164	100.000						

Extraction Method: Principal Component Analysis.

**Table7**

**Type of promotion influenced**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid TV	51	50.0	50.0	50.0
Newspaper	8	7.8	7.8	57.8
Radiojingle	2	2.0	2.0	59.8
Discounts	1	1.0	1.0	60.8
Free sample distribution	4	3.9	3.9	64.7
Word of mouth	36	35.3	35.3	100.0
Total	102	100.0	100.0	