

Research to study different aspects affecting the buying behavior of consumers towards different variants of a toothpaste brand

Abhishek Singh Bhriguvanshi

ABSTRACT

The objective of the research work was to find out if the various variant of a toothpaste brand and their purchase are in any way related to the various demographic aspects of a consumer. If a customer's age, gender, income, lifestyle, promotions influence their buying behavior. So there are some researches issues on which the research is conducted to find if these have any relevance towards this and if such factors should be considered during the marketing and propositions offered by the company. To fulfill the effective purpose of the study, variant on which the survey was required to be done had to belong to a single brand with a spectrum of product variants under its brand; therefore Colgate was referred as a brand of focus with its different variants. The main focus of the research design and the research survey exercise was to fulfill the aim of the study and ensure that the data collected was relevant to the objectives. The sampling plan involved convenience sampling as it is based on the convenience of the researcher who selects the sample. Respondents in the sample were included merely on account of their availability and on the fact that they were students either in graduation or post graduation. An online survey was made to collect the responses from them. The data was collected through a structured questionnaire. Also, there was a comparison made between the data collected from the retail store and the questionnaire which focused only on the youth.

RESEARCH DESIGN

Type of Research: Exploratory Research Instrument/Tool: Structured Questionnaire Data collected from retail store. Sampling Method: Non-Probability convenience sampling Sample Size: 50(Primary data) 84(Secondary Data) Sample unit: Students at a University Customers at Retail shop.

OBJECTIVE OF THE RESEARCH

- To study the sales, promotion, & positioning aspects of various variants of Colgate.
- To study the sales structure at the retail store.

Specific Research Questions

- Do different variants of Colgate attract different age groups?
- Stating relation between promotional offers and sales.
- Does individual description & motivation boost the sales?

Research Methodology

The main aim of the research was to find out what attracts a prospective customer in buying Colgate variants. Besides, the research also helped in finding out if the demographic aspects of consumers are related in purchasing variants of



Colgate. The following research design was followed:

Type of Research: Exploratory

Research Instrument/Tool: Structured Questionnaire; Secondary sales data

Sampling Method: Non-Probability convenience sampling

Sample Size: 50 primary 84 secondary

Sample unit: Students of the University Customers at retail store

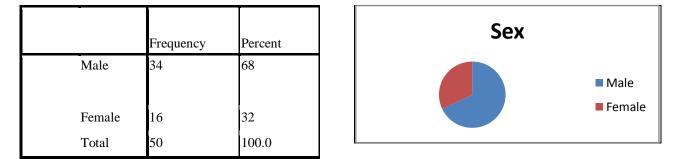
Data Collection Plan: A questionnaire was designed with 10 questions to get an insight from all the respondents. 50 students of a University were asked to fill the questionnaire.

Data Analysis Method: The descriptive analysis was done to understand the general trends in the thoughts of the people. Cross tabs were used to find out the dependence of some of the variables on other variables. Regression analysis, Bar graph & pie chart comparisons were done to understand and analyze the data.

Analysis and Results:

1) Sample of respondents

Table 1: Frequency Distribution of Males and Females



Interpretation: From the sample of 50 respondents, 68% were males & 32% were female respondents.

2) Brush habits of respondents

30

19

50

Frequency

1

Group

Once Twice

More

than

twice

Total

Age

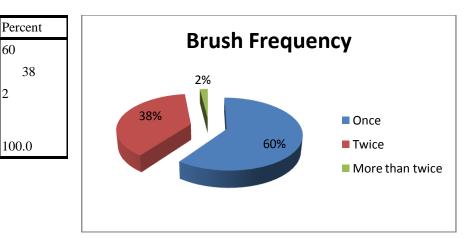


Table 2: Frequency Distribution of brushing habits of respondents



Interpretation:- 60% of the respondents brushed only once while 38% brushed twice a day and only 2% brushed more than twice .

3) Income Distribution

Income group	Frequency	Percent	
<1,00,000	28	56	Annual Income
100000-200000	8	16	
200000-300000	2	4	
>300000	12	24	10 4% Annual Income
Total	50	100.0	$\int \mathcal{L}_{1}^{0} 0^{1} \cdot \cdot$

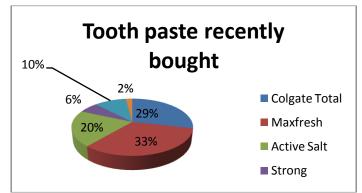
Table 3: Frequency Distribution of income of the respondents

Interpretation: Majority of the respondents had their income groups below 11akhs because they were students and they get limited money from their parents. Yet .there are people who have income more than 24% representing that they have worked earlier and some of them are still involved in business.

3) Choice of Colgate variants of respondents

Table 4: Frequency Distribution of most recently purchased Colgate variant

Colgate	Variant	Frequency	Percent
	Total	14	28
	Maxfresh	16	32
	Active Salt Strong Sensitive Visible White	10 03 05 01	20 06 10 02
	Total	50	100.0



Interpretation: Majority of the respondents have recently purchased Colgate Maxfresh i.e.33% and the second preference has been given to Colgate Total with 29%.

5) Offers liked most by the respondents

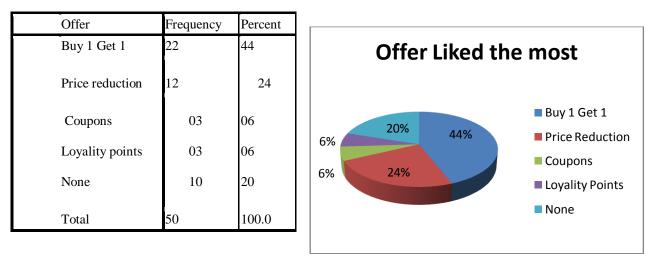


Table 5: Frequency Distribution of most liked offers by respondents

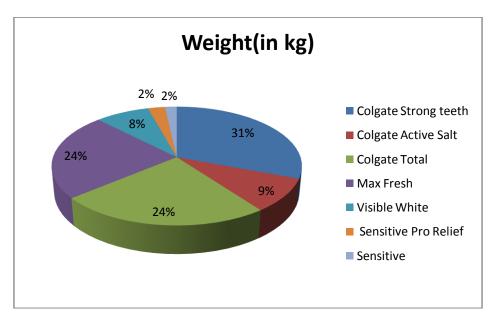


Interpretation: Most liked offer among respondents is "Buy 1 Get 1" offer with 44% and then the second most liked is "Price reduction" with 24% people liking it.

6) Highest sold toothpaste by weight according to 10 days retail store data

Colgate	Variant	Weight(Kg)	Percent
	Total	25.83	24
	Maxfresh	25.31	24
	Active Salt	9.75	09
	Strong	32.85	31
	Sensitive	1.88	02
	Visible White	8.65	08
	Senstivie Pro Releif	2.71	02
	Total	106.98	100.0

Table 6: Frequency Distribution of sale Colgate variant by weight



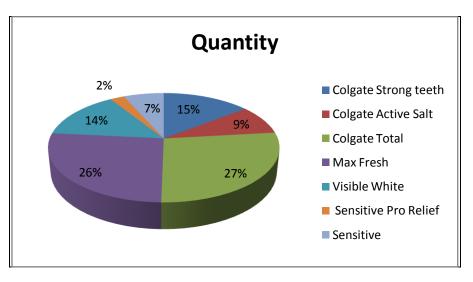
Interpretation: According to retail store data the highest selling toothpaste by weight is "Colgate Strong Teeth" and this is due to promotional offers like "Buy 1 get 1" on the variant.

7) Highest sold toothpaste by unit according to 10 days retail store data

Colgate	Variant	Units	Percent
	Total	139	27
	Maxfresh	135	26
	Active Salt	45	09
	Strong	74	15
	Sensitive	44	07
	Visible White	74	14
	Senstivie Pro Releif	12	02
	Total	523	100.0

Table 7: Frequency Distribution of sale Colgate variant by units sold



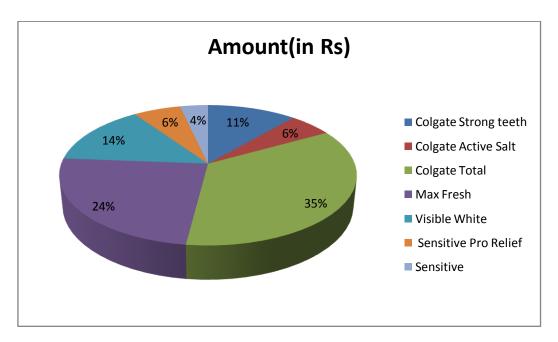


Interpretation: According to 10 days retail store data "Colgate Total" is the highest selling toothpaste by unit as it has been rated as number 1 Dentist recommended brand which motivates people to buy it in more quantity.

8) Highest sold toothpaste by amount of money contributed to the company according to 10 days retail store data

Colgate	Variant	Amount	Percent
	Total	20858	35
	Maxfresh	14381	24
	Active Salt	3290	06
	Strong	6742	11
	Sensitive	2115	04
	Visible White	8409	14
	Senstivie Pro Releif	3593	06
	Total	59388	100.0

Table 8: Frequency Distribution of sale of Colgate variant by money.



Interpretation: According to 10 days secondary data from retail store the highest monetary contribution towards the company is made by "Colgate Total".



REGRESSION TESTS RESULTS

Hypothesis:

- H₀:- There is no relation between the sales and gender of the consumer
 H₁:- There is a relation between the sales and gender of the consumer
- 2) H₀:- There is no relation between sales & age of the consumerH₁:- There is a relation between sales and age of the consumer
- 3) H_0 :- There is no relation between sales and weight of the product H_1 :- There is a relation between sales and weight of the product
- 4) H₀:- There is no relation between sales and price of the product
 - H_1 :- There is a relation between sales and price of the product

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Age, Gender ^a		Enter

a. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.197ª	.039	.015	1.411

a. Predictors: (Constant), Age, Gender

anova^d

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.526	2	3.263	1.639	.201ª
	Residual	161.283	81	1.991		
	Total	167.810	83			

- a. Predictors: (Constant), Age, Gender
- b. Dependent Variable: ITEM

Interpretation:-

In hypotheses 1 & 2, we see the R^2 value is only 3.9% and hence the variables and not representative of the whole picture. Hence, we accept null hypotheses that there is no relation between sales and gender, age of a consumer.



Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Amount, Weight ^a	-	Enter

a. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.955ª	.913	.869	17.620

a. Predictors: (Constant), Amount, Weight

ANOVAD

	Model	Sum of Squares	df	Mean Square	F	Sig.
	1 Regression	12985.583	2	6492.791	20.913	.008ª
I	Residual	1241.846	4	310.461		
	Total	14227.429	6			

a. Predictors: (Constant), Amount, Weight

b. Dependent Variable: Quantity

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Mode	el	В	Std. Error	Beta	t	Sig.
1	(Constant)	11.655	11.801		.988	.379
1	Weight	1.030	.762	.264	1.352	.248
	Amount	.005	.001	.762	3.907	.017

Interpretation:-

From the above analysis, we find that the R^2 value is 91.3% which shows the representativeness of the variables. But, we see the significance value of amount is 0.017 which is very significant and hence we reject null hypotheses. We conclude that the sale is dependent on the price of a product. And in case of weight, significance value is high and hence we accept null hypotheses and conclude that there is no relation between the sales and weight of the product variant.

Findings

- There is no relation between sales, age and gender of the consumer.
- There is a direct relation between sales and price of a product.
- There is again no relation between the sales and weight of the product.
- Dentist motivation towards "Colgate Total" makes it the highest selling toothpaste variant.
- Consumers are inclined towards "buy1-get1" offer.
- Maxfresh toothpaste is the most preferred toothpaste among the youth.
- Sensitive pro relief is used only among a few groups of people which is evident from the actual sales data.

LIMITATIONS OF THE RESEARCH

• The questionnaire survey and the retail store data are not of same geographical location.



• Survey is done only with current Colgate users.

BIBLIOGRAPHY

- Business research methods By Zikmund, Babin, Carr, Adhikari, Griffin
- www.wikipedia.com
- www.colgate.co.in

RECOMMENDATIONS

- The Gel form of toothpaste (e.g.- Maxfresh) is most popular among youths so the company should focus on their target consumers and their preference.
- The products like Colgate Sensitive and Pro-Relief are dentist recommended toothpastes but fail to attract more consumers because of its high price. So the company should offer discounts and other promotional offers to boost the sales.