



## Factors that affect Consumers' Choice of using Toothpaste in Nigeria

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The study was on the factors that affect consumers' choice of using toothpaste in Nigeria. The specific objectives of the study include to; examine television advert as a significant factor in consumer's choice in using toothpaste. Evaluate brand as a significant factor in consumer's choice in using toothpaste and Assess consumers past experience as a significant factor in consumer's choice in using toothpaste. The data used in the study were taken from the survey of households from selected areas in Enugu metropolis. A questionnaire was employed to collect quantitative data. The population of the study consisted of 138 Toothpaste consumers within Enugu metropolis In all 138 households were involved in the study. All households were categorized based on a number of years of marriage ranging from a minimum of five years to a maximum of twenty-five years. In all 138 households were involved in the study. All households were categorized based on a number of years of marriage ranging from a minimum of five years to a maximum of twenty-five years. Three hypotheses were tested using regression analysis, F-statistics (ANOVA), with aid of Special Package for Statistical Software (SPSS). The findings in the study included; Television advert had a significant positive factor in consumers' choice in using Toothpaste. The brand had a significant positive factor in consumers' choice in using Toothpaste and Consumers' past experience had a significant positive factor in consumers' choice in using Toothpaste. The study concluded that all factors considered had a significant effect. Besides the values of the test criteria were positive showing that each factor contributes an upward influence on consumers' choice in using toothpaste. The study recommended among others that there is a need for a modified advertising campaign or a new definition of the target group i.e. target groups who may have a general tendency to be more involved with the purchase of toothpaste.

↑  
ABSTRACT

**Keywords:** Consumers Choice; Toothpaste; Television Advert; Consumers Past Experience; Enugu Metropolis

## Introduction

*Consumer choice* refers to the decisions that *consumers* make with regard to products and services. *Consumer choice* deals with the behaviors and *consumers* decisions on which products to purchase or consume over time. Toothpaste is a paste or gel dentifrice used with a toothbrush to clean and maintain the aesthetics and health of teeth. Toothpaste is used to promote oral hygiene: it is an abrasive that aids in removing dental plaque and food from the teeth, assists in suppressing halitosis, and delivers active ingredients (most commonly fluoride) to help prevent tooth decay (dental caries) and gum disease (gingivitis) (TO, 2014). The choice of toothpaste used in tooth brushing varies from one household to the other and some factors are definitely responsible for this. Like many other basic goods, the toothpaste market in Nigeria has witnessed a massive expansion in the last two decades. This is not only due to the considerable increase in the number of users but also in the multiplication of new brands on the retail stand. Competitions are now stiffer than ever before as the market, which used to be dominated by fewer than about 4 (four) brands, are now flooded with a variety of other local and imported toothpastes (Okeke, 2013).

Some of the factors that had been concerned in determining choice of toothpaste include socioeconomic factors, design or packaging and advertisement. Some other factors that had been considered as important in the choice of toothpaste brand include the smell of the paste, perceived performance, awareness by the consumers and some other attributes of the paste. Different designs and packaging of products have been used by manufacturers to gain an added advantage over other competing manufacturers of similar products. This has resulted in some companies specialising on product design as a competitive tool (Shimp, & Andrews, 2013). These efforts are geared towards attracting and retaining the attention of consumers concerning a particular product. Appearance of products had been reported to have some of the following effects on the consumers, which includes attention drawing, functionalities, aesthetics and symbolic. The appearance of a product is supposed to draw the attention of a would-be consumer, while at the same time, it should communicate the brand image of the product. Brand is the aspect of a product or service that distinguishes such product/service from any other type of its kind. Brand is defined by the American Marketing Association, (2010) as, "a name, term, design, symbol, or any other feature that identifies one seller's product or service as distinct from those of another seller. However, apart from the effect of the branding on the producer of goods and services, choice of brands had been used to determine the status, taste and socioeconomic class of a user (Martins, Oliveira, and Pordeus, 2011).

Kumar, Priya, Madhushankari (2013) explained that another factor that may go a long way in determining the choice of toothpaste by a consumer is the content of the paste. Some consumers are concerned with the herbal contents, while others are concerned about the fluoride content. Anecdotal reports have it that the majority of consumers of toothpaste in Nigeria are more concerned about the herbal content, while the dentists are those more concerned about the fluoride content. It is imperative to know that product quality and product attribute affects consumer perception.

Dietz (2018) states that a consumer who has decided to spend a particular proportion of his income on consumer goods (say toothpaste, a fast moving consumer good) will soon discover that many brands of the product and sources of purchase are in competition for his patronage. There are over a hundred brands of toothpaste in the market and these could be bought from any of the ubiquitous neighbourhood kiosks, lock-up shops, supermarket, department stores, specialty stores, and shopping centers around, just to mention a few but depend on consumers choices. The consumer cannot buy all the brands toothpaste from all the sources at any one given time. This is because he/she does not need so many and the satisfaction each gives differs somehow from others. The consumer has to choose one of the brands and buy from one of the sources. Besides, the consumer is faced with the challenge of having so many brands of toothpaste at the same time on a counter. Consumers may not able to attend to all of the items on display, let alone weigh up all of the available options; they must decide what to buy in the blink of an eye. In making the decision to buy a particular brand the consumer need to use mental shortcuts, or heuristics, to guide their choices. Certain cues present in the environment guide shoppers 'attention and aid their decision making in store. More often consumers are not conscious of the cues or the mental shortcuts they have used to arrive at a decision. Marketing managers are interested in determining – how the consumer decides which product to buy Oladele, et al., 2014).

Consumers, as agreed by many authors, determine the sales and profits of a firm by their purchasing decisions and as such their motives and actions determine the economic viability of the firm. Unfortunately, managers of business firms were not always concerned with consumer motives and actions. There was a time when firms only focused on sales results with little concern for why consumers do what they do. Today, however, as noted by Assael (2014), business managers realize that they must gain an understanding of consumers if their marketing strategies are to be successful. This awareness has created a new and more efficient focus in developing marketing strategies. Consumer's choice forms an integral part of consumers' buying behaviour and it determines the survival or failure of goods and services. However, the study aims to evaluate the factors that affect consumers choice in using toothpaste in Nigeria.

### **Statement of the Problem**

Consumers choice is imperative to every marketer today as customer's decision to purchase or use a product will be greatly influenced by how he/she perceives the product quality. Consumers choice are not only affected by it's quality but also by the attributes the producer is able to invest to the product through advertising and packaging of the product.

However, consumer buying behaviour and the diverse nature of marketing situations pose a great challenge to the success of business organization. Many companies have failed either because of their inadequate research on the factors that affect consumer's choice because of their nonchalant attitude towards how consumer perceives their products. Many a times, consumer products or services are found to be competing against each other in the market place; this normally leads to problem of choice for the consumers, who have to choose out of available alternative product.

The question arises from what factor(s) influence(s) the consumer to choose a particular brand of product as at that time. Thus, there is need to study the factors that affect consumers choice in using toothpaste in Nigeria.

### **Objectives of the Study**

The overall objective of the study was to determine the factors that affect consumers' choice of using toothpaste in Nigeria. The specific objectives of the study includes to;

- i. Examine television advert as a significant factor in consumer's choice in using toothpaste.
- ii. Evaluate brand as a significant factor in consumer's choice in using toothpaste.
- iii. Assess consumers past experience as a significant factor in consumer's choice in using toothpaste.

### **Research Questions**

- i. To what extent is television advert a significant factor in consumers' choice in using Toothpaste?
- ii. To what proportion is brand a significant factor in consumers' choice in using toothpaste?
- iii. To what measure is consumers' past experience a significant factor in consumers' choice in using toothpaste?

### **Statement of Hypotheses**

The following null hypotheses guided the study:

- i. Television advert is not a significant factor in consumers' choice in using toothpaste;
- ii. Brand is not a significant factor in consumers' choice in using Toothpaste.
- iii. Consumers' past experience is not a significant factor in consumers' choice in using Toothpaste.

### **Significance of the Study**

The study will be of enormous importance to the producers in the toothpaste industry. Facts about consumer preferences and attitudes make for better product planning, marketing and enhanced consumer satisfaction. Also to benefit from this study are the advertising agencies, the print and electronic media whose input in the promotion of those products depends so much on consumer perception and choice (response).

Finally, it is also expected that this study will be of immense help to Dental Health Practitioners. If consumer attitudes as regards brand choice are known, dental health workers would be even in better positions to offer useful advice either to their patients or to the government.

## **Review of Related Literature**

### **Conceptual Framework**

#### **Consumer Choice**

Consumer's choice refers to how people decide to spend their money, given their preferences and budget constraints. It shows how individuals make choices, given restraints, such as their income and the prices of goods and services. These choices are among the most critical factors, shaping the overall economy (Consumer Theory, n.d). A varied number of psychological factors (learning rate and pattern, perception, motivation, beliefs and attitudes) influence a person's buying choice. While it is true that a combination of these factors interacts to determine consumer behaviour, it is the motivational process that is critical to the consumer in the determination of the final consumption decision (Sanford and Wrightsman, 2010).

Although human beings have many needs at any given time, these needs do not all constitute motives at the same time. Only those of them that are stimulated or activated become consumer's choice. A line of thought is also shared by Kotler *et al* (2012) when they opined that "a consumer is motivated when his system is energized or made active and the behaviour is directed towards some type of goal. This motivation can be thought of simply as the force that activates goal - oriented behaviour.

#### **Concept of Toothpaste**

Toothpaste is a gel dentifrice used in conjunction with a toothbrush to help clean and maintain the aesthetics and health of teeth. Toothpaste is used to promote oral hygiene; it functions as an abrasive agent that helps to remove dental plaque and food from the teeth, works to suppress halitosis, and delivers active ingredients such as fluoride or xylitol to the teeth and gums to help prevent tooth decay (cavity) and gum disease (gingivitis) (Associated Press, 2012). This list includes notable brands of toothpaste, both historic and contemporary. It helps maintain oral hygiene. The essential components are an abrasive, binder, surfactant and humectant. Other ingredients are also used. The main purpose of the paste is to help remove debris and plaque with some marketed to serve accessory functions such as breath freshening and teeth whitening.

#### **Television Advert of Toothpaste**

Business organization involves advertisement in order to create awareness about their products and services and boost sales. In consumer products, advertising is an ever-widening task in creating consumer interest and loyalty. In this research the researcher is more concerned with televising. Television advertising is one of the newest and fastest growing mediums of communication. In Nigeria, we have both the local and national network stations. All national station (NTA) operates on ultra-high frequency (UHF), while the local stations (privately owned) authority. According to NTA marketing plan, television attracts about 39% advertising companies (Ayanwale et al., 2015).

Since television advertising has become popular there has been a big dispute about how it impacts on consumers choices. Advertising is used to alert and boost a particular product or service to certain consumers. It gives consumers the authority to pick their choices of television advertising. The same consumers might be exposed to advertising at work and seeing it on television adds to it. The added advertising on television has the ability to make a consumer more influencing. Television advertising appeals to the consumers because they are entertaining. "Companies use advertising to tell us about distinct products they offer in response to this diversity" (Advertising promotes choice). A prime example of this is the Super Bowl. Companies spend millions of dollars on Super Bowl ads because they know a large amount of people watch this national event. The commercials are done on a very large scale. When impressionable consumers view this, there is a great chance they will want to purchase the item the advertisement is promoting. The advertising that consumers seen will continue or remain on television for the rest of time. It causes consumers to find advertising wonderful to influencing on television when it is time to purchase

item. The consumers would have to make their own choice or comment toward advertising. Advertising on television is very persuasive to consumers (Shimp, & Andrews, 2013).

### **The Role of Brand on Consumers Choice**

Branding on packaging allows us to quickly and efficiently select from a huge array of products. Specifically, branding draws consumers' attention to certain products; it allows them to recognise familiar products and serves as a cue for retrieving stored information from memory about those products. In order to fully understand consumer choice, it is necessary to understand the underlying psychological mechanisms that guide those choices, that is the conscious and unconscious factors that influence decision making. Different types of branding practices can effect consumers choices in a number of different ways. First, branding can influence whether consumers notice a product or not, that is, how much attention is paid to a product. Second, branding can influence whether and how quickly consumers recognise a product. This recognition and subsequent memory retrieval then have a knock-on effect on how consumers feel about that product. Branding on packaging facilitates these memory processes, giving consumers the information they need quickly and efficiently. The speed with which consumers can find and recognise products is crucial in determining their decisions (Winkielman, et al., 2013).

### **The Effect of Consumers Past Experiences for Products**

Positive experiences appeal more to emotion than a static product or service. Eating a burger is over in a few minutes but feeling like a valued customer can leave a lifelong impression. By creating a great customer experience that makes people feel good, you're more likely to motivate them to make a purchase and be loyal to your company in the future. Society is shifting. In the past, possessions and status symbols like the corner office were a big deal, but now people crave experiences (Dietz, 2018).

The value of experiences is driven in part by younger generations. The value of experiences is so powerful in the consumer world that it's created new business models. The sharing economy and the boom in subscription services are two examples. In both situations, you can get everything you need without owning anything. For example, most of us now stream our music without purchasing a single song. And social media focuses on pictures, stories, and videos about what people are doing right at that moment, instead of what they own long term. Your customer experience fits in this new worldview better than your products and services. For a brand to keep up, organizations need to focus on experience. Products are still important, but there is need to pivot how to promote them. Products can no longer stand alone, they must be built around an experience that makes people feel excited and motivates them to share how they feel in an Instagram story. That's what will convince them to buy (Ciotti, 2013).

### **The Household Budget: A Determinant factor for Making Choice**

Income, like occupation has the ability to determine household budget, the greatest buying power and market potential. (Schiffman and Kanuk, 2010). People need money to allow them to obtain the goods and services that they need to express their tastes, so income is also an important factor in determining consumer behaviour. (Bamosy et al., 2011) Marketers consider people with more money as "cash cows" for their products. Changes in disposable income can result in changes in the market demand for many durable products. For example the demand for houses and cars tend to fall when disposable income decreases and likewise rises as disposable income increases.

Du Plessis, et al (2014) Therefore household budget can actually determine how a consumer will respond to certain products. Kotler (2000) summarises the impact of income in one statement by saying that "product choice is greatly affected by economic circumstances. Income is seen as a significant determinant of household expenditure. Income was found to be the most important factor to explain the major expenditure variations in the four race groups.

### **Theoretical Framework**

#### **Maslow's Theory of Motivation for Buyer's Behaviour**

Abraham Maslow sought explain why people are driven by particular needs at particular times. Why do one person spends considered time and energy on personal safety and another on pursuing the esteem of others? His answer is that human needs are arranged in hierarchy, from the most pressing to the least pressing.

Maslow's hierarchy of needs is shown in the figure below. In their order of importance, they are; physiological needs, safety needs, social needs, esteem needs and self-actualization needs.

1. **PHYSIOLOGICAL NEEDS:** This is the first and the most basic needs of men. These are needs for food, drinks, sex and shelter and it is when these needs are satisfied before people move to the second on the rungs of the hierarchy. However, an individual perceive this need as the basic need.
2. **SAFETY NEEDS:** the need for security, order and protection of self and family stability. All these motivate a consumer to consume things, as we want to satisfy the safety need or protection need.
3. **SOCIAL NEEDS:** (sense of belongings, love) Belongings and love needs to motivate people to consume things that will create their affections, they will buy things that will make them belong to group and consume things that will make them to be accepted.
4. **THE ESTEEM NEEDS:** it is satisfied by the consumption of material things that will satisfy people's needs for self-respect, reputation, prestige and certain status.
5. **SELF-ACTUALIZATION NEEDS:** (self-development and realization) this is the need that is satisfied when people consume things that will make them feel they have achieved what they what in life, they are doing what they are best fitted and they have got self-fulfillment. It has been found out that people are working to satisfy all these needs at different level at the same time.

For example; a starving man (need 1) will not take an interest in the latest happening in art world (need 5), nor in how he is viewed or esteemed by others (need 3 or 4), nor even in whether he is breathing clear air (need 2). But as each important need is satisfied, the next-most-important need will come in to play.

Maslow theory helps the marketer understand how various products fit into the plans, goals and lives of potential consumers.

### **Empirical Review**

Leah (2011) examined the impact of television advertising on consumer product purchasing in Nigeria (A case study Pf J. Udeagbala Holding Nigeria limited). This work was conducted for the purpose of evaluating the Impact of television advertisement on consumer behaviour with reference to J. Udeagbala Holding Nigeria Limited. This specific Objective of the study was to determine whether consumers are aware of the company of J. Udeagbala, product to find out television advertisement on behaviour and making recommendation to help in improving television, advertisement on the marketing of consumer product in J. Udeagabla. The study was carried out by analyzing the responses selected from sample of 50 consumers with in Aba and Umuahia and 10 management and staff of the company. The research questions were analyzed using percentage while the hypothesis were tested using the chi-square ( $X^2$ ) test. From the finding it was discovered that most of their consumer know of the product. The researcher recommended that, they should be improvement in marketing research and development and should be encourage determining exactly what the consumer require in the product and always try to maintain the good standard of product.

Leighton and Geoff (2014) carried out a study on the effect of branding on consumer choice. Branding on packaging acts as an important cue to guide consumer choice in the retail environment. The role of branding was examined in three specific area; The impact of reduced branding on consumer choice. When branding on packaging is reduced, how does this influence decision making? The impact of increased non-branded information on consumer choice. What effect does non-branded information, such as nutritional information, have on decisions? The impact of copycat branding on consumer choice. When a brand is perceptually similar to another, well established brand, how does this effect decision making? In order to answer these questions, eye tracking and visual search tasks were employed to measure attention and recognition, in a scientifically validated and rigorous manner. Key findings are demonstrated that reducing the branding on packaging can influence consumer behaviour, by reducing attention to



and recognition of certain brands. Strong evidence from the recognition data suggested that reducing the size of a logo on packaging impairs consumers' ability to recognise and find a brand they are looking for. This effect was particularly pronounced when the changes to the logo size are large.

Strong evidence from the recognition data suggested that copycat branding can influence consumer choice; the results demonstrated the impact of perceptually similar (copycat) brands on an established brand. In cases where an established brand was displayed alongside a copycat supermarket brand, participants were slower and more inaccurate in identifying the established brand. This was compared to cases where the established brand was displayed alongside a non-copy supermarket brand. These robust results suggest that the presence of a copycat brand may distract or confuse consumers, impairing their ability to find the brand they are looking for, and in some cases causing them to choose the wrong brand.

Umer, et al. (2014) examined the Influence of Brand Name on Consumer Choice & Decision. Brand image or Brand name plays a crucial role to enhance the performance of any company or business. Brand name is the tool which can positively change people's buying behavior. The purpose of this study is to examine the Effect of brand name on consumer buying behavior in University students of Gujranwala, Faisalabad and Lahore. Questionnaire survey was used to collect the data by using non probability convenient sampling technique. The researchers sent 300 questionnaires to the different university students in above mentioned cities, in which 250 responses were collected in the period of one month. Data were analysed by using Statistical Package for Social Sciences (version 16). Findings show that brand image or brand name has significant positive relationship with consumer buying behavior. This study was conducted in university students of Gujranwala, Faisalabad, and Lahore and it shows that they are brand conscious and prefer branded products. In the last part of article with

Ahsan and Hossain (2015) examined the impact of advertisement on consumer choice: a case of SME and consumers. With some examples of advertisements we have print ads, radio and television commercials, infomercials, advertorials, and billboards and kiosks--both of which may be stagnant or interactive. All these communication means are very expensive for corporates. When a company faces a crisis, advertising is usually the first item that is cut from budgets in order to face that economic crisis. However, we have to recognize the fact that advertising is the most accurate instrument in terms of carrying, evaluating a product. In this context and with the help of technology nowadays the product is presented in an aspect that stimulate and can only arouse the interest and attention of the audience to which it is addressed. The aim of the study, was to highlight the impact of advertising on consumer choice with like case study, "LULU Hypermarket, The Avenue and Muscat Grand Mall" established in Al Ghubra, near to the area of Al khuwair and Bausher. SPSS was used to analysis the data, correlation analysis was used to know the relationship between LULU Hyper Market, Muscat Grand Mall and The Avenue's advertisement and consumer exposure towards purchasing behavior. The result showed that there was a positive relationship between them and it is statistically significant.

Oladele, et al. (2015) product packaging as a predictive factor of consumer patronage of toothpaste in Ado-Ekiti, Nigeria. The study examined the effect of packaging on the patronage of toothpaste among consumers in Ado-Ekiti metropolis, Nigeria. A total of 320 questionnaires were administered to respondents who were customers to eight most popular supermarkets through purposive sampling technique. Pearson-moment correlation analysis was used to determine the relationship between packaging information and patronage of toothpaste. Multiple regression was used to determine the influence of packaging attributes on patronage of toothpaste. The result revealed that among packaging information available on toothpaste products, expiry date, NAFDAC number and nutritional composition had the strongest relationship with patronage. The packaging attributes with highest influence were quantity, quality, and colour. The study recommended that manufacturers should place on their products only relevant information that will influence purchase decision. Furthermore, as families are growing, companies should be innovative to produce family size toothpaste tubes that will be cost saving for the consumers.

Kavitha, and Vanitha, (2015). A study on customer satisfaction towards toothpaste with special reference to colgate, Journal of Business and Management,4, 08-12. A study on customer satisfaction towards toothpaste with special reference to Colgate. 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. Secondary data were collected from the available literature sources. For distribution of questionnaire to the respondents random sampling method was used and to collect the respondents opinion, survey was taken among the selected sample respondents. After collecting the data from the respondents, it was analyzed using factor analysis, percentage analysis, and chi square method The collected data include customer satisfaction towards Colgate toothpaste personal product details. Key words: Colgate toothpaste, customer satisfaction.

**Methodology**

The data used in the study were taken from the survey of households from selected areas in Enugu metropolis. A questionnaire was employed to collect quantitative data. Enugu metropolis is known for its area divisions made up of New Haven, Camp, Independence Layout, Trans Ekulu, Abakpa, G.R.A., Garki etc. The population of the study consisted of Toothpaste consumers within Enugu metropolis which include: Transekulu: 20, Ugboezeji: 44, Ugbene One: 30, Ugbene Two: 20, Ogwuagu: 24 = 138. In all 138 households were involved in the study. All households were categorized based on a number of years of marriage ranging from a minimum of five years to a maximum of twenty-five years. *In all 138 households were involved in the study. All households were categorized based on a number of years of marriage ranging from a minimum of five years to a maximum of twenty-five years. Three hypotheses were tested using regression analysis, F-statistics (ANOVA), with aid of Special Package for Statistical Software (SPSS).*

**Data Presentation**

**Table 1 Response on the statement that television advert as a significant factor in consumer’s choice in using toothpaste.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	5.1	5.1	5.1
	Agree	66	47.8	47.8	52.9
	Neutral	23	16.7	16.7	69.6
	Disagree	31	22.5	22.5	92.0
	Strongly disagree	11	8.0	8.0	100.0
	Total	138	100.0	100.0	

From the table 1, indicates that 7 respondents, representing 5.1 percent strongly agreed that television advert as a significant factor in consumer’s choice in using toothpaste, 66 respondents, representing (47.8) percent agreed, 23 respondents, representing (16.7) percent were of neutral that television advert as a significant factor in consumer’s choice in using toothpaste. 31 respondents, representing (22.5) percent disagreed while 11 respondents, representing (8.0) percent strongly disagree that television advert as a significant factor in consumer’s choice in using toothpaste.

**Table 2, Response on the statement that brand is significant factor in consumer’s choice in using toothpaste.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	19	13.8	13.8	13.8
	Agree	54	39.1	39.1	52.9
	Neutral	23	16.7	16.7	69.6
	Disagree	18	13.0	13.0	82.6
	Strongly disagree	24	17.4	17.4	100.0
	Total	138	100.0	100.0	

From the table 2, indicates that 19 respondents, representing 13.8 percent strongly agreed that brand is significant factor in consumer’s choice in using toothpaste, 54 respondents, representing (39.1) percent agreed, 23 respondents, representing (16.7) percent were of neutral that brand is significant factor in consumer’s choice in



using toothpaste. 18 respondents, representing (13.0) percent disagreed while 24 respondents, representing (17.4) percent strongly disagree that brand is significant factor in consumer’s choice in using toothpaste.

**Table 3: Response on the statement consumers past experience is a significant factor in consumer’s choice in using toothpaste.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	22	15.9	15.9	15.9
	Agree	45	32.6	32.6	48.6
	Neutral	29	21.0	21.0	69.6
	Disagree	18	13.0	13.0	82.6
	Strongly disagree	24	17.4	17.4	100.0
	Total	138	100.0	100.0	

From the table 3, indicates that 22 respondents, representing 15.9 percent strongly agreed that consumers past experience is a significant factor in consumer’s choice in using toothpaste, 45 respondents, representing (32.6) percent agreed, 29 respondents, representing (21.0) percent were of neutral that consumers past experience is a significant factor in consumer’s choice in using toothpaste., 18 respondents, representing (13.0) percent disagreed while 24 respondents, representing (17.4) percent strongly disagree that consumers past experience is a significant factor in consumer’s choice in using toothpaste.

**Test of Hypotheses**

**Hypothesis One**

**Television advert is not a significant factor in consumers’ choice in using toothpaste.**

**Table 4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.888 <sup>a</sup>	.886	.886	.07545

a. Predictors: (Constant), TAE,TAC,TAI,TAA.

**Table 5: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	201.876	4	50.469	886.588	.000 <sup>b</sup>
	Residual	.757	133	.006		
	Total	202.633	137			

a. Dependent Variable: TAAS

b. Predictors: (Constant), TAE,TAC,TAI,TAA

**Table 6: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.106	.019		5.520	.000
	TAE	.406	.016	.441	25.086	.000
	TAC	.210	.020	.230	10.292	.000
	TAI	.464	.036	.479	13.048	.000
	TAA	-.116	.034	-.125	-3.468	.001

a. Dependent Variable: TAAS .

Where:

TAAS = Television adverts as a significant factor in consumer's choice in using toothpaste

TAE = Television adverts enlightens the public about their product and services.

TAC = Television adverts creates consumer interest and loyalty for consumers

TAI = Television advert influences consumer to buy a particular toothpaste

TAA = Television advert attracts a large number of consumers to a particular product.

### Statistical criteria {first order test}

#### Coefficient of multiple determinants {r<sup>2</sup>}

The R<sup>2</sup> {R-Squared} which measures the overall goodness of fit of the entire regression, shows the value as .886 and adjusted to .886. This means that R<sup>2</sup> accounts for 88.6 percent approximately 89 percent. This indicates that the independent variables accounts for about 89 percent of the variation in the dependent variable. Which shows goodness of fit?

#### The Student's t-test:

The test is carried out, to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.

H<sub>0</sub>: The individual parameters are not significant.

H<sub>1</sub>: The individual parameters are significant.

#### Decision Rule:

If t-calculated > t-tabulated, we reject the null hypothesis {H<sub>0</sub>} and accept the alternative hypothesis {H<sub>1</sub>}, and if otherwise, we select the null hypothesis {H<sub>0</sub>} and reject the alternative hypothesis {H<sub>1</sub>}.

Level of significance =  $\alpha$  at 5 percent =  $\frac{0.05}{2} = 0.025$

Degree of freedom: n-k

Where n: sample size.

K: Number of parameter.

138-4 = 298 = 2.326

The calculated value for t-test:

**Table 6: The t-test is summarized in the table below:**

Variables	t-cal	t-tab	Remark
(Constant)	5.520	± 2.326	Significant
TAE	25.086	± 2.326	Significant
TAC	10.292	± 2.326	Significant
TAI	13.048	± 2.326	Significant
TAA	-3.468	± 2.326	Insignificant

The t-statistics is used to test for individual significance of the estimated parameters. From the table above, we can infer that the following parameters were statistically significant, we now agree that Television adverts as a significant factor in consumer's choice in using toothpaste; Television adverts enlightens the public about their product and services; Television adverts creates consumer interest and loyalty for consumers; Television advert influences consumer to buy a particular toothpaste and Television advert attracts a large number of consumers to a particular product.

**F-statistics (ANOVA)**

The f-statistics is used to test for simultaneous significance of all the estimated parameters.

The hypothesis is stated;

$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4$

$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4$

Level of significance:  $\alpha$  at 5%

Degree of freedom:  $\frac{N-1}{N-K} = \frac{4-1}{138-4} = (134, 3) = 2.7858$

**Decision Rule:**

If the f-calculated is greater than the F-tabulated {F-cal > F-tab} reject the null hypothesis {H<sub>0</sub>} that the overall estimate is not significant and if otherwise conclude that the overall estimate is statistically significant.

**Decision**

From the result, F-calculated {886.588} is greater that the f-tabulated {2.7858}, that is, F-cal > F-tab. Hence, we reject the null hypothesis {H<sub>0</sub>} and accept Alternative hypothesis which means that the overall estimate has a good fit which also implies that our independent variables are simultaneously significant. We now conclude from the analysis that Television advert is not a significant factor in consumers' choice in using toothpaste.

**Hypothesis Two**

**Brand is not a significant factor in consumers' choice in using Toothpaste**

Table 7: Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767 <sup>a</sup>	.745	.744	.09055

a. Predictors: (Constant), BAI,BDR, BAC,BSA

**Table 8: ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	200.782	5	40.156	489.788	.000 <sup>b</sup>
	Residual	1.082	132	.008		
	Total	201.864	137			

a. Dependent Variable: BASA  
b. Predictors: (Constant), BAI,BDR, BAC,BSA

**Table 9: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.151	.025		-6.004	.000
	BAI	.240	.022	.240	11.004	.000
	BDR	.445	.029	.409	15.432	.000
	BAC	.038	.025	.034	1.500	.136
	BSA	.028	.039	.029	.717	.475

a. Dependent Variable: BASA

Where:

BASA = Brand as a significant factor in consumer's choice in using toothpaste.

BAI = Brand aids consumers fast selecting of products.

BDR = Brand draws attention of consumer to certain products.

BAC = Brand allows consumer to recognize familiar products.

BSA = Brands serves as a cue consumer for retrieving stored information from memory about those products

**Statistical criteria {first order test}**

**Coefficient of multiple determinants {r<sup>2</sup>}**

The R<sup>2</sup> {R-Squared} which measures the overall goodness of fit of the entire regression, shows the value as .745 and adjusted to .745. This means that R<sup>2</sup> accounts for 74.5 percent approximately 75 percent. This indicates that the independent variables accounts for about 75 percent of the variation in the dependent variable. Which shows goodness of fit?

**The Student's t-test:**

The test is carried out, to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.

H<sub>0</sub>: The individual parameters are not significant.

H<sub>1</sub>: The individual parameters are significant.

**Decision Rule:**

If t-calculated > t-tabulated, we reject the null hypothesis {H<sub>0</sub>} and accept the alternative hypothesis {H<sub>1</sub>}, and if otherwise, we select the null hypothesis {H<sub>0</sub>} and reject the alternative hypothesis {H<sub>1</sub>}.

Level of significance =  $\alpha$  at 5 percent =  $\frac{0.05}{2} = 0.025$

Degree of freedom:  $n-k$

Where  $n$ : sample size.

$K$ : Number of parameter.

$138-4 = 298 = 2.326$

**The calculated value for t-test:**

**Table 10: The t-test is summarized in the table below:**

Variables	t-cal	t-tab	Remark
(Constant)	-6.004	$\pm 2.326$	Significant
BAI	11.004	$\pm 2.326$	Significant
BDR	15.432	$\pm 2.326$	Significant
BAC	1.500	$\pm 2.326$	Significant
BSA	.717	$\pm 2.326$	Insignificant

The t-statistics is used to test for individual significance of the estimated parameters. From the table above, we can infer that the following parameters were statistically significant, we now agree that Brand aids consumers fast selecting of products; Brand draws attention of consumer to certain products; Brand allows consumer to recognize familiar products and Brands serves as a cue consumer for retrieving stored information from memory about those products.

**F-statistics (ANOVA)**

The f-statistics is used to test for simultaneous significance of all the estimated parameters.

The hypothesis is stated;

$H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4$

$H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4$

Level of significance:  $\alpha$  at 5%

Degree of freedom:  $\frac{N-1}{N-K} = \frac{4-1}{138-4} = (298, 3) = 2.7858$

**Decision Rule:**

If the f-calculated is greater than the F-tabulated { $F\text{-cal} > F\text{-tab}$ } reject the null hypothesis  $\{H_0\}$  that the overall estimate is not significant and if otherwise conclude that the overall estimate is statistically significant.

**Decision**

From the result, F-calculated {489.788} is greater that the f-tabulated {2.7858}, that is,  $F\text{-cal} > F\text{-tab}$ . Hence, we reject the null hypothesis  $\{H_0\}$  and accept Alternative hypothesis which means that the overall estimate has a good fit which also implies that our independent variables are simultaneously significant. We now conclude from the analysis that Brand is not a significant factor in consumers' choice in using Toothpaste.

**Hypothesis Three**

**Consumers' past experience is not a significant factor in consumers' choice in using Toothpaste**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.777 <sup>a</sup>	.774	.794	.09293

a. Predictors: (Constant),CEXP,CUS,BUEX,TCFO

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	190.160	4	47.540	550.488	.000 <sup>b</sup>
	Residual	1.149	133	.009		
	Total	191.308	137			

a. Dependent Variable: CPAS  
b. Predictors: (Constant), CEXP,CUS,BUEX,TCFO

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.092	.026		3.471	.001
	CEXP	.306	.021	.345	14.706	.000
	CUS	.354	.026	.334	13.583	.000
	BUEX	.236	.039	.260	5.963	.000
	TCFO	.073	.039	.077	1.864	.065

a. Dependent Variable: CPAS

Where:

CPAS = Consumers past experience as a significant factor in consumer's choice in using toothpaste.

CEXP = Consumer experience appeal more to motion than a static product or service

CUS = Customers recommend to friends, and family members due to paste experience

BUEX = Buying experience attracts more new customers from the old ones.

TCFO = The customer feeling for a company attracts retain and more customer

**Statistical criteria {first order test}**

**Coefficient of multiple determinants {r<sup>2</sup>}**

The R<sup>2</sup> {R-Squared} which measures the overall goodness of fit of the entire regression, shows the value as .774 and adjusted to .774. This means that R<sup>2</sup> accounts for 77.4 percent approximately 77 percent. This indicates that the independent variables accounts for about 77 percent of the variation in the dependent variable. Which shows goodness of fit?



**The Student’s t-test:**

The test is carried out, to check for the individual significance of the variables. Statistically, the t-statistics of the variables under consideration is interpreted based on the following statement of hypothesis.

H<sub>0</sub>: The individual parameters are not significant.

H<sub>1</sub>: The individual parameters are significant.

**Decision Rule:**

If t-calculated > t-tabulated, we reject the null hypothesis {H<sub>0</sub>} and accept the alternative hypothesis {H<sub>1</sub>}, and if otherwise, we select the null hypothesis {H<sub>0</sub>} and reject the alternative hypothesis {H<sub>1</sub>}.

Level of significance =  $\alpha$  at 5 percent =  $\frac{0.05}{2} = 0.025$

Degree of freedom: n-k

Where n: sample size.

K: Number of parameter.

138-4 = 298 = 2.326

**The calculated value for t-test:**

**Table 14: The t-test is summarized in the table below:**

Variables	t-cal	t-tab	Remark
(Constant)	3.471	± 2.326	Significant
CEXP	14.706	± 2.326	Significant
CUS	13.583	± 2.326	Significant
BUEX	5.963	± 2.326	Significant
TCFO	1.864	± 2.326	Insignificant

The t-statistics is used to test for individual significance of the estimated parameters. From the table above, we can infer that the following parameters were statistically significant, we now agree that Consumer experience appeal more to motion than a static product or service, Customers recommend to friends, and family members due to paste experience, buying experience attracts more new customers from the old ones, The customer feeling for a company attracts retain and more customer.

**F-statistics (ANOVA)**

The f-statistics is used to test for simultaneous significance of all the estimated parameters.

The hypothesis is stated;

H<sub>0</sub>:  $\beta_1 = \beta_2 = \beta_3 = \beta_4$

H<sub>1</sub>:  $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4$

Level of significance:  $\alpha$  at 5%

Degree of freedom:  $\frac{N-1}{N-K} = \frac{4-1}{138-4} = (298, 3) = 2.7858$

### Decision Rule:

If the f-calculated is greater than the F-tabulated { $F_{cal} > F_{tab}$ } reject the null hypothesis  $\{H_0\}$  that the overall estimate is not significant and if otherwise conclude that the overall estimate is statistically significant.

### Decision

From the result, F-calculated {550.488} is greater than the f-tabulated {2.7858}, that is,  $F_{cal} > F_{tab}$ . Hence, we reject the null hypothesis  $\{H_0\}$  and accept Alternative hypothesis which means that the overall estimate has a good fit which also implies that our independent variables are simultaneously significant. We now conclude from the analysis that Consumers' past experience is not a significant factor in consumers' choice in using Toothpaste.

### Discussion of Findings

From the result, F-calculated {886.588} was greater than that the f-tabulated {2.7858}, that is,  $F_{cal} > F_{tab}$ , we now concluded from the analysis that Television advert was a significant positive factor in consumers' choice in using toothpaste. Television advertising as a factor had similar findings with Panigrahi (2015) which found that Brand image, advertising, and offer play important role in purchasing toothpaste. Also, Oladele, et al. (2014) which found that consumers' patronage of toothpaste is influenced by (1) jingles and advertisement in the media. Lastly was Rashmi (2013) which found that Feature advertisement (-0.52) affect the brand choice decision.

From the result, F-calculated {489.788} was greater than the f-tabulated {2.7858}, that is,  $F_{cal} > F_{tab}$ . We now conclude that from the analysis that brand was a significant positive factor in consumers' choice in using Toothpaste. Umanah and Braimoh (2017) which found selection of toothpaste and toothbrush to be based mainly on the cost. Added to this is Rashmi (2013) which found that discounted brands can attract the attention of the consumer and he/she can swing from his/her last purchased brand which may be even the top brand of the market.

The t-statistics is used to test for individual significance of the estimated parameters. From the result, we now agree that Consumer experience appeal more to motion than a static product or service, Customers recommend to friends, and family members due to paste experience, buying experience attracts more new customers from the old ones, The customer feeling for a company attracts retain and more customer. Consumers' past experience as a factor had relative alignment with Mwangi (2007) which found consumers gave much credence to a toothpaste that has the capacity to prevent tooth cavities, fights bad breath, reduces gum bleeding, cleans between teeth, fight germs, prevent exposed root cavities, strengthen weak tooth enamel, prevent gums inflammation, removes stains, prevent tartar and whitens the teeth.

### Summary of Findings

The following findings emanate from the study:

- i. Television advert had a significant positive factor in consumers' choice in using Toothpaste.
- ii. The brand had a significant positive factor in consumers' choice in using Toothpaste.
- iii. Consumers' past experience had a significant positive factor in consumers' choice in using Toothpaste.

### Conclusion

The findings of the study showed that all factors considered had a significant effect. Besides the values of the test criteria were positive showing that each factor contributes an upward influence on consumers' choice in using toothpaste. In order of importance, it was noted that in importance Consumers' past experience recorded the highest importance, followed by television advert. Next was Brand and Health concerns which recorded the same answers from respondents. At the end was the household budget.

## Recommendations

The following recommendations were made:

1. There is a need for a modified advertising campaign or a new definition of the target group i.e. target groups who may have a general tendency to be more involved with the purchase of toothpaste. For example, older people, whose teeth may have different needs from those of younger people, may buy toothpaste, which meet their needs.
2. Measures should be created by firms that produce toothpaste to deny their competitors the chance to use copy branding. They should design their brands to be uniquely different from other substitute brands.
3. Manufacturers of toothpaste should intermittently conduct investigations of the effect of their products on the public. It will help them to have a regular update on the impact their product has on people's lives.

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