

Investigation into the Factors Affecting the Attitudes of Consumers towards the Consumption of Herbal Medicines in Nigeria

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Abstract

This paper investigates into the factors affecting the attitude of consumer towards herbal medicines in Nigeria. Emphasized was on consumer attitude towards herbal medicine in relations to marketing variables. The study was carried out with a sample size of 400 respondents in the three major cities in the Southern Nigeria; comprises Aba, Port Harcourt, and Ibadan. Data were sourced through structured questionnaire; convenience sampling method was employed to administer the questionnaire to the consumers of herbal medicine in the study areas. Responses from the questionnaire were ranked with the aid of 5 point likert scale. The study was generally a descriptive research and our method of analysis followed an electric approached, qualitative data from primary source were transformed to quantitative data with the use of likert scale, tabulations, plain descriptive frequency table, simple percentage and average mean score and simple regression were employed to analysis the data. The finding revealed that all the marketing variables, namely; product, price, promotion and place strategy were all statistically significant in affecting attitude of consumer towards herbal medicines. The average mean score of all the variables 3.7, 4.40, 3.62 and 3.73 respective > 3.0 criterions mean value. Particularly, price strategy has highest mean score of 4.40 > 3.0 criterion mean value. This implies that price strategy had significant impact on consumer attitude towards herbal medicine. The null hypothesis formulated in this study, stated that product, price, promotion and place strategy do not affect consumer attitude towards herbal medicine in Nigeria. The decision follow a simple rule, that is, null hypothesis (H_0) will be rejected if t-calculated is greater than t-statistic at 0.05 percent significant level and alternative hypothesis (H_1) will be accepted, if otherwise, accept the null hypothesis (H_0) and reject alternative hypothesis (H_1). Thus, from the foregoing results, null hypothesis will be rejecting, and alternative hypothesis will be accepted. That is, product, price, promotion and place strategy affect attitude of consumer toward herbal medicines in Nigeria. Based, on our finding, the study recommended that policy framework that will enhance improvements of marketing variables should be sustained.

Keywords: herbal medicine, customer attitude, health care

1. Introduction

As consumers, each of us has a vast number of attitudes towards products or services, whenever we are asked whether we like or dislike a product or service. We are being asked to express our attitudes. An appreciation of prevailing attitudes has considerable strategic merit, especially amidst of competition. Growth in the sales of natural herbal products throughout the world seems linked to the currently popular attitude that things “natural” are good and things “synthetic” are bad. Yet, in reality, the positive attitude favouring things natural is not based on any systematic evidence that natural herbal products are any safer or better for consumers.

It is necessary to investigate into the factors affecting the attitude of consumers towards herbal medicines in Nigeria, following the herbal product criticism overtly. The study seeks attitudes of target consumers with respect to the marketing variables-viz, product, price, place and promotion strategy employing by the herbal practitioners.

Herbal medicines are defined as plant-derived material or preparations with therapeutic or other human health benefits, which contain either raw or processed ingredients from one or more plants. Specific elements of herbal medicines including crude plant material such as leaves, flowers, fruit, seed, stems, wood, bark, roots, rhizomes, or other plant parts, which may be entire, fragmented, or powdered. In some case, these materials may be processed by various local procedures, such as steaming, roasting, or stir-baking with honey, alcoholic beverages, or other materials. The use of herbal medicine remains controversial, the criticism argued that the product lack credibility in terms of mode of preparation, measurement intake, adverse reaction, universal acceptability, knowledge of the user, accessibility, inadequate information's, and polarization. Amidst of this criticism herbal medicine is favorably compete both on domestic and international market. What then are the factors responsible for the attitude of consumer towards herbal medicine? This is the crux of this study.

Amidst of blatantly criticism, herbal medicine is favorably compete both on domestic and international market. Marketing variables; price, promotion and place strategies have been identifies as factors that responsible for the consumers attitude towards herbal medicine globally. Therefore, it is equally necessary to ascertain the factors that affect Nigeria consumers towards herbal medicine in the faces of increasing competition between herbal medicine and conventional medicine. The crux of this study is to ascertain the

impact of marketing variables on attitude of consumers towards herbal medicines in Nigeria.

1.3 Objectives of the Study

The broad objective of the study is to investigate into the factors that affecting consumer attitude towards herbal medicines in Nigeria. The specific objectives of the study include the following:

- To ascertain the impact of product strategy on attitude of consumer towards herbal medicine
- To ascertain if prices strategy affects consumer attitude towards herbal medicine.
- To determine if promotion strategy affects consumer attitude towards herbal medicine
- To determine if place strategy affects consumer attitude towards herbal medicine.

1.4 Research Questions

The following research questions have been carefully formulated.

- Do product strategy affects consumer attitude towards herbal medicine?
- Do price strategy affects consumer attitude towards herbal medicine?
- How does promotion strategy affect consumer attitude towards herbal medicine?
- How does place strategy affect consumer attitude towards herbal medicine?

1.5 Research Hypotheses

The following hypotheses in the null form are formulated.

1. Product strategy do not affects consumer attitude towards herbal medicine.
2. Price strategy do not affects consumer attitude towards herbal medicine.
3. Promotion strategy do not affect consumer attitude towards herbal medicine
4. Place strategy do not affect consumer attitude towards herbal medicine.

2. Literature

(a) Theoretical Review

Health Utilization Models

Andersen, 1968; Andersen & Newman, 1973 Original utilization models consider individuals to vary health-seeking behaviours according to predisposing characteristics, enabling resources and need for care. *Predisposing characteristics* include demographic traits such as age, gender and other biological factors influencing need, in addition to 'social structures' (which describes an individual's status within society), their ability to cope with presenting health needs and their physical environment. *Enabling resources* describe availability of facilities and associated infrastructure (community resources), personal means and know-how to access them. Frequently used indicators include income, health insurance, travel and waiting times. Together, enabling resources may be seen as affecting 'potential accesses, as increasing enabling resources will increase the likelihood of utilization, whereas 'realized access' is the actual use of services (Donabedian, 1988).

(b) Propose Conceptual Framework Marketing Variable and Attitude of Consumer towards Herbal Medicine.

McCarthy (1960) and (1964) offered the 'marketing variables often referred to as the "4ps" (Product, price place and promotion) as a means of translating marketing planning into practice. Marketing variables is not a scientific theory, but merely a conceptual framework that marketing manager employ in decision making in configuring their offering to suit consumers' needs. The tools can be used to develop both long-term strategies and short-term tactical programmes (Palmer, 2004). Thus, the study hypothesis one-tail directional relationship between marketing variables and attitude of consumers toward herbal medicine.

(a) Dependent variables:

Consumer Attitude, (CA): here consumers' attitude serves as the dependent variable; it's viewed as a predisposition to behave in a consistently favorable and unfavorably way with respect to consumption of herbal products.

(b) Independent variables:

Marketing mix variables, which comprise the product, price, promotion and place:

- (i) **Product strategy**, (PS₁): For this study the product concerned is herbal medicine. Thus it is expected that PS₁ will have positive effect on CA. that is $dCA/dPS_{1>0}$
- (ii) **Price strategy**, (PS₂): In this study the price includes the ability of consumers to pay for the herbal medicine. Thus, the study postulates that PS₂ will have positive effect on consumers' attitude. That is $dCA/dPS_{2>0}$
- (iii) **Promotion strategy**, (PS₃): This involves the messages and communication activities by herbal medicine to reach the target audience. The study, also expected that PS₃ will have positive impact on consumer attitude.
- (iv) **Place strategy**, (PS₄): This takes into account the distribution channel, displace, window shop, mobile vendor, amongst others that involves in reaching consumers. It is expected that place strategy will have a positive impact on consumers attitude.

(c) Empirical Literature.

Thongruang (2008), studied the consumer behaviour towards herbal medicine in Drugstore in Bangkok. The objective of this research was to study the consumers' behaviour in purchasing herbal medicines and their attitudes toward herbal medicines in modern drugstores in Bangkok. The samples were drawn from herbal medicine consumers from 12 districts in Bangkok, with 5 drugstores randomly drawn from each district. Five subjects were purposively selected from the clients at each store by using a simple random sampling technique. The subjects were interviewed using a structured interview questionnaire. The findings revealed that 66% of the subjects purchased herbal medicines by the drug's names. In terms of frequency of the purchase, 56.3% of the subjects purchased herbal medicines by the drug's names. In terms of frequency of the purchase, 56.3% purchased the medicine once in a while and purchase the medicine in composite or mixed forms rather than in single item forms. For the purpose of purchasing, 56% bought the herbal medicines to course their own illness while 24.7% bought the herbal medicines for health prevention or to enhance their health. Before making decision to purchase, 93.3% of the subjects thought it were necessary to find information about the herbal medicines, and the most popular sources of information were from physicians, pharmacists, and nurses, and 83.3% thought it was necessary to read the labels first before purchasing. It was also found that products with complete labels, product with legal licensing and good indications were the factors which the subjects based their decision on the purchase of the herbal medicines.

Fakeye (2009), studied the attitude and use of herbal medicine among pregnant women in Nigeria. They find out that more than two-third of respondents [67.5%] had used herbal medicine in crude forms or as pharmaceutical prepackage dosage forms, with 74.3% preferring self-prepared formulations. The study concluded that the majority of the respondents use herbal during pregnancy believed that the use of herbal medicine is safe, been natural, easier access and cultural belief in herbal medicine to cure many illnesses and above relatively cheap compared to conventional medicine. Amit (2012) carry out a research on a qualitative study of consumer behavior about the traditional medicine in Bharat, the study revealed that Traditional medicines are the most valuable asset for the developing countries like India, available literature indicates that the only and commonly tools available for the cure of patient suffering any kind of critical diseases was Traditional medicine. Due to side effects of synthetic products, herbal products are gaining popularity in the world market. The article deals mainly with the measures to be adopted for global promotion of Indian herbal products.

Abzakh (2013), studied the impact of perceive risks on the consumer resistance towards generic drugs in the Malaysia pharmaceutical industry. A study on consumers who resist generic drugs usage by purchasing the branded drugs over the counters was undertaken through the usage of self-administered questionnaire survey. Seven hypotheses were developed based on the proposed conceptual framework. In total, 456 branded drug users were surveyed in one of the private pharmaceutical providers that in Klang Valley. Samples were drawn based on convenience sampling technique and multiple regression analysis was used as statistical technique to empirical testing the tested hypotheses. The findings of the research showed that only two independent variables (performance risk-technology and physical risk) are in positive relationship with consumer resistance towards generic drug. On the other hand, financial risk, performance risk-infrastructure, time risk, social risk, and psychological risk do not have significant relationships with the consumer resistance towards generic drugs.

Adefolaju (2014), examined the structures and features of the Traditional and Orthodox medical systems in Nigeria, with a view to finding a convergence that will be to the advantage of the populace. The finding of the study revealed that traditional health care system has continued to thrive not only in the rural areas where over 70 per cent of the population live but also in the urban centres which have greater access to orthodox medical facilities. The stiff opposition to traditional medical practice from official quarters has not whittled down its level of patronage by the people simply because it was developed in response to the dictates of their environment. Consequently, the study revealed the factors that contribute to consumer attitude towards herbal products, it emphasized on factors such as affordable, accessible and efficacious of the product. This paper therefore argues for the integration of both systems of health care for the benefit of the people and sustainable national development.

3. 0 RESEARCH METHODOLOGY

Research Design

The survey research technique was adopted for the study. The purpose is to gather information about variables from a representative sample of the population. It is essentially cross-sectional and describes and interprets what exists at present. The study sourced for data from the residents of Aba, Port Harcourt and Ibadan on factors that are responsible for the attitude of consumer towards herbal medicine. Thereafter, both descriptive and inferential statistic analytical tools are used to analyze and test the hypothesis.

Sources of Data Collection: The study made use of primary data collected through questionnaire, interview as well as observation. **Pilot Study:** The pilot for this study was conducted in one urban Centre's Port Harcourt and

made use of only 30 respondents. Only 30 copies of the questionnaire were administered to ensure high response rate, the researcher administered the questionnaire and collected them same day himself. Despite all efforts made to retrieve all, only 22 copies of questionnaire were correctly filled and returned. The calculations of the reliability from the pilot study were therefore based on the mean responses from the twenty two respondents. Population of the Study: Ugwuonah, (2005) defines population as the totality of items, people or things under consideration. Population for this study was purposively selected targeted at consumers of herbal products in the study areas only. 2006 populations census was modified to reflect the present population in each areas, 6% growth rate was added to preceding year in each center. Aba in Abia state stood at 1,300,000, population figure, Port Harcourt has 1,320,214 while, Ibadan has 2,550,593 population figure. The entire population for these areas is 5,170,807. With this population, it will be too extensive and expensive to do a thorough research work of this nature. In other to reduce this to a manageable size, a representative sample is required. Sample Size Determination: The sample size for this study were determined or computed using an equation developed by Taro Yamane (1967).

$$n = \frac{N}{1 + N(e)^2}$$

Where: n= Sample size, N= Population size, e= Level of Precision, 1= Constant

Applying, this formula to a population of 5,170,807 at 5% level of precisions. (Level of tolerable error, 0.05) the sample size is obtained as follows:

$$n = \frac{5,170,807}{1 + 5,170,807 (0.05)^2}$$

$$n = \frac{5,170,807}{1 + 5,170,807 (0.05)^2}$$

$$n = \frac{5170807}{12928.0175}$$

n = 399.969059. Therefore: n = 400 respondents. Sampling Technique: The research was conducted using convenience sampling technique in selecting respondents who are consumer of herbal medicine at waiting areas of herbal medicine store on the days of administration. This was done in good faith; since the study is interested on the major respondents that consume herbal medicine.

With a sample size of 400, the researcher used the proportionate sampling approach to give a fair representation to the centers by adopting the proportionality formula as recommended by Adogbo and Ojo (2003:41) as follows:

$$Q = \frac{A \times n}{N \times 1}$$

Where:

Q = The number of questionnaire to be allocated to each segment

A = The population of each segment

N = The population of all the segments

n = The estimated sample size used in the study

Therefore:

$$\text{Aba} = \frac{1,300,000 \times 400}{5,170,807 \times 1} = 101$$

$$\text{Port Harcourt} = \frac{1,320,214 \times 400}{5,170,807 \times 1} = 102$$

$$\text{Ibadan} = \frac{2,550,593 \times 400}{5,170,807 \times 1} = 197$$

4. Analysis Technique

The mass of data collected from respondents on the field were subjected to series of treatment. They were presented, for simplicity, using appropriate tables, charts, graphs as well as texts. The SPSS software package used to generate and analyzes descriptive as well as inferential statistics for the study.

Data Presentation.

Table 4.1. Distribution and Retrieval of Questionnaire

S/N	Areas of study	Number of questionnaires distributed	Number of questionnaires retrieved	Number of questionnaires properly field and returned used in the analyses
1	Aba	101	12	89
2	PH	102	7	95
3	IBD	197	57	140
	GRAND TOT	400 (100%)	76 (19%)	324 (81%)

Sources: Field survey, 2015

Table 4.1, shown four hundred (400) questionnaires were distributed to the respondents, despite all the efforts and repeated visits, 76 questionnaires representing 19% could not be retrieved. However, 324 questionnaires representing 81% were properly filled, retrieved and used in the analyses.

Data Analysis

Analysis of Section A. Socio-Economic Characteristics of the Respondents

Table 4.2: Frequency Distribution of Respondents According to Age

Age group	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Below 25 years	96	29.6	30.0	30.0
26-35 years	32	9.9	10.0	40.0
36-50 years	144	44.4	44.0	84.0
Above 50 years	52	16.0	16.0	100.0
Total	324	100.0	100.0	

Sources: Field survey, 2015

The above table shows that 96 respondents or 29.6% were 25 years of age or below, 32 respondents or 9.9% were between 26-35 years of age, while 144 respondents or 44.4% were between the ages of 36-50 and 52 respondents or 16% above 50 years respectively.

The implication of this is that majority of the respondents fall within the older age bracket, follow by the younger ages this attest to the fact the has one getting older, the organs of the body are getting weaker; likewise the little ones demand more of medicine in immunize their body system . Thus it is reasonable to believe that adults and younger ones are more likely to consume more of herbal products. The relevance of this table is to demonstrate that the participants were not just picked from one age bracket but spread out across the various age groups.

Table 4.3: Percentile Frequency Distribution of Respondents According to Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	132	40.7	41.0	41.0
Female	192	59.3	59.0	100.00
Total	324	100.00	100.00	

Sources: Field survey, 2015

The above table 4.3 presents us with the information of respondents' gender distribution in frequency and percentage. The analyses indicate that the female respondents far outnumbered their male counterparts' 192 respondents or 59.3% were female, while 132 or 40.7% were male. The essence of this table was to make sure that the number of respondents selected for the study was gender friendly.

Table 4.4: Percentile Frequency Distribution of Respondents According to Educational Attainment

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Primary/Secondary	68	21.0	21.0	21.0
Tertiary(Secondary an Above)	256	79.0	79.0	100.0
Total	324	100.0	100.00	

Sources: Field survey, 2015

Analysis of table 4.4 above exhibits clear evidence that respondents who attended tertiary institutions far out-numbered those with only primary/secondary education. The implication of this is also to show that the responses were appropriate coming from well informed participants and hence more reliable. It also shows that most participants were literate enough to appreciate the subject matter of the study.

Analysis of Section. B. Research questions. Using 5 point likert scale

Table 4.5: Expressed opinion of respondents on consumer attitude towards herbal medicine and product strategy.

S/N	Questionnaire Item	SA (5)	A (4)	D (3)	SD (2)	I (1)	Sample Size	Mean - \bar{x}	Decision
1	Do you agree that product safety affect consumer attitude towards herbal medicine?	120 (600)	134 (536)	10 (30)	0 (0)	60 (60)	n=324 X=1226	3.78	Accept
2	Do you agree that product package affect consumer attitude towards herbal medicine?	76 (380)	129 (516)	39 (117)	15 (30)	65 (65)	n=324 X=1108	3.41	Accept
3	Do you agree that product composition affect consumer attitude towards herbal medicine?	120 (600)	145 (580)	12 (36)	6 (12)	41 (41)	n=324 X=1269	3.91	Accept
Note: The criterion means $\bar{x} = 3.0$ accept positive effect if $\bar{x} > 3.0$, otherwise reject, if $\bar{x} < 3.0$									

Source: Researcher's Field work (2015)

Base on the respondents, the result presented on the table 4.5 revealed that product strategy is a key factor that affects consumer attitude towards herbal medicine. All the means value of the respondents is greater than the criterion mean value of 3.0. Thus, 3.78, 3.41 and 3.91 > 3.0 the decision rule is that accept the computed mean value if it's greater than the criterion mean value, otherwise reject the computed mean value if the value is less than criterion mean value. However, the impact of product composition mean value 3.91 is relatively higher in determine consumer attitude towards herbal medicine. The average overall mean value, 3.7 > 3.0. Hence, product strategy affect consumer attitude towards herbal medicine.

Table 4.6: Expressed opinion of respondents regarding price strategy on consumer attitude towards herbal medicine.

S/N	Questionnaire Item	SA (5)	A (4)	D (3)	SD (2)	I (1)	Sample Size	Mean - \bar{x}	Decision
4	Do you agree that selling price of herbal medicine affect consumer attitude?	170 (850)	130 (520)	0 (0)	0 (0)	24 (24)	n=324 X=1394	4.30	Accept
5	Does discount on price of herbal medicine affect consumer attitude?	175 (875)	130 (520)	5 (15)	0 (0)	14 (14)	n=324 X=1424	4.39	Accept
6	Do you agree that consumer attitude towards herbal medicine is as a result of cost involvement (non-monetary value)?	170 (850)	154 (616)	0 (0)	0 (0)	0 (0)	n=324 X=1466	4.52	Accept
Note: The criterion means $\bar{x} = 3.0$ accept positive effect if $\bar{x} > 3.0$, otherwise reject, if $\bar{x} < 3.0$									

Source: Researcher's Field work (2015)

Table 4.6 revealed that price strategy is most influential key factor that affects consumer attitude towards herbal medicine. All the means value of the respondents is greater than the criterion mean value of 3.0. Thus, 4.30, 4.39 and 4.52 > 3.0 the decision rule is that accept the computed mean value if it's greater than the criterion mean value, otherwise reject the computed mean value if the value is less than criterion mean value. However, the impact of non-monetary cost mean value 4.52 mean is relatively higher in affect consumer attitude towards herbal medicine. The overall mean value of 4.40 > 3.0 implies that price strategy affect consumer attitude toward herbal medicine.

Table 4.7: Expressed opinion of respondents regarding promotion strategy as it affect consumer attitude towards herbal medicine.

S/N	Questionnaire Item	SA (5)	A (4)	D (3)	SD (2)	I (1)	Sample Size	Mean - \bar{x}	Decision
7	Does awareness campaign on herbal medicine affect consumer attitude?	70 (350)	90 (360)	130 (390)	14 (28)	20 (20)	n=324 X=1148	3.54	Accept
8	Does informative marketing message on herbal medicine determine consumer attitude?	124 (620)	190 (760)	10 (30)	0 (0)	0 (0)	n=324 X=1410	4.35	Accept
9	Do you agree that the sale promotion of herbal medicine determine consumer attitude?	15 (75)	34 (136)	225 (675)	30 (60)	20 (20)	n=324 X=966	2.98	Reject

Note: The criterion means $\bar{x} = 3.0$ accept positive effect if $\bar{x} > 3.0$, otherwise reject, if $\bar{x} < 3.0$

Source: Researcher's Field work (2015)

Table 4.7 revealed that promotion strategy affect consumer attitude at the different degree towards herbal medicine, the mean value of 3.54 and 4.35 > 3.0 criterion mean value shown that awareness campaign and marketing message has significant impact on consumer attitude towards herbal medicine. Meanwhile, the mean value of 2.98 sale promotion suggested insignificant impact on consumer attitude towards herbal medicine. However, the sum means value of the respondents is greater than the criterion value of 3.0. Thus, 4.35, 3.54 and 2.98 > 3.0 the decision rule is that accept the computed mean value if it's greater than the criterion mean value, otherwise reject the computed mean value if the value is less than criterion mean value. The average overall mean value, 3.62 > 3.0 . Thus, promotion strategy affects consumer attitude towards herbal medicine.

Table 4.8: Expressed opinion of respondents regarding place strategy and the impact on consumer attitude towards herbal medicine.

S/N	Questionnaire Item	SA (5)	A (4)	D (3)	SD (2)	I (1)	Sample Size	Mean - \bar{x}	Decision
10	Do you agree that channel of distribution affect consumer attitude towards herbal medicine?	138 (690)	112 (448)	20 (60)	0 (0)	54 (54)	n=324 X=1252	3.86	Accept
11	Does environments affect consumer attitude towards herbal medicine?	65 (325)	110 (440)	104 (312)	30 (60)	15 (15)	n=324 X=1152	3.55	Accept
12	Distance involves in procurement herbal medicine affect consumer attitude?	90 (450)	144 (576)	50 (150)	9 (18)	31 (31)	n=324 X=1225	3.78	Accept

Note: The criterion means $\bar{x} = 3.0$ accept positive effect if $\bar{x} > 3.0$, otherwise reject, if $\bar{x} < 3.0$

Source: Researcher's Field work (2015)

Table 4.8 revealed that place strategy affect consumer attitude towards herbal medicine. All the means value of the respondents is greater than the criterion mean value of 3.0. Thus, 3.86, 3.55 and 3.78 > 3.0 the decision rule is that accept the computed mean if it's greater than the critical value, otherwise reject the computed mean value if the value is less than criterion mean value. However, the impact of accessibility with mean value 3.86 is relatively higher in affecting consumer attitude towards herbal medicine. Thus, average overall sum of mean value 3.73 > 3.0 suggested that place strategy affect consumer attitude towards herbal medicine.

In sum, from the analysis above, marketing variables shown significant impact in affecting consumer attitude towards herbal medicine, but in particular, price strategy has a greater positive significant impact in determine the consumer attitude towards herbal medicine. The implications of this finding attest to the fact that consumer are limited by their scarce resources and ability to pay for the herbal medicine. (See Adefolaju, 2014 Siti and Juhdi, 2012).

Test of Hypotheses

The study revealed that all the marketing variables are statistically significant in explained consumer attitude towards herbal medicine. See appendix for detailed explanation. The ANOVA tables revealed that F values explained the goodness of the overall model. Hence, the values of the 4Ps is statistical significant at 0.05 percent significant level to explain the overall goodness of the model. Given, the following F-values of product, price, promotion and place respectively; 17272.045, 13333.333, 578815.413 and 6075.000 all the values are

statistically significant. Furthermore, the t-values explained the significant of the estimated coefficients understudy; the t-value revealed that all the 4Ps-product, price, promotion and place are statistically significant respectively in explaining the consumer attitude towards herbal products in Nigeria. Thus, at 0.05 percent significant levels the t-value of the 4Ps marketing-product, price, promotion and place strategy as follows; 131.423 (0.005), 115.470 (0.006), 760.799 (0.001) and 77.942 (0.008) respectively are statistically significant. This implies that marketing variables strongly and positively affecting consumer attitude towards herbal medicine in Nigeria. Particularly, the impact of promotion strategy, which comprises the awareness campaigns, informative marketing message, sales promotion among others are important variables that affect consumer attitudes towards herbal product in Nigeria. Next, product strategy, which comprises, product composition, product safety, product efficacy, product package e.t.c is strong variable that affects consumer attitude toward herbal medicine. Also, variable that affects consumer attitude toward herbal product in Nigeria is price strategy, which comprises selling price, discount, and input-cost and non-monetary cost value. Lastly, place strategy, equally affects consumer attitude toward herbal medicine in Nigeria. From the results of the hypothesis testing, it is therefore, inevitable to conclude that marketing variables affects consumer attitude toward herbal medicine in Nigeria. Thus, the null hypothesis was rejected, $H_0 = 0$ and alternative hypothesis was accepted. That is product, price, promotion and place strategy affects attitude of consumer towards herbal medicine in Nigeria.

5. Conclusion and Recommendation

The objective of the study is to investigate into the factors affecting the attitudes of consumers towards herbal medicine in Nigeria. Emphasis was on consumers' attitudes towards herbal medicine in relations to marketing variables. Three urban centers namely; Aba, Port Harcourt and Ibadan were selected for the study. The influences of products, price, promotion and place strategy in relations to consumer attitude towards herbal medicine were examined. Base on the finding, it would be safe to conclude that attitude of consumer towards herbal product are affected by the marketing variables.

Based on the findings and the conclusions made from the study, the researcher deems it pertinent to make the following recommendations. That policy framework that will enhance the improvements of marketing variables is inevitable. Also, manufacturer, distributor, handler and all others agent involves in herbal medicine should focus and improve on the particular (Ps) of marketing strategy that significantly impacted on consumer attitude in order to achieved better patronage and continuously influence consumer attitude towards herbal medicine in Nigeria.

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**Appendix
 Test of Hypotheses**

Product strategy

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Product strategy	.	Enter

a. Dependent Variable: Consumer attitude

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000	.89700

a. Predictors: (Constant), Product strategy

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13897.195	1	13897.195	17272.045	.005 ^b
	Residual	.805	1	.805		
	Total	13898.000	2			

a. Dependent Variable: Consumer attitude

b. Predictors: (Constant), Product strategy

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.107	9.061		1.336	.409
	Product strategy	321.322	2.445	1.000	131.423	.005

a. Dependent Variable: Consumer attitude

Price strategy

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Price strategy	.	Enter

- a. Dependent Variable: Consumer attitude
 b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000	.44293

- a. Predictors: (Constant), VAR00002

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2615.804	1	2615.804	13333.333	.006 ^b
	Residual	.196	1	.196		
	Total	2616.000	2			

- a. Dependent Variable: Consumer attitude
 b. Predictors: (Constant), Price strategy

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-11.782	12.472		-.945	.518
	Price strategy	326.975	2.832	1.000	115.470	.006

- a. Dependent Variable: Consumer attitude

Promotion Strategy

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Promotion Strategy	.	Enter

- a. Dependent Variable: Consumer attitude
 b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000	.41489

- a. Predictors: (Constant), Promotion Strategy

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	99634.495	1	99634.495	578815.413	.001 ^b
	Residual	.172	1	.172		
	Total	99634.667	2			

- a. Dependent Variable: VAR00001
 b. Predictors: (Constant), VAR00002

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.552	1.562		.353	.784
	VAR00002	324.043	.426	1.000	760.799	.001

a. Dependent Variable: VAR00001

Place Strategy

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Place strategy		Enter

a. Dependent Variable: Consumer attitude

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000	.93859

a. Predictors: (Constant), place strategy

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5351.786	1	5351.786	6075.000	.008 ^b
	Residual	.881	1	.881		
	Total	5352.667	2			

a. Dependent Variable: Consumer attitude

b. Predictors: (Constant), place strategy

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.738	15.392		.698	.612
	Place strategy	321.429	4.124	1.000	77.942	.008

a. Dependent Variable: Consumer attitude

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