Sociodemographic Determinants of Consumers Purchasing Decision in The Nigerian Automobile Industry

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Abstracts

Consumers all over the world are faced with problems of choice of products because of vast array of product that are available for purchase, but the resources are limited. However consumers are likely influenced by so many factors among them are reference group, family members, social roles and status, this is important especially in decision of capital expenditure such as the purchase of automobiles. This study investigated the socio demographic determinant of consumer purchase decision in the Nigeria Automobile industry. This study employed the use of survey method as well as descriptive analysis, by which consumers opinion where sampled. The population of the study comprises of car owners residing in Niger state. The sample size of 1443 was determined through Yaro Yamane formula. Regression and correlations analysis was used to analyse the data collected with the aid of the statistical package (SPSS). There is significant relationship between reference group and purchase decision of automobile ($R^2 = .953$) and $P$ value of .000, hypothesis two indicated that family members has strong influence on the purchase decision of automobiles ($R^2 = .895$) and $P$ value of .000,. the result of hypothesis three indicated that there is strong effect of social roles and status on the purchase decision of automobile ($R^2 = .959$) and $P$ value of .000. The study concludes that there is significant relation between demographic and social determinant and consumer purchasing decision in an automobile industry in Nigeria. Recommendations are that companies must take all these variables into consideration in designing products and advertising.

Key words: Consumers, Socio-demographic, determinant, Purchase decision

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Background of study

The Nigerian automotive industry has installed capacity to produce 108,000 cars, 56,000 commercial vehicles, 10,000 tractors, 1,000,000 motor cycles and 1,000,000 bicycles annually” (Echenim, 2014). While “The current vehicle inflow into the economy is about 50,000 new and 150,000 used ones per annum” (Agbo, 2013). Hence “Nigeria harbors the highest number of vehicles in the West Coast of Africa.” (Filani 20012), that’s why road transportation will remain the main means of transportation in both the commercial areas and rural areas of the country.

Even when auto manufacturers have gone through these problems of producing vehicles, manufacturers still need to find out the means and ways of getting their products sold to consumers. Suuleiman and Diko (2012) say that “buyers of automobile products are faced with problems both within and without that will enable them to either buy or not to buy such product”. These problems that are within and without include four basic determinants that shape consumers final decision as to what brand to buy. ‘Consumer buying decisions with regard to purchase of automobiles are affected by various factors and these factors are uncontrollable. These factors are called the determinants of consumer buying behavior. These factors affect the consumer behavior differently. These factors are also referred to as the buying characteristics influencing consumer behavior’ (Arora 2010). Cultural factors consist of sub factors as Culture, Subculture, and Social class. While Social factor consists of Family Influencer, reference group, Role and status. Personal factor is another consumer buying decision factor, it consisting of Age, Occupation, Income, Life style and Personality. Psychological factor has Motivation, Perception, Learning, Beliefs and attitude as its subsets of factors affecting buying decision (Opara 2014).

When all the necessary information has been gotten, he evaluates the information in relation to the brand of cars available, consumers will see a product as a bundle of satisfaction, and he will go ahead to develop a set of belief about where each brand stands on each attribute. After this he will attach a utility function to the product that is the expectation consumer has on the product he will choose. Based on the above he will use one or more of several evaluation procedure to arrive at a brand to purchase. “At the evaluation stage the consumer ranks brand in the choice set and forms purchase intention, generally the consumer will buy the most preferred brand. Post purchase behaviour is when a consumer buys your product, your job do not stop there as a
marketer, because a consumer is bound to be satisfied or dissatisfied and will engage in post purchase actions of significant interest to the marketer. What determines post purchase satisfaction or dissatisfaction with a purchase? The answer lies in the relationship between consumer expectations and perceives performance. If the product matches expectations the consumer will be satisfied. If it falls short, the consumer will experience dissatisfaction” (Armstrong & Kotler, 2013)

The researcher tries to concentrate on information search, evaluation of alternative and purchase decision of automobile products. Consumers of cars are affected by many factors, but then Socio-demographic determinants are the factors researcher relies on to see the extent to which they influence the buying decision. A Socio-demographic determinant consists of social factors (family effect, reference group effect, and role and status effect).

**Statement of Problem**

Family is the most universal and fundamental socio-institution in the world which is expected to be cared for. However, the wants of the family becomes unending while the resources are limited in attaining its goals. These family resources plays a major role as it determined consumers purchasing decision power, which is under the control of the nation’s economy, that has effect on global economy and, mostly in Nigeria with its numerous challenges in the midst of plenty resources and ardent poverty. Mohammed (2014) say that “disposable personal income is that income that an income earner is left with, when all necessities are satisfied, that could be used for other expenditures like building, buying of cars, holiday trips etc.”. it means therefore that disposable income of Automobile buyers in Nigeria are low.

Because of this low disposable income in Nigeria, the users and buyers of automobile product are always in a fix of how to source for resources to buy cars, despite the fact that the need of car is a necessity to the family. Because of array of various brands of cars and lack of resources within the economy the choice of this products to fulfill the family need, feel belong among friends and boost once status and ego comes in conflict with one’s basic need that have not been satisfied.
Purpose of the study

The guiding objective of this study is to study the socio-demographic (reference group, family members’ and social status) determinants of consumer purchase decision in the Nigerian Automobiles industry, which translate into the following objectives:

1. Determine the impact of reference group on consumer purchase decision of automobiles.
2. Explore the role of family members in decision on the brand of automobile purchased
3. Examine the effect of social role and status on automobile purchase decision making.

Significance of the study

The study pinpointed the marketing issues and necessary approaches to consumer’s factors influencing automobile purchase decision in Nigeria. The research may be used as learning material especially within areas related to consumer buying decision. Also, the reports suggested marketing strategies that can boost up purchase of automobile products in Nigeria. Automobiles companies tend to know which of the determinants they should concentrate on when they advertise their products so as to capture consumer’s attention.

Through consumer behavior perspective in automobile industry, the research of this study prescribed the assembler and manufacturer with importance information about the socio-demographic variables in contributing to the purchase buying decision. With globalization, companies compete across borders and cultures. It is important for automobile industry to understand these socio demographic determinants and forecast them before venturing into international market.

In addition, the research provided useful tool in developing effective marketing plans. It also provided some insight into Nigeria socio-demographic determinant towards international brand that has influence the consumers purchase decision. By conducting this research, it has assisted in exploring the socio-demographic determinants as it affects brands choice in an automobile purchase.

This study aimed at ascertaining the Socio-Demographic Determinant and buying decision process in an Automobile Industry in Nigeria. The study will look at some selected car owners in
Niger state (Bida, Kontangora and Minna) that have their car registered in the state whether the car is new, “tokunbo”, or second hand. Niger state is chosen because of the fact that the state is aspiring to be the third largest economy in year 2020, based on this, deliberate action are taken to encourage businesses to strive in the state, Niger state shares border with Abuja in the south, business activities in Abuja is seriously having a positive impact on the economy of Niger state. Bida, Kontangora and Minna where equally chosen because these three cities are the headquarters’ of the three senatorial zones of the state.

**Research questions**

1. How do reference groups affect buying decision of automobiles?
2. How does a family member exert influence on purchase decision of automobiles?
3. To what extend do social roles and status affect buying decision process of automobiles?

**Hypotheses of the study**

**Ho1:** There is no significant influence of reference groups on buying decision of automobiles

**Ho2:** Family members have no significant influence on buying decision of automobiles.

**Ho3:** There is no significant relationship between roles and status and decision making process of buying automobiles.

**Concept of reference group and consumer buying decision**

Reference groups include buyer reference group, such as family members, friends, social organizations, professional institutions and trade, heavily influence buying decision. Reference Group somehow affects the value and behavior of others. Most of the purchases affect ideas and opinions of the reference group (Shende, 2014).

Reference groups have potential in forming a person attitude or behavior. The impact of reference groups varies across products and brands. For example if the product is visible such as dress, shoes, car etc. then the influence of reference groups will be high. Reference groups also include opinion leader (a person who influences other because of his special skill, knowledge or other characteristics).
Reference Group can impact a person at least in three ways. First, the person will face new behaviors and lifestyles; second, the ideas and imaginations that affected individual’s interests will be adapted to the reference group. Third, the created compulsive conditions may have influence on the choice of product brands (Armstrong & Kotler, 2014). For marketers, reference groups have three important implications: they serve as information sources and influence perceptions, they affect an individual’s aspiration levels; and their norms either constrain or stimulate consumer behavior.

Reference groups are those that somehow affect the value and the perceived behavior of others. All the formal and informal groups that influence the buying behavior of an individual are that person’s reference groups. Consumers may use products or brands to identify with or become a member of a group. They learn from observing how members of their reference groups consume, and they use the same criteria to make their own consumer decisions. The activities, values, and goals of reference groups directly influence consumer behavior. Understanding the effect of reference groups on a product is important for marketers as they track the life cycle of their products (Beardem & Etzel, 1982).

Reference groups are groups a consumer identifies with and wants to join. If you have ever dreamed of being a professional player of basketball or another sport, you have a reference group. Marketing professionals are aware of this. That’s why, for example, Nike hires celebrities such as Michael Jordan to pitch the company’s products. In Nigeria, Mikel, Moses, Odewinge are used for Pepsi. Valeecha and Reza (2013) opined that Individual identifies with the group to the extent that he takes on many of the values, attitudes or behaviors of the group members (families, friends, and sororities, civic and professional organizations).

Membership groups (belong to). Affinity marketing is focused on the desires of consumers that belong to reference groups. Marketers get the groups to approve the product and communicate that approval to its member’s example Credit Cards etc. Aspiration groups (want to belong to). Disassociate groups (do not want to belong to) e.g. Honda, tries to disassociate from the "biker" group. “The degree to which a reference group will affect a purchase decision depends on an individual’s susceptibility to reference group influence and the strength of his/her involvement with the group” (Valeecha & Reza, 2013).
Models of consumer behavior

The influences of social science have prompted marketing experts to propound certain buying behaviour models for explaining buyer behaviour. These models are divided in two broad categories microeconomic and macroeconomic models. The classical microeconomic approach focuses on type of purchase and quantity of purchases made by the consumer. Macroeconomic approach considers the monetary value of goods and resources and how they will change over the period the period of time. Several models have been put forward for explaining buyer behaviour. “All the social sciences like Economics, Psychology, Sociology and Anthropology have influenced the buyer behaviour studies” Asifo (2012).

Roles and status

Each person possesses different roles and status in the society depending upon the groups, clubs, family, organization etc. to which he belongs. For example a woman is working in an organization as finance manager. Now she is playing two roles, one of finance manager and other of mother. Therefore her buying decisions will be influenced by her role and status

“A social role is a set of attitudes and activities that an individual is supposed to have and do according to his profession and his position at work, his position in the family, his gender, etc. and expectations of the people around him” (Solomon, 2013). Social status meanwhile reflects the rank and the importance of this role in society or in social groups. Some are more valued than others. “The social role and status profoundly influences the consumer behavior and his purchasing decisions, especially for all the “visible” products from other people” (Blackwell, Miniard& Engel 2014). For example, a consumer may buy a Ferrari or a Porsche for the quality of the car but also for the external signs of social success that this kind of cars represents. Moreover, it is likely that a CEO driving a small car like a Ford Focus or a Volkswagen Golf would be taken less seriously by its customers and business partners than if he is driving a German luxury car. And this kind of behaviors and influences can be found at every level and for every role and social status. Again, many brands have understood it by creating an image associated with their products reflecting an important social role or status.
Research methodology

The study was conducted using Survey research design. Data were collected directly from the respondents through questionnaire and personal observation.

Twenty One (21) items questionnaire consist of strictly designed questions to collect data from a systematic sampling of 1443 respondents in Niger state.

The study is aimed at getting the opinion of the socio-demographic determinants of consumer purchase decision in the Nigerian Automobiles industry on,

4. How do reference groups affect buying decision of automobiles?
5. How does a family member exert influence on purchase decision of automobiles?
6. To what extend do social roles and status affect buying decision process of automobiles?

Validity of the instrument

The instrument was validated by Academicians and a Professor in the field of marketing and equally professional buyers and sellers in the Nigerian Automobiles industry to ensure the relevance of the instrument.

3.2 Population and the sample size of the study

The population of study includes number of car owners residing in Niger state. The population figure is five hundred and eight thousand, five hundred and sixty four(508,564) registered car

In the determination of the sample size for the respondents to the questionnaires, the researcher adopted the Yaros variance formula cited by (Kahne, 2013) that provides a simplified formula to calculate a sample size. A 95% confidence level and e0.005

\[
\frac{n}{N} = \frac{N}{1 + N(e)^2}
\]
Where:

n = Sample size

N = population size

e = level of precision or significance

1 = constant figure

Population of registered car owners in Niger state 508,564

Solving for sample size:

\[ n = \frac{508,564}{1 + 1110.40175 \times 0.003^2} \]

\[ n = \frac{508,564}{1 + 457.7076} \]

\[ n = \frac{508,564}{558.7076} \]

\[ n = 910.40175 \]

The sample size formula provided the sample base that needed to be obtained. According to Asika (1999), however, there is need for the sample base to be marked up to 30% margin as non-responses.

Hence, final sample size = \( n \times 0.3 + 400 \)

\[ = 333 + 1110 \]

\[ = 1443 \]
Method of data collection

The researcher employed primary source of Data. Questionnaire were administered in some selected local Government are of Niger state that are cosmopolitan in nature and represent the capital of each senatorial zones of Niger state ie Minna, Bida and Kontagora

Method of Data collection

In this work, questionnaires were used. This was designed to collect information on some of the socio-demographic determinant of car purchase decision in the automobile industry. The questionnaires were developed on Six Likert-scales type questions, which range from strongly agree to strongly disagree were used (strongly agree=6, agree= 5, fairly agree=4, fairly disagree=3, disagree= 2, strongly disagree=1).

Method of Data analysis

After collecting data from the respondents, statistical package and service solution (SPSS) 20.0 windows was used for data analysis. Regression analysis was used because it enables the researcher test hypotheses about relationship of two variables; it equally sees whether two variables are associated without necessarily having effect on the relationship.

Data presentation and analysis

Table 1: Regression analysis of reference groups effect on automobile purchases

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
<th>Sig Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Y = a = bx2 + e</td>
<td>.976</td>
<td>.953</td>
<td>.953</td>
<td>1.055</td>
<td>2.102</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: research field survey result 2018

The table has the information on the result test between reference Group and consumer purchase decision. The correlation coefficient shows a high value at 0.976 which indicates that there is.976 coefficient relationship it means there is a high relationship between reference group and
consumer buying decision. The effect of reference group on consumer buying behaviour is given at 0.953 meaning that the change in consumer buying decision can be explained by reference group up to 95.3%. The real effect of reference group after errors and discrepancies have been take care is shown by the adjusted R square at still 0.953 that is 95.3%. The Durbin Watson shows that there is an accepted level of auto correlation. The significance value which is given at 0.000 shows that the estimate is statistically significant. For that reason, we can go ahead to reject the null hypothesis and pitch our tent on the fact that there is a significant effect of reference group of the buying decision of automobiles.

**Table 2: Regression analysis of family member’s effect on automobile purchases**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
<th>Sig Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)Y = a =bx1 + e</td>
<td>.946</td>
<td>.895</td>
<td>.895</td>
<td>1.574</td>
<td>2.102</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Source: research field survey result 2018*

The table above shows that relationship test between family and consumer purchase decision. The R which is the correlation coefficient shows .946, there is a high correlation between the two variables. This implies that there is .946 correlations between them as family decisions improve the consumer purchase decision will improve. Moving further to the R Square, we can see that the effect of Family on consumer buying behaviour is given as 0.895. This shows that the change in consumer purchase decision can be accounted for up to 89.5% by family. The adjusted R square shows the real effect or explanatory power of the model when errors and other discrepancies has been accounted for.

The relationship between these variables shows a standard error of 1.574. Which means that the estimate, though low, was computed with a little marginal error. The Durbin Watson test for auto-correlation indicated that the estimate is free from positive or negative auto correlation. This is evident in the value obtained at 2.102. This depicts that neither of the independent variables are explaining themselves. The significance value which is lower than 0.05 at 0.000 shows that our estimate is statistically significant and that we can go ahead to reject the null hypothesis and
conclude that family members have a significant influence on the buying decision of automobiles.

### Table 3: Regression analysis of social roles and status effect on automobile purchases

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
<th>Sig Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Y = a =bX + e</td>
<td>.979</td>
<td>.959</td>
<td>.959</td>
<td>.987</td>
<td>2.102</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Source: research field survey result 2018*

The test of relationship between social roles and status and the decision making process of buying automobiles. The correlation is high at 0.979 between the two variables. This shows that there is correlation coefficient of .979 relationships between these two concepts or variables. The effect of social roles and status on consumer purchase decision process of automobiles is given as 0.959. This implies that there is a high effect at 95.9%. The adjusted R square shows the value of the effect when errors have been accounted for. The significance value is 0.000 which indicates that the estimate is statistically significant and that we have to reject the null hypothesis and however conclude that there is a significant relationship between social roles and status and the decision making process of buying automobiles.

**Discussion of finding**

Hence, the study carried out it shows categorically that family members (husband, wife and children) have a significant influence on the buying decision of automobile which van not be ignored by the manufacturers or dealers of automobile products.

The researcher can authoritatively say that reference group has a significant effect on the buying decision of automobiles in Nigeria. Based on the statistical analysis, reference group issue cannot be relegated to the background.
The research carried out shows that there is a significant relationship between social roles and status and the decision making process of buying automobiles.

There is a significant relationship between demographic variables and consumer buying decision. In designing automobile product and selling these products, sex and age must be considered.

**Conclusion**

From the study carried out its shows a significant relationship between the socio-demographic determinants and consumer buying decision in the Nigerian automobile industry and behaviour of consumers. The socio demographic determinants of consumer buying decision consist of family, reference group roles and status, age marital status and income. Realizing the importance of automobile industry in the present economic situation, the researcher has analysed the effect related to automobile products, hence at this period of our economy, automobile is no more a luxury. The growth in the population of Nigeria and the increasing number of consumers has attracted the attention of automobile manufacturers and marketers. The manufacturers and marketers who study the buying decision of consumers and cater for their needs will be successful. It may be concluded that consumer buying decision has a great role to play in liquid petroleum gas (LPG) era of economic activities.

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