Effect of Product Packaging on Consumer Buying Behaviour in Offa, Kwara State, Nigeria

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ABSTRACT: Packaging is a strong element of product which not only communicate, attractive, facilitate handling but also protect the product to meet the desires of customers and consumers respectively. This study investigates product packaging and consumer buying behavior in Offa, Kwara State. The study was cross-sectional survey in nature and targeted Consumers of fast-moving consumable goods (FMCG) in Owode market, Offa. Copies of questionnaire was used to solicit information from the 440 respondents that participated in the survey and data collected was analyzed with multiple regressions and t-test using SPSS 20.0. The results revealed that packaging design and packaging materials have positive and significant impact on consumer buying behavior. The study concluded that, product packaging (packaging design amd packaging material) plays a vital role in influencing consumer purchase decisions. It was recommended that, manufacturers should design their products' package in such a that it will be attractive enough to convinve consumer to make purchase decision. Also, manufacturers should endeavor to use quality packaging material that will protect the product from damage and ensure ease of handling.

I. INTRODUCTION

The success of any company is also a function of its successful performance of various marketing activities such as branding, packaging, pricing, and the selective channel of distribution by the marketing executives. It is believed that some consumers are very rational in their buying decision while others might not be. The challenge of decisions happening within the consumer between his/her exposure to marketing stimuli and the actual decision to purchase otherwise called **'Black Box'** makes it difficult to predict consumers because marketers know little or nothing about how human mind works. This makes it imperative for whosoever in charge of marketing activities to plan an effective promotional strategy that will convince consumers to prefer (purchase) the company's brand.

Consumer behavior entails what, how, where, when and why people buy a product, service or idea (Hammed, Kabir and Idris, 2018). At a glance, the consumer seems to make a simple decision to buy or not to buy. However, a closer look through the simple decision reveals a long process of decision making by consumer before making purchase decision. According to Hammed and Auwal (2017), it will be suicidal for a marketer or business owner to consider only the final decision to buy or believes that consumer only take rational decisions towards buying and that was the reason Abdulaziz, Hammed and Fatimah (2019) stressed that, consumer buying behavior demands the consideration of both rational and irrational buying motives of the market.

Consumers buying behavior is an antecedent of many factors in which product packaging cannot be left out. It is a known fact that, no exchange will result unless consumers are interested in a particular product. Thus, there is need for special attention on product packaging in order to entice consumer towards buying. Packaging has become an integral part of modern society and is one of the most important factors that stimulate sales (Hammed and Abdulaziz, 2017). Packaging helps in attracting and sustaining the consumers' attention. The uses of packaging as a strong variable of product can be seen as a vital tool used for communicating the attractiveness of product to the respective and identified target market. Packaging components plays a vital role in the production, storage, distribution and marketing of products. Mousavi and Jahromi (2014) opined that, packaging could also cause differentiation from competitors and can be considered as a competitive advantage.

Researchers and marketing practitioners have long realized the significance of packaging in retail settings. Packaging components such as packaging design and packaging materials have been suggested by Ghosh (2016), Mazhar, Daud, Bhutto and Mubin (2015), Ahmed, Parmar and Amin (2014) as a strategy for increasing product's competitiveness, make a product saleable in various target markets and increasing market share for products. Impliedly, products package performs an important role in marketing, especially at the point of sale and could be treated as one of the most important influencing tools of consumer's purchase decision (Khan, Rehman, Sultan and Rashid, 2016).In spite of this fact, some manufacturers still perceived packaging as mere container (Abdullah, Kalam and Akterujjaman, 2015). This opposing views worth to be investigated in order to take a position.

II. PROBLEM STATEMENT

Though, a number of studies have been conducted on the nexus between products' packaging and consumers buying behavior, such studies (Hammed and Abdulaziz, 2017; Budiardjo, 2016; Olawepo and Ibojo, 2015; Poturak, 2014; Suraj and Raveendran, 2013). However, to the best of researcher's knowledge, no studies have been conducted in Offa, Kwara State. Most of the studies conducted were done in different context. According to Li and Liu (2014), conducting a study in different context is a significant gap in the literature. In view of this, examining the impact of product packaging on consumers buying behavior in Offa, Kwara State is worth investigating. Against this backdrop, this study attempts to answer the following research questions: To what extent do product packaging design has significant impact on consumer buying behavior in Offa? And, what is the impact of product packaging materials on consumer buying behavior in Offa?

III. LITERATURE REVIEW
Concept of Consumer Buying Behavior

Shah, Ahmad and Ahmad (2013) described consumer buying behavior as the way through which individual purchase and use the product to satisfy his/her needs and wants. According to Ayuand Harimukti(2012), consumer behavior is the consumer's decision with respect to the acquisition, consumption, and disposition of goods, services, time, and ideas by human decision-making units. Impliedly, consumer behavior can be said to be the study of how individual makes decisions to spend their available

resources (time, money and effort) on the consumption related items.

Concept of Packaging

Borishade, Ogunnaike, Dirisu and Onochie (2015) defined packaging as the container for a product, encompassing the physical appearance of the container and including the design, color, shape, labeling and materials used. In the opinion of Hammed and Abdulaziz (2017), it is any material used specially to protect something. Package design and packaging shapes consumer perceptions and can be the determining factor in point-of-purchase decisions which characterize the majority of shopping occasions. A product that is well packaged, is self-advertising and serves as a purchase appeal (Lifu, 2012).

Empirical Review

Studies (Hammed and Abdulaziz, 2017; Budiardjo, 2016; Olawepo and Ibojo, 2015) have shown relationships and effects between the two concepts under review. In the study of Mousavi and Jahromi (2014) which examined the relationship between packaging and consumer buying behavior with consumers of Mihan brand 1.5L milk and Roozaneh brand 1.5 L milk across a number of grocery stores in Shiraz city involving one hundred and ninety-three sampled consumers that provided response through structured copies of questionnaire administered on them, results revealed that packaging elements such as color, context image, packaging material, style of writing, cover design, printed information and innovation have positive and significant relationship with consumer buying behavior. Similar study conducted by Olawepo and Ibojo (2015) in Nigeria on the effects of packaging on consumer purchasing intention, using Nestle Nigeria Plc as a case study revealed in the survey that all elements of packaging affect consumers purchase intention. It was concluded in the study that packaging is an engine that propel uniqueness of a product in the market, the picture quality and other attributes of packaging stand out amongst other products so as to draws attention of customers.

In another study conducted by Mazhar, Daud, Bhutto and Mubin (2015) on the impact of product packaging on consumers buying behavior in Karachi among three hundred consumers of products and data collected through copies of questionnaire administered. Result revealed that packaging has significant effect on consumer buying behavior and concluded that the packaging elements like its color, packaging material, design of wrapper and innovation are more important

factors when consumers making any buying decision. Specifically, the study of Budiardjo (2016) examined the impact of packaging design on purchase behavior through brand trust among one hundred housewives in Sidoario, Surabaya and Krian. With survey approach, data was collected and analysed with the use of Covariance-Based Structural Equation Modeling (CB-SEM). Results revealed that packaging design has positive and significant influence on purchasing behavior and that brand trust also prove to have a positive and significant impact on buying behavior.

Furthermore, study conducted by Hammed and Abdulaziz (2017) on the impact of packaging on sales turnover of Chi Limited products with the use of cross-sectional survey and data primarily sourced from twenty-five staff of Chi Limited Sokoto Branch revealed that packaging has significant impact on sales turnover for Chi Limited products during the period of the study. It was concluded that packaging is one of the most important marketing tools available to Chi Limited to convey messages about the products to consumers, which in turn make their products saleable and increase sales turnover.

Theoretical Review
This review adopted Emotional Dominated Model of Environmental Psychology developed by Mehrabian and Russell (1974) to explore the relationship and effects of product packaging on consumer buying behavior. The basic assumption of this theory is that, the impact of the situation on behavior is mediated by emotional responses, so that any set of conditions initially generates an emotional reaction, which in turn leads to a behavioral response. Mehrabian and Russell (1974) proposed that various stimuli in the environment cause primary emotional responses, thus causing reactions to that environment. Consumers look at the packaging and respond to how it makes them feel at that moment (Hammed and Abdulaziz, 2017). If the consumer feels that the product can potentially satisfy their needs, it influences their buying behavior. This feeling is a result of choices made across several cognitive stages; thus, most consumers find it to be complex and overwhelming at times. Since consumers are often in state of confusion, the most important role of packaging is to alleviate their fears. Consumer as a subject who gets exposed to a product on the shelf, wrapped in its packaging, as the stimuli. The stimuli in this case are heavily cultured to affect subject's response and achieve a desired consumer behavior. Therefore, product packaging directly influences a consumers' perception of the product and value perception of product is bound to affect consumers buying decision.
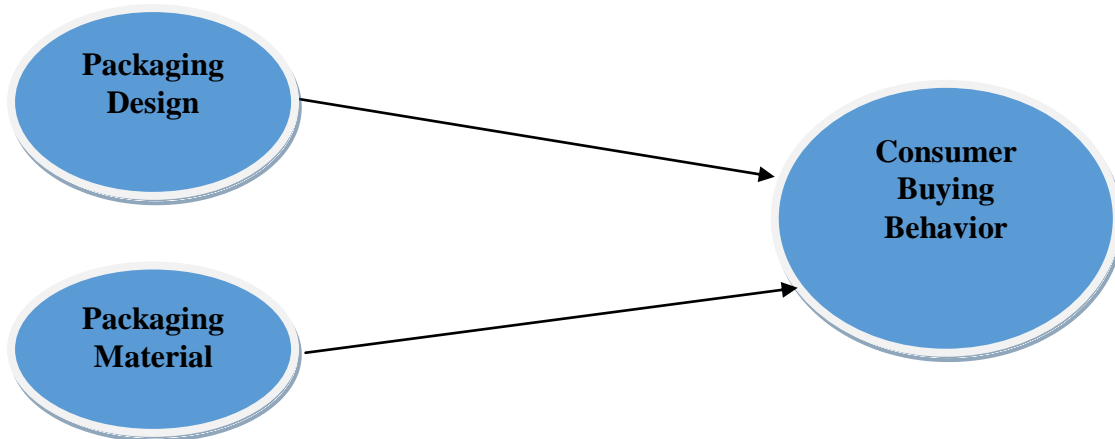

Fig. 1: Relationship between Independent Variables and Dependent Variable

IV. RESEARCH METHOD

This research work was conducted at Offa town, in Offa Local Government area of Kwara State. Customer of fast-moving consumable goods in the Offa town area was randomly selected to achieve the objectives of the study. The method of data collection used for the research is Quantitative data analysis. Data for the research was collected through the primary method of field survey of Consumers. A questionnaire using 5 point likert scale with personal interview was used due to time constraints.A total samples of 440 respondents were randomly selected from the total population within the study area and a total of six (6) fast-moving consumable goods out of eight (8) fast consuming goods were picked. This represents about 75% of the total number of fast consuming goods within the study area, this is in conformity with random sampling method of Marcor and Raosoft sample size calculator.

V. DATA ANALYSIS

Description of Data

Figure 2 shows the gender range of the randomly selected respondents for this research. Out of the 440 respondents randomly selected, 211 were female and 229 were males as shown in Figure 1. This thus implies that majority of the respondents are still males. Figure 3 shows how packaging elements affect consumer decision to purchase a product. It was observed from Figure 3, most consumers believe that products with packaging of good color, image, brand, shape and packaging material greatly influence them to purchase the product. From Figure 3, it was observed that the Distribution of how Packaging Elements affect consumers' behavior was nearly bi-asymmetric.
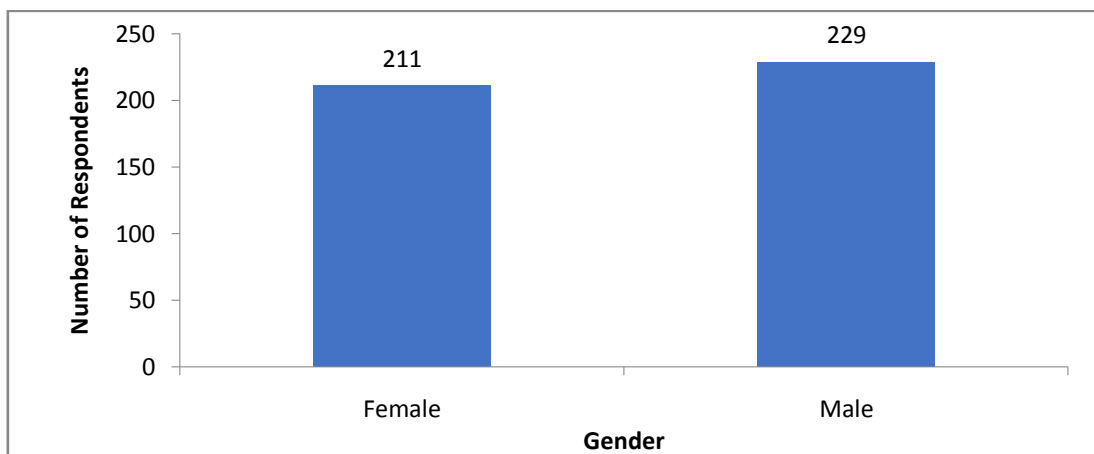

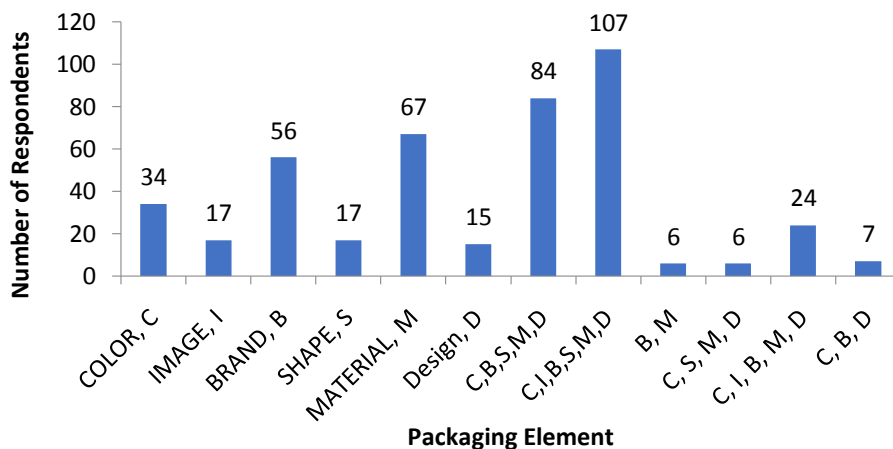**Figure 2: Gender Distribution of Respondents**

Figure 3: Distribution of how Packaging Elements affect consumers' behavior.

Data Analysis And Interpretations
Regression analysis and t-Test via SPSS 20.0 was used to test the research hypothesis and analyze the dependent and independent variables.
Hypothesis One
To determine the significance impact of quality and packaging of brands on price of products, two test hypotheses were set, which are;

H0: There is no significant impact of Quality on Packaging of Brands on Price of Brands;

$\mu_{\text{quality and packaging of brands}} \neq \mu_{\text{Price of Brands}}$

H1:   There is significant impact of Quality on Packaging of Brands on Price of Brands;

$\mu_{\text{quality and packaging of brands}} = \mu_{\text{Price of Products}}$

For testing for the overall significance, a multiple regression analysis and t-tests were done, the results are as shown in Table 1-3

Table 1: Model Summary

Model	Multiple R	R Square	Adjusted R Square	Standard Error
1	0.5610657	0.382553	-0.012980109	0.6005621

Table 1 presents the model summary. It shows that the correlation coefficient R is 0.562 (i.e. R = 0.562) which indicates that there exists a linear relationship between Price of Brands (dependent variable i.e. the variable being predicted) and Quality and Packaging of Brands (independent variable). It is also crystal clear from the Table 1 that the R^2 which is the coefficient of determination is 0.383 approximately 38.3%. This implies that 38.3% of Price of Brands can be accounted for by Quality and Packaging of Brands.

Table 2: Anova

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.000189282	0.000189282	0.000524799	0.00981782524
Residual	122	27.77196262	0.360674839		
Total	123	27.7721519			

Table 2 presents ANOVA table. The F-statistic as shown from the table above is significant since the ANOVA significance of 0.0098 is less than the alpha level of 0.05, thus the model is fit. Hence the null hypothesis (Quality and Packaging of Brands has no significant impact on price of fast consuming goods in Offa, Kwara State) is rejected and the alternate hypothesis (Quality and Packaging of products has significant impact on Price of fast consuming goods in Offa, Kwara State) is accepted. Thus, Table 2 shows that Quality and Packaging of products has significant impact on Price of fast consuming goods in Offa, Kwara State.

Table 3: T-test

Variables	Quality and Packaging of Brands	Price of Brands
Mean	4.341772152	4.151898734
Variance	0.356053229	0.694579682
Observations	440	440
Pearson Correlation	0.5610657	
df	439	
t Stat	2.644433108	
P(T<=t) two-tail	0.104111497	
t Critical two-tail	1.990847036	

It can be observed from Table 3, that t-score value of 2.646 does exceeds the critical value of t, 1.991; we reject the null hypothesis and conclude that Quality and Packaging of brands has a significant impact on Price of fast consuming goods in Offa, Kwara State. The probability of getting an observed difference between Quality and Packaging of products and Price of fast consuming goods of 0.1898 or greater if the null hypothesis is true is 0.104.

Hypothesis Two

To determine the influence of package design on customer purchasing a product, two test hypotheses were set, which are;

H0: There is no significant impact of Package Design on Customer Purchasing a Product;

$\mu_{Package\ Design} \neq \mu_{Customer\ Purchasing\ a\ Product}$

H1:   There is significant impact of Package Design on Customer Purchasing a Product;

$\mu_{Packaging\ Design} = \mu_{Customer\ Purchasing\ a\ Product}$

For testing for the overall significance, a multiple regression analysis and t-tests were done, the results are as shown in Table 4-6

Table 4: Model Summary

Model	Multiple R	R Square	Adjusted R Square	Standard Error
1	0.330180216	0.109018975	0.097447793	0.534363689

Table 4 presents the model summary. It shows that the correlation coefficient R is 0.33 (i.e. R = 0.33) which indicates that there exists a non-linear relationship between Customer purchasing a product (dependent variable i.e. the variable being predicted) and Packaging Design (independent variable). It is also crystal clear from the Table 4 that the R^2 which is the coefficient of determination is 0.11 approximately 11%. This implies that 11% of Customer Purchasing a product can be accounted for by Packaging Design.

Table 5: Anova

ANOVA

	df	SS	MS	F	Significance F
Regression	1	2.690284699	2.690284699	9.42159352	0.002961069
Residual	439	21.98693049	0.285544552		
Total	440	24.67721519			

Table 5 presents ANOVA table. The F-statistic as shown from the table above is significant since the ANOVA significance of 0.00296 is less than the alpha level of 0.05, thus the model is fit. Hence the null hypothesis (Packaging Design has no significant impact on Customer purchasing a product) is rejected and the alternate hypothesis (Packaging Design has significant impact on Customer purchasing a product) is accepted. Thus, Table 5 shows that Packaging Design has significant impact on Customer purchasing a product.

Table 6: T-test

Variables	Packaging Design	Consumer purchasing a product
Mean	4.098101266	4.189873418
Variance	0.316374554	0.489126907
Observations	439	439
Pearson Correlation	0.330180216	
df	439	
t Stat	-2.10151702	
P(T<=t) two-tail	0.274059191	
t Critical two-tail	1.690847036	

It can be observed from Table 6, that t-score value of -2.10 does exceeds the critical value of t, -1.691; we reject the null hypothesis and conclude that Packaging Design has significant impact on Customer purchasing a product. The probability of getting an observed difference between Packaging Design and Customer purchasing a product of -0.092 or greater if the null hypothesis is true is 0.274.

Hypothesis Three

To determine the influence of Image of Brands on product differentiation by customers, two test hypotheses were set, which are;

H0: There is no significant impact of Image of Brands on Brands differentiation by customers;

$\mu_{\text{Image of Brands}} \neq \mu_{\text{Brands differentiation by customers}}$

H1: There is significant impact of Image of Brands on Brands differentiation by customers;

$\mu_{\text{Image of Brands}} = \mu_{\text{Brands differentiation by customers}}$

For testing for the overall significance, a multiple regression analysis and t-tests were done, the results are as shown in Table 7-9

Table 7: Model Summary

Model	Multiple R	R Square	Adjusted R Square	Standard Error
1	0.481858011	0.45700734	-0.006199256	0.861011745

Table 7 presents the model summary. It shows that the correlation coefficient R is 0.482 (i.e. R = 0.482) which indicates that there exists a fairly linear relationship between differentiation of brands by customers (dependent variable i.e. the variable being predicted) and Image of Brands (independent variable). It is also crystal clear from the Table 7 that the R^2 which is the coefficient of determination is 0.457 approximately 45.7%. This implies that 45.7% of differentiation of brands by a customer can be accounted for by Image of Brands.

Table 8: Anova

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.385080157	0.385080157	0.519437129	0.0047326433
Residual	439	57.08327427	0.741341224		
Total	440	57.46835443			

Table 8 presents ANOVA table. The F-statistic as shown from the table above is significant since the ANOVA significance of 0.00473 is less than the alpha level of 0.05, thus the model is fit. Hence the null hypothesis (Image of Brands has no significant impact on Differentiation of Brands by Customers) is rejected and the alternate hypothesis (Image of Brands has significant impact on Differentiation of Brands by Customers) is accepted. Thus, Table 8 shows that Image of Brands has significant impact on Differentiation of Brands by Customers.

Table 9: T-test

Variables	Image of Brand	Differentiation of Brands by Customers
Mean	4.139240506	4.518987342
Variance	0.736773775	0.457968192
Observations	440	440
Pearson Correlation	0.481858011	
df	439	
t Stat	-2.971937191	
P(T<=t) two-tail	0.00393371	
t Critical two-tail	1.89233890	

It can be observed from Table 9, that t-score value of 2.97 does exceeds the critical value of t, 1.892; we reject the null hypothesis and conclude that Image of Brand has significant impact on differentiation of Brands by Customers. The probability of getting an observed difference between Image of Brand and Differentiation of − brands by customers is -0.380 or greater if the null hypothesis is true is 0.003.

VI. DISCUSSION OF FINDINGS

This research statistically studies the effect of product packaging on consumer buying behavior in Offa, Kwara State. Shreds of evidence show how quality and packaging of brands impact on price of brands, package design impact on customer purchasing a product and Image of brands on brands differentiation by customers in the Offa town, Kwara State, Nigeria.

From Table 1-3, the result of Regression of analysis and t-test on Hypothesis test one (1) show that there is a significant and fairly positive linear relationship between quality and packaging of brands and price of brands (R=0.562, t=2.644, df=439, p=0.104). It can be said from this analysis that quality and packaging of brands is the major factor that influences price of brands. This effect can be explained on the basis that use of quality packaging by producers add to their cost price, thus need to increase sales price.

From Table 4-6, the result of Regression of analysis and t-test on Hypothesis test two (2) show that there is an significant and a non-linear relationship between package design and customer purchasing a product (R=0.33, t=-2.101, df=439, p=0.274). The findings are in line with the results obtained by Hammed and Abdulaziz (2017), Budiardjo (2016) and Olawepo and Ibojo (2015) that all established that packaging has significant effect on consumers buying behavior. This effect can be explained on the basis that proper packaging appeals toconsumer attentiveness and interest towards a certain brands and increase the brand image.

From Table 7-9, the result of Regression of analysis and t-test on Hypothesis test three (3) show that there is a significant and fairly linear relationship between image of brands and differentiation of brands by customers (R=0.482, t=−2.97, df=439, p=0.00393).

VII. CONCLUSION AND RECOMMENDATIONS

This study investigated the impact of product packaging on consumers buying behavior in Offa, Kwara State. The result revealed that packaging has substantial impact on consumers buying behavior. Also the result reveals that packaging design and packaging material do influence consumers purchase decision. The study therefore concluded that products' packaging (packaging design and packaging material) plays a vital role in influencing consumer purchase decisions.

Based on the above conclusion, the following recommendations were proffered:

i. The manufacturers should design their products' package in such a way that, it will be attractive enough to convince consumer to make purchase decision.

ii. The manufacturers must endeavor to use quality packaging material that will protect the product from damage and ensure ease of handling the product.

X. ACKNOWLEDGEMENT

REFERENCES

[1]. Abdulaziz, M. A.; Hammed, S. O.; and Yaro, F. A., 2019, "Effect of Demographic Factors on Impulse Buying Behaviour in Shoprite Shopping Mall Ilorin, Nigeria," 1st International Conference on Business and Governance, Faculty of Management Sciences, University of Lagos.

[2]. Abdullah, M.; Kalam, A.; and Akterujjaman, S. M., 2015, "Packaging Factors Determining Consumer Buying Decision," International Journal of Humanities and Management Sciences, 1(5), 285-289.

[3]. Ahmed, R. R.; Parmar, V.; and Amin, M. A., 2014, "Impact of Product Packaging on Consumer's Buying Behavior," European Journal of Scientific Research, 122, 125-134.

[4]. Borishade, T. T.; Ogunnaike, O. O.; Dirisu, J. F.; and Onochie, M. P., 2015, "Empirical Study of Packaging and Its Effect on Consumer Purchase Decision in a Food and Beverage Firm," European Journal of

Business and Social Sciences, 3(11), 44 – 53.

[5]. Budiardjo, H., 2016, "The Impact of Packaging Design to Purchase Behaviour Through Brand Trust," International Journal of Business and Management Invention, 5(1), 82-89.

[6]. Ghosh, B., 2016, "Impact of Packaging on Consumers' Buying Behaviour: A Case Study of Mother Dairy, Kolkata, Parikalpana," KIIT Journal of Management, 12(1), 63-59.

[7]. Hammed, S. O.; Kabir, T.; and Idris, B. H., 2018, "Effect of Branding on Consumer Buying Behaviour Towards Fast Moving Consumable Goods (FMCG)," Kogi Journal of Management, 6(1), 11-22.

[8]. Hammed, S. O.; and Abdulaziz, M. A., 2017, "Impact of Packaging on Sales Turnover of Chi Limited Products," Online Journal of Arts, Management and Social Sciences (OJAMSS), 2(3), 204-213.

[9]. Hammed, S. O.; and Auwal, Y. A., 2017, "Effect of Visual Display and In-store Promotion on Impulse Buying Behaviour Among Shoppers in Ilorin," Nassarawa Journal of Administration, 10(2), 27-35.

[10]. Israel, G. D., 2013, "Determining Sample Size," University of Florida.

[11]. Kothari, C. R.; and Gard, G., 2014, "Research Methodology; Methods and Techniques, New Delhi" New Age International Limited Publishers, 3rd edition.

[12]. Khan, S. K.; Rehman, F.; Sultan, F.; and Rashid, K., 2016, "Impact of Labeling and Packaging on Consumer Buying Behavior," Journal of Marketing and Consumer Research, 19(1), 13-21.

[13]. Li, D.; and Liu, J., 2014, "Dynamic Capabilities, Environmental Dynamism and Competitive Advantage: Evidence from China," Journal of Business Research, 67(1), 2793–2799.

[14]. Lifu, F. L., 2012, "An Analysis of the Effect of Product Packaging on Consumers' Buying Choice in Calabar Municipality, Cross River State, Nigeria," Asian Journal of Business Management, 4(2), 186- 191.

[15]. Mazhar, M.; Daud, S.; Bhutto, S. A.; and Mubin, M., 2015, "Impact of Product Packaging on Consumers Buying Behaviour: Evidence from Karachi," Journal of Marketing and Consumer Research, 16, 35-42.

[16]. Mehrabian, A. & Russell, J. A. (1974). An Approach to Environmental Psychology, MIT: Cambridge, MA.

[17]. Mousavi, S. A.; and Jahromi, M. M., 2014, "Examining the Relationship Between Packaging and Consumer Buying Behaviour (Case study: Comparison of Pasteurized 1.5l Milk of Brands Roozaneh and Mihan)," Indian Journal of Fundamental and Applied Life Sciences, 4(1), 1038-1044.

[18]. Olawepo, G. T.; and Ibojo, B. O., 2015, "The Relationship Between Packaging and Consumers Purchase Intention: A Case Study of Nestlé Nigeria Product," International Business and Management, 10(1), 72-81.

[19]. Poturak, M., 2014, "Influence of Product Packaging on Purchase Decisions," European Journal of Social and Human Sciences, 3(3), 144-150

[20]. Rose, S.; Spinks, N.; and Canhoto, A. I., 2015, "Formulae for Determining Sample Size," Management Research: Applying the Principles, 1–4.

[21]. Shah, S.; Ahmad, A. and Ahmad, N., 2013, "Role of Packaging in Consumer Buying Behaviour," International Review of Basic and Applied Sciences, 1(2), 35-41.

[22]. Suraj, K. S.; and Raveendran P. T., 2013, "Role of Packaging Cues on Consumer Buying Behaviour," International Journal of Engineering and Management Sciences, 4(1), 61-69.