

## EFFECT OF PRODUCT PACKAGING ELEMENTS ON PURCHASE BEHAVIOUR OF KADUNA POLYTECHNIC STUDENTS, KADUNA STATE

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### Abstract

*This paper examines the effect of product packaging on the purchase behaviour of Kaduna Polytechnic Students. A descriptive survey research design was adopted for the study. The study population consists of 17,732 students of Kaduna Polytechnic spread across the four colleges of the institution. Krejcie and Morgan's table of sample size determination was used to select 376 students as target respondents of the study. Structured questionnaire and personal interview were employed primary instruments used for data collection. Out of the 376 copies of questionnaire administered to the respondents only 360 questionnaire were returned while 16 were not returned. The collected data were analysed using multi regression statistical which were ran with the aid of SPSS version 23. Findings from the study showed that, product packaging elements: product shape/size, product colour and product wrapping materials have significant and positive effect on purchase behaviour of Kaduna Polytechnic Students, while product graphic design show a negative effect on purchase behaviour. In the light of this, the study therefore concluded that, packaging elements (product shape/size, product colour and product material) are inevitable pointers of purchase behaviour of Kaduna Polytechnic Students. The study therefore, recommended that manufacturing companies that want their products to compete favourably on a retail store, should concentrate their efforts on making the package of their products very attractive in order to attract, influence and retain the interest of their customers toward purchasing their products*

**Keywords:** Product Packaging, Packaging Elements, Purchase Behaviour

### 1. INTRODUCTION

In today's competitive business world, expansion of market, attraction of new customers, and even retaining existing customers are of great concern to many companies. The presence of the intense competitive pressures in the operating

environment makes organizations to use various methods of sales and marketing promotion in order to persuade, titillate and even force customers to buy their products or services. Some of these methods applied by these companies according to Rasheed, Olanipekun and Sydney (2015) include different strategies such as high quality, reasonable price, good services, good customer relation and so on to attract customer's satisfaction. Packaging also has been used by many companies as a marketing strategy to attract customer's satisfaction through the use of stylish and high-quality packages, to communicate effectively with the buyer to provide the substitute for product selection. According to Borishade, Oluseye, Favour and Prosper (2015) package has now become an ultimate selling preposition arousing impulsive buying behaviour of customers, increasing market share and reducing promotional costs. Now companies have realized that, for a product to travel safely through the channel of distribution it must have at least the minimum protection offered by the company through the use of containers, which is regarded as packaging.

The role of packaging is very critical in actual protection of fresh produce and processed food in transit, storage, at point of sale and prior to consumption (Borishade, et al 2015). Packaging of a product helps deliver a wide range of functions while reducing product waste. Packaging as a silent salesman is directed toward influencing the point of purchase buying decision through the package design, colour, shape, size etc. Most companies are aware of the effect of packaging on the buying behaviour of young people schooling in colleges, polytechnics and universities (Olawepo & Ibojo 2015). Packaging provides the manufacturer with the final opportunity to persuade young people prior to brand selection, because they are exposed to packages just as they are in other forms of promotion.

Despite the numerous and significant role of packaging at the center of promotion activities, the problem still remain that most marketing practitioners in developing economies like Nigeria have down-played the importance and relevance of product package design (Ladipo & Olufayo, 2011). Worst still, most manufacturers emphasize and eulogize only the product quality, but show little or no consideration for the package appearance. Some of them believed that emphasizing on quality packaging will attract more cost for the company while other manufacturers believed that, a good product sells itself without too much emphasis on its package. Recently, Manufacturer Association of Nigeria (MAN) in her 2018 annual general meeting in Lagos, advised their members to improve on the package quality of their products so as to compete with their foreign counterparts around the globe. This scenario really undermined the level of importance attached to packaging by most companies in developing economies like Nigeria. This is so because most of them do not really understand the powerful influence packaging elements possess on purchase behaviour of young people in Nigeria. More so, studies like (Chukwu & Enudu 2018:

Rasheed, Olanipekum & Sydney 2015: Borishade, et al 2015) investigated the effect of product packaging on consumer behaviour but, none of the study was conducted in any of the polytechnic in Nigeria.

It is therefore, against this background that this study is undertaken to investigate the Effects of Product Packaging Elements on Purchase Behaviour of Kaduna Polytechnic Students.

This study raised the following questions:

- i. what is the effect of product graphic design on purchase behaviour of Kaduna Polytechnic Students?
- ii. what is the effect of product packaging colour on purchase behaviour of Kaduna Polytechnic Students?
- iii. what is the effect of product packaging shapes and sizes on purchase behaviour of Kaduna Polytechnic Students? and
- iv. what is the effect of product wrapping materials on purchase behaviour of Kaduna Polytechnic Students?

The main objective of the study is to examine the effect of product packaging elements on purchase behavior Kaduna Polytechnic Students in Kaduna State, while the specific objectives are to:

- i. determine the effect of product graphic design on purchase behaviour of Kaduna Polytechnic Students;
- ii. examine the effect of product packaging colours on purchase behaviour of Kaduna Polytechnic Students;
- iii. investigate the effect of product packaging shapes and sizes on purchase behaviour of Kaduna Polytechnic Students; and
- iv. examine the effect of product wrapping materials on purchase behaviour of Kaduna Polytechnic Students.

The null hypotheses of the study were formulated in concordance with the above set out objectives.

H<sub>01</sub>: Product graphic design does not have significant effect on purchase behaviour of Kaduna Polytechnic Students.

H<sub>02</sub>: Product colour does not have significant effect on purchase behaviour of Kaduna Polytechnic Students.

H<sub>03</sub>: Product shape and size do not have significant effect on purchase behaviour of Kaduna Polytechnic Students.

H<sub>04</sub>: Product wrapping material does not have significant effect on purchase behaviour of Kaduna Polytechnic Students.

## 2 LITERATURE REVIEW

### Product Graphic Design

Miremadi and Faghani (2012) defined graphic design as an art or skill of combining text and pictures to create an image, which communicates a message to prospective customers in form of advertisement. Underwood, Klein and Burke (2001) posit that prospective consumers are likely to anticipate the tastes, feel or smell of a product while they look at the graphics design on a product package. In essence, a graphic design that produces attractive looks could highly attract prospective consumers and therefore influence their interest to buy such product. Also, Rundh (2009) says that an eye-catching graphics design would project a high image of the product on the retail shelves, which will titillate consumers' attention. Furthermore, a research study carried out by Rettie and Brewer (2000) revealed that the attractiveness of pictorial elements is likely influenced by the lateral position on the package of the product. The study further revealed that consumers are highly attracted to visual stimuli when placed at the left side of the package. Therefore, this may imply that visual elements should be positioned at the left side of packages to produce higher attention.

### Product Shape and Size

A shape represents the status or condition of a product while size simply means a specific set of dimension or an expression of how small or big a product appears. In a study conducted by Silayoi and Speece (2007), the study identified shape and size as crucial dimension in packaging attributes. The study argues that consumers use shape and size as simplifying visual heuristic to make volume judgments. The study reveals that consumers perceived a more elongated packages to be larger, even when they frequently purchase these packages and have experience using them. The shape of a product package is associated with the differentiation of the product's brand. This is because the design shape of a package has the tendency to influence consumers' purchasing decision (Sherwood, 1999).

According to Kotler and Keller (2008), frequent use of a product increases when packages are redesigned or available in larger sizes. In the view of Smith and Taylor (2004), packaging size depends on products features and the target market. Larger pack sizes convey better quality and increases impulse consumption (Keller, 2009).

### Product Colour

Colour represents spectral composition of visible light seen by the prospective consumers. It is another packaging attribute which affect several aspects of human life. Each property of colour type exerts certain signals which in turn permeate

through human neurological system, mental and psychological state. This justifies why a customer will show preference and respond positively to a particular product colour depending on the level at which such colour influence his neurological system. In view of this, Valentya, Lestari, Gotama, and Kumar (2014) suggest that, companies should decide on what colour combinations that can best be used to excite consumers to respond positively to their products. Consumer perceptions of an acceptable colour are associated with perceptions of other quality attributes, and also with satisfaction levels. Similarly, Gofman, Moskowitz and Mets, (2010) argues that, if company select the right colour for their product, it becomes a vital factor that can create an impression necessary to enhance the selection of product and brand by the consumers.

### **Product Material**

Product packaging material represents any tangible substance that is used to wrap any physical product to avoid the loss and damage of such product.

According to Annan (2018), material refers to the texture of the material for packaging commodity which mostly impacts the commodity packaging visual effect. Material, like other visual elements of packaging also communicates and consumers associate certain intrinsic values with the material of a product (Smith & Taylor, 2004).

Materials also symbolise the perceived quality of the product, meaning that the perception of consumers about some materials could be translated to the product's perceived quality. The wise use of various material surface changes or surface shape can enhance commodity packaging at the best effect. Furthermore, Adam and Kamran, (2014) posits that, material for packaging, whether, plastic, paper, metal, glass, bamboo, ceramic and wood, and other materials combined together, exhibit a different material texture quality effect on consumers' preference. In essence, using various materials and proper combination can provide customers with cold, luxurious or novel feeling. It is very important to note that companies that use high quality wrapping material increases the value of their product hence, customers will show positive preference for such products.

### **Consumer Purchase Behaviour**

Consumer purchase behaviour can be seen as those major decision processes as well as the actions the consumer takes in buying and using products. Whether or not the consumer realizes it, there is far more that goes into the buying process than simply

driving to the store and picking something off the shelf. There are mental and social processes that consumers go through that precede the actual act of purchasing. Willkie and Salmon (2016) define consumer behaviour as physical, emotional, and mental activities of a person when they choose, buy, use, and dispose a product and service in order to satisfy their needs and demands. Consumer purchase behaviour is also defined as set of activities done directly to acquire, consume, and dispose products and services. These activities include decisions taken before and after the purchase action.

Consumer purchase behavior is more controversial and challenging issue which includes individuals and what they buy, why they buy, how they buy, and from which market or combination of markets they buy. This makes the study of consumer purchase behaviour inevitable and its understanding very important. Therefore, having an in-depth knowledge of customers and their buying behaviour is of numerous advantages. By understanding customers, managers and marketers of a company could make the best decisions to meet customer needs and achieve the company goals.

## **2.2 Theoretical Review**

### **Gestalt theory of visual perception**

The underpinning theory for this study is the Gestalt theory founded by Kohler, Koffka and Wertheimer (1954). The theory principally allows communicator to predict how viewers will respond to design elements in its whole. Based on the Gestalt principles of form perception which specifically tried to explain human perception of groups of object and how they perceive parts of objects and form objects on the basis of their evaluation, Gestalt principles determines to bring to bear the regularities by which the input of the human perception is arranged into single forms. The key idea behind Gestalt theory of visual perception is the whole being other than the sum of the parts. Thus, when human beings see a group of objects, they perceive the objects in their entire whole before they see the individual objects. This, Bradley (2014) argues that human being sees the whole as more than the sum of the parts. Philosophically, the Gestalt school of thought proposes that human perception is the result of the relationship between stimuli, rather than the existence of the stimuli themselves. Again Bradley (2014) argues that visual perception is a function of our eyes and brain and that we see things as a whole rather than in parts. The parts of things usually constitute visual images including line, shape, texture and colour.

Fundamentally, the Gestalt theory of visual perception put in effort to comprehend the laws of our ability to achieve and keep intact meaningful perceptions in an

apparently dynamic world (Carlson, Miller, Heth, Donahoe, and Martin, 2010). In the perception environment, Gestalt psychologists posit that the products of complicated interactions among all stimuli is perception.

In relation to product packaging in marketing, the philosophical assumption of the Gestalt theory of visual perception implies that all combined into one entity (a picture of a package) produces a varied and strong meaning than its individual components (colour, shape etc, respectively). Hence the power of seeing individual elements as whole stimulate behaviour. Escher and Water (1938) argue that, in viewing the "whole," a process of cognition occurs where there is a leap of the mind from understanding the parts to seeing the whole. This study applies the Gestalts theory based on Schiffman & Kanuk (2000) argument that the theory is very essential in understanding the visual environment and its effect on human behaviour.

This indicates that consumers will take a final judgement of a product by considering its graphic design, shape and size, colour and product material as a whole which translate to purchase stimuli.

### **Empirical Review**

The study of Dunmade (2017) evaluated the impact of product packaging on consumer's purchase decision at Oba Market in Akure, Ondo State. The study data was presented using tables, simple percentages and the study hypotheses were tested using Chi-Square. The results showed that product packaging had a significant role to play in influencing consumer's patronage of such products and that product packaging features such as packaging colour, packaging materials, font style, design of the wrapper, printed information, background information, background image and innovation influenced the purchase decision of consumers at Oba Market in Akure, Ondo State.

Available literature also confirms the argument that product packaging elements are strong effective tools for influencing consumer purchase behaviour. The study by Oaya, Newman and Ezie (2017) investigated the impact of packaging on consumer buying behaviour in Nasarawa State. Descriptive research design was used in the study and 230 copies of questionnaire were distributed to the sample consumers of So-Klin detergent limited in selected locations of Nasarawa state. Ordinary least square (OLS) regression was used to analyze the data collected. Result analyzed shows that there is a positive significant relationship between product packaging elements (size, form, material, colour, graphics and brand) and consumer purchase behaviour.

Similarly, empirical evidence exists on the study conducted by Obinna and Horsfall (2016) who seek to determine the effect of table water packaging on consumer buying behavior in Port Harcourt, Nigeria. The study examines the attributes of packaging on consumer buying behaviour and the degree of relationship between purchase decision and packaging design elements of table water labels in Port Harcourt. The study was cross-sectional in nature and the identified dependent variables were brand loyalty, product liking, repeat purchase, product preference, positive word of mouth and consumer eagerness; while packaging color, Background Image, Packaging Material, Font Style, Design of wrapper, Printed Information, and Innovation are the independent variables. The study employs the descriptive survey research design. A sample size of 220 consumers of table water in Port-Harcourt were randomly selected and administered with questionnaire. Multiple regression analysis was used to analyse the data obtained from their responses, with the aid of SPSS version 23. The result of their findings indicates that product packaging elements shows a positive and significant relationship with consumer purchase behaviour. This confirms that packaging element influence consumers of table water purchase behaviour in Port-Harcourt.

Similarly, Annan (2018) conducted a research study aimed at investigating the effects of packaging characteristics on consumer perception about liquid soap in Ghana. The characteristics of packaging that were researched upon were categorised into two, namely visual and informational elements. The visual elements include size, colour, graphics, shape, and material, whereas the informational elements include origin of product, manufacture and expiry date, ingredient, regulatory body, and environmental concern. A survey research design was used and 500 respondents were randomly sampled and administered with questionnaire. Data collected from the respondents were analysed using multiple regression analysis with the aid of SPSS version 2.0. Results of the empirical data analysed indicate that all the six (6) independent variables which are the elements of packaging characteristics influences consumers' perception. These elements included information, size, colour, graphics, material, and shape in high-low order of influence.

Also, the research revealed that product size was identified as the most attractive visual element of packaging characteristics that influences consumers' perception about liquid soap. Furthermore, the research revealed that manufacture/expiry date was the most important informational element of packaging characteristics that influences consumers' perception about liquid soap. Clearly, these results relate to results of previous research in the same field. Most available literature in this field reveals that colour, shape, size, graphics and packaging material attract consumers' attention with few deviating depending on the context and the culture in which the research was carried out.

### 3 METHODOLOGY

This study employed descriptive and survey research design which is cross sectional in nature. Its advantages are that, it is cost effective and saves a lot of time (Sekaran, 2003). The population for this study consists of all registered Kaduna polytechnic students as at 2018/2019 academic section. A comprehensive list of students was obtained from the office of the Dean of student affairs. The total population of 17,732 students was drawn from the five (5) colleges; College of Administration and Social Science (CASS), College of Business and Management Studies (CBMS), College of Engineering (COE), College of Environmental Studies (CES) and College of Science and Technology (CST). The population distribution of the five colleges is shown in table 3.1 below.

Table 3.1 Population Distribution of Kaduna Polytechnic Student

| S/N          | Names of Colleges                           | Number of students | Percentage |
|--------------|---------------------------------------------|--------------------|------------|
| 1            | College of Admin. and Social Science (CASS) | 3,843              | 22         |
| 2            | College of Business and Mgt. Studies (CBMS) | 3,605              | 20         |
| 3            | College of Engineering (COE)                | 3,515              | 20         |
| 4            | College of Environmental Studies (CES)      | 1912               | 11         |
| 5            | College of Science and Technology (CST)     | 4,857              | 27         |
| <b>Total</b> |                                             | <b>17, 732</b>     | <b>100</b> |

**Source:** Dean of Students' Affairs Office Kaduna Polytechnic.

The sample size of 376 students was chosen for the study. Krejcie and Morgan (1970) table for determining sample was adopted to statistically select 376 respondents to serve as the sample size. The sample elements were subsequently selected from the study's population using stratified sampling method. The instrument employed for data collection was a questionnaire; closed ended questions. The questionnaire was designed in the form of five-point Likert scale adopted from the studies of Annan (2018) and Samreenlodhi (2015).

A total of 360 copies of questionnaire were returned and analysed out of the 376 copies of questionnaire administered to students across the five (5) colleges in Kaduna Polytechnic. Both descriptive and inferential statistics were adopted for data analysis in the study. The questionnaire administered was made of two sections. Section 'A' of the questionnaire was on the demographic characteristics of the respondents, Section 'B' contained both the independent and dependent variables.

The dependent variable (consumer purchase behaviour) was measured using 4 items developed by Samreenlodhi (2015). While for the independent variables: graphic design, product shape and size, product colour and product material were adapted from the study of Annan (2018). All responses were measured using five-Likert scale

ranging from 'strongly disagree' (1) to 'strongly agreed' (5). The use of 5-point Likert scale is necessary because Krosnic and Fabrigar (1997) posit that a scale of 5 to 7 points is more reliable and valid than shorter or longer scale. It is also an interval scale that enables a researcher to analyse questionnaire responses using parametric tools.

### 4 RESULTS AND DISCUSSION OF FINDINGS

Table 4.1: Summary of Regression Result

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |
| 1     | .576 <sup>a</sup> | .332     | .325              | .83197                     | .332              | 44.154   | 4   | 355 | .000          |

a. Predictors: (Constant), EPM, ESS, EPC, EGD

b. Dependent Variable: CPB

The result in table 4.1 above shows the R value of 0.576 or 58% which suggests a strong positive correlation between product packaging elements and purchase behaviour of Kaduna Polytechnic Students. The R square value of 0.332 suggests that the entire model has explained about 33% variation of purchase behaviour of Kaduna Polytechnic Students. Hence, the remaining 67% of variation can be explained by other factors outside the model.

Table 4.2 Summary of ANOVA

| Model      | Sum of Squares | Df  | Mean Square | F      | Sig.              |
|------------|----------------|-----|-------------|--------|-------------------|
| Regression | 122.251        | 4   | 30.563      | 44.154 | .000 <sup>b</sup> |
| Residual   | 245.724        | 355 | .692        |        |                   |
| Total      | 367.975        | 359 |             |        |                   |

a. Dependent Variable: CPB

b. Predictors: (Constant), EPM, ESS, EPC, EGD

The result in table 4.2 above reveals the regression equation represented by a set of regression coefficients that in total, are statistically significant, shows an 'F cal' of 44.154 and a significance value of 0.000 (or  $p < .01$ ). This indicates the fitness of the model. The implication is that product packaging elements provided by manufacturing companies are strong factors that influences purchase behaviour of Kaduna Polytechnic Students.

**Table 4.3 Coefficients of the Predictor Variables**

| Model                 | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|-----------------------|-----------------------------|------------|---------------------------|--------|------|
|                       | B                           | Std. Error | Beta                      |        |      |
| (Constant)            | 25.816                      | .935       |                           | 27.599 | .000 |
| Graphic design (GD)   | -.253                       | .064       | -.179                     | -3.929 | .870 |
| Shape and size (SS)   | .284                        | .034       | .385                      | 8.339  | .000 |
| Product colour (PC)   | .287                        | .040       | .322                      | 7.245  | .000 |
| Product material (PM) | .233                        | .038       | .272                      | 6.166  | .000 |

a. Dependent Variable: CPB

#### Test of Hypothesis One

H<sub>01</sub>: Product graphic design does not have significant relationship with purchase behaviour of Kaduna polytechnic students.

Table 4.3 the result shows the contribution of product graphic design on purchase behaviour of Kaduna Polytechnic Students. The beta weight of graphic design was -.179 with a negative P-value of 0.870 (p .01) which suggests that graphic design is not a product packaging element that influences purchase behaviour of Kaduna Polytechnic Student. Thus, the null hypothesis which stated that product graphic design does not have significant relationship with purchase behaviour of Kaduna polytechnic students is accepted.

#### Test of Hypothesis Two

H<sub>02</sub>: Product colour does not have significant effect of purchase behaviour of Kaduna Polytechnic Students.

As showed in table 4.3 product colour with a beta weight of .322 and a significant P-value of 0.000 (p<.01) has a strong positive relationship with purchase behaviour of Kaduna Polytechnic Students. It applies that, any good product colour used by manufacturing company influences consumer purchase behaviour. Therefore, we reject null hypothesis, which states that product colour does not have significant effect of purchase behaviour of Kaduna Polytechnic Students.

#### Test of Hypothesis Three

H<sub>03</sub>: Product shape and size do not have significant effect on purchase behaviour of Kaduna Polytechnic Students.

Also, in the regression result in table 4.3, product shape and size have a beta weight of .385 with a P-value of 0.000 (p<.01) shows a positive and significant relationship with purchase behaviour of Kaduna Polytechnic Students. The result therefore provide evidence for rejecting hypothesis three which states that product shape and size do not have significant effect on purchase behaviour of Kaduna Polytechnic Students.

#### Test of Hypothesis Four

H<sub>04</sub>: Product wrapping material does not have significant effect on purchase behaviour of Kaduna Polytechnic Students.

Similarly, the result in table 4.3 shows the contribution of product wrapping material on purchase behaviour of Kaduna Polytechnic Students. The beta weight of product wrapping material was .272 with a significant P-value of 0.000 (p<.01), which suggests that product wrapping material is a strong packaging element that affect purchase behaviour of Kaduna Polytechnic Students. Thus, the null hypothesis which stated that product wrapping material does not have significant effect on purchase behaviour of Kaduna Polytechnic Students is rejected.

#### Discussion of Research Findings

Based on the results of the analysis, particularly the results of the test of hypotheses. For instance, the result in hypothesis one, uncovered that product graphic design showed an insignificant effect on purchase behaviour of Kaduna Polytechnic Students. This finding is similar to the studies conducted by (Ksenia, 2013: Otterbing, Shams, Wastlund & Gustafsson 2013) However, the study contradicted the results of (Dunmade 2017: Adam & Ali, 2015) who in their studies concluded that product graphic design have significant effect on the purchase decision of consumers at Oba Market in Akure, Ondo State.

The study also discovered that product colour was significantly connected with purchase behaviour of Kaduna Polytechnic Students. The study is in accordance with the related studies whose results were positive like (Anna 2018: Samreenlodhi 2015: Jyoti, and Dibyojyoti 2010). The implication of their finding is that consumers tend to buy a particular product whose colour is appealing to them. The finding of the study is contrary with the findings of (Bradley 2014: Gofman & Moskowitz, 2010)

whose studies showed an insignificant effect of product colour on purchase behaviour.

Also, the study found that Product shape and size have significant association with the purchase behaviour of Kaduna Polytechnic Students. This suggests that the variable is well recognized by the students as a good predictor that influence purchase behaviour. This finding concurs with the findings of (Dunmade 2017: Miremadi & Faghani 2012) which provide evidence of a positive association between product shape and size and consumer purchase behaviour. Nevertheless, finding of the study, deviated from the results obtained by Mustsikiwa & Marumbwa (2013) who found that product shape and size do not have a significant effect on consumer purchase behaviour.

Finally, the study discovered wrapping material having a positive and significant effect on purchase behaviour of Kaduna Polytechnic Students. The result of the study is in line with the findings of (Oaya, Newman & Ezie 2017: Deliya, 2012). This infers that a company that uses better wrapping material will enjoy high purchase of their products. On the contrary, studies conducted by (Rasheed, Olnipekum & Sydney 2015: Rundh 2005), found wrapping material as a variable with insignificant effect on purchase behaviour.

## 5 CONCLUSION AND RECOMMENDATIONS

In conclusion, the study was carried out to examine the effect of product packaging elements on purchase behaviour of Kaduna Polytechnic. Four hypotheses were developed for the study and the scope of the study was limited to Students of Kaduna Polytechnic. Their responses were collected and multiple regression was used to analyse the data. The study found that, product graphic design has no significant effect on purchase behaviour, while product shape and size, product colour and product wrapping material have significant effect on purchase behaviour of Kaduna Polytechnic Students.

Based on the findings of the results, the study recommended that:

- i. Managers of manufacturing companies should concentrate their efforts on developing quality package of product that is very attractive in order to attract the interest of their customers.
- ii. Manufacturing companies must pay attention when developing their products. The shape and size of their product should be modified to conform with portability and easy to carry.
- iii. Manufacturing companies should introduce more fascinating colours to their products this will attract the attention of more customers to their products.

- iv. Manufacturing companies should exploit other forms of packaging material such as Aluminum, metal, glass, bamboo, ceramic and wood, to consolidate on the commonly used paper material and plastic materials. If they are properly combined together, they exhibit a different material texture quality effect on consumers' preference.

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