

# PRODUCT DIFFERENTIATION AND CONSUMERS' PREFERENCE FOR HOUSING ESTATES AMONG CLIENTS IN HOUSING SECTOR

BY

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## **Abstract:**

*The study investigated the effect of product differentiation and consumers' preference for Housing Estate among clients in Lagos State, Nigeria. It specifically examines the effect of housing design; infrastructure; price and environment on clients' preference for a housing estate. The study population comprises of clients in the selected housing estate in Lekki area of Lagos State. A total of 400 questionnaires was administered out of 393 were returned using convenience and judgmental sampling techniques were used. Data collected were analyzed using multiple regression analysis. The study revealed that housing design ( $\beta=0.784$  &  $0.818$ ,  $p=0.02 < 0.05$ ) have the strongest statistically significant among the predictors of preference for a housing estate of other dimensions of product differentiation in this study. Next in strength of influence among the predictors is infrastructure attributes ( $\beta=0.626$  &  $0.624$ ,  $p=0.045 < 0.05$ ). Also, environment which returned the lowest regression coefficient among the significant dimensions of product differentiation is considered to effect lesser influence on preference for Housing Estate with ( $\beta=0.361$  &  $0.372$ ,  $p=0.015 < 0.05$ ) while price ( $\beta=-0.058$  &  $-0.079$ ,  $p=0.117 > 0.05$ ) was discovered to exert no statistically significant effect on preference for Housing Estate in Lagos State, Nigeria. The study concluded that the dimensions of product differentiation (Design, Infrastructure and Environment) have a strong and significant influence on preference for Housing Estate in a competitive environment. Thus, the management should give utmost priority to product differentiation dimensions in relation of their significance in order to achieve firm objectives and having a competitive advantage over their competitors by providing a durable driven design, quality infrastructure that stands the test of time, and a friendly and conducive environment. Also that the higher the level of differentiation, the more acceptability of the Housing Estate brand and the likelihood of being patronage, and competitive edge over others.*

**Keywords:** Product, differentiation, consumer, preference,

## **Introduction**

The contemporary Nigerian Housing Estate is very dynamic and has evolved tremendously from its original state to the present state, both in the Urban and Rural areas. We operate in a dynamic environment that is unpredictable and challenging (Aloku, 1998). The Nigerian Housing sector is challenging and still remains challenging that competition has grown in the real estate of the housing sector in both Urban and Rural areas where Housing Estate is growing readily. In today's tense

shortages of good inhabitable accommodations with infrastructure have become a major concern to all stakeholders. This has made real estate to capitalize on this housing shortages in establishing housing estates all over to minimize the problems in Urban areas. Thus, product differentiation has become a major concern for firms, the clients' decision-making process is a complex one which is structured in hierarchical pattern and clients' prioritize options before making a decision. Numbers of challenges and opportunities faced by the present-day real estate were outlined in relation to changes in customers' attitudes and behavior, competitive forces, marketing efficiency, and effectiveness and internal firms' dynamics (Keller, 2013) also noted that the key challenges in today's environment are the vast number of information clients consult. In view of competitive environment Oyatoye, Adebisi and Amole (2013) posit that globalized competition has the strategic importance of quality, satisfaction and consequently loyalty, in the battle for winning consumers' preference and maintaining sustainable competitive advantages. The higher the perceived quality, the more satisfied and loyal the customers are, quality in relation to the product (building) is regarded as one of the critical elements of competitiveness (Shararch & Fauziah, 2012).

The housing estate is no exemption and has made a serious and conscious effort towards establishing and maintaining a good relationship with the clients with the aim of winning their preference and increasing profitability. However, the vast majority of real estate clients have made a conscious effort in having in a personal relationship with their estate valuer. Thus, choosing an appropriate estate valuer becomes an important part of the clients because most of the valuers are fraudulent in nature. For this reason, it is important for the estate valuer to provide quality infrastructures, maintain standards in order to attract new clients, by providing adequate and functional durable infrastructure in their houses, which meets the required expected standard of the clients. The client is affected by price, quality of building and infrastructure, brand image and environment. These factors affect primarily the new clients who are, by nature, influenced easily by their peers and tend to make hasty and abrupt decisions. However, the popularity of housing estate among clients is a global phenomenon and Nigeria is not an exception. Interest in a housing estate and their acquisition is rampant within the middle class in particular.

Differentiation is seen as buyers' perception of perceived product values differences, hence, it aids the consumers in distinguishing a product in the mix of competing for similar products in the market. In marketing, literature differentiation is a strategy that firms use to position and reposition their offerings in the market, which presents unique features, design or infrastructure that is not common to competitors' offerings (Kotler, 2009). Positioning is an act of designing the company's offering and image to occupy a distinctive place in the mind of the target market (Clients).

In view of high competition, differentiation strategy becomes necessary for real estate valuer to target potential segment of the market positively and effectively deliver unique offerings that give the desired satisfaction as expected by the client. The real estate valuers adopt differentiation to create value to stakeholders by focusing on the

cost value of the product and other similar products in the market. There are many social and interpersonal factors that influence customers to decide about the housing estate they want to for. Consumer behavior is affected by lots of variables, ranging from personal motivations, needs, attitudes and values, personality characteristics, socio-economic and cultural background, demographic profile, professional status, social influences of various kinds exerted by family, friends, peer groups, colleagues and society as a whole (Liu, 2002). This indicates that consumers' behavior plays a greater role in purchase intention and buying decisions. This is collaborated by Kotler's (2004) study that for the organization to position their products effectively in the market, they should be able to know and understand the consumers they want to reach, in terms of what motivates their purchase decision.

Considering the classical problem-solving buying process behavior, consumers go for information Search before making a purchase decision (Kotler & Keller, 2016). The common behavior exhibits linking the previous likings for some specific alternatives is due to its, features in terms of infrastructures (Chernev, 2007). A company's physical product offering may be highly differentiated on features not provided by competitors in the same industry, some differentiate their product on performance which is based on functionality of the infrastructures, professional credibility in terms designs and quality structures etc. while others may differentiate their physical product on attributes such as innovation, design, consistency, packaging, price and durability (Shafiwu & Mohammed, 2013). Furthermore, the effect of differentiating a product may not necessarily be in terms of financial gains but mostly, for certain benefits that enhance the value creation process of the firm (Soomro 2013). Research had shown that preference between Housing estates is affected by new designs, infrastructural innovative features, and Environment (Liu, 2002). Despite the empirical evidence on the effect of product differentiation on the preference for housing estates, the study is faced with the challenges of determining the impact of design, infrastructure, price, and environment on preference for housing estates among clients in Lagos State. In view of the above, this study intends to determine the possible influence of the product differentiation sub-variables such as design, infrastructure, price, and environment may have on customer preference for housing estates among clients in Lagos State, Nigeria.

### **Conceptual Clarification**

#### **Product Differentiation:**

Considering the changing nature of the world today, an increasing complication of the market and environment, dynamism among organizations and their survival in the competitive system. Product differentiation becomes necessary for organizations to engage in. Product differentiation is pervasive in marketing as a positioning strategy that many firms use to distinguish their products from those of competitors. (Lamb, Hair, & McDaniel, 2009). Berkowitz (2002) defined product differentiation as an inn using different marketing mix activities such as product features and advertising to help the consumer perceive the product as being different and better than competing products. The perceived differences may involve physical features or non-physical ones such as design, infrastructure, image, price, and environment. A firm's physical

product offering may be highly differentiated on features not provided by competitors in the same industry. On the other hand, firms may differentiate their physical product on attributes such as innovation, consistency, durability, reliability, and reparability (Shifawu & Mohamed 2015). The purpose of differentiation is to show that the product is unique, and therefore, valued by customers.

### **Parameters of Product Differentiation:**

#### **Design:**

As innovation is centrally concern for organizations hence Real estate valuers are faced with the challenges of mobilizing the innovative design's potential of their employees in order to be relevant in the environment. Innovation is an idea, practice or object that is perceived as new by an individual or another unit of adoption (Rogers, 2003). As the firm can develop, exploit the innovative potential and mobilized its knowledge to create a niche for themselves in the environment with high returns on investments (Getz & Robinson, 2003).

**Infrastructure:** It is observed that, in general, the definition of durable facilities in terms of the infrastructure is linked to two aspects: the ability of the product to perform its' intended functions (physical nature in term of materials, facilities' functionality) and the ability to accomplish the expectancies of the users (consumer psychological on facilities). However, How durability the infrastructures and their functionality goes long way influencing the client's perception and gives an assessment of the overall quality of such infrastructure as compared to its competitors (Aaker, 2004), which leads to attitudinal preference and commitment forming (Keller, 2013).

**Environment:** The International standards, organization (ISO) technical report (2002) on integrating environmental aspects of product design and development defined the design for durability as considering the product's longevity, reparability and maintainability, considering environmental improvements emerging from new technologies, in terms of functionality, defining the product's lifespan and extending the services associated with the infrastructure can reduce adverse environmental impacts (ISO, 2002) that shows how well the environment suits the purpose for which it is intended, in terms of people being closer to nature useful for life span. Environment matters a lot for clients in choosing housing estate, also it appeared in relation to beautification which increases the status. Some clients who have class want to belong to such estate

**Price:** Price in literature is a function of class ad many things and no matter the price of a product, some people will not be able to pay, while others are willing to pay any amount because they perceived the value to worth because of the social class. Conversely, it simply being cheap is not enough, the product must meet some level of expected performance (Kotler 2009). In some situations, how expensive a product it makes it more desirable than a lower price. However, price awareness had been found to vary from one customer group to another (Kotler & Armstrong, 2016). Some certain social class are more likely to search for, and uses' price information consciously (Zeithanel, 1985). Many consumers use price as an indicator for quality, Image and

pricing are especially effective with ego sensitive Kotler 2009 cited in (Kotler& Keller, 2016).

**Consumer Preference:** Customer preference is about the state of mind and choices among valued options with acceptance indicating a willingness to tolerate the status quo (Grune-Yansoff, 2013). Therefore, customer's preference can be regarded as an individual's attitude towards a set of objects, which reflects on an explicit decision-making process (Lichtenstein & Slovic in 2006as cited in Kotler& Armstrong, 2016). On the other hand, could be interpreted in term of evaluative judgment in the sense of liking or disliking of an object, Preference is dynamic in nature but can be notably modified by decision-making process, such as choice (Sharot, De Martino, & Dolan, 2009), even in an unconscious way (Sander & Porcherot, 2010). Brand preference is a measure of brand loyalty in which consumers will not change a particular brand in the presence of competing brands. But will accept substitution when the brand is not available (Amadi & Ezekiel, 2013).

**Theoretical Framework:** The study is anchored on the Preference theory because is relevant for this study and the theory is concerned with the direction of attitude change. It provides a reasonable explanation of phenomena of interest and predicts how consumers' separate attitudes towards product differentiation in the eyes of consumers are reconciled in evaluating the combined attributes. The theory relates to the choice of consumption and kind of expenditures, in relation to the consumer demand curve. It analyzes how consumers achieve equilibrium between preference and expenditures by minimizing utility as subject to consumer budget constraints and preferences. It presumes that the consumers are motivated enough to adjust both their expectation and their brand performance perception. Thus, asserting that the consumer will try to minimize the expectation and performance discrepancy. The study of Isac and Rusu (2014) depicts that satisfaction is a function of the magnitude of the discrepancy between expected and perceived value (performance). Similarly, Ekinci and Sirakaya (2004) illustrated that consumers seek to avoid dissonance by adjusting perception about brands, in order to align with their expectations.

### **Research Method**

The descriptive research design was adopted using a cross-sectional survey method of questionnaire administration. The population of the study comprises clients of selected Housing Estate in Lekki area of Lagos State, convenience sampling techniques were used to select the appropriate housing estate in Lekki area of Lagos State. Also, judgmental sampling techniques were used to enhance the efficient administration of the study instrument only on the desired respondents who are actual clients and have a history of usage over time. A structured questionnaire with a six-point modified format of the Likert scale was used for the data collection. Instrument validation, both face and content validity were subjected to experts for appropriately fine-tuned questionnaire items in relation to the suitability of the study. Cronbach Alpha reliability coefficient for the constructs ranges between (0.75 and 0.86) respectively. Both descriptive and inferential statistics were used to analyze various data collected

for the study, the descriptive statistics include: frequency and simple percentage and inferential statistics of multiple regression analysis were used.

**Model Specification:** The linear equations model was formulated capturing the variables of product differentiation (design, infrastructure, price, and environment). A total of 21 items were used for the analysis. The multiple regression analysis was used to establish the influence of product differentiation parameters which are the independent variables (design, infrastructure, price, and environment) on the dependent variable (Consumer Preference).

To determine the influence of product differentiation on consumer preference for smartphones, the model adapted from Adaramola, (2012) was employed as:

$$CP = f^1 (PD) \dots\dots\dots(1)$$

$$CP = f^1 (DS, IF, PR, EN) \dots\dots\dots(2)$$

$$CP = \beta_0 + \beta_1 DS + \beta_2 IF + \beta_3 PR + \beta_4 EN + e \dots\dots\dots(3)$$

Where: CP=Consumer Preference, DS= Design,IF=Infrstrature, PR= Price, EN= Environment,  $\beta_0$  = Regression Intercept,  $\beta_1, \beta_2, \beta_3, \beta_4$ = coefficients of Independent variables.

**Analysis and Results**

**Ho 1:** *Design has no effect on Preference for Housing estate among clients in Lagos State*

**Table 1: Regression Analysis for Hypothesis One**

| Model      | Summary of Statistics |                |                    |           |       | Coefficients |           |      |        |      |
|------------|-----------------------|----------------|--------------------|-----------|-------|--------------|-----------|------|--------|------|
|            |                       |                |                    |           |       | Unstd.       |           | Std  |        |      |
|            | R                     | R <sup>2</sup> | Adj R <sup>2</sup> | Std error | DW    | B            | Std Error | B    | T      | Sig. |
| Constant   | .818                  | .714           | .711               | .352      | 1.736 | 3.925        | .144      |      | 27.193 | .000 |
| Innovation |                       |                |                    |           |       | .784         | .036      | .818 | 2.344  | .020 |

- a. Dependent Variable: Client Preference
- b. Predictors: (constant), Design (Ho I)

The regression table explained the relationship between clients’ perception of housing design and clients’ preference. From table1, the R (correlation Coefficient) gives a positive value of 0.818<sup>a</sup>; this indicates that there is a high positive correlation between the clients’ perception of housing design and clients’ preference. The R<sup>2</sup> is a portion of the totals variation in the dependent variable that is explained by the variation in the independent variables. From the results obtained, R<sup>2</sup> equal to 0.714, this implies that there is also highly positive linear relationship between the perceived housing design and clients’ decision in the choice of housing estate patronage, and this is further proven by the adjusted R<sup>2</sup> that showed the relevance of the model with a value of 0.711, implying

that when all errors are corrected and adjustments are made the model can account for 71.1% of clients' preference for housing estate. The value of Durbin Watson statistics is 1.736 which showed autocorrelation in the model due to large sample, the result showed that the null hypothesis is rejected and accepts otherwise i.e. Clients' perception of housing design influenced their consumer preference and housing estate choice.

From table 1, the unstandardized and standardized  $\beta$  co-efficient of clients' perception of housing design gave a positive value of 0.784 and 0.818 respectively with a T-test value of 2.344 and significance value ( $0.02 < 0.05$ ). These results showed that perception of housing design has a great significant influence on clients' preference for a housing estate. The result is synonymous with the work of Mokhlis and Yaakop (2012) that concludes that preference for housing estate is a function of housing design and was recommended. Also, Ling and Salvendy (2006) found housing design and innovation as factors influencing the choice. This means that respondents' reason for making the choice is strongly and positively influenced by the perceived innovation and housing design.

Based on Significant, the column in table 1, the p-value for the clients' perception of housing design for housing estate is 0.020 which is less than 0.05, indicating that the variable has a significant relationship with clients' preference. The regression equation of the model is

$$CP = 3.925 + 0.784 DS$$

Where CP= Clients Preference, DS=Design

Based on the result obtained, the innovation attribute has a significant influence on Clients' housing estate preference, as it has a positive beta value ( $\beta$ ). This means that if other variables held constant, housing design will increase and determine clients' decisions on choices at 0.784 (78.4%).

**Table 2: Analysis of Variance (ANOVA)**

| Model      | Sum of Square | Df  | Mean Square | F      | Sig                |
|------------|---------------|-----|-------------|--------|--------------------|
| Regression | .679          | 1   | .679        | 15.493 | 0.020 <sup>b</sup> |
| Residual   | 48.338        | 391 | .124        |        |                    |
| Total      | 49.017        | 392 |             |        |                    |

An analysis of variance (ANOVA) was used to test whether there is a significant linear relationship between the client's perception of housing design and the clients' preference on the housing estate, and it is noted that the ANOVA table shows a high-level significance. The F-test was used to test the overall significance of a model by comparing the F-calculated with the F-tabulated, the comparison is done on table 2.

**Table 3** **F-test**

|              |             |        |        |              |
|--------------|-------------|--------|--------|--------------|
| F calculated | F tabulated | Ho     | Hi     | Remark       |
| 15.493       | 2.751       | Reject | Accept | Significance |

In table 3, the calculated value of F-distribution gave a value greater than the F-tabulated. Hence, we accept Hi and reject Ho.

Ho 2: Infrastructure has no effect on preference for housing estates among clients in Lagos State.

**Table4: Regression Analysis for Hypothesis Two**

| Model          | Summary of Statistics |                |                    |           |       | Coefficients |           |      |        |      |
|----------------|-----------------------|----------------|--------------------|-----------|-------|--------------|-----------|------|--------|------|
|                |                       |                |                    |           |       | Unstd.       |           | Std  |        |      |
|                | R                     | R <sup>2</sup> | Adj R <sup>2</sup> | Std error | DW    | B            | Std Error | β    | T      | Sig. |
| Constant       | .642                  | .602           | .599               | .354      | 1.685 | 4.155        | .128      |      | 32.539 | .000 |
| Housing design |                       |                |                    |           |       | .626         | .032      | .624 | 1.834  | .045 |

- a. Predictors: (Constant), Infrastructure (Ho 2)
- b. Dependent Variable: Client Preference

The regression table explains the relationship between Infrastructure and client preference. From table4, the R (correlation coefficient) gives a positive value of 0.642, this indicates that there is a positive correlation between Infrastructure and client preference. From the results obtained. R<sup>2</sup> is equal to 0.602, this implies that there is positive linear relationship between the Infrastructure and clients' preference for housing estate that is, it can only account for 60.2% clients' decision in the choice on housing estate patronage, this is further proved by the adjusted R<sup>2</sup> that showed the goodness of fit of the model which gave a value of 0.599, implying that when all errors are corrected and adjustments are made, the model can only account for 59.9% of Infrastructure in clients' preference. The value of Durbin Watson statistics is 1.685 showed autocorrelation in the model due to the large sample, the result showed that the null hypothesis is rejected and accepts otherwise i.e. Infrastructure influence clients' preference for Housing estate.

From table 4, the unstandardized and standardized β co-efficient of clients' perception of infrastructure gave a positive value of 0.626 and 0.624 respectively with the T-test value is 1.834 and significance value (0.045 < 0.05). These results showed that Infrastructure has a great significant influence on Housing Estate preference among clients of Lagos State. This is similar to the work of Sata(2013) which showed the six important factors i.e. price, social group, product features, brand name, and infrastructure are the major factors that determine preference for Housing estate.

The P. value in table 4 shows that Infrastructure is 0.045 which is less than 0.05, indicating that the variable has a significant relationship with clients' preference.

The regression equation of the model is stated as:

$$CP = 4.155 + 626IF$$



Where CP= Client Preference, IF= Infrastructure

Based on the result obtained, the Infrastructure attribute has a significant impact on clients' Housing estate preference, as shown by the positive  $\beta$ . This means that if other variables are held constant, Infrastructure will increase and determine clients' decisions on choices on Housing Estate by 0.626 (62.6%).

**Table 5: Analysis of Variance (ANOVA)**

| Model      | Sum of Square | Df  | Mean Square | F     | Sig               |
|------------|---------------|-----|-------------|-------|-------------------|
| Regression | .087          | 1   | .087        | 2.696 | .045 <sup>b</sup> |
| Residual   | 48.929        | 391 | .125        |       |                   |
| Total      | 49.017        | 392 |             |       |                   |

An analysis of variance (ANOVA) is used to test whether there is a significant linear relationship between Infrastructure and preference for Housing Estate among the clients. And it is noted that the ANOVA table showed high-level significance.

**Table 6 F-test**

| F calculated | F tabulated | Ho     | Hi     | Remark       |
|--------------|-------------|--------|--------|--------------|
| 15.493       | 2.751       | Reject | Accept | Significance |

In table 6, the calculated value of F-distribution gave a value greater than the F-tabulated. Hence, we accept Hi and reject Ho.

**Ho 3:** *Price has no effect on preference for Housing among clients in Lagos State*

**Table 7: Regression Analysis for Hypothesis Three**

| Model      | Summary of Statistics |                |                    |           |       | Coefficients   |           |             |        |      |
|------------|-----------------------|----------------|--------------------|-----------|-------|----------------|-----------|-------------|--------|------|
|            | R                     | R <sup>2</sup> | Adj R <sup>2</sup> | Std error | DW    | Unstd. $\beta$ | Std Error | Std $\beta$ | T      | Sig. |
| Constant   | .079                  | .006           | .004               | .353      | 1.710 | 4.491          | .148      |             | 30.436 | .000 |
| Innovation |                       |                |                    |           |       | -058           | -037      | -079        | -1.572 | .117 |

- b. Predictors: (Constant), Infrastructure (Ho 3)
- c. Dependent Variable: Consumer Preference

The regression table explained the relationship between price and client preference. From table 7, the R (correlation Coefficient) gave a positive value of 0.079, this indicates that there is a low but positive correlation between the price and preference among clients. From the results obtained R<sup>2</sup> is equal to 0.06, this implies that there is also low and positive linear relationship between price and clients' preference for Housing Estate that is, it can only account for 6% clients' housing purchase decision with reference Housing's price, this is further proven by the adjusted R<sup>2</sup> that shows the goodness of fit of the model which gives a value of 0.004, implying that when all errors

are corrected and adjusted the model can only account for 4% of clients preference for Housing Estate. The value of Durbin Watson statistics is 1,710 showed the autocorrelation or inclusive region in the model due to large sample, the result showed that the null hypothesis is accepted not otherwise that is price do not influence clients' preference for Housing Estate.

From table 7, the unstandardized and standardized co-efficient of  $\beta$  students' perception of price gives a negative value of -0.058 and -0.079 respectively with a T-test negative value of 1.572 and significance value ( $117 > 0.05$ ). These results showed that price has an inverse relationship and not significant. This means that respondents' reason for choices of Housing Estate is not necessarily influenced by the price.

Table 4.8 showed the P. value for the price is 0.117 which is greater than 0.05, indicating that the variable has no significant impact on clients' preference. The regression equation of the model is stated as:

$$CP = 4.491 - 0.058PR$$

Where CP= Client Preference, PR= Price

Based on the result obtained, the price attribute has no significant influence on clients' Housing Estate preference, as it gave negative  $\beta$ . This means that if other variables held constant, the price will not necessarily induce or influence clients' decisions on choices of Housing Estate by 0.058 (5.8%). The result is synonymous to the work of Malasi(2012) that concluded and affirms that the price of a Housing Estate is not a major determinant of preference because the choice of different users varies and more so, despite the special price offer, alternative payment condition and reduced-price function of price, preference for Housing Estate is still based housing design, infrastructure, and other noticeable amenities.

**Table 8: Analysis of variance (ANOVA)**

| Model      | Sum of Square | Df  | Mean Square | F     | Sig               |
|------------|---------------|-----|-------------|-------|-------------------|
| Regression | .308          | 1   | .308        | 2.470 | .117 <sup>b</sup> |
| Residual   | 48.709        | 391 | .125        |       |                   |
| Total      | 49.017        | 392 |             |       |                   |

An analysis of variance (ANOVA) is used to test whether there is a significant linear relationship between price and the clients' preference of Housing Estate, and it is noted that the ANOVA table shows a higher level of significance than 0.05 (5%).

**Table 9 F-test**

| F calculated | F tabulated | Ho     | Hi     | Remark       |
|--------------|-------------|--------|--------|--------------|
| 2.470        | 2.751       | Reject | Accept | Significance |

Table 9 showed that the calculated value of F-calculated distribution gave a value lesser than the F-tabulated. Hence, we accept Ho and reject otherwise.

**Ho4:** *Environment has no effect on preference for Housing Estate among clients in Lagos State*

**Table 10: Regression Analysis for Hypothesis Four**

| Model          | Summary of Statistics |                |                    |           |       | Coefficients |           |      |        |       |
|----------------|-----------------------|----------------|--------------------|-----------|-------|--------------|-----------|------|--------|-------|
|                |                       |                |                    |           |       | Unstd        |           | Std  |        |       |
|                | R                     | R <sup>2</sup> | Adj R <sup>2</sup> | Std error | □     | β            | Std Error | β    | T      | Sig.  |
| Constant       | .572                  | .505           | .480               | .376      | 1.806 | 4.488        | .169      |      | 26.579 | .000  |
| Housing design |                       |                |                    |           |       | .361         | .043      | .372 | 2.422  | .1157 |

- d. Predictors: (Constant), Infrastructure(Ho 4)
- e. Dependent Variable: Client Preference

From table 10, the R (correlation coefficient) gave a positive value of 0.372; this indicates that there is a positive and moderate correlation between the Environment of Housing Estate and client preference. From the results obtained, R<sup>2</sup> is equal to 0.505, this implies that there positive linear relationship between environment and clients' preference for Housing Estate, that is, it can only account for 50.5% clients' preference for Housing Estate, this is further proven by the adjusted R<sup>2</sup> that showed goodness of fit of the model which gave value of 0.480, implying that when all errors are corrected and adjusted, can account for 48% of Environment in clients' preference and purchase decision in Lagos State. The value of Durbin Watson statistics is 1.806, showed auto-correction in the model due to large sample, the result showed that the null hypothesis is rejected and otherwise accepted alternative (Environment influenced clients' preference for Housing Estate).

From table 10, the unstandardized and standardized β co-efficient of students' perception of Environment gave a positive value of 0.361 and 0.372 respectively with the positive t-test value is 2.422 and significance value (0.015<0.05). These results showed that the environment has a great significant influence on Housing Estate preference among clients in Lagos State.

Table 10 showed that P. Value for the Environment is 0.015 which is less than 0.05, indicating that the variable has a significant relationship with clients' preference. The regression equation of the model is stated as:

$$CP = 4.488 + 0.361 EN$$

Where CP= Client Preference, EN= Environment

Based on the result obtained, the Housing Estate attribute has a significant influence on clients' preference, as it showed positive β. This means that if other variables held constant, Housing Estate will influence clients' decisions for Housing Estate by 0.361 (36.1%).

**Table 11: Analysis of variance (ANOVA)**

| Model      | Sum of Square | Df  | Mean Square | F     | Sig               |
|------------|---------------|-----|-------------|-------|-------------------|
| Regression | .286          | 1   | .286        | 2.023 | .015 <sup>b</sup> |
| Residual   | 55.726        | 391 | .141        |       |                   |
| Total      | 55.562        | 392 |             |       |                   |

An analysis of variance (ANOVA) is used to test whether there is a significant linear relationship between price and the clients' preference of Housing Estate in Lagos State. And it is noted that the ANOVA table showed a higher level of significance  $.015 < 0.05$  (5%).

**Table 12 F-test**

| F calculated | F tabulated | Ho     | Hi     | Remark       |
|--------------|-------------|--------|--------|--------------|
| 2.023        | 2.751       | Reject | Accept | Significance |

In table 12, the calculated value of F-distribution gave a value greater than the F-tabulated. Hence, we accept Hi and reject Ho.

### Discussion of Findings

From the findings of the research hypotheses, it was observed that most of the independent variables (product differentiation) proxies (Design, Infrastructure, Environment) except price variable exert significant influence on Housing Estate preference among clients in Lagos State. This was revealed and further proven by the regression coefficient (R, R<sup>2</sup>, and Adj. R<sup>2</sup>) at a 5% level of significance coupled with the T-test and F-distribution value. The following can be deduced from the tested hypothesis; Housing design has a significant influence on preference for Housing Estate among clients in Lagos State. Infrastructure has a positive significant influence on preference for Housing Estate in Lagos State.

Price has no significant influence on preference for Housing Estate in Lagos State.

Environmental attributes are significant and positively influence preference for Housing Estate in Lagos State.

With regard to the results of the regression analysis on hypothesis one, the housing estate variable illustrated significant relationship with clients' preference. This aligned with the work of Mokhlis and Yaakop (2012) that concludes that preference for Housing Estate is a function of housing estate and recommendations.

From the results of hypothesis two, housing estate indicated that there is a positive correlation with clients' preference. This is reflected in the work of Sata (2013) who used six important factors to determine preference for Housing Estate and a housing estate was found to be one of the major factors for preference for Housing Estate.

Hypothesis four was to test the influence of Environment attributes and was found to have a positive significant influence on preference for Housing Estate among clients.

This is in line with the works of ISO (2002) who found that the attraction of the Environment influences choice.

Based on the results obtained in hypothesis three, the price was discovered to exert no significant influence on clients' Housing Estate preference, as it has a negative beta value. This implies that price will not necessarily increase or influence clients' decisions on choices of Housing Estate. This result is synonymous with the work of Malasi (2012) that concluded and affirms that the price is not necessarily influenced by choice.

### **Conclusion and Recommendations:**

**Conclusion:** This study analyzed the influence of product differentiation on clients' preference for Housing Estate among the clients in Lagos State. The study provides an overview of an emerging trend in the Housing Estate sector of the economy. It highlighted the dimensions of product differentiation that strategically enhance the brand (Housing Estate) repositioning in view of the stiff competition. The results of the data analysis based on related literature revealed that adequate usage of these product differentiation dimensions gives the Real estate valuer, a competitive edge over their competitors in the housing sector. The findings of the study show that product differentiation dimensions optimally affects the influence of clients' Preference for Housing Estate in the environment.

It could, therefore, be said from the findings that housing design attributes were strongest among the constructs of product differentiation under observation, followed by infrastructure and environment respectively in relation to client's commitment on the perception of satisfaction among Housing Estate especially in the faces of high involvement of choice. Therefore, Real estate valuer, should give utmost priority to Housing design, quality Infrastructure and conducive and friendly Environment to attract the clients for their marketability and patronage. However, it is observed that only price was returned as a non-significant predictor of clients' preference for Housing estate among the constructs of product differentiation investigated in the study. This does not mean that Real estate valuer should overlook price as not being significant because clients are really concerned based on the economic factors, Estate valuer should make price attractive and affordable. This indicates that product differentiation has a strong role to play in the marketing environment whether in a competitive environment or not.

**Recommendations:** Consequently, the study recommends that Real estate valuer, clients, policymakers, as well as other stakeholders who engages in researching on product differentiation in relation to having a healthy and conducive housing estate for clients, need to provide durable driven design, quality infrastructure that stands the test of time, and conducive and friendly environment that brings nature closer to the people in their housing estate for healthy living. Also, to achieve a competitive edge, they should engage in building design with distinctive features, more innovative infrastructure, a friendly and conducive environment because the higher the level of differentiation, the more acceptability the Housing Estate brand and the likelihood of patronage and a competitive edge over others.

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