

Determinants of Cost of Students Houses in the Buea Municipality

Baninla Nicholas¹, Kongson Killian², Veuphuteh Francis³, Atabongkeng Lionel⁴, and Isuma Lyonga⁵

¹Instructor of Management, University of Buea, Cameroon

²M.Sc in Management, University of Buea, Cameroon

³M.Sc in Marketing, Hacettepe University, Turkey

⁴M.Sc in Management, University of Buea, Cameroon

⁵M.Sc in Management, Robert Gordon University, UK

Abstract— The importance of housing to a country or nation and its people has gained greater attention. Student housing problem worldwide is assuming a greater scale especially with the creation of schools in all parts of the countries around the world. Based on the absence or little presence of policies, land owners randomly evaluate the property and charges unaffordable values with the assumptions that there is no alternative, depending on the need, tenants have to accept it. In this light, this study sort to investigate the determinants of cost of students' houses in the Buea Municipality. The main objective was to examine the determining role of housing facilities, construction materials, government supervision, proximity to campus, security, property taxes and deliberate raises on the cost of students houses in Buea. This study adopted the survey research design where primary data was collected from 300 university students renting in Buea through the uses of questionnaires. The random sampling technique was used in selecting the 300 respondents. The collected data was analyzed through both descriptive and inferential statistics. The findings of the study showed that housing facilities, proximity to campus, security, and deliberate raises all had significant effects on the cost of students' houses. Also, the study found out that construction materials, property taxes and government supervision do not determine the high cost of students houses in the Bues Municipality.

Keywords— Housing Facilities, Construction Materials, Government Supervision, Proximity, security, Property Taxes, Deliberate Raises and on the Cost of Students Houses.

I. INTRODUCTION

In recent years, the world's population is in a constant increase as per every country and nation. The importance of housing to a country or nation and its people has gained greater attention. There is a rise in the demand for houses all round the world and greatly associated to this rise in the demand for houses is a change in the prices of houses. Housing has great impact on the welfare and productivity of individual within the society (Abram, 1966). Housing is a multidimensional good differentiated into a package of attributes that differ in both quantity and quality (Wickramaarachchi, 2016). Among those searching for houses, a significant proportion is made up of students. Student housing problem worldwide is assuming a greater scale especially with the creation of schools in all parts of the countries around the world. Real estate property is complex in nature; that is, it is made up of many unique sets of characteristics that influence its value wherever it is located (Nma, 2020). Adegoke (2014) reported that the value of a real estate property is influenced by several independent attributes.

Student housing is considered a precise type of accommodation constructed for the specific use of students while pursuing their education with the objective of creating an environment that supports living and learning (Omunagbe, 2015). Students' housing is acknowledged as one of the crucial components of tertiary institutions as well as an exceptional residential property. The accessibility of accommodation for students enables tertiary institutions to draw an immense number of students of diverse nationalities and backgrounds to pursue higher education (Zotorvie, 2017). Academic productivity of students is considered highly dependent on available facilities and services for the students. Among the basic facilities which can enhance the academic productivity of students of tertiary institution is decent housing. Shahid et al (2012) noted in their study that contribution of sustainable housing facilities on and off campus should be given ample consideration if students' performance is to be improved. Based on the study of Akinyode (2015), increase in rents in student's areas is accounted for by short supply, high income areas, strategic location, inflation and landlord's decisions. In the words of Razak

et al. (2017), an excellent housing and decent accommodation play an important role in healthy living and guide to improved productivity especially those in higher level of educational institutions, who require sound accommodation in a tranquil environment for proper assimilation of what they have been taught.

The student housing system worldwide, Africa and Cameroon in particular has witnessed an unprecedented transformation, such that private off-campus student housing facilities are now the primary source of accommodation for students. A researchable relationship exists between the demand for student houses, the private provision of the houses and the amount of rent charged for these houses.

Cameroon has eleven state Universities spread out in her national territory of which one is located in Buea-South West Region. Alongside this state University in Buea (University of Buea), there are many private professional Higher Institutions operating in Buea. The existence of these institutions have led to the construction of many student houses for the students. The Government of Cameroon constructed student Hustles for students in the University of Buea. Based on the absence or little presence of a policies, land owners randomly evaluate the property and charges unaffordable values with the assumptions that there is no alternative, depending on the need, tenants have to accept it. In this light, the private individuals also constructed many privately owned hustles for the students in Buea. The Government of Cameroon warned landlords over rice hikes at varsity residential areas where landlords in various student residential areas were called upon to respect the homologated prices for rents (journal du Cameroun, 2021).

Despite the increasing number of students' houses being constructed to satisfy the students demand for houses, it has been observed in the Buea Municipality that the prices of houses are in a constant increase. In this light, this study is out to investigate the actual cause of this increase in the prices of student houses.

II. REVIEW OF LITERATURE

1. Theoretical Review

The Theory of Basic Human Values

The Theory of Basic Human Values was developed by Schwartz in 1987. This theory applies across the worlds' population because across the globe, people are facing conflicts between certain values that must be prioritized,

motivating their actions such as housing preferences which are personal and unique. When connected to the Schwartz' value system structure, it explains that values are vital influencers of the attitude and the behaviour of an individual. The author derived ten value domains that claim to be motivational and culturally universal. These are: Power (social power, wealth); Achievement (success, ambition); Hedonism (pleasure, enjoying life); Stimulation (daring, exciting life); Self-direction (independence, curiosity); Universalism (social justice, unity with nature); Benevolence (helping, true friendship); Tradition (modesty, devoutness); Conformity (politeness, self-discipline); Security (family security, cleanness). There is evidence in the research that human values affect decision-making process vis-à-vis residential options. For instance, those that assign the high significance to hedonism and low to the universalism in general prefer the practicable neighborhoods with many activities happening in the area round the clock.

Means-End Chains (MEC) Theory

This theory was developed by Gutman 1982. This theory assumed that people make decisions apropos buying products (housing) based on how they help them achieve their life goals (education). The prospective consumer in deciding whether to buy a product, identifies the good to be a means to important ends. The theory further assumed that people make decisions based on the attribute (features of the good), its consequences (benefits and liabilities the good causes) and values (emotionally preferred benefits). It creates a hierarchical chain that drives the decision-making process.

The chain usually begins with a concrete attribute, that is a physical feature that can be pointed to, such as "rent". Else, it may start with a nonconcrete attribute, which usually is the effect of the multiple concrete attributes, such as "privacy". These attributes usually have a functional consequence, that is what the product does for the person, such as "better sleep quality". The psychological consequences are expressing how the person feels after consuming the product, for instance "feel good about myself". The terminal values are representing the life aspirations of the person, while instrumental values are helping to achieve them. For instance, in order to reach a terminal value of "successful career", a person could aspire to be "hardworking", which is an instrumental value that would be boost career progression.

2. Conceptual Framework and Hypotheses

Figure 1 shows the interrelations between the various determinates and the high cost of students houses. These

determinants include; housing facilities, construction materials, government supervision, proximity to campus, security, taxes and deliberate raises.

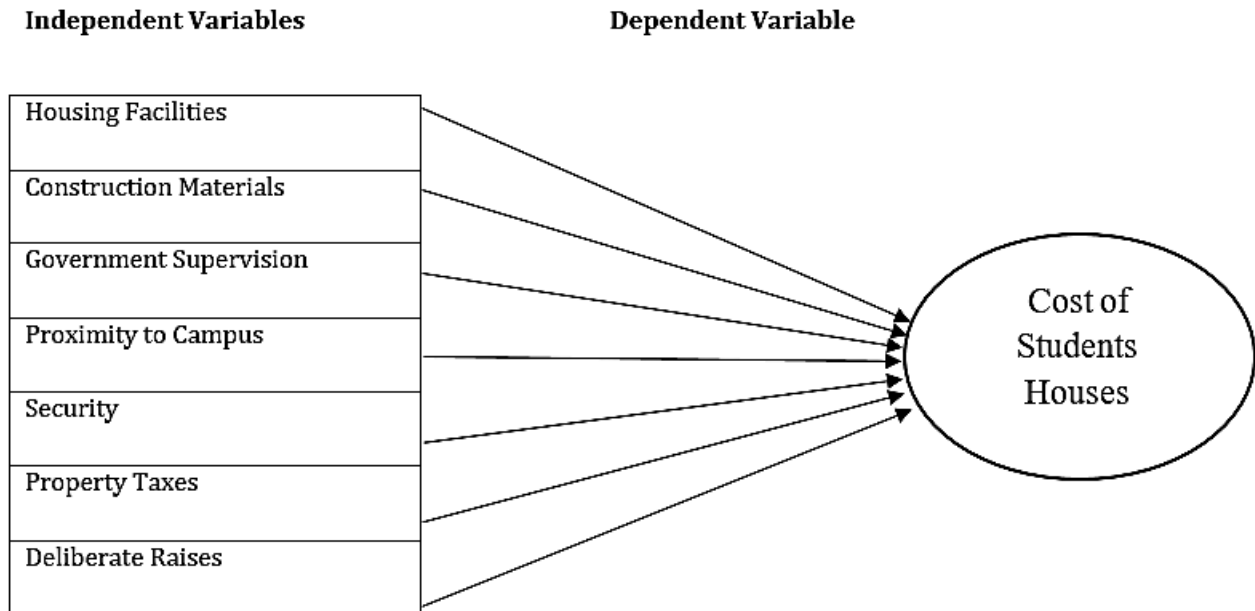


Figure 1: Conceptual Framework of Determinants of High Cost of Student's Houses

Source: Authors Conception (2024)

Based on the conceptual framework and on the determinants of cost of students houses, the following hypotheses were developed or formulated;

Table 1: Hypothesis

H01	Housing Facilities do not significantly determine the cost of students' houses in the Buea Municipality.
H02	Construction Materials do not significantly determine the cost of students' houses in the Buea Municipality.
H03	Government Supervision does not significantly determine the cost of students' houses in the Buea Municipality.
H04	Proximity to Campus does not significantly determine the cost of students houses in the Buea Municipality.
H05	Security does not significantly determine the cost of students houses in the Buea Municipality
H06	Property Taxes do not significantly determine the cost of students houses in the Buea Municipality.
H07	Deliberate Raises do not significantly determine the cost of students houses in the Buea Municipality

III. METHODOLOGY

The survey research design was adopted for this study. The primary source of data was used for this study through the uses of questionnaires. The choice of this source of data was due to the fact that it is first hand data collected by the researcher at the exact time of usage. The population of this study is was made up of all the students that live and pay rents in the Buea Municipality. This population is so large and unknown due to the fact that there is a state university and many private universities operating in the Buea Municipality. In this light, a sample of 300 university students were selected for the study through the random sampling technique.

Estimation Technique: This study used both the descriptive and inferential statistics in order to analysis the data collected using questionnaires (the data coded and transformed into quantitative data).

With focus on the inferential statistics, the ordinary least square (OLS) regression technique of analysis was used. Most specifically, the multivariate regression that gives room for many independent variables to be regressed on the dependent variable.

Model Specification

Dependent Variable (Y) = Cost of Students Houses

Independent Variables = Housing Facilities (HF), Construction Materials (CM), Government Supervision (GS), Proximity to Campus (PC), Security (S), Property Taxes (PT) and Deliberate Raises (DR)

$$(Y) = f (HF, CM, GS, PC, S, PT \text{ and DR}) \dots \dots \dots (1)$$

$$Y_i = \beta_0i + \beta_1HF_i + \beta_2CM_i + \beta_3GS_i + \beta_4PC_i + \beta_5S_i + \beta_6PT_i + \beta_7DR_i + \mu_i \dots \dots \dots (2)$$

Where β_0 is the constant term while $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7 are the parameters to be estimated and μ is the error term or stochastic term.

IV. FINDINGS

Table 2: Regression on Determinants of Cost of Student's Houses

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	**1.108	0.560		1.978	0.049
Housing Facilities	**0.078	0.038	0.070	2.069	0.039
Construction Materials	-0.016	0.043	-0.014	-0.367	0.714
Government Supervision	***-0.142	0.073	-0.080	-1.960	0.051
Proximity to Campus	*0.406	0.054	0.319	7.452	0.000
Security	*0.360	0.057	0.269	6.282	0.000
Property Taxes	*-0.245	0.068	-0.171	-3.607	0.000
Deliberate Raises	*1.259	0.058	0.699	21.800	0.000
R	0.890a				
R-square	0.792				
Adjusted R2	0.787				
F(7, 292)	158.787				
Sig	.000b				

a. Dependent Variable: High Cost of Student's Houses
* = 1% level of Significance, ** = 5% and *** = 10% Level of Significance

Based on Table 2, the value of Adjusted R-square is 0.787. This value of Adjusted R-square illustrates the fact that 78.7% changes in cost of students houses is accounted for by the inclusive variables (housing facilities, construction materials, government supervision, proximity to campus, security, property taxes and deliberate raises) while only 21.3% of the changes in high cost of students houses is accounted for by the error term. These results are good illustrating the fact that the responses given by the respondents indicate that the inclusive variables determine the high cost of students houses in the Buea Municipality. The ANOVA results illustrate the fact that the regression equation in the model fits the data. Results show that $F(7, 292) = 158.787$, P-value of 0.000b is less than 0.01. This indicates that the overall regression model statistically predicts the outcome variable (there is goodness of fit).

H_{01} : Housing Facilities do not Significantly Determine the Cost of Students Houses in the Buea Municipality

In line with the regression results presented in Table 2, the coefficient of housing facilities is positive (0.078).

This implies that an increase in housing facilities will lead to a corresponding increase in cost of students houses. Specifically, a one unite increase in housing facilities in the Buea Municipality will lead to a 0.078 units increase in the cost of student's houses. The results of housing facilities are significant at 5% level of significance because the P-value is less than 0.05 ($p < 0.05$). Based on these results, we fail to accept the hypothesis that housing facilities do not significantly determine the high cost of student's houses in the Buea Municipality.

H_{02} : Construction Materials do not Significantly Determine the Cost of Students Houses in the Buea Municipality

The coefficient of construction materials is negative (-0.016). This implies that an increase in construction materials will lead to a corresponding drop in cost of student's houses. Specifically, a one unite increase in construction materials in the Buea Municipality will lead to a 0.016 units fall in the cost of student's houses. The results of construction materials are insignificant

because the P-value is greater than 0.05 ($p > 0.05$). We accept the hypothesis that construction materials do not significantly determine the high cost of student's houses in the Buea Municipality.

H₀₃: Government Supervision does not Significantly Determine the Cost of Students Houses in the Buea Municipality

The coefficient of government supervision is negative (-0.142). This implies that an increase in government supervision will lead to a corresponding drop in cost of student's houses. Specifically, a one unite increase in government supervision in the Buea Municipality will lead to a 0.142 units fall in the cost of students houses. The results of government supervision are also significant at 10% level of significance because the P-value is less than 0.1 ($p > 0.1$). In this light, we fail to accept the hypothesis that government supervision does not significantly determine the high cost of student's houses in the Buea Municipality.

H₀₄: Proximity to Campus does not Significantly Determine the Cost of Students Houses in the Buea Municipality

The coefficient of proximity to campus is positive (0.406). This implies that an increase in proximity to campus will lead to a corresponding increase in cost of student's houses. Specifically, a one unite increase in proximity to campus in the Buea Municipality will lead to a 0.406 units increase in the cost of students houses. The results of proximity to campus are significant at 1% level of significance because the P-value is less than 0.01 ($p < 0.01$). Based on these results, we fail to accept the hypothesis that proximity to campus does not significantly determine the high cost of student's houses in the Buea Municipality.

H₀₅: Security does not Significantly Determine the Cost of Students Houses in the Buea Municipality

The coefficient of security is positive (0.360). This implies that an increase in security will lead to a corresponding increase in cost of student's houses. More precisely, a one unite increase in security in the students neighborhood in the Buea Municipality will lead to a 0.360 units increase in the cost of students houses. The results of security are significant at 1% level of significance because the P-value is less than 0.01 ($p < 0.01$). Based on this, we fail to accept the hypothesis that

security does not significantly determine the high cost of student's houses in the Buea Municipality.

H₀₆: Property Taxes do not Significantly Determine the Cost of Students Houses in the Buea Municipality

The coefficient of property tax is negative (-0.245). This implies that an increase in property tax will lead to a corresponding decrease in cost of student's houses. Specifically, a one unite increase in property tax in the students houses in the Buea Municipality will lead to a 0.245 units decrease in the cost of students houses. The results of property tax are significant at 1% level of significance because the P-value is less than 0.01 ($p < 0.01$). Also, we fail to accept the hypothesis that property taxes do not significantly determine the high cost of student's houses in the Buea Municipality.

H₀₇: Deliberate Raises do not Significantly Determine the Cost of Students Houses in the Buea Municipality

The coefficient of deliberate raises by house owners is positive (1.259). This implies that a deliberate raise in prices by property owners will lead to a corresponding increase in cost of student's houses. Specifically, a one unite increase in deliberate raises in the students houses in the Buea Municipality will lead to a 1.259 units increase in the cost of students houses. The results of deliberate raises are significant at 1% level of significance because the P-value is less than 0.01 ($p < 0.01$). Judging by these results, we fail to accept the hypothesis that deliberate raises do not significantly determine the cost of student's houses in the Buea Municipality.

V. DISCUSSION OF RESULTS

There is a positive and significant effect of housing facilities, proximity to campus, security, property tax, government supervision and deliberate raises on the cost of student's houses in the Buea Municipality (Table 2). Meanwhile there is a negative and insignificant effect of construction materials on the cost of students houses in the Buea Municipality. This significance of the results is accounted for by the fact that the respondents who were students of various universities renting houses in the Buea Municipality indicated that the inclusive variables determined the cost of students houses in the Buea Municipality. This could be explained by the fact that, buildings do not have constant water supply, buildings do not have constant electricity supply and buildings do not have constant cable supply. Also, this could be as a

result of the fact that, the government does not step in to regulate prices of houses, the government does not set policies that protect students from rents abuse, their buildings are closest to their schools and houses closest to school are more expensive.

The results of this study are in line with the Theory of Basic Human Values which was developed by Schwartz (1987). That is, students that assign a high significance to hedonism and low to the universalism in general prefer the viable neighborhoods with a lot of activities happening in the area round the clock as it helps them stay away from thieves there by guaranteeing security. This security aspect and location increases the cost of students houses in the Buea Municipality. Also, the results of this study are in line with the Means-End Chains (MEC) Theory as developed by Gutman (1982). That is, people make decisions based on the attribute (facilities, location, security and comfortability), its consequences (benefits and liabilities the good causes) and values (emotionally preferred benefits) which all of these in the Buea Municipality come with extra cost.

VI. CONCLUSION

This paper had as main focus to investigate the determinates of cost of students houses in the Buea Municipality. The various determinants that were tested in this study were housing facilities, construction materials, government supervision, proximity to campus, security, taxes and deliberate raises. With multivariate regression used in this study, the following conclusions were arrived at. It was concluded that housing facilities, proximity to campus, security and deliberate raises all had positive significant effects on the cost of students houses in the Buea Municipality. Equally, this study also revealed that construction materials, property taxes and government supervision do not determine the high cost of students' houses in the Buea Municipality as they had insignificant effects. Therefore, it is recommended that the Government of Cameroon intervenes in this housing issue by setting maximum rates as per the type of houses. When this is done, the issue of deliberate raises shall be handled.

REFERENCES

[1] Adegoke, O. J., Aluko, B. T., & Adegoke, B. F. (2017). Determinants of Market Value of Residential Properties in Ibadan Metropolis, Nigeria. 11.

- [2] Akinyode, B. F., Khan, T. H. and Ahmad, A S. (2015). Socio-Economic Factors in Measuring the Demand for Residential Neighbourhood in Nigeria. *Journal of Asian Social Science*. Vol. 11. Pgs 235 – 247.
- [3] Gutman, J (1982). A Means-End Chain Model Based on Consumer Categorization Processes. *Journal of Marketing*. Vol. 46, No. 2 (Spring), pp. 60-72 (13 pages).
- [4] Nma, D. Y. (2020). A Study of the Determinants of Rental Values of Students Accommodation around the Federal Polytechnic Bida. *Journal of Env. Design & Constructions Mgt. JECM* Vol. 20 (4) 2020 ISSN – 2278-8892.
- [5] Razak, F. A., Shariffuddin, N., Padil, H. M., & Hanafi, N. H. (2017). Phenomenon Living in Off-Campus Accommodation among UiTM Students. *International Journal of Academic Research in Business and Social Sciences*, 7(6). <https://doi.org/10.6007/IJARBS/v7-i6/3038>
- [6] Simpeh, F. and Akinlolu, M. (2018). Importance level of on-campus Student Housing Facility Spaces: Perception of Postgraduate Students. Conference: 10th Cidb Postgraduate Conference At: Port Elizabeth, South Africa.
- [7] Shahid, A., Wilkinson, K., Shai, M. and Shapiro, C. M. (2012). STOP, THAT and one hundred other sleep scales. DOI:10.1007/978-1-4419-9893-4. ISBN: 978-1-4419-9892-7
- [8] Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53(3), 550–562. <https://doi.org/10.1037/0022-3514.53.3.550>.
- [9] Wickramaarachchi, N. (2016). Determinants of rental value for residential properties: A land owner's perspective for boarding homes. *BuiltEnvironment Sri Lanka*, 12(1), 10. <https://doi.org/10.4038/besl.v12i1.7612>
- [10] Zotorvie, J. S. T. (2017). Students' Accommodation and Academic Performance: The Case of Ho Technical University, Ghana. *European Scientific Journal, ESJ*, 13(13), 290. <https://doi.org/10.19044/esj.2017.v13n13p290>