STUDENTS' WILLINGNESS TO PAY FOR IMPROVED ACCOMMODATION FACILITIES: A CASE OF THE COLLEGE OF BUSINESS EDUCATION, TANZANIA.

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ABSTRACT

Purpose: This study explores the students' Willingness to Pay (WTP) for improved accommodation facilities using the case of the College of Business Education (CBE) in Tanzania.
Design/Methodology/Approach: The Contingent Valuation Method (CVM) was used to estimate the value that the students attach to the accommodation facilities. A survey was conducted on the two campuses of Mbeya and Dodoma involving a sample of 348 students out of the total population of 3618 continuing students from the two campuses. An interviewer-administered questionnaire was used to elicit the information from the respondents. In the analysis, the binary logistic regression was conducted to estimate the parameters for the students' WTP for the accommodation facilities and then the parameter estimates were used to compute the mean students' WTP.
Findings: The findings of the study showed that the significant determinants of the students' WTP for accommodation facilities included age of the students, education level of the student, current accommodation of the student, students' preference for accommodation, income of the students and the campus dummy (Mbeya campus).
Research Limitations: The study findings are limited by the fact that its scope included only one higher learning institution. The inclusion of more than one higher learning institution could yield a sounder conclusion. Besides this, the study is also limited by the ability of the applied methodology (CVM) in measuring WTP. Future studies can consider using other stated preference approaches like the Choice Experiment Method or a revealed preference method like the Hedonic Pricing Method.
Practical Implications: The findings of this study will be useful to decision-makers in higher learning institutions when allocating resources for improving accommodation facilities for the students. The study therefore first recommends that the determinants of the students' valuation of the accommodation facilities should be considered when allocating accommodation facilities to the students in higher learning institutions. Secondly, higher learning institutions should attach equivalent value to the students' accommodation facilities by improving the facilities to meet the needs of the students.
Social Implications: Students at CBE attach higher values to the accommodation facilities than the value attached to the services by the College. It also sends a signal that for the campus with no in campus hostels, the need for accommodation facilities is more pressing and thus receives a higher value (WTP).
Originality / Value: This study has contributed to the pool of knowledge in this area as it has unveiled the students' valuation of (WTP for) accommodation facilities in higher learning institutions, especially in Tanzania where there are scanty works of literature on the same area.
Keywords: Contingent; Students' Accommodation; Valuation Method; Willingness to pay, Hostel

1.0 INTRODUCTION

1.1. Background and Statement of the Problem

Students' accommodation stands out to be one of the most important facilities for students, especially at the tertiary levels of education. Studies have shown that apart from providing the students with a friendly environment for studying which influences their academic performance, good students accommodation influences their personal growth and behaviour, (Devi, Binti Mohamad Ashari, Binti Abd Rashid, Bin NurAdlan, & Bin Mohamed Musadiq, 2016). Besides this, good students accommodation can increase enrolment and retain students on campus, (Marshak, Van Wieren, Ferrell, Swiss, & Dugan, 2010).

Studies, (Accardo, Kuder, & Woodruff, 2019; Gopal & van Niekerk, 2018; Mzileni & Mkhize, 2019) have shown that inadequate students accommodation facilities are one of the key elements that may lead to exclusion in education, especially for the vulnerable groups of students. Among the most vulnerable groups impacted by inadequate students accommodation facilities is the group of female students. this is why some studies have also contended that good students accommodation can increase female students enrolments, (Marshak et al., 2010).

Provision of adequate accommodation facilities to tertiary students has continued to be a great challenge to many higher learning institutions in the world, (Mzileni & Mkhize, 2019; Spio-Kwofie, Anyobodeh, & Abban, 2016). This challenge has been aggravated by the increasing number of enrollments in higher learning institutions and the increased preferences for better learning environments, (Mulhearn & Franco, 2018)

However, it is worth noting that despite the importance of accommodation facilities to higher learning students, some of the higher learning students have been preferring off-campus private accommodation facilities to on-campus accommodation facilities, (Verhetsel, Kessels, Zijlstra, & Van Bavel, 2017). The literature has found out that the students' preferences for accommodation facilities are influenced by some factors including proximity to the College, the availability of services such as fast internet, academic services, facility to cook meals, ability to live with friends, safety and social atmosphere, (Accardo et al., 2019; Gopal & van Niekerk, 2018). These could be some of the factors that may explain the reason why still students prefer off-campus accommodation facilities despite having in-campus accommodation facilities in some higher learning institutions.

This study focuses its analysis on the College of Business Education (CBE) which is a public higher learning institution in Tanzania with four campuses across the country. For this study, the two campuses of Dodoma and Mbeya were considered. The College provides accommodation to the students of all levels of study within in-campus hostels on the Dodoma campus while on the Mbeya campus the College provides accommodation through off-campus hostels rented by the College. The College has been making efforts for making the internal accommodation facilities a better choice for the College students as these are comparatively more adequate in providing a better learning environment to the College students.

Despite the presence of the hostels and the efforts being done by the College to make the hostels a better choice of accommodation for the students, the proportion of the students living in the

hostels both at the Dodoma and Mbeya campuses has not been promising. Although some of the off-campus hostels are located far from the campuses and are sometimes more expensive than the College (In campus) hostels, still some students prefer to live off-campus. This might be emanating from the reasons mentioned in the literature, (Ashley et al., 2018; Verhetsel et al., 2017). However, before making this conclusion, two important questions emanate. Firstly, are the students at CBE influenced by the same factors in choosing accommodation facilities? Secondly, does the College attach enough value to the accommodation facilities to attract them in-campus? The answer to these questions will unveil the determinants of the students' preferences (WTP) for accommodation facilities and more importantly, it will uncover the value that students attach to the accommodation facilities so that the relevant authorities can use it as a proxy for the improvements that need to be done on the higher learning accommodation facilities to attract more students in the campus.

The general objective of this study, therefore, was to investigate the Students' willingness to pay for improved accommodation facilities. Specifically, the study intended firstly to analyse the determinants of the student's willingness to pay for improved accommodation facilities and secondly to estimate the value that students place on the improved accommodation facilities.

2.0   LITERATURE REVIEW

2.1   Theoretical Literature Review

The Contingent Valuation Method (CVM) is a stated preference method that originates from the microeconomics and welfare economics theories of Compensatory Variation and Equivalent Variation. The first measurement, (compensating variation) is how much the consumer would have to compensate to offset a price change to let the consumer remain on the same utility curve. The second measure, (equivalent variation) on the other hand, is how much one needs to take from the consumer to harm the consumer as much as the new price so that he will be on the new lower utility curve, (Perman, Ma, Mcgilvray, & Common, 2003).

From the students' accommodation point of view, the compensating variation will be that the student would be asked how much of his / her income he/she would be willing to give up to improve the accommodation facilities up to the desired standards. Using the compensating variation will reveal how much the students are willing to pay (WTP) to have improved hostel facilities. On the other hand, the equivalent variation would imply that the student is asked how much additional income he/she would be willing to accept (WTA) to forego the improved hostel facilities or in other words remain at the *status quo*. This study made use of the compensating variation technique in which the students were asked to state their WTP for improved accommodation facilities up to the desired standards.

2.2   Empirical Literature Review

Several studies have been done addressing accommodation facilities. Some of them specifically have addressed accommodation facilities in tertiary academic institutions, among others include, (Accardo et al., 2019; Bland & Charity, 2018; Card & Thomas, 2018; Gopal & van Niekerk, 2018; Magambo, Dida, & Kaijage, 2020; Mzileni & Mkhize, 2019; Philip, Ileanwa, & El-Hussain, 2018). These studies have addressed the importance of good accommodation to students, especially at the tertiary level. They have also shown the impacts of having no or poor accommodation for students.

Among other impacts, these include drug abuse, early sexual relationships, less concentration on studies and other impacts related to poor security and guidance. However, none of these studies has estimated the students' WTP for improved accommodation facilities.

Some other studies,(Khan, Thaheem, & Ali, 2020; Lee & Yoo, 2019; Zhang, Chen, Wu, Xue, & Dong, 2018); have addressed the customers' value of accommodation facilities and specifically, they have made the use of the CVM. However, these papers concentrated mostly on general housing facilities. None of them was addressing the accommodation facilities for students. Unfortunately, no study has been found addressing the WTP for accommodation facilities among the higher learning institutions in Tanzania.

This particular paper addresses the observed gap by analyzing the students' WTP for improved accommodation facilities using the CVM. The results from this particular study will help in unveiling the value that the higher learning students attach to the accommodation facilities. Thus indirectly it will send a signal to the decision-makers in higher learning institutions to attach an equivalent value to the improvement of students' accommodation facilities.

3.0 METHODOLOGY

3.1 Description of the Study Area

The College of Business Education (CBE) in Tanzania was used as a study area. The College was chosen since it has all the characteristics that may represent other higher learning institutions in Tanzania that provide accommodation facilities to their students. CBE operates on four campuses across the country. The campuses include Dar es Salaam Campus, Dodoma Campus, Mwanza Campus and Mbeya campus. For this study, only two (Dodoma and Mbeya) campuses were involved. Dodoma was included in the study since it is one of the big campuses with reasonable accommodation facilities for students while the Mbeya campus was included in the study due to its small size and inadequate students accommodation infrastructures. This was intended to provide a basis for comparison. Dodoma is located at 6.1630°S, 35.7516°E while Mbeya is located at 8.9094°S, 33.4608° E.

On the Dodoma campus, there are in-campus hostels provided to the students at a reasonable price, (TZS 300,000). The campus has also signed a memorandum of understanding with a private hostel owner who provides the facility at the price of four hundred thousand Tanzanian Shillings per year per student, (TZS 400,000). On the Mbeya campus, there are no in-campus hostels. However, the campus has signed a memorandum of understanding with a private hostel owner to provide accommodation facilities to the students at a reasonable price equal to the amount that could be charged by the College on its hostels, (TZS 340,000). On both the two campuses, in the hostels, the students are provided with the basic facilities necessary to meet their academic requirements.

3.2 Study Design

This study has adopted the cross-sectional survey research design. This design was chosen based on the nature of the requirements of the intended methodology of this study. CVM which is the main analytical methodology for collecting and analysing the main findings of the study requires

conducting an interviewer-administered cross-sectional survey to obtain the necessary information intended for the study. This helps in giving the respondent enough clarifications of the Contingent scenario before soliciting the WTP for the improvement in the targeted amenity.

3.3   Data type and Unit of Analysis

This study made use of cross-sectional primary data that were collected in the study area during the second to fourth week of March 2021. The unit of analysis was individual students studying at the College. The data set was therefore comprised of individual students as observations and their individual social and economic characteristics and accommodation characteristics were captured as variables.

3.4   Population Sample and Sampling Procedures

The target population for this study was all the students studying at the College of Business Education – Dodoma and Mbeya Campuses, these included, certificate to bachelor level students. The number of students was 2823 for Dodoma Campus and 795 for Mbeya Campus which made a total of 3618 students who made the sampling frame for this study. From this, a sample of 348 students was calculated using the Raosoft online sample size calculator. This sample size was obtained using a 5% margin of error and 95% confidence level.

The multistage sampling procedure was used to get the respondents to be included in the sample. In the first stage, the study used purposive sampling to select every level of study starting from the certificate level to the bachelor level[1]. This sampling technique was used at the first stage to ensure that all the levels of study were involved in the study. In the second stage, the study used the systematic random sampling technique to select some respondents from each level of study. Systematic random sampling was used at this stage to avoid bias since it gives an equal chance of selection to every observation.

3.5   Data Analysis

After the data was collected, it was entered into a statistical package (STATA version 13) and was analysed to obtain the results for the study. The binary logistic model was used to estimate the Students' WTP for accommodation facilities. This model was chosen because of the binary nature of the dependent variable for the study. The model was specified as seen in equation 1.

$$WTP = f\begin{pmatrix} Age, Sex, Education, Accomodation, Preference, \\ Income, Background, Campus \end{pmatrix} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.1$$

Equation 1 is a functional form (Mathematical form) of the students (WTP) for accommodation facilities. This equation can further be written in an econometric form as follows:-

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[1] The bachelor level students were treated as one level starting from the first year to the third year.

$$L_i = ln\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 Age_i + \beta_2 Sex_i + \beta_3 Education_i + \beta_4 Accomodation_i +$$
$$\beta_5 Preference_i + \beta_6 Income_i + \beta_7 Background_i + \beta_8 Campus + \varepsilon_i \dots\dots\dots\dots\dots\dots\dots\dots..2$$

L_i is a notation for logistic regression. P_i is the probability that the respondent is willing to pay for the improved accommodation facilities. "*Age*" is the age of the respondent measured in years lived; "*Sex*" is the sex of the respondent measured by 1 if male and 0 otherwise. "*Education*" is the level of study of the respondent measured by 1 if the respondent was a degree student and 0 otherwise. "*Accommodation*" is the current accommodation of the respondent which takes the value of 1 if accommodated in-campus2 and 0 if the respondent was accommodated off-campus3. "*Preference*" is the accommodation preference of the respondent which is valued as 1 if the respondent prefers in-campus accommodation and 0 otherwise. "*Income*" refers to the monthly income of the respondent including transfers from parents or guardians, measured in Tanzanian shillings (TZS). "*Background*" refers to the accommodation background of the respondent when studying at secondary school. This was taken at the value of 1 if the respondent was studying in a boarding secondary school and 0 otherwise, "*Campus*" is the campus where the student was pursuing his / her studies. This took the value of 1 if the student was on the Mbeya campus and 0 otherwise if the student was on the Dodoma campus. Lastly, ε_i is the error term.

After estimating the binary logistic model the mean WTP was calculated using equation 3 as follows

$$(Y) = \overline{x}'\hat{\beta}\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.3$$

From this equation; $\overline{x}$, is a vector of sample averages of the regressors and $\hat{\beta}$ is the vector of maximum likelihood estimates of the parameters.

4.0 FINDINGS AND DISCUSSION
4.1 Characteristics of the Respondents

The first important finding to be presented is the summary of the study variables. In the surveyed sample, it was found that 48% of the respondents were above 20 years of age while 52% were below 20 years of age. As regards the sex of the respondents 57% were males while the remaining 43% were females so the study tried to give equal chances to all gender. The level of education of the respondents involved in the study was that 35% were bachelor level students while the remaining 65% were certificate and diploma level students. In accommodation, 67% of the respondents had off-campus accommodation while the remaining 33% had in-campus accommodation. The preferences for their accommodation showed that 58% of the respondents preferred to stay off-campus while 42% preferred living in-campus. 25% of the respondents had their incomes above TZS, 100,000/= per month while the remaining 75% had less than TZS 100,000/= per month. The background of the respondents showed that 38% of them studied in boarding schools while 62% studied in day schools. Out of all the respondents involved in the

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2 Inside the College accommodation facilities
3 Outside the College accommodation facilities

study, 167(48%) were on Mbeya Campus and 181(52%) were on the Dodoma campus. These characteristics are summarized in table 1 below.

Table 1: Summary of Respondents Characteristics

Variable		Frequency	Percentage
Age	Below 20	181	52
	20 and above	167	48
Sex	Males	198	57
	Females	150	43
Education	Certificate and Diploma	226	65
	Bachelor	122	35
Accommodation	In campus	115	33
	Off campus	233	67
Preference	In campus	146	42
	Off campus	202	58
Income	Below TZS 100,000/=	261	75
	TZS 100,000/= and above	87	25
Background	Day schools	216	62
	Boarding schools	132	38
Campus	Mbeya Campus	167	48
	Dodoma Campus	181	52

4.2   Willingness to Pay for Improved Accommodation Facilities

To fulfill the key objective of the study which was to investigate the Students' willingness to pay for improved accommodation facilities, the CVM was applied. In this, the hypothetical situation (Contingent valuation scenario) of the improved accommodation facilities was first narrated to the respondents. The hypothetical scenario described a condition whereby CBE was planning to undertake a program to improve the students' accommodation facilities, the nature of the improved facilities would include all the necessary amenities desired by the students including a fewer number of occupants per room, wardrobes, study tables and chairs, clean surrounding environment, recreational facilities nearby the hostels and the like. The respondents were then given the information that this project would involve some compulsory monetary contribution from the students which would be added to the school fees. After this, a series of contingent valuation questions were posed to the respondents inquiring about their WTP for improving accommodation facilities.

The results from the WTP question which inquired the respondents to state their WTP for improvement in the accommodation facilities were as presented in figure 1. It can be seen from the figure that a proportionally larger percentage (59%) of the respondents were not willing to pay for the improved accommodation facilities. The remaining smaller percentage (41%) was willing to pay for the improved accommodation facilities.

These findings were similar to the findings of other studies which also revealed that the number of respondents willingness to pay for such amenity improvement projects is comparatively less than the number of respondents not willing to pay, (Mallios, Latinopoulos, & Latinopoulos, 2015; Zhang et al., 2018). However, some studies showed that a higher percentage of the respondents

were willing to pay for the improvement of the amenity undervaluation as compared to the percentage of those who were not willing to pay, (Hsu, 2020; Lee & Yoo, 2019).
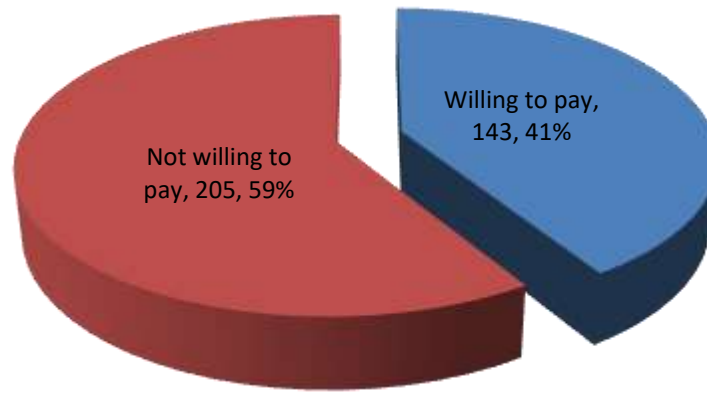

Figure 1: Student's Willingness to Pay for Improved Accommodation Facilities

4.3 Determinants of the WTP

Before estimating the determinants of the students' WTP, it was ensured that our variables were free from serious multicollinearity. The first test for multicollinearity was conducted using the correlation matrix and the results showed that none of the correlations exceeded 80% proving the absence of serious multicollinearity. A second confirmatory test was done using the Variance Inflation Factor (VIF) and the results showed no VIF greater than 10 signifying the absence of serious multicollinearity. Due to the strength of the binary logit model estimated, the other diagnostic tests were not conducted.

Equation 2 was then estimated using the binary logistic regression and thereafter the marginal effects after the regression was estimated. The results were as presented in table 2.

Table 2: Marginal Effects after Logit Regression

Variables	Dy / dx	Standard Error	P - value
Age	- 0.0123***	0.00863	0.008
Gender	0.678	0.23742	0.520
Education	- 0.0231*	0.02425	0.055
Accommodation	0.1562**	0.17324	0.015
Preference	0.1282*	0.15705	0.074
Income	0.2345***	0.15234	0.005
Background	0.3568	0.12556	0.652
Campus	0.1825**	0.03785	0.012

Note: *** p<0.01, ** p<0.05, * p<0.1.

From the table we can see that out of the 8 estimated independent variables, 6 of them could significantly determine changes in the dependent variable.

The age of the respondent (*Age*), was negatively significant at 1% indicating that, holding other variables at their means, the increase in age of the respondent decreases the probability of the respondents' WTP for improved accommodation facilities. The reason for this may be that older students prefer to live off-campus more than younger students because they are already used to the College environment. This makes them not willing to pay for improvements in the on-campus hostels. The same finding was also found in the studies by, Khan et al., (2020).

The education level of the respondent (*Education*) was negatively related to the WTP for the improved accommodation facilities. This variable was weakly significant at 10% of the significance level. This implies that, as the respondent enters the category of the students with a bachelor's level of education it decreases the probability of his / her WTP for improved accommodation facilities. This can also be attributed to the reason that students of higher levels of study are already used to the College environment and they are less motivated to stay in-campus and so they are less willing to pay for improved accommodation facilities.

The current accommodation of the students (*Accommodation*) could positively determine the changes in the students' WTP for improved accommodation facilities by a 5% significance level. This can be interpreted to mean that as the respondent enters the category of the students currently living on campus, it increases the probability of the WTP for improved accommodation facilities. This is likely because the students who are currently in the hostels are motivated by the good conditions and benefits that can be obtained by staying in the hostels and thus they would wish to make the hostels a better living and studying environment.

The accommodation preference of the students (*Preference*) was found to positively and significantly influence the WTP for improved accommodation facilities by a 10% significance level. This means that holding other variables at their means, as the respondent enters the category of the ones preferring to stay in the on-campus hostels, increases the probability of the WTP for

improved accommodation facilities. This is likely because students who prefer to live on campus would prefer to live in better hostels that will cater for their social and academic needs.

The income of the respondent (*Income*) was positively significant at a 1% significance level. This implies that, as the incomes of the respondents' increase, it increases the probability of WTP for improved accommodation facilities holding other variables constant at their means. This likely means that students with more incomes would prefer better living conditions in the hostels. They would wish to have such hostels that would meet their desired standards.

The campus of the respondent (*Campus*) was found to be positive significant at a 5% significance level. This implies that holding other variables at their means, as the respondent enters into the category of the respondents from the Mbeya Campus; increases the probability of his / her WTP. Intuitively this may likely mean that students on Mbeya Campus feel that the need for in-campus hostels is more pressing than the students on the Dodoma campus because the facilities in Mbeya are more inadequate than the ones on the Dodoma campus. In other simple words, the need for improved accommodation facilities is more pressing in Mbeya Campus than in the Dodoma campus.

The other remaining variables (Respondents' background gender) as seen in the table had some influence on the dependent variable but this was not significant in determining changes in the WTP for improved accommodation facilities.

Related studies, (Khan et al., 2020; Lee & Yoo, 2019) which were conducted to estimate the determinants for the WTP for improvement of accommodation/housing facilities also revealed that age, education level and income are significant determinants of the WTP. However, none of these studies purely addressed the WTP for improvement in students' accommodation facilities.

4.4   Welfare Measurement

The welfare change or the compensating variation was found by calculating the mean WTP. Two approaches were used. The first involved the direct calculation of the mean WTP from the stated amounts in the open-ended question which asked the respondents to state directly their WTP amount. The second approach was through estimating equation 3 above.

The results showed that the overall calculated mean WTP from the open-ended question was found to be TZS 425,000/= and TZS 452,000/= per person per year for Dodoma and Mbeya campuses respectively while the mean WTP calculated from estimating equation 3 above was found to be TZS 412,000/= and TZS 433,000/= per person per year for Dodoma and Mbeya campuses respectively. It can be seen that the stated WTP from the open-ended question is higher than the WTP figure from the dichotomous elicitation technique (Using equation 3) for all campuses. However, the difference in the WTP figures is not that significant likely indicating that the double confirmation of the calculated figures using the two techniques has given us proof of their validity.

Again the WTP figures for Mbeya Campus have been seen to be slightly higher than the ones for Dodoma Campus. As intuitively described before, this is a likely indication of the fact that the need for accommodation facilities on the Mbeya campus is more pressing thus driving more students' to WTP for improvement.

These welfare measures mean that the students would be willing to pay such stated amounts to offset a price change (In this case the school fees) to attain the desired higher utility curve.

A similar study by, Lee & Yoo, (2019) conducted to evaluate the WTP for improved housing/accommodation facilities also found the stated WTP to be higher than the normal market price. It is also worth noting that the literature has also shown that students' preferences for better accommodation facilities are much determined by the desired comfort, (Verhetsel et al., 2017). This also likely explains why the WTP for the improvement of the facilities is higher than the market prices as seen in our findings.

5.0   CONCLUSION AND RECOMMENDATIONS

From the study findings, it can be concluded that the age of the students, education level, current accommodation, preference for accommodation, the income of the student and the campus of the student are significant determinants of the students' WTP for improved accommodation facilities. The relevant authorities should consider these variables when planning for improvements in the students' accommodation facilities.

Students in lower age groups and lower education levels should be given a priority when it comes to allocating accommodation facilities to them. Sensitization of the students can also help improve their preferences for the on-campus accommodation facilities and this will yield a continuous preference. Again, where possible the design of the students' accommodation facilities should consider their differences in incomes. A price differentiation can help in accommodating all students of all income levels. Moreover, students in the campuses with no / more inadequate accommodation facilities (Mbeya campus in this case) are under more pressure for better accommodation facilities. This should signal the need for having adequate students accommodation infrastructures in all campuses / higher learning institutions.

The mean WTP for improved accommodation facilities is much higher than the current amount paid by the students as accommodation fees on all campuses. The practical implication of this is that the College attaches less value to the accommodation facilities than the students do. This calls for measures to give enough importance to the students' accommodation facilities by devoting resources to renovating, putting the accommodation facilities in a better condition and/or constructing new ones. The resources devoted to improvement should tally with the value attached to the hostels by the students. This is a wake-up call for higher learning institutions like CBE to discover the value of the accommodation facilities desired by students and thus devote equivalent resources for improving the same.

6.0   REFERENCES

Accardo, A. L., Kuder, S. J., & Woodruff, J. (2019). Accommodations and support services preferred by college students with autism spectrum disorder. *Autism*, *23*(3), 574–583. https://doi.org/10.1177/1362361318760490

Ashley, R., Gersonius, B., Digman, C., Horton, B., Smith, B., & Shaffer, P. (2018). Including uncertainty in valuing blue and green infrastructure for stormwater management. *Ecosystem Services*, *33*(November 2017), 237–246. https://doi.org/10.1016/j.ecoser.2018.08.011

Bland, B., & Charity, S. A. (2018). It ' s All About The Money : The Influence Of Family Estrangement , Accommodation Struggles and Homelessness On Student Success in UK Higher Education Introduction : Estranged students in UK higher education, *20*(3), 68–89.

Card, P., & Thomas, H. (2018). Student housing as a learning space. *Journal of Geography in Higher Education*, *42*(4), 573–587. https://doi.org/10.1080/03098265.2018.1514489

Devi, V., Binti Mohamad Ashari, S. N., Binti Abd Rashid, S., Bin NurAdlan, M. A., & Bin Mohamed Musadiq, M. M. (2016). Cost, Benefit and Risks Associated with in-Campus and off-Campus Accommodations of Medical Students: A cross-Sectional Study. *International Journal of Pharmacology and Clinical Sciences*, *4*(3), 58–62. https://doi.org/10.5530/ijpcs.4.3.5

Gopal, N., & van Niekerk, C. (2018). Safety in student residences matters! *South African Journal of Higher Education*, *32*(3), 172–188. https://doi.org/10.20853/32-3-2524

Hsu, K. (2020). House Prices in the Peripheries of Mass Rapid Transit Stations Using the Contingent Valuation Method. *Sustainability*, *8701*(12), 8–12.

Khan, R. A. J., Thaheem, M. J., & Ali, T. H. (2020). Are Pakistani homebuyers ready to adopt sustainable housing? An insight into their willingness to pay. *Energy Policy*, *143*(May), 111598. https://doi.org/10.1016/j.enpol.2020.111598

Lee, S. Y., & Yoo, S. E. (2019). Willingness to pay for accessible elderly housing in Korea. *International Journal of Strategic Property Management*, *24*(1), 70–82. https://doi.org/10.3846/ijspm.2019.11095

Magambo, L., Dida, M. A., & Kaijage, S. F. (2020). Towards an Online Portal for Locating Students ' Private Rental Accommodation in Tanzania, *5*(3).

Mallios, Z., Latinopoulos, D., & Latinopoulos, P. (2015). A contingent valuation method application for the valuation of the park of Thessaloniki International Fair. In *Fifth International Conference on Environmental Management, Engineering, Planning & Economics* (pp. 14–18).

Marshak, L., Van Wieren, T., Ferrell, D., Swiss, L., & Dugan, C. (2010). Exploring Barriers to College Student Use of Disability Services and Accommodations. *The Journal of Postsecondary Education and Disability*, *22*(3), 151–165.

Mulhearn, C., & Franco, M. (2018). If you build it will they come? The boom in purpose-built student accommodation in central Liverpool: Destudentification, studentification and the future of the city. *Local Economy*, *33*(5), 477–495. https://doi.org/10.1177/0269094218792740

Mzileni, P., & Mkhize, N. (2019). Decolonisation as a Spatial Question: The Student Accommodation Crisis and Higher Education Transformation. *South African Review of*

Sociology, *50*(3–4), 104–115. https://doi.org/10.1080/21528586.2020.1733649

Perman, R., Ma, Y., Mcgilvray, J., & Common, M. (2003). *Natural Resource and Environmental Economics* (3rd ed.). Edinburgh Gate Harlow: Pearson Education Limited.

Philip, A., Ileanwa, A. C., & El-hussain, A. M. (2018). Post-Occupancy Evaluation of Students Hostel Facilities in Federal Universities in North Central , Nigeria, (December). https://doi.org/10.5923/j.arch.20180804.02

Spio-Kwofie, A., Anyobodeh, R., & Abban, G. (2016). an Assessment of the Accommodation Challenges Faced By Students of Takoradi Polytechnic, *3*(1), 64–72.

Verhetsel, A., Kessels, R., Zijlstra, T., & Van Bavel, M. (2017). Housing preferences among students: collective housing versus individual accommodations? A stated preference study in Antwerp (Belgium). *Journal of Housing and the Built Environment*, *32*(3), 449–470. https://doi.org/10.1007/s10901-016-9522-5

Zhang, L., Chen, L., Wu, Z., Xue, H., & Dong, W. (2018). Key factors affecting informed consumers' willingness to pay for green housing: A case study of Jinan, China. *Sustainability (Switzerland)*, *10*(6), 7–8. https://doi.org/10.3390/su10061711