Student Satisfaction with Hostel Facilities: A Case Study of Njala University, Njala Campus, Sierra Leone

Samuel Maxwell Tom Williams
Augustus Osborne
Camilla Bangura
Department of Biological Sciences,
School of Environmental Sciences, Nala University, Sierra Leone
Jonathan Johnny
Ibrahim A. Bakarr
Department of Wildlife Management and Conservation,
School of Natural Resources Management, Njala University, Sierra Leone
Alusine Hassan Koroma
Department of Biological Sciences,
School of Environmental Sciences, Nala University, Sierra Leone
Janet Boynah Saidu
Jonathan Aruna Musa
Department of Wildlife Management and Conservation,
School of Natural Resources Management, Njala University, Sierra Leone
George Mayeh Fefegula
Department of Biological Sciences,
School of Environmental Sciences, Nala University, Sierra Leone

Abstract

Aim and Scope: The importance of students' social environments in their day-to-day lives cannot be overstated. The extent to which students are happy in their hostel depends on its facilities' availability, adequacy, and functionality. A case study of Njala University, Njala campus, was used to determine the amenities provided and the level of satisfaction the students

derived from those amenities. **Methods:** A cross-sectional research design was used to conduct the research through a close-ended questionnaire. The study's sample size was 482 students. SPSS version 26.0 was used for the data analysis. **Result:** Most (82.0%) of the respondents were within the age group 20-29 years, and more than two-thirds (70.7%) were living in overcrowded rooms with double the number than the room was designed for.; this is attributed to the common phenomenon of students who get a place sub-letting to their less fortunate colleagues on a cost-sharing basis. Overcrowding has implications of increasing pressure on the available facilities. Students were reasonably satisfied with hostel facilities such as recreational grounds, security status, Library/ICT, waste management, and electricity, but very dissatisfied with the drainage system, state of mattresses, toilet facilities, water supply, kitchen, room size, laundry, and lack of firefighting devices. **Conclusion :** Students are dissatisfied with current facilities as enrollment continues to rise faster than Government intervention the paper suggests that a public-private partnership be established to fund the construction of other hostels with updated designs and amenities.

Keywords: Hostel, Facility, Students, Satisfaction, and Sierra Leone

Introduction

The success or failure of a modern nation can be traced back to the standard of its higher education system. Higher education is seen as one of the most valuable resources for a country's economic and technological development. The success of universities depends in part on the satisfaction of their students (Rahman et al., 2020a), which can be increased through the provision of high-quality educational services (Kalam & Mahonta, 2017). A hostel is a form of student housing, that is essential in many institutions in most cultures and climates (Adebisi et al., 2017). According to Adewunmi et al., (2011), academic productivity is significantly related to indicators such as; facilities available to students and other support services. The campuses' physical settings should be taken into account as well. Most universities usually provide student housing in residential halls, hostels, apartments, dormitories, etc. Price et al., (2003) posited that prospective students consider the forms of hostel facilities, among others, when choosing institutions. Therefore, academic institutions such as universities must pay good attention to providing functional hostel facilities with adequate; water supply, electricity, security, internet connectivity, and recreational facilities.

Sierra Leone's higher education system has a lot of untapped potential to contribute to raising people's living standards and boosting the economy. Student enrolment in higher institutions has been increasing in recent times, and it is estimated that there has been about a 160% increase in tertiary

education globally (Sharma, 2012). However, in many countries like Sierra Leone, providing accommodation facilities for tertiary students remains a challenge for the government   (CGD, n.d.). One of the essential concerns of education management in higher institutions is the issue of students' accommodation globally. The provision of accommodation for the student population in higher institutions takes three models, which are; non-residential (no provision of housing on-campus), residential (all students are housed on-campus) and dual-residential (YUSUFF, 2011), Njala University tried to adopt the residential model but due to the inadequate hostel facilities, many students had to go out and lodge in off-campus accommodations.

Each university's primary focus should be on its students. The happiness of one's students is crucial to the success of any educational institution. Students' levels of contentment serve as a barometer for the relative success of colleges and universities. In this case, students' levels of contentment are influenced by aspects of educational services (such as the quality of instruction, extracurricular opportunities, and other academic offerings). As such, it's fair to say that students' happiness is tied to more than just academics. High levels of student satisfaction in higher education can be achieved by providing high-quality educational services (Coleman, 2005; Kalam & Mahonta, 2017).

Over the past decade, Sierra Leone's higher education system has undergone rapid change. The number of colleges and universities in Sierra Leone has more than doubled in the last decade. In addition, the Sierra Leonean government and other players in the higher education system have prioritized students' happiness. The various services universities provide ensure that their students receive an excellent education. However, research into whether or not students at Sierra Leone universities are happy with the support they receive is lacking. That's why we're conducting this research: to find out how content students are with the available facilities at Njala University's Njala campus.

Methodology
Study Area
The study was conducted at Njala University, Njala campus (latitude 8.115736N, and longitude -12.06818W) in the Moyamba district of Sierra Leone. Njala University (or simply Njala as it is fondly called) has had a rich history since its establishment in 1964 as a university college based on the American Land Grant University model (MTHE, n.d.). Originally part of the University of Sierra Leone with Fourah Bay College in Freetown, it became an independent University with the passing of the Universities Act 2005. Njala University has several campuses; the largest is at Njala a rural location specializing in Agriculture and the Environment there are two campuses in the

city of Bo, at Torwama and Kowama (social science and health), there is also a School of Post-graduate studies centered at Henry Street in Freetown and a further campus is planned for Bonthe Town on Shabro Island. Since its establishment, Njala University has metamorphosed into one of the leading universities in the country, preparing undergraduate and postgraduate students for careers in a wide variety of specializations.

The Njala campus has thirteen functional hostel blocks. Female students occupy six (6) blocks of the hostels, and the males occupy the remaining seven (7) blocks. The female hostels are Winters, Florence Carew 1, Florence Carew 2, Tourist, Matturi Block D and Quadrangle. The male hostels are Tokpombu, Matturi Block A, B, C, E, F and H. The number of bed spaces in the rooms differs depending on the hostel size.

Data Collection

The study used a descriptive random survey to collect the data. The primary data were obtained from a questionnaire survey for only registered students for the 2021/2022 academic year. The questionnaire consisted of questions relating to the condition of the hostel facilities on the scale of "Very Poor to Very Good" and the level on the scale of "Strongly dissatisfied to Satisfy Strongly".

Using Cochran's formula to calculate for an unknown population (Cochan Estimator, n.d.), assuming maximum variability of p = 0.5, at 95% confidence, and at least 5 percent plus or minus precision.

A 95 % confidence level gives us Z values of 1.96, per the normal tables,

- ❖ n_0 = expected sample size
- ❖ e is the desired level of precision (i.e. the margin of error),
- ❖ p is the (estimated) proportion of the population which has the attribute in question,
- ❖ q is $1 - p$.

$$n_0 = \frac{z^2 pq}{e^2}$$

$$((1.96)^2 \, (0.5) \, (0.5)) / (0.05)^2 = 385.$$

But the size was however increased to 482 to increase reliability

Data Analysis

The research is descriptive and relies on data collected from respondents through the use of closed-ended questionnaires. Data were

analyzed using SPSS Version 28. Residents' satisfaction level was assessed on a 5-point scale with a neutral option to any questions from (+2 to -2). The use of positive numbers to positive sentiments and negative numbers to negative sentiments was used to calculate the Weighted Satisfactory Index (WSI) so that the average value automatically tells whether the general sentiment is positive or negative. The scales were measured as +2 indicating "Strongly Satisfied", +1 "Satisfied", 0 "Fairly Satisfied", -1 "Dissatisfied", and -2 representing "Strongly Dissatisfied". The data analysis was undertaken using the Weighted Satisfactory Index (WSI) for both the status assessment and the satisfaction they derive from the facilities.

$$\text{Given WSI} = ((+2)_{n1} + (+1)_{n2} + (0)_{n3} + (-1)_{n4} + (-2)_{n5}) / N$$

Where: $n1$ is the number of criteria with "Very Good" and or "strongly satisfy" (+2)

$n2$ is the number of criteria with "Good" and or "satisfying" (+1)

$n3$ is the number of criteria with "Undecided" and or "fairly satisfy" (0)

$n4$ is the number of criteria that "Poor" and or "dissatisfy" (-1)

$n5$ is the number of criteria that "Very Poor" and or "strongly dissatisfy" (-2)

N is the total number of the study population

A One-Way ANOVA was conducted to test for the relationship between the sex of the students and the status and level of satisfaction they derived from the hostel facilities

Results

A total of 482 students were interviewed in the research comprising of but males and females. The female hostels have a total of 41 single-bed spaces and 200 double-bed spaces, giving 241-bed spaces available for lodging female students. The male hostels have a total of 53 single-bed spaces and 318 double-bed spaces, which gives 371-bed spaces available for lodging male students. The majority of the students (respondents) (82.0%) were within the age group 20-29 years, and more males (60.4%) than females (39.6%) were interviewed (Table 1); reflecting the general gender imbalance among undergraduates. The majority of the respondents were single (91.9%), followed by married (7.3%), divorced (0.6%), and widow/widower (0.2). Most of the respondents were in the school of Agriculture (43.2%), followed by the School of Environmental Sciences (22.6%), School of Technology (14.7%), School of Social Sciences and Law (8.9%), School of Natural Resources Management (5.4%) and School of Education (5.4%) (Table 1).

Table 1. Social characteristics of respondents

	Variables	Frequency	Percent
Age	10-19 years	58	12.0
	20-29 years	395	82.0
	30-39 years	24	5.0
	40-49 years	5	1.0
Sex	Female	191	39.6
	Male	291	60.4
Marital Status	Divorced	3	0.6
	Married	35	7.3
	Single	443	91.9
	Widow	1	0.2
School	School of Agriculture	208	43.2
	School of Education	25	5.2
	School of Environmental Science	109	22.6
	School of Natural Resource Management	26	5.4
	School of Social Sciences	43	8.9
	School of Technology	71	14.7

The study demonstrates that the cost of living in hostel facilities (in terms of cost center) is more expensive than renting an apartment from a private lodging because most respondents stated that these hostel lodgings are very expensive (34.4%) or expensive (32.4%) and very few (2.9%) considered them to be cheap(Table: 2). The analysis also shows considerable overcrowding; typically four students occupy rooms for two legitimate students (each of the legitimate occupants sub-lets part of the space). Students who do not have access to dormitories or who cannot afford off-campus housing typically make arrangements with and squat with colleagues. Each legalized student who successfully obtained a room for two people will bring a companion. As a result, four students will be living in the room intended for two people, which causes overcrowding and problems for both the residents and the hostel's amenities. Congestion harms the residents' health and well-being since it makes it impossible to guarantee the safety of indoor air quality in such a setting. According to Table 2, 70.7% of respondents concurred that they accept unpermitted residents, while 29.3% disagree

Table 2. Cost of university hostels to private accommodations

Cost of owning a hostel bed space		
	Frequency	Per cent
Very Expensive	166	34.4
Expensive	156	32.4
Moderately Cheap	146	30.3
Cheap	14	2.9
Total	482	100
Illegality lodging		
	Frequency	Per cent
Yes	341	70.7
No	141	29.3
Total	482	100

Table 3 shows that, overall, students' satisfaction with the hostel facility was not appealing. These findings reveal that the students' satisfaction with the facilities has a negative weighted satisfactory index (WSI) ranging from -0.54 to -1.65, indicating a fairly high level of dissatisfaction with the facilities. However, students were fairly dissatisfied (because of the negative value of WSI) with facilities like recreational grounds (-0.54), security status (-0.61), library/ICT (-0.65), waste management (-0.73), and electricity (-0.85). Furthermore, the study vividly reveals that students are dissatisfied with the following facilities: drainage system, foam, toilet, water supply, kitchen, room size, laundry, and fire extinguisher, as they fall within the RIS percentage range of 20–40%.

Table 3. Level of satisfaction of students with the available facilities

Facilities	WSI	Rank
Recreational	-0.54	1
Security	-0.61	2
ICT/Library	-0.65	3
Waste Management	-0.73	4
Electricity	-0.85	5
Drainage System	-1.01	6
Foam/mattras	-1.11	7
Toilet	-1.14	8
Water	-1.27	9
Kitchen	-1.51	10
Room size	-1.57	11
Laundry	-1.62	12
Fire Extinguishing	-1.65	13

Figure 1. Average satisfacion with & 3 times the stanadrd error of the mean

The study investigates the relative and actual experiences of the students on the facilities and services provided in the hostels within the university, and Table 4 presents their assessment. The finding reveals general contentment with most of the services and facilities. For example, security-wise, electricity supply, ICT/Library, and waste management were rated in decending order of their weighted satisfactory index score. This means that the students have actual acceptance for these facilities but do not necessarily meet their expectations, as availability does not mean accessibility. Furthermore, the finding shows that respondents were not happy with the status of the drainage system, recreational grounds, toilet, room size, mattress/foam, water supply, kitchen, and fire extinguisher.

Table 4. Condition of hostels facilities

Facilities	WSI	Rank
Security	-0.17	1
Electricity	-0.60	2
ICT/Library	-0.71	3
Waste Management	-0.73	4
Drainage System	-0.93	5
Recreational	-1.10	6
Toilet	-1.19	7
Room Size	-1.19	8
Mattress/Foam	-1.21	9
Water	-1.22	10

Laundry	-1.36	11
Kitchen	-1.55	12
Fire Extinguisher	-1.58	13
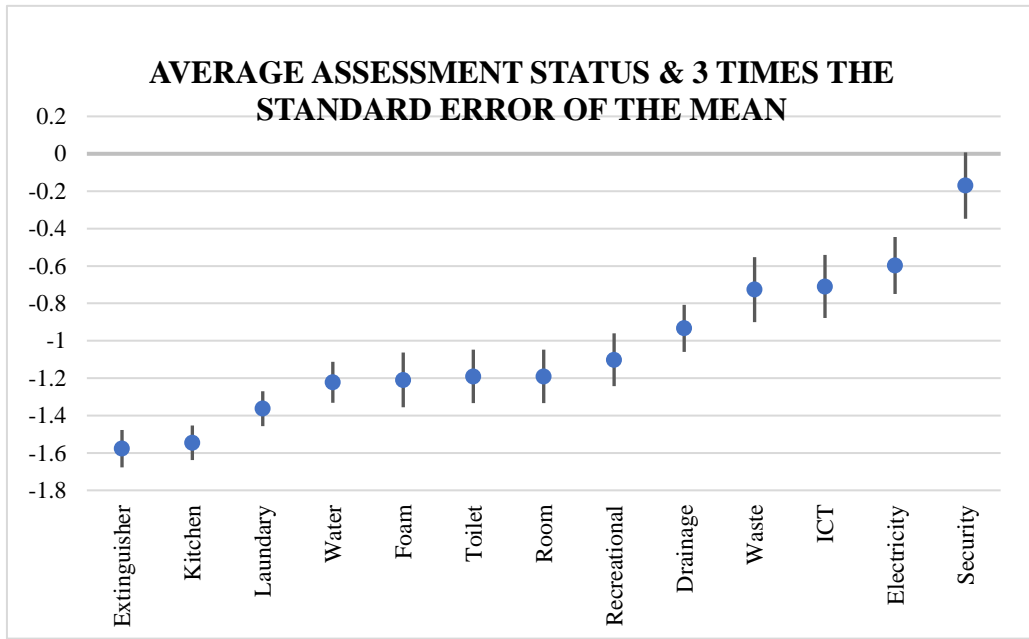
Figure 2. Average Assessment Status & 3 times the standard error of the mean

Table 5 demonstrates a significant association between gender and the state of the hostels' kitchen, restroom, fire extinguisher, room size, and mattress or foam. Furthermore, there is a strong correlation between gender and how satisfied students were with the hostel's room size, toilet, fire extinguisher, laundry, and waste management. It was observed that most of the facilities in the student hostels were in bad shape, which could be attributed to the low-level satisfaction. From field observation, the administration is renovating most of the old facilities to keep up with the current trend of hostel conditional services.

Table 5. One-Way ANOVA test between sex and the satisfaction the students derived from the status of the hostel facilities

Facilities / Variables	P-value		Significance
	Status	**Level of Satisfaction**	
Security status	0.660	0.104	-
Electricity supply	0.855	0.166	-
Water supply	0.087	0.141	-
Waste disposal	0.453	0.012	*
Kitchen	0.020	0.427	-
Toilet	0.025	0.037	*
Drainage system	0.622	0.196	-
Recreational facility	0.362	0.088	-
Laundry	0.865	0.005	**
ICT and reading room	0.145	0.142	-
Fire extinguisher	0	0	***
Mattrass/Foam	0.01	0.051	-
Room size	0.025	0.003	**

Discussion

The analysis shows that the students were not satisfy with the condition of the available hostel facilities. Students' were dissatisfied with all the provided hostel facilities: room size, foam/mattress, kitchen, toilet, water supply, electricity, drainage, waste management, internet facility (ICT), laundry, fire control device, recreational grounds and security status. These facilities are the primary spaces students interact with, and they could be important determinant for the wellbeing and adequate learning of students. The research revealed that, the students' satisfaction is fairly dissatisfactory, unlike what obtains in the non-privately owned hostels in the institution, as reported by Ajayi et al., (2015)jayi et al. (2015). The findings from the study present a low rating as it can be concluded that the hostel buildings are structurally archaic, with a smaller rooms ranging from 12 by14 square feet to 14 by 18 square feet. Most of the hostels are relatively old since they were last renovated in 2007 before the university was transferred from Freetown to its original campus after the rebel war. Hence there is a need to maintain the building structure to prevent further deterioration (Ajayi et al., 2015; Amole, 2008).

According to several studies, there is a direct association between a resident's quality of life and the standard of their home (Ozdemir, 2002; Oladapo, 2006), and a poor living environment is detrimental to a resident's (Adeyinka Adetunji et al., 2015; Wan & Su, 2016). According to Agbola, (1998), housing, regardless of its form, has an impact on both the lives of those

who live in it and the lives of the nation. For this reason, nature and society attach considerable importance to the roles housing plays in fostering human comfort. The attainment of superior learning and academic results at the institution has been influenced significantly by adequate student housing with functioning amenities. As a result, there is a pressing need to upgrade the hostel amenities since education cannot be comfortably pursued without suitable housing for the students. The hostel's amenities, such as the laundromat, kitchen, standard rooms, access to water, and reliable power and internet connectivity, are crucial to the well-being of the students. Most frequently, the administration constantly worries about the cost of maintaining these amenities. This helped clarify why it was essential to get the students' input on adequately maintaining the hostel facilities.

Finally, this study also found that recreation and sports facilities influence students' satisfaction. This is in line with Manzoor, (2013), showing that sports facilities positively impacted students' satisfaction. The finding of (Rahman et al., (2020b) is similar to this study, which found that recreation and sports facilities contribute significantly to higher student satisfaction. This is because Njala University provides a sufficient budget for sports activities to the students. Besides that, Njala University also arranges inter-campus sports activities regularly and has enough playgrounds for sports for the students.

Conclusion

Most students were fairly satisfied with facilities, such as; recreational grounds, security status, Library/ICT, waste management and electricity, but faced significant problems by the drainage system, foam/mattress, poor toilet condition, lack of kitchen and no laundry space. For example, the cleanliness of the toilets should be improved by making the cleaners work, and the internet facility should be upgraded to assist students' academic performance and many more. This study is significant to help the university identify the satisfaction level and problems faced by students when staying at the hostel provided by the university, thus allowing the university to improve these facilities constantly. For this reason, the study urges the University administration to construct more dormitories for male and female students to accommodate the expanding student body. Additionally, it is essential to build using superior construction techniques that will shorten the distance to restrooms. Hostels must be regularly inspected and maintained, and enough money should be allocated to maintain them.

Declarations

Ethics approval and consent to participate: Njala University Ethical Review Committee gave permission and authorisation to conduct the survey.

The participants signed a consent form indicating that they were aware of the study's objective and goals and that they were comfortable participating.

Competing interests: The authors declared no conflict of interest.

Contribution of authors: SMTW and AO contributed to designing the study, conducted the analysis, interpreted the results, and wrote the first draft of the manuscript. CB, and JJ contributed to designing the study, analyzing the results, and writing the manuscript. IAB, JBS, JM, GMF, and AHK participated in interpreting the results and editing the manuscript. All authors read and approved the final manuscript.

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