Level of Satisfaction with Private Hostels around Knust Campus

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ABSTRACT

The past few decades have witness tremendous increase in student population in the Kwame Nkrumah University of Science and Technology (KNUST). In an effort to address the above challenge of inadequate hostel facilities at the university, a number of private hostels have sprung up over the years on the university campus and the neighboring communities such as Ayeduasi, Kotei, Bomso and Kentenkrono. Despite the efforts by the university community and private developers to quantitatively address the accommodation needs of students, the quality of the facilities should also be given close attention. Quality housing provides the foundation for stable communities, social inclusion and enabling environment for students to study. In view of the above, this research was conducted to identify the level of satisfaction of students with registered private hostels facilities around KNUST campus. To achieve the aim of the study, questionnaires were designed and administered to 105 students to rate their level of satisfaction with the hostel under Building features; the Environment; the quality of Social amenities; and the management system put in place by the hostel operators on a 5-point Likert scale The data collected was analyzed using the Statistical Package for Social Science (SPSS) software. It was found that the students were satisfied with the design features of the building (e.g. room size, height, quality of ventilation in the room), social amenities and the neighborhood of the hostels. Despite the above, they indicated that some aspects of the management system especially the commitment of the hostel operators towards maintenance needs improvement. Based on the findings above, it was recommended that hostel managers should regularly conduct interviews with the students to solicit their opinions on the quality of the services provided to them. The findings from such an exercise will help to improve the design and management of their hostel facilities.

Keywords: *Level of Satisfaction, Private Hostels, Campus*

1. INTRODUCTION

Housing has been universally acknowledged as one of the most essential necessities of human life and is a major economic asset in every nation. Adequate housing provides the foundation for stable communities, social inclusion and enabling environment for students to study (Jiboye, 2010) citing (Oladapo, 2006) and the need to improving user satisfaction is vital in the lives of every housing project.

The Kwame Nkrumah University of Science and Technology is one of the largest public Universities in Ghana which attracts a number of students including international students. Currently, it has a population of close to 40,000 students. The past few decades have witnessed tremendous increase in student population at KNUST. Agyen-Gyasi (2008) reported that from 1996 to 2006, total enrollments have increased more than 200% (6,321 in 1996 and 19,964 in 2006). This has put pressure on facilities on campus especially accommodation. There are six traditional halls of residents namely Unity, Africa, Queens, Republic, University and Independence. Out of these, three are single sex (i.e. Unity hall and University hall for males and Africa hall for females). Reports from the KNUST Estate office cited in Botchway and Boatemaa-Oti (2012) indicates that the six traditional halls of residence have recorded 300% increase in

student occupancy compared with the original designed capacity of the buildings. There are also number of hostel facilities built by corporate institutions and private individuals on the University campus and the neighboring communities such as Ayeduasi, Kotei, Bomso, Kentenkrono, Ayigya, Gaza and Gyinyasi etc.

Accommodation has been one of the key problems students face on KNUST campus. Continuing students are not accommodated in the halls of residence. They are compelled to stay in hostels in and around KNUST campus due to unavailable places. Private hostel operators play key role in addressing the accommodation challenges in KNUST. Most of them are registered with the University who provides supervisory role. The University has a unit which works with providers of private hostel accommodation to ensure the safety and welfare of non-residential students of the University. The unit holds a series of meetings with hostel operators and also conduct physical inspection of these hostels. While many efforts have been made by the university community of KNUST and private developers to quantitatively address the accommodation needs of students, the quality of the facilities should also be given close attention. Parker and Mathews (2001) cited in Jaafar et al., (2004) defines satisfaction as a process of evaluation between what was received

and what was expected. In the context of housing, Adesoji (2010) defines satisfaction as the "perceived gap between a respondent‟s needs and aspiration and the reality of the current residential context". Alkandari also refer to housing satisfaction as the degree of contentment experienced by an individual or a family member with regards to the current housing situation. In Ghana, there is a paucity of research on student satisfaction with hostel facilities. In studies that place the critical lens on students' satisfaction levels of their university accommodation, the units of focus have been diverse such as on the influence of the physical attributes, and, psychological and management aspects. Basically, when the environment meets the individuals' expectation, a higher degree of satisfaction has been noted. On the other hand, incongruence between housing needs and aspirations leads to dissatisfaction (Mohit et. al, 2010). Thus, it can be concluded that understanding students‟ satisfaction with the hostel can assist the universities to undertake changes to increase satisfaction among them. The current study was designed to investigate into the level of satisfaction of students with private hostel facilities around KNUST campus.

Literature has found that, the decision to choose a particular hostel facility/accommodation to rent is influence by several factors (Adesoji, 2010; Russell, 2010; Li et al., 2005; Amole, 2009). The factors can be grouped into four categories Characteristics of the dwelling unit; Social Amenities; Neighbourhood conditions; and Management (Adesoji 2010). Oladapo (2006) observed that a dwelling that is adequate from the physical or design point of view may not necessarily be adequate or satisfactory from the users‟ point of view. The house is only one link in a chain of factors which determine people‟s overall satisfaction level. Therefore, the concept of habitable and satisfactory house is related to the physical, architectural and engineering components of the house, as well as to the social ,behavioral, cultural and personal characteristics of the inhabitants, the components of the environment of which the house is a part ;and the nature of the institutional arrangements under which the house is managed. This concept can be referred to as the resident – building features (BF) – Neighborhood condition (NC) - social amenities (SA) and management (MA) interaction system (Oladapo, 2006).

The satisfaction level was assessed based on the quality of the social amenities in the hostels (water supply, electricity etc.), features of the building (room sizes, door sizes, fire safety etc.),

sanitation, noise and security provisions in the hostel, and cost of rent among others. The findings will help in making decisions on the development of hostel facilities on the university campus.

2. METHODOLOGY

This study adopted a two-stage approach – desk study and field inquiry using questionnaires. Hence, a quantitative method of research was adopted. The questionnaires were developed from information gathered in the literature review. Respondent's profile was captured in the first section of the questionnaire. The questionnaire were mostly closed-ended and mainly asked respondents to score different dimensions of their satisfaction under Building features; the Environment; the quality of Social amenities; and the management system put in place by the hostel operators management on a 5-point Likert scale where 1 = "very dissatisfied"; 2= "dissatisfied"; 3 = "Neither satisfied nor dissatisfied"; 4= "Satisfied "and "very Satisfied"= 5. The questionnaire also had few open-ended items which gave the respondents the opportunity to comment on issues which were not captured on the questionnaire but relevant to the study.

The study was conducted on registered private hostels on KNUST campus. The researchers purposively selected 40 hostels which have large student occupancy. Table 1 presents the names of the hostels. In each hostel, 3 respondents were purposively sampled. Hence, a total of 120 questionnaires were sent out. Out of this, 105 were successfully received and analysed.

The data collected was analyzed using the Statistical Package for Social Scientist (SPSS) software package. Following this, the relative importance of each of the criterion was calculated to aid comparison. This was done using a statistical tool known as Relative Importance Index (RII). The Index is computed using the formula:

$$RII = \frac{5n5+4n4+3n3+2n2+n1}{5(n5+n4+n3+n2+n1)}$$

Where:

n1 - number of respondents who answered "very dissatisfied"

n2 - number of respondents who answered "dissatisfied"

n3 - number of respondents who answered "neither satisfied nor dissatisfied"

n4 - number of respondents who answered "satisfied"

n5 - number of respondents who answered "very satisfied"

Table 1: List of studied hostel facilities on and around KNUST Campus

No.	Name of hostel	Location	Approximate distance from faculty/ commercial area
1	ADOM- BI HOSTEL	Ayeduase residential area, adjacent Frontline apartment	600m from Faculty Area
2	R & B HOSTEL	Ayeduase residential area, adjacent Nana Adomah	450m from Faculty Area
3	SHALOM KIBUTZ HOSTEL	Ayeduase residential area, behind Nana Adomah	500m from Faculty Area
4	**AMERICAN HOUSE**	**AYEDUASE NEW SITE, F&F JUNCTION**	**2KM FROM FACULTY AREA**
5	ASANSIKA HOSTEL	Ayeduase new site, close to the Trotro Last Stop	2km from Faculty Area
6	ABUNDANCE GRACE HOSTEL	Ayeduase New Site	2km from Faculty Area
7	FRONTLINE INN	Ayeduase, near Nana Adomah	400m from Faculty Area
8	FRONTLINE APARTMENT	Ayeduase, near Shalom Hostel	500m from Faculty Area
9	NANA ADOMAH HOSTEL	Ayeduase, behind Faculty of Built environment	300m from Faculty Area
10	GHANA HOSTELS	Gaza	1.2km from Faculty Area
11	GEORGIA HOSTEL	Gaza	1.2km from Faculty Area
12	ROYAL GATE HOSTEL LTD.	PLT 13, BLK. S., Bomso	200m from Commercial Area

14	WILKADO HOSTEL	Gaza	1.2km from Faculty Area
15	ABUNDANT GRACE HOSTEL	Ayeduase new Site, last stop	1.5km from Faculty Area
16	FOSUA HOMES	Ayeduase new site	1.2km from Faculty Area
17	WESTEND HOSTEL	Ayeduase, Close to Beacon Hostel	700m from Faculty Area
18	BY HIS GRACE	Ayeduase, Close To Westend Hostel	700m from Faculty Area
19	PELIKAN MANOR HOSTEL	No. 102 Baffoe Bonnie Avenue, Nsenie Kentinkrono	2.5km from Faculty Area
20	PROVIDENCE HOUSE HOSTEL	Ayeduase – Kotei, Off Brobbey Junction	2km from Faculty Area
21	JALEX HOSTEL	Ayeduase, adjacent Shalom Hostel	500m from Faculty Area
22	BO EXECUTIVE HOSTEL	Ayeduase, Close to the R/C Primary	200m from Faculty Area
23	P3 HOSTEL	Ayeduase, adjacent Frontline Main	500m from Faculty Area
24	DE-LISA HOSTEL (MAIN)	Ayeduase, Kotei Road adjacent Shepherdsville	600m from Faculty Area
25	DE-LISA HOSTEL (ANNEX)	Ayeduase new site	600m from Faculty Area
26	WHITE HOUSE HOSTEL	Ayeduase, opposite Nana Adomah hostel	300m from Faculty Area
27	AMEN HOSTEL INN	Ayeduase, adjacent Adom Bi Hostel	600m from Faculty Area
28	AMEN HOSTEL (MAIN)	Ayeduase, adjacent Adom Bi Hostel	600m from Faculty Area

29	AMEN HOSTEL (ANNEX)	Ayeduase, adjacent Adom Bi Hostel	600m from Faculty Area
30	SPLENDOR HOSTEL	Ayeduase, opposite the Chief's Palace	700m from Faculty Area
31	SHEPHERDSVILLES RESIDENCE	Ayeduase, along Kotei Road	600m from Faculty Area
32	CANAM HOSTEL	Kotei, near Methodist Church	700m from Faculty Area
33	NO WEAPON HOSTEL (MAIN & ANNEX)	Kotei	1.00km from Faculty Area
34	DR. SARFO HOSTEL	Ayeduase new site, long Mango Road	1.00km from Faculty Area
35	FRANCO HOSTEL	Ayeduase-Kotei, near Providence Hostel	1.00km from Faculty area
36	MORNING STAR PALACE	Bomso	500m from Commercial Area
37	STANDARD HOSTEL	Plot 16 Block "V", Bomso	1.2km from Commercial Area
38	EVANDI HOSTEL	Behind Bomso Clinic, Bomso Residential Area	500m from Commercial Area
39	PINAMANG HOSTEL	Ayeduase new Site	900m from Faculty Area
40	BEACON HOSTEL	Ayeduase, close to Westend Hostel	700m from Faculty Area

3. RESULTS AND DISCUSSION

3.1 Background of Respondents

From Table 2, a majority of the students (55.86%) have stayed in their hostels for more than 2 semesters (i.e. more than a year) while 43.14% have stayed for less than a year. Their period of stay in the hostels give credibility to the answers they provide. 24.8% and 36.2% of the respondents live 3 in a room and 4 in a

room type of occupancy respectively. Those who live in a room with more than 4 occupants were only 4.8%.

Table 2: Respondents' background information

1	Period of stay in the hostel	Frequency (n)	Percentage (%)
a	1 semester	6	5.71
b	1 – 2 semesters	35	33.34
c	2 – 3 semesters	18	17.14
d	3 – 4 semesters	25	23.81
e	4 – 5 semesters	6	5.71
f	5 – 6 semesters	15	14.29
	TOTAL	**105**	**100.00**
2	**Room Occupancy**	**Frequency (N)**	**Percentage (%)**
a	1-in-a-room	7	6.67
b	2-in-a-room	29	27.62
c	3-in-a-room	26	24.76
d	4-in-a-room	38	36.19
e	More than 4-in-a-room	5	4.76
	TOTAL	**105**	**100.00**

3.2 Satisfaction of students with Building Features

From Table 3, the respondents expressed satisfaction with several of the building features examined. All the variables achieved RII value of more than 0.5. Students expressed great satisfaction with 'the roof performance (leakages)' with RII of 0.8400. The level of 'privacy within the room' ranked 2nd with RII of 0.7429. 'The floor to ceiling heights' with RII of 0.7200 ranked 3rd. 'The size of the rooms' with RII of 0.7162 and 'sanitary fittings' with RII of 0.7029 ranked 4th and 5th respectively. This shows that students are highly satisfied with these building features. However, 'The kitchen design and size' with RII of 0.6190, 'Fire services system' with RII of 0.6114 and 'Adequacy of escape routes in case of fire' with RII of 0.5295 ranked 13th, 14th and 15th respectively. This signifies students' low satisfaction with these features. Li et al (2005) reported corresponding findings whereby the residents expressed high satisfaction with their doors and windows. Being ranked 6th on the Table with high Relative Importance index value of 0.6990, the students expressed much satisfaction with this element of their buildings. In line with the above, the results also confirm the widely accepted notion that ventilation is directly proportional to the quality of doors and windows (i.e. their sizes and positions). The level of natural ventilation in the rooms were also found to be very good according to the students. The large room sizes and the orientation of the building also influenced the level of the ventilation in the rooms. It was found that the hostels provide more spacious room and the majority of the rooms are designed for double sharing. The results is similar to what was observed by Fatameh et al., (2010) on students' satisfaction with hostel accommodation in the University of Sains in Malaysia. They found the most important factors that predict students' satisfaction and influence their choice of hostels were the room

size, hostel security, and the other facilities of the hostel. Oppewal et al. (2005) also had similar findings in their studies.

Table 3: Ranking of the variables of the Building Features

Item	Factors	RII	Rank
1	The size of the rooms	0.7162	4th
2	The kitchen design and size	0.6190	13th
3	The floor to ceiling height	0.7200	3rd
4	The number and placement of the electrical outlets	0.6743	11th
5	Doors and Windows(the size, position and operation	0.6990	6th
6	Adequacy of daylight distribution in the rooms	0.6762	10th
7	The finishes (the wall, floor & ceiling)	0.6819	7th
8	The orientation of the house	0.6819	7th
9	The roof performance (leakages)	0.8400	1st
10	Adequacy of natural ventilation in the rooms	0.6762	10th
11	Availability and adequacy of study rooms	0.6800	9th
12	Privacy within room	0.7429	2nd
13	Sanitary fittings (number of wash basins, water closet, etc.)	0.7029	5th
14	Fire services system (adequacy of fire extinguishers etc.)	0.6114	14th
15	Adequacy of escape routes in case of fire	0.5295	15th
16	Adequacy of car parking space	0.6305	12th

3.3 Satisfaction of students with Environment

From table 4, the 'drainage system' in the hostels' surroundings received positive response from the residents. It was ranked 1st with a high RII value of 0.7100. The 2nd ranked item, 'incidence of crime or burglary activities' in the area was found to be on the low side. This according to some of the students have contributed to their long period of staying in their hostels. The findings agree with Parker and Mathews (2001) that safety is one of the most important factors in determining satisfaction with one's neighborhood. The people expressed high satisfaction with the security and crime rate in their areas. McCrea, et al., (2005) also found neighborhood crime to be the second most important predictor of neighborhood satisfaction. According to Aero (2002), quietness is one of the most important factors which influence an individual's satisfaction with his/her neighborhood. The study results concurs with Aero (2002). The residents indicated high level of satisfaction with the 'noise levels' in their neighborhoods. Being 3rd on the list, it had a RII value of 0.6700. Finally, the 'street light systems' in their area was also found to be adequate.

Table 4: Ranking of the variables of the Environment

Item	Factors	RII	Rank
1	Incidence of crime or burglary activities	0.6720	2nd
2	Sanitation in the vicinity	0.6040	5th
3	Noise levels	0.6700	3rd
4	Drainage system	0.7100	1st
5	Street light systems	0.6320	4th

3.4 Satisfaction of students with Social Amenities

Andersen (2008) posited that the availability and quality of basic amenities such as electricity, water supply, public transport, internet and access to neighborhood facilities such as supermarkets, affect the standard of living in an area and hence the level of satisfaction of the residents. From Table 5, most of the items had a high RII value implying high students'' satisfaction. 'Electricity supply' had the highest score of 0.7010, ranking 1st. 'Water supply' ranked 2nd with a score of 0.6930. 'Availability of a market' ranked 3rd and 'television services' ranked 4th with RII of 0.6170 and 0.6080 respectively. It was found that due to the recent problem of electricity supply in Ghana most of the hostels have stand-by generators/plants. These findings are not different from what was observed by Mary et al (2015) on students' satisfaction with hostel facilities in the Federal University of Technology, Akure, Nigeria. They noted that students'' level of satisfaction with the facilities such as electricity, water supply and the availability of standby generator were highest with satisfaction indexes of 0.76, 0.73 and 0.70 respectively and were ranked 1st, 2nd and 3rd. However in their study, the students were not satisfied with the location of the laundry rooms, toilets and bathrooms. They noted that those facilities were located at the far end of the buildings such that the students staying at the other end have to travel a long distance to get to and from them. Hence only the few students whose rooms were located close to the toilets and bathrooms were satisfied with the location. In the current study, the situation was different. Most of the rooms had their own toilet and bathrooms. It was in few cases, occupants of two rooms share one toilet facility.

Table 5: Ranking of the variables of the Social Amenities

Item	Factors	RII	Rank
1	Water supply	0.6930	2nd
2	Electricity supply	0.7010	1st
3	Access to wireless or internet facilities	0.5770	7th
4	Availability of market	0.6170	3rd
5	Television services	0.6080	4th
6	Availability of recreational facility (e.g. swimming pool, playing groups, TV rooms etc.)	0.6020	5th
7	Strength of Telephone network signal	0.6020	5th

3.5 Satisfaction of students with Management System

The statistics in Table 6 clearly shows that, there is a problem with the quality of the management system put in place by the hostel operators. Torbica and Stroh (2001) noted that the quality of the services offered by home owners to their tenants is the most important component in determining overall satisfaction. However, this is the area in which most home owners demonstrate the poorest performance. Most of the variables under the management system had their RII a little above average (i.e. 0.5). The 'garbage collection system' in the hostels on KNUST campus recorded the highest RII value of (0.743) implying the students' greatest satisfaction. According to the students, the hostel operators make sure that the rooms and the environment are always kept clean. Ukoha and Beamish (1997) also had similar observation in their study on public housing in Abuja, Nigeria. Despite the above, the students' level of satisfaction with the hostel operators' 'response to repairs', 'handling of residents' complaints', 'the amount of rent they pay' and 'maintenance of the buildings' were a little above average. Their responses revealed that even though they are satisfied with the management situation, they believe much could be done to improve the system. The results agree with the findings of the study by Salleh *et al.,* (2011) on public housing in Majlis Bandaraya Ipoh, Malaysia.

Table 6: Ranking of the variables of the Management System

Item	Factors	RII	Rank
1	Handling of residents' complaints	0.5680	3rd
2	Management response to necessary repairs	0.5410	5th
3	Garbage collection system	0.7430	1st
4	Amount of rent paid	0.5900	2nd
5	Maintenance of the building	0.5540	4th

3.6 Overall satisfaction of student with hostel facilities

Finally, the respondents were asked to rate their overall satisfaction taking all the factors discussed above into consideration. From Table 7, more than half (i.e. satisfied - 40.00% and very satisfied – 14.29%) were satisfied with their hostels' building features, the management, social amenities and the whole environment surrounding their hostels. This confirms the findings by Awotona (1991) where the interplay between dwelling unit characteristics, management, environmental and locational factors contributed to high residents' satisfaction.

Table 7: Overall satisfaction of students with the hostel facilities

Satisfaction level	Frequency	Percentage (%)
Very dissatisfied	5	4.76
Dissatisfied	10	9.52
Neither satisfied nor dissatisfied	33	31.43
Satisfied	42	40.00
Very satisfied	15	14.29
TOTAL	**105**	**100**

4. CONCLUSION

This study was designed to assess the level of satisfaction of students with hostel facilities on and around KNUST campus. Based on the questionnaires administered to the 105 students in the selected hostels, the following were the key findings/conclusions drawn from the study:

a. The findings from the study showed that the features of a dwelling unit/building influence the level of comfort of an individual in his home

b. All the variables achieved a high tenant satisfaction with RII value of more than 0.5. The students expressed great satisfaction with the performance of the roofing element of the hostel buildings, the level of privacy within the rooms, the floor to ceiling heights, the size of the rooms, the number and quality of sanitary fittings such as wash hand basins and water closets in the wash rooms.

c. Most of the students are satisfied with their hostels' building features, the management, social amenities and the whole environment surrounding their hostels hence, satisfied with their hostel facilities.

5. RECOMMENDATIONS

From the findings of the study, it was observed that the hostel operators are doing very well to keep the students satisfied within their hostel facilities. They are therefore encouraged to keep it up. In other to be able to meet the needs of the students, it is recommended that:

a. The hostel managers should regularly to conduct interviews with the students and solicit their opinion on the quality of the services provided to them.

b. Hostel management should pay attention issues like response to necessary repairs; maintenance of the building; and handling of residents' complaints.

6. ACKNOWLEDGEMNTS

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