

STUDENTS’ RESIDENTIAL SATISFACTION WITH HOSTEL FACILITIES IN UNIVERSITIES IN GHANA, A STUDY OF AAMUSTED-KUMASI CAMPUS

Millicent Esinam Tuglo¹

Ellen. Fagbemi Olu²

Adi Doreen Dedo³

Abstract

Purpose and Scope: Attempts to increase access to higher learning in Sub Sahara Africa have led to Universities’ efforts to provide and manage student accommodation on campus. Satisfying the users of hall facilities should be one of the main objectives of providing such a facility. The current study sought to *assess* students’ residential satisfaction in residence halls at Ghanaian University, *AAMUSTED, Kumasi*. **Design/Methods:** Using a mixed-method approach, the study adopted a descriptive research design. Quota and Convenience sampling techniques provided 200 respondents. Major data collection instruments included focus group discussions (FGDs), observations, and questionnaires designed under three attributes namely; Personal (in-room), Social amenities; and Management system. **Result/Findings:** Descriptive statistics using SPSS V.23 and thematic analysis revealed students’ *Dissatisfaction* with specific facilities under Personal and Social *attributes that offer privacy, comfort, and recreation. Additionally, there was dissatisfaction with the provision of tables and chairs for room learning, utilities as well as services that ensured reliable security and cleaning.* However, students “*Dissatisfaction*” with management's attitude and responses to their grievances and complaints in the halls in “*repairing and replacement of gadgets or facilities* ultimately resulted in a negative impact on student’s residential satisfaction. **Practical Implication:** The results of this study will help the university's hall administration enhance a few areas of the administration structure, most notably the association's dedication to facility maintenance and repairs. **Conclusion** It was suggested, based on the aforementioned findings, that residence hall managers periodically interview students to get their feedback on the caliber of services they receive. In addition to having plants or generators

¹ Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development- Kumasi Campus(AAMUSTED). esinamtuglo@gmail.com

² Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development- Kumasi Campus(AAMUSTED). elofagbemi@aamusted.edu.gh

³ Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development- Kumasi Campus(AAMUSTED). ddadi@aamusted.edu

available to replace power failures in the residence halls, university administration should also ensure a steady supply of electricity. Additional research ought to evaluate the degree of contentment experienced by students residing in private hostels.

Keywords: University, Hall, Residential, Student housing, Level of Satisfaction.

1. INTRODUCTION

Housing is one of humanity's fundamental needs. It's believed to be the most basic human need. Akpu & Darah (2015) state that among human needs are clothing and food. Ojikpong, Agbor, and Emri (2016) state that, after food, housing is the most essential basic human need. Generally speaking, a home helps its owner integrate into his local social network and provides him with a social identity. Therefore, having a home gives you a lot of security and social position.

Thus, housing affects people's health, education, social behavior, job, productivity, knowledge of personal growth opportunities, safety, and general well-being in a big way. When evaluating student satisfaction in Turkey, Kaya and Erkip, (2001), take special note of how big and packed the room is thought to be. Hassanain, (2008) examines the degree of satisfaction with both functional performance (i.e., room arrangement and furniture quality) and technical performance (i.e., thermal comfort) in sustainable student housing facilities in Saudi Arabia.

Over 160% more people are estimated to have completed their university education internationally, and the number of students enrolling in tertiary institutions worldwide has been rising recently, Sharma, (2012). In many countries around the world, housing for university students remains a challenge for the government (Center for Global Education, 2002).

The world is becoming a more interconnected place, and as a result, students' needs for appropriate housing have grown. According to Najib & Yusof, (2009), Khozaei, et al., (2010), Hassanain (2008), and other scholars, housing is a prerequisite for students to perform well in their academic endeavors. The primary concern is how comfortable the university's residence halls are for its students. To gauge a student's happiness with their hostel and its amenities, it is essential to consider factors like room quality, safety, and security.

Facilities are a vital component of human resources and the achievement of corporate objectives. Attracting and retaining top talent is one of the main objectives for universities. The estimated tertiary enrolment rate in Ghana was 9.7%, which may not be as high as the rates in industrialized nations, which were above 50% (Ghana Education Performance Report, 2010, p. 38). This suggests that the number of students enrolling in universities and technical universities has increased significantly.

In various sectors of the economy, the Ghanaian government has supported private involvement in socio-economic development for the past 40 years (Ghana Shared Growth and Development Agenda – GSGDA, 2010). One such area in which private involvement in the education sector has drawn a lot of attention is the supply of student housing, particularly for tertiary students, Asare- Kyire, et al., (2012).

2. LITERATURE REVIEW

2.1 Assessing Residential Satisfaction-Definition, Theories, and Concepts

Hostel accommodations are described by Adeyemi & Igbineweka, (2008), as affordable, social, and cooperative lodging options available to students. Hostels often consist of bunk beds inside of dorms that share a lounge, restrooms, and occasionally a kitchen. The majority of hostel lodgings are solely for single people; nonetheless, there are extremely few instances in which mixed-gender hostel accommodations are offered. Students typically pay less for hostel lodgings than they would if they were to find housing elsewhere.

The "perceived gap between a respondent's needs and aspirations and the reality of the current residential context" is how Abdullahi, (2009) defines satisfaction. The process of comparing what was obtained or received with what was anticipated is what is meant by the word satisfaction. It can also be precisely described as the seeming difference between goals and achievements.

2.2 Concept of Residential Satisfaction

According to Mohit & Raja, (2014), residential satisfaction is the sense of fulfillment one experiences in a home after obtaining what one requires or wants. Residential satisfaction can also be characterized as an indication of homeowner's perspective of the general quality of their life and it can suggest that an individual's expectation of housing is met, Tan, (2016). Residential satisfaction refers to the assessments of the standard of living of occupants in a certain residential setting and catalyzes residential mobility. Aragonés & Amerigo, (1997).

2.3 Theoretical Framework

Mohit & Raja, (2014), state that some academics studying students' residential satisfaction have relied on a variety of theories, including Rossi's, (1955) Housing Needs Theory, Morris and Winter's, (1978), Housing Deficit Theory (table 1), and Galster's (1985), Psychological Construct Theory. Furthermore, Jiang et al., (2017), noted that another theory applied in residential satisfaction studies is Galster's, (1987), Gap Theory. Some have evaluated residents' satisfaction by synthesizing two or more of the theories.

According to Biswas et al., (2021), three ideas are believed to provide the foundation for research on residential satisfaction, Mohit, and Raja, (2014). According to Rossi's "Housing Needs Theory," residents will become unsatisfied when there is a "lack of fit" between their intended and current housing demands. Residents may consequently relocate more frequently to accommodate this "*lack of fit*" (Rossi, 1955). The "Housing Deficit Theory," which was created by Morris et al., (1976), clearly sees housing requirements as cultural housing norms. In contrast, Rossi's study appears to emphasize the implicit impact of physical and social circumstances on housing desires. If the home does not "*fit*" with the necessities that are there, it is deemed to be deficient in housing.

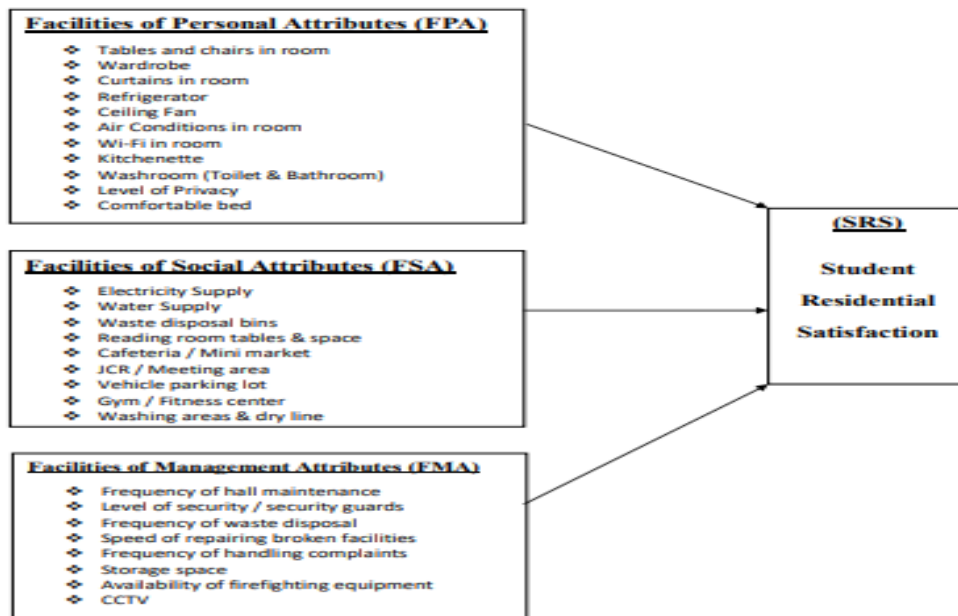
According to Dekker et al., (2021), the term "housing satisfaction" conceptually refers to a family's level of satisfaction with their existing housing situation.

Table 1. Summary of Residential Satisfaction Theories with their major elements.

Author(S) & Year	Name of Theory	Main Elements
Rossi (1955)	Housing needs theory	a) Life cycle phases and evolving housing requirements. b) Stress or discontent with housing results from differences between present and ideal housing demands. c) Locals migrate as a response to this suffering
Morris & Winter (1978)	Housing deficit theory	a) People evaluate their living circumstances based on certain standards. b) A housing deficit is caused by an incongruity between the norms of family dwelling and real housing. c) Housing adjustments are used to reduce the housing deficit.
Galster (1985)	Psychological construct theory	a) People mentally create a reference state for their living environment. b) When the current housing condition is roughly in line with the reference scenario, satisfaction is high. c) Inconsistency will result in either alteration or adaptation, depending on the situation.

Source: Literature review 2024

Figure 1. Conceptual Framework



Source: Authors

3. METHODOLOGY

The three residence halls on the AAMUSTED – Kumasi Campus, Opoku Ware II Hall, Atwima Hall, and Autonomy Hall were included in this study. The study employed a descriptive survey as the research design and a questionnaire and Focus Group Discussion, (FGD) were the methods used to collect data (table 1). The creation of the questionnaire was facilitated by a pilot survey of the instrument in KNUST. Twenty resident students participated in the pilot survey to eliminate any ambiguity in the questions before they were given to the sampled respondents. The answers obtained from this preliminary investigation aided in refining the inquiries for the ultimate surveys that were distributed. Using the quota and convenience sampling method, the 1,513 residents of the 2023–2024 academic year were categorized based on their residence halls. Since it was not feasible to create a comprehensive list of every on-campus resident, this sampling technique was used; nevertheless, the residents had previously been divided into their halls of residence (subpopulations). During the first semester, 210 conveniently chosen students from these three subpopulations (halls) received questionnaires. 200 of them were obtained and utilized in the analysis.

Table 2. Focused Group Discussion Grouping

Groups	Location	Number of Participants
Group 1	Opoku Ware II Hall (New Block, F, G&H)	7
Group 2	Autonomy Hall	5
Group 3	Autonomy Hall	6
Group 4	Opoku Ware II (Old Block, A, B&C)	5
Group 5	Atwima Hall	6

4. RESULTS AND DISCUSSIONS

From Table 3, Opoku Ware II Hall is the most occupied hall, with 100 residents, accounting for 50.0% of the total occupancy. Autonomy Hall is the second most occupied hall, with 51 residents, making up 25.5% of the total occupancy. Atwima Hall has the lowest occupancy, with only 49 residents, representing 24.5% of the total occupancy. In summary, Opoku Ware II Hall is the most popular choice among residents, with half of the total occupancy, while Atwima Hall has the lowest occupancy. There are 110 males or 50.5% of the total population. The remaining 45.0% of the population is made up of 90 females in the sample. Conclusion: The data shows that the sample's gender distribution is nearly equal, with only a 5% difference in the proportion of males and females making up 100% of the population overall. The age (21 years to 25 years) group is the largest age group in the sample, with 130 respondents. This group represents the highest percentage of the population. The second-largest age group in the sample, with 36 respondents, is aged less than 20 years. It represents a significant portion of the population, indicating a relatively younger demographic. The 26 -30 years age group comprises 28 respondents, indicating a

significant presence of individuals in their late twenties. 4 respondents fall within 31 – 35 years making up a fifth of the sample.

Table 3. Demographic Information of the Respondents

Demographics	Frequency (N)	Percentage (%)
Hall	200.	100.0
Atwima Hall	49	24.5
Opoku Ware II Hall	100	50.0
Autonomy Hall	51	25.5
Gender	200	100.0
Male	110	55.0
Female	90	45.0
Age	200	100.0
Less than 20yrs	36	18.0
21-25	130	65.0
26-30	28	14.0
31-35	4	2.0
Greater than 36	2	1.0
Marital status	200	100.0
Single	174	87.0
Married	20	10.0
Divorced	6	3.0
Number of yrs. in Hall	200	100.0
One year	62	31.0
Two years	50	25.0
Three years	12	6.0
Four years	40	20.0
Less than a year	36	18.0
Educational Level	200	100.0
Masters	2	1.0
First Degree	162	81.0
Diploma	36	18.0
Occupancy Rate	200	100.0
One in a room	6	3.0
Two in a room	24	12.0
Three in a room	66	33.0
Four in a room	104	52.0

Table 4. Summary of Level of Satisfaction with Personal(In-room) Facilities in the Halls

Attributes	RS Mean	Standard. Deviation	Interpretation	Rank
Level of privacy	2.90	1.508	Dissatisfied	1 st
Television in room	2.74	1.467	Dissatisfied	2 nd
Air conditioning in the room	2.72	1.412	Dissatisfied	3 rd
Dressing Mirror in the room	2.71	1.516	Dissatisfied	4 th
Refrigerator/ Fridge in room	2.70	1.277	Dissatisfied	5 th
Ceiling Fan /Standing Fan in room	2.69	1.416	Dissatisfied	6 th
Curtains in room	2.66	1.124	Dissatisfied	7 th
Comfortable Bed/ Mattress type in the room	2.60	1.352	Dissatisfied	8 th
Kitchen facilities in the room	2.55	1.503	Dissatisfied	9 th
Internet Connection/ Wi-Fi in the room	2.51	1.460	Dissatisfied	10 th
Clean toilet and Bathroom in the room	2.48	1.398	Dissatisfied	11 th
Wardrobe/Closet in room	2.38	1.020	Dissatisfied	12 th
Table and Chair in room	1.81	1.181	Very Dissatisfied	13 th

NB: 1.0-1.99= Very Dissatisfied, 2.0-2.99= Dissatisfied, 3.0-3.99 = Neutral, 4.0-4.99= Satisfied and 5.0= Very Satisfied

Source: Author’s field data, 2024

Verifying the relationship or impacts of personal characteristics or in-room amenities on students' satisfaction levels with the varied range of facilities was the goal of the analysis. This effect can be understood in light of our expectation, which was stated in objective one and states that students' residential pleasure is significantly impacted negatively by their level of contentment with the in-room amenities. This explanation was based on previously published research. The result from Table 4 shows that respondents expressed dissatisfaction with several of the hostel facilities examined under the attributes. All the variables achieved an RS mean value of less than 5.0 under the personal facilities in the room. Students expressed great dissatisfaction with ‘tables and chairs’ and ‘the level of privacy’ provided in the room, ranked 13th and 1st with RS mean of 1.18 and 2.90 respectively. This is similar to the findings of Danso & Hammond (2017) on student level of satisfaction with private hostels around KNUST, Kumasi. ‘Television, Air conditioning, dressing mirror; with RS mean of 2.74, 2.72, and 2.71 respectively. They ranked 2nd, 3rd and 4th.

‘Refrigerator, Ceiling fan, and curtains with RS of 2.70, 2.69, and 2.66 ranked 5th, 6th and 7th respectively.

Bed with RS mean of 2.60, wardrobe with RS mean of 2.55, and internet connections (Wi-Fi) with RS mean of 2.51 ranked 8th, 9th, and 10th respectively. This shows that students are highly satisfied with these in-room facilities. However, ‘The kitchen size and facilities’ with an RS mean of 2.38, sanitary fittings and cleaning of the washroom with an RS mean of 2.48, and tables and chairs with 1.80 RS mean score ranked 11th, 12th, and 13th respectively. This signifies students’ low satisfaction with these facilities.

Table 5. Summary of Level of Satisfaction with Social (Outside-room) Facilities in the Halls

Attributes	RS Mean	Standard Deviation	Interpretation	Rank
Waste disposal facility/ Bin types and sizes	3.01	1.435	Neutral	1 st
Reading room tables & chairs, Space	2.93	1.463	Dissatisfied	2 nd
Gym / Fitness center	2.87	1.516	Dissatisfied	3 rd
Recreational/ sports facilities	2.78	1.573	Dissatisfied	4 th
Mini Market / Cafeteria/Food vendors	2.69	1.401	Dissatisfied	5 th
Parking lot/ Space	2.69	1.416	Dissatisfied	5 th
Electricity light and fittings/Available Sockets	2.68	1.497	Dissatisfied	7 th
JCR Entertainment facility/ Meeting area	2.64	1.364	Dissatisfied	8 th
Washing area & Drying Clothes areas and Dry Lines	2.53	1.330	Dissatisfied	9 th
Reliable water supply and reliable clean tanks	2.40	1.311	Dissatisfied	10 th

NB: 1.0-1.99= Very Dissatisfied, 2.0-2.99= Dissatisfied, 3.0-3.99 = Neutral, 4.0-4.99= Satisfied and 5.0= Very Satisfied

Source: Author’s field data, 2024

A Likert scale was used to gather data from our respondents regarding students' happiness based on social qualities, taking into account the assumptions made for the analysis. The frequency of social or outdoor room facilities is seen in Table 5. Based on Table 4.5, it shows that the level of satisfaction for 1st to 6th rank were waste disposal facilities (3.01.), reading room table and chair (2.93), Gym /fitness center (2.87), Recreational/sports facilities (2.78), mini market (2.69) and parking lot/space (2.69). However, the top 4 facilities with low satisfaction were Electricity supply and sockets (2.68), JCR Entertainment facility/meeting area (2.64), laundry area and dry lines (2.53), and reliable water supply (2.39). This result is in contrast to Mansor, et al., (2020),

corresponding findings whereby the residents expressed high satisfaction with their outdoor facilities.

The result shows the overall students’ satisfaction level for each facility under the social attributes. We can see that students are mostly dissatisfied with facilities, which are waste disposal facilities, reading room table and chairs, Gym /fitness center, Recreational/sports facilities, mini market, and parking lot/space. These findings contradict the findings of Mansor et al, (2020), at the University Utara Malaysia whose findings indicated that the level of satisfaction towards facilities, such as lounge, drinking fountains, and security are the highest satisfaction indexes; 0.7816, 0.6587, and 0.6469 respectively and was ranked first, second and third.

Furthermore, this study reveals that Electricity supply and sockets (2.68) JCR Entertainment facility/meeting area (2.64) laundry area and dry lines (2.53), and reliable water supply (2.39) receive the lowest level of satisfaction indicating dissatisfaction of students towards this facility.

Table 6. Summary of Level of Satisfaction with Management Attribute in the Hall

Attributes	RS Mean	Standard Deviation	Interpretation	Rank
Rate/Speed of handling residents’ complaints	3.06	1.532	Neutral	1 st
Availability and adequacy of firefighting equipment/ Fire assembly point	2.88	1.466	Dissatisfaction	2 nd
Lounge/visitors' place/ Environmental or Greening space	2.83	1.538	Dissatisfaction	3 rd
Storage Space	2.69	1.462	Dissatisfaction	5 th
Level of security/ Security guards	2.56	1.381	Dissatisfaction	6 th
Availability of facilities for PWDs	2.51	1.425	Dissatisfaction	7 th
Frequency of maintenance of the hall	2.37	1.375	Dissatisfaction	8 th
Cleanliness of bathroom/toilet	2.19	1.268	Dissatisfaction	9 th
Speed of repairing broken facilities	1.94	1.330	Very Dissatisfaction	10 th

Based on the results, it shows that the level of satisfaction for 1st to 6th rank was the speed of handling residents’ complaints (3.06), firefighting equipment (2.87), lounge (2.82), CCTV (2.71), Storage space (2.68), level of security/security guards (2.56). However, the remaining 4 facilities with the lowest satisfaction were PWD facilities (2.51), frequency of maintenance of facilities (2.36), cleanliness of washrooms (2.18), and speed of repairing facilities (1.93).

The study results are in line with the findings by Fatameh, et al., (2010), on students’ level of satisfaction with hostel accommodation at the University of Sains in Malaysia. Their study revealed that the most important factors that predict students’ level of satisfaction and influence

their choice of hostels were the lounge, hostel security, and the other facilities of the hostel. Osei-Poku, et al., (2020), also had similar findings in their studies.

Table 7. Overall Summary of Research Findings

Variables	RS Mean	Standard Deviation	Interpretation	RS Ranking
Effect of Facilities of Social Attributes on Students Residential Satisfaction (FSA → SRS).	2.7190	0.92140	Dissatisfied	1st
Effect of Facilities of Personal Attributes on Students Residential Satisfaction (FPA → SRS).	2.5710	0.93822	Dissatisfied	2nd
Effect of Facilities of Management Attributes on Students Residential Satisfaction (FMA → SRS).	2.5704	0.73844	Dissatisfied	3rd

From Table 7, above, the overall satisfaction mean was determined for all three major variables. Based on the result, FMA (2.5704) ranked 3rd with 25.2% as the most facilities that students are dissatisfied with. FPA with (2.5710) ranked 2nd at 35.1% and FSA with a mean score of (2.7190) ranked 1st at 39.7% as the least facility that students are dissatisfied with.

5. CONCLUSION

This study's primary goal is to evaluate how satisfied students are with the amenities offered at AAMUSTED's school halls in Kumasi, Ghana. Its objective was to evaluate the impact of the facilities management, social, and personal attributes on the residential satisfaction of university students living in the residence halls.

The criteria used to measure the satisfaction levels were categorized under three headings: management elements, social amenities, and personal facilities. The statistics make it evident that there are variations in the degree of student satisfaction with the type of accommodation available on AAMUSTED campuses.

Despite this, the overall satisfaction scores showed that residents of the hall were dissatisfied with the amount, caliber, and culture of upkeep or repairs of some facilities. Additionally, the results show that residents are unsure about the majority of the attributes. To improve residential happiness in the current residence halls, one option is to make future adjustments based on what the residents want.

Along with immediately furnishing each room with a personal table and chair as well as internet access (Wi-Fi), this also entails adding more overhead water storage tanks to boost water distribution. The electric power supply should be improved by adding more solar panels to generate electricity on top of what is already available. Management should again improve daily cleaning and regular waste disposal to keep the halls neat. To address student issues promptly, hall administrators should set up a budget to cover maintenance needs and do routine inspections.

The report also recommends performing routine Post Occupancy Evaluations to learn about the challenges that the occupants of the on-campus residences are encountering. To increase students' satisfaction with campus accommodation while protecting the environment, new resident halls should be built to accommodate the large number of students living on campus. Thus, to improve user experience, the new halls' shared room sizes should be increased by universal design principles.

Every room has to have a balcony so that students can sit outside and take in some fresh air. Again, the new designs should feature study/reading rooms where students can work on individual studies, kitchens, restrooms, and areas for drying and washing wet garments on each floor. The travel times and distances between each bedroom and these utilities should be as short as possible thanks to their placement.

To ensure that individuals have healthy bodies and brains, residence halls should provide sports facilities, including a gym. The new halls should incorporate environmentally friendly water and power generation methods, such as gathering and storing rainwater, as well as solar panels for low-cost, clean electric energy.

REFERENCES

- Abdullahi, R. B. (2009). A descriptive study on students’ satisfaction towards the services provided by University Utara, Malaysia. Unpublished M.Sc. Thesis, University Utara Malaysia.
- Adeyemi J. K., & Igbineweka, V. O., (2008). Sitting Space Utilization in Nigerian Universities: A Case Study of the University of Benin. *Journal of Teachers Education*. Teach. 4(1): 12-23
- Akpu, B. and Darah, S. (2015). Urban Housing Condition and the Prevalence of Cerebrospinal Meningitis in Badawa, Kano Metropolis, Nigeria. *Journal of Contemporary Urbanology*. 2 (1): 77-86.
- Amerigo, M. and Aragones, J. (1997). A Theoretical and Methodological Approach to the Study of Residential Satisfaction. *Journal of Environmental Psychology*. Vol.17.pp47-57.
- Asare-Kyire, L., Appienti, W. A., Forkuoh, S. K., & Osei, A. (2012). The Economics of Private Hostels in Ghana: A Case of Private Hostels on KNUST Campus. *International Journal of Social Science Tomorrow*, Vol. 1 No. 8 1-18
- Centre for Global Education (2002). Rich World, Poor World: A Guide to Global Development downloaded at www.cgdev.org/files/2844_file_EDUCATON1.pdf
- Danso, A. K. & Hammond, S. F. (2017). Level of Satisfaction with Private Hostels around KNUST Campus. *International Journal of Science and Technology* Volume 6 No. 3, March, 2017
- Dekker, K., De-Vos, S., Musterd, S., & Kempen, R.V. (2021). Residential Satisfaction in Housing Estates in European cities, A multi-level research approach. *Housing Studies*, 26(04), 479–499.
- Fatemeh K., Nadia A., Ahmad S. H., & Zahra K. (2010). The Factors Predicting Students’ Satisfaction with University Hostels, Case Study, University Sains Malaysia. *Journal of Asian Culture and History* Vol. 2, No. 2; July 2010.
- Galster, G. C., (1985). Evaluating Indicators for Housing Policy: Residential Satisfaction VS Marginal Improvement Priorities. *Social Indicator Research*. Vol.16. pp.415- 448. 1981, 13, 735–758.

- Hassanain, M. A., (2008). On the Performance Evaluation of Sustainable Student Housing Facilities. *J. Facilities Manage.*, 6: 212-225.
- Jiang, W.; Feng, T.; Timmermans, H.; Li, H. (2017), A Gap-Theoretical Path Model of Residential Satisfaction and Intention to move house applied to renovated historical blocks in two Chinese cities. *Cities* 2017, 71, 19–29.
- Kaya, N., & Erkip, F. (2001). Satisfaction in a Dormitory Building: The effects of floor height on the perception of room size and crowding. *Environment and Behavior*, 33(1), 35–53.
- Khozaei, F., Ayub, N., Hassan, A. S. and Khozaei, Z. (2010b). The Factors Predicting Students’ Satisfaction with University Hostels, Case Study, University Sains Malaysia. *Asian Culture and History*, 2 (2), 148-58.
- Mansor, R., Zaini, B.J., Sarkawi M. N, & Lee E. P. (2020) Relative Satisfaction Index on Students’ Satisfaction towards Hostel Facilities. *Journal of Facilities Management*, 11(4): 306-322.
- Mohit, M. A., & Raja, A M M A. (2014). Residential Satisfaction E- Concepts, Theories and Empirical studies. *Planning Malaysia e-Journal of Malaysian Institute of Planners*, 3, 47-66
- Morris, E. W., & Winter, M. (1978). A Theory of Family Housing Adjustment. *Journal of Marriage and the Family*, 37(1), 79.
- Morris, E. W., Crull, S. R., & Winter, M. (1976). Housing Norms, Housing Satisfaction, and the Propensity to Move. *Journal of Marriage and Family*, 38(2), 309-320
- Najib, N. U. and N. A. Yusof, (2009). A Review of Student Housing Facilities in Higher Learning Institutions. *Proceeding of the 3rd International Conference on Built Environment in Developing Countries (ICBEDC 2009)*, Dec. 2-3, School of Housing and Building Planning, Malaysia, pp: 1817-1831.
- Najib, N. U. and Yusof, N. A., (2010). Identifying Factors Affecting Satisfaction with Student Housing: A Research Framework. *Proceeding of the 2nd International Postgraduate Conference on Infrastructure and Environment*, June 11-12, The Hong Kong Polytechnic University, Hong Kong, pp: 1-2.
- Ojikpong, B. E., Agbor, E. A. and Emri, S. I. (2016). The Impact of Building Use Conversion on Residential Accommodation in Calabar, Cross River State, Nigeria. *International Journal of Science, Environment and Technology*, 5(3): 1445 – 1462
- Osei-Poku, G., Braimah, A., & Clegg, R. (2020). Comparative Assessment of User-Satisfaction with on-campus Residential Accommodation at Takoradi Technical University, Ghana. *Journal of Building Performance ISSN*, 11(1), 2020.
- Rossi, P.H. (1955) *Why Families Move: A Study in the Social Psychology of Urban Residential Mobility*. The Free Press, Glencoe
- Tan, T. H., (2016). Residential satisfaction in gated communities, *Property Management*, Vol. 34 Iss 2 pp. 84 – 99.