

Article

Influence of Physical Features of Housing Environment on Students Halls of Residence

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Abstract: The purpose of the study was to examine the Influence of Physical Features of the Housing Environment on Students' Halls of Residence at the University of Cape Coast in the central region of Ghana. Quantitatively, a descriptive survey research design was adopted for the study. Housing Deficit Theory underpins the study. The study population comprised three hundred and eight one (381) level 100 students in the Halls of Residence at the University of Cape Coast. Stratified proportionate random and simple random sampling techniques were used to select the eight (8) halls of residence and three hundred and eight one (381) level 100 students. The main instrument for data collection was a questionnaire. Cronbach's alpha was used in the study to assess the reliability of the variables. Descriptive statistics were used to analyse the data and show the direction of the responses. The study revealed that the students were satisfied with the physical features of the halls of residence, which influenced their contentment. Features such as recreational facilities, fire service systems, and relaxation facilities were vital in reaching such satisfaction. The study also indicated that the students were satisfied with how much their housing environment influenced their contentment. Students' relationship with their colleagues, the proximity of their halls of residence to the lecture halls and the serenity of the environment of the halls of residence all proved helpful in aligning the students' contentment to such an extent. It is recommended that the hall management should maintain the present physical features and facilities in the halls of residence for students' satisfaction. It is also recommended that the university management take into consideration the proximity of the halls of residence to the lecture theatres and the serenity of the environment of halls of residence in any future halls of residence construction.

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1. Introduction

Housing is a fundamental need and a requirement for the life of human beings. It is, therefore, regarded as one of the most essential basic infrastructures for the growth of all societies [1]. Housing indeed impacts the lives of individuals and the nation; its role in generating human comfort for nature and society is of great importance [2]. A study claimed that shelter is one of man's fundamental requirements, and the right to adequate housing is universally recognised globally and in more than one hundred national constitutions worldwide. Housing has been widely recognised as one of man's most significant requirements [3]. The demand for higher education in Ghana has risen rapidly, resulting in public universities expanding and implementing more programmes. The demand for student housing has increased with this growth. In Ghana, thus, every year, with the continuous expansion of higher education institutions and growing numbers of

students, the student housing assessment was undertaken by housing/residential staff, planners, and policymakers to make them more responsible [4]. A study found that academic success among the students was much higher than among on-campus students who stayed. This means that stakeholders should make accommodations for students on campus who are keenly interested [5].

A writer indicated that the student's residence is "probably the most important and pervasive" environmental influence on the student's persistence in school. Astin posited that those who live on campus have a natural advantage over commuter students in developing an attachment to and involvement in undergraduate life. Further, living in residence is positively associated with faculty interaction, student government involvement, and participation in a fraternity or sorority. It increases students' chances of persisting and aspiring to a graduate degree [6]. A similar study found that residence hall living contributes significantly to students' social integration into the institution. Residence halls are communities because they have geographical boundaries that define them [7].

Community is that aspect of the structure of social systems that is preferable to the territorial location of persons and their activities. Beyond geographical definition, residence halls possess feelings of congeniality and an opportunity for community members to participate in social processes [8]. Residence hall communities play a significant role in establishing an environment for students' involvement in campus-related and off-campus activities during their undergraduate years. Students are still forming their identities, and being involved in community activities may influence their personal development [9]. Interacting with others is an essential component in identity formation because it enables the development of a sense of respect and interdependence [10].

Additionally, environmental influences gained in the residence halls, such as friendships and a sense of community, powerfully influence students' development. Residence hall involvement is also related to students' satisfaction with their living environment. An international study of 183 institutions found satisfaction with the ability to interact with others in the residence halls to be the most critical factor in predicting overall satisfaction among students living in residence halls [11].

Colleges and universities provide a wide range of residence hall designs. Many residence halls are designed around a single room serving as a bedroom and study space. Although names for room types differ by campus, general variations depend on (a) occupancy, (b) room type, and (c) living space. Regarding occupancy, some halls have one student per room (single), whereas others have two (doubles) to four students (quads). Furthermore, halls are designed around room types with different bathroom locations. Standard rooms have a sleeping/study area with a community bathroom on the floor; private rooms have a private bathroom in addition to the sleeping/study area.

In contrast, suites have two rooms connected through an adjoining semi-private bathroom. Finally, deluxe rooms feature extra shared living space (i.e., study room) separate from the bedrooms. Therefore, more research is needed in other contexts, especially sub-Saharan Africa, to test the generalizability of the results established in developed economics. In carrying out this study, a self-study questionnaire was administered to students currently residing in on-campus accommodation in the eight traditional halls of residence of the University of Cape Coast.

Factors that lead to satisfaction with housing may differ across cultures. For example, the occupant's dwelling, facilities within the dwelling area, community relationships, social connections with one's residential neighbourhood, dwelling unit location, and physical aspects of the housing area, such as common areas, ventilation, and lighting [12]. A limited study is looking at students' housing satisfaction in Ghana. Moreover, only a few researchers are advocating certain aspects of housing satisfaction. A study on residents' satisfaction with the Social Security and National Insurance Trust housing in

Ghana revealed that in recent years, student numbers have risen steadily, which has increased the demand for student accommodation [13].

Despite these growing worrying developments, more research must be done to assess how students are satisfied with their housing units or environment in the region and the University of Cape Coast. Much of the previously conducted housing research focuses on family life. More needs to be done about the housing arrangements of young people, even though young people have different needs to families due to their different stages in life [14]. However, in some fields of study, the student's housing situation has been a subject of interest. Aspects of social behaviour and relationships with the physical environment have been studied from different perspectives of academic fields. Studies have established that housing facilities profoundly influence students' housing satisfaction [15, 16].

This study focuses on researching actual housing conditions in UCC. Housing satisfaction with a home is seen as a significant predictor of the general well-being of students. The study aimed to examine the influence of physical features of the housing environment on students' halls of residence at the University of Cape Coast in the central region of Ghana. These research questions guided the study – (1) How do the physical features of the Halls of Residence influence students' satisfaction? (2) How does the housing environment influence students' satisfaction?

1.1. Concept of Housing

Housing is an essential aspect of life and the basic needs of man [17]. Housing is defined as the residential environment, neighbourhood, micro-district, or the physical structure that humanity uses for shelter and the environment of that structure, including all the necessary services, facilities, equipment and devices needed or devised for the physical and mental health and social well-being of the family and the individuals [18]. It is the totality of the immediate physical environment where families live and grow [19]. It is a unit of the environment that significantly impacts the productivity, efficiency, and satisfaction of an individual and the community. Many researchers have discussed the varied factors that influence the components of accommodation that are favourable to students. In their study of undergraduate student housing preferences, it was found that the preferred accommodations of students are accommodation facilities with a high premium on privacy and amenities [20]. The most important criteria influencing students' satisfaction with their accommodation are room safety, rental costs, distance from university amenities, room size, and other hostel features such as hostel security and water supply [21].

1.2. The Influences of Neighborhood Interaction on Housing Satisfaction

In Ogun State, a study investigated the influence of residential settings on inhabitants' housing satisfaction. Four thousand six hundred and ninety-one (4691) respondents from Ogun State's households were used in the study. According to their findings, all environmental variables employed in predicting respondents' home satisfaction in the study region (residents' community perspective, security, facilities and amenities, safety to community association, and residential density) were considerably favourable. The respondents' community perception is the study's most critical environmental element associated with housing satisfaction. The second key factor was the proximity to medical services. These findings imply that residents' satisfaction depends on the availability and adequacy of any of these social and physical environmental variables, and they would have negative or positive effects on the occupants' satisfaction with their housing units [22].

1.3. General Physical Facilities

The general physical facilities include security, a serene and calm environment, availability of washrooms, frequent water supply, a library, and a standby generator. The university halls of residence and hostels can boast of the following: security, a student library, a conference room, a washroom, an electricity standby generator, and a frequent water supply. The general physical facilities available in the private hostels include washrooms, a serene and calm environment, and a frequent water supply. Private hostels in the University mostly need security men available, as well as more conference rooms, libraries, and a standby generator. The accommodation with the least general facility per observation is the "hostel". The hostels have the probability of a lack of washroom facility, a conference room, a library, a standby generator, and security men. Since it is usually a compound house managed by the locals in the community, students who rent such facilities ought to share the public washroom near the hostel.

1.3.1. Accommodation Occupancies

Accommodation occupancies in the University come in single, double, and up to six beds per room. There are also self-contained rooms and rooms using shared washroom facilities in the various hostels, hostels, and residence halls. The students residing in the halls of residence use shared washroom facilities. The university hall management usually allows 3-4 occupants per room, depending on the room size. The hall allows 6-8 occupants per room in larger room sizes. With the exemption of single-sex halls such as Casley Hayford Hall and Adehye Hall, all the remaining halls and university hostels have designated washroom areas for male and female occupants. For mixed halls, the rooms are shared according to the gender of the student occupant. This is to ensure that each gender receives the needed privacy. Private hostels usually have mixed-gender occupants. The rent owner takes student tenants on a first-pay, first-serve basis. Thus, a male and a female can decide to share the same room, unlike the halls of residence. Like the halls of residence, accommodation occupancies are from single self-contained, up to 4 beds per room. In some situations, due to the lack of rooms available, a room meant for two occupants can be shared by three or four students. Most hostels (per observation) have a washroom inside each room (self-contained). They also provide kitchen space for occupants as well. Occupants in hostels are usually at most two in a room. Hostels usually provide a single room with a porch for its occupants. It becomes more work to expand the room for more occupants. Like private hostels, hostels allow a mix of genders to share one room if they do not cause any menace to the household.

1.3.2. Rules and Regulations of the Accommodation

Rules and regulations bind all the accommodations available for University of Cape Coast students. The rules and regulations of the University's halls of residence and hostels are binding on every student who utilises such facilities. On the other hand, the rules set by private hostel managers and hostel landlords might lead to the sacking of the student as a tenant of the accommodation facility. The university hall of residence rules are found in the University student handbook. All university students must abide by the rules or face the penalty. Some rules of the University about the halls of residence found in the Statute 49 of the Student Handbook are as follows:

- There shall be halls of residence and hostels of the University for students bearing such names as the Council may determine.
- Each hall of residence, hostel, or other residential facility shall consist of several students, senior members, and other university employees, as the Residence Committee may determine. Every senior member shall be assigned to a hall of residence as a Fellow.
- Each hall of residence, a hostel or other residential facility shall, where conditions permit, be managed, subject to the Statutes, by a Hall Council or Hostel Council, as the case may be, consisting of the Hall Master or Hall

Warden, six Hall Tutors and six junior members including the President, Secretary, and Treasurer of the Junior Common Room Committee.

- The Hall or Hostel Council responsible for the management of each hall, hostel or residential facility shall be responsible for recommending disciplinary action against any junior member concerning a breach of the discipline of the hall, hostel, or facility, always provided that where the breach of discipline will result in dismissal or is, in the opinion of the Hall Council, a significant breach of discipline, the matter shall be referred to the Academic Board through the Vice-Chancellor.
- Gaining admission into the University or a Hall of Residence or Hostel through falsified records, fraud, deceit, or impersonation is subject to dismissal of a junior member.
- Any individual or collective action that threatens to disrupt academic and everyday life on campus or that brings the University into disrepute is also subject to dismissal.

For the safety of the students resident in the halls, further directives could be given by the hall tutors or the Dean of Students. The Hall tutor is the authority that seeks to manage the hall of residence. Each Hall Council shall be responsible for recommending to the Vice-Chancellor the necessary disciplinary action against a junior member of such Hall for any breach of Hall discipline except those breaches that might result in dismissal.

General rules and regulations in some hostels and hostels include:

- The prompt payment of bills, especially water bills and electricity bill
- All tenants are to ensure that the environment is kept clean at all times
- No noise-making
- No dealing in illegal activities in the hostel

1.3.3. Closeness to Campus

Every student was admitted to the University with the aim of learning. The essence of having a student accommodation facility is to aid learning. Therefore, the closeness of the accommodation facility to campus helps students spend less time reaching their lecture halls for teaching and learning activities. The University's residence halls are very close to campus, except for the superannuation and SRC halls. The University is geographically divided into the old site, new sites, lecturers' village, Ayensu, and Kwaprow. Most of the lecture halls are found in Old Site and New Site. Therefore, hostels found on the outskirts of these two areas are a little further away from the lecture halls. Students living in such areas ought to board vehicles to lectures daily. This adds up to the cost of living for students at the University.

1.3.4. Transport Accessibility

Road and transport systems in the University are essential for the easy movement of both students and lecturers to their respective lecture halls, departments, hostels, and halls of residence. The need for transportation services arises to meet an individual's basic mobility demands [23]. The quality of service provided by the University of Cape Coast's transport service is heavily influenced by the comfort of providing clean and well-conditioned vehicles, good roads, reasonable entertainment, comfortable seats, and adequate air circulation. Another aspect that affects commuter happiness is the availability of cabs at stations and their safe arrival at destinations on time [25]. The University has four taxi ranks that provide services to the various locations on campus. These are the Old Site taxi rank, Valco taxi rank, Science taxi rank, and the Kwaprow taxi rank. The old site taxi rank provides services for commuters moving to the New site, Science, and outside the university campus. The Valco taxi rank services commuters moving to Old Site and Science. The science taxi rank services commuters moving to Kwaprow, Ayensu, Old Site, and Valco. The University also provides buses to commute

students around campus at cheaper fares than taxis. However, these buses do not commute on weekends and public holidays. Therefore, it is costly for commuters (students) to travel around campus. Moreover, the roads within the University campus are well-tared, but poor roads lead to areas such as Kwaprow, Ayensu, and its environs, where most private hostels and hostels can be found. This makes students dirty due to the dusty nature of the road.

1.3.5. Market Place

As part of the needs of students on campus, it is essential to have market squares nearby, which can provide students an avenue for their foodstuff needs. The University of Cape Coast has two primary market squares: One at the Old site and the other at Science. The Science Market is the closest available to students in hostels around Ayensu and Kwaprow. The old site market serves students at the old site.

1.3.6. Rent Cost

Generally, the cost of these accommodation facilities depends on the occupancies and facilities available in the room. Therefore, students who wish to take up single occupancy rooms would pay twice as much as persons taking the double occupancy rooms. Similarly, students living in a room with six occupants would pay less. This differs from the prices offered for hostels. Due to the lack of adequate home facilities, the prices for double or single-occupancy rooms are relatively low compared to public and private hostels. Fees charged per hostel usually increase as demand for rooms near the educational institution increases. For first-year students, the accommodation and academic fees are combined in the fee payment for the year. Unlike the university halls of residence and hostels, private hostels usually charge separately the fee for a room and the fee for facilities such as electricity and water usage.

1.4. Concept of Housing Satisfaction

Housing satisfaction is defined as the feeling of contentment one achieves when one's needs or desires in a house are met [24]. Various researchers have studied it, and the outcome is viewed as a critical predictor of an individual's perception of the quality of a house [25]. Satisfaction with housing conditions signifies the absence of any complaint about one's house and an indication of congruence between the desired and actual housing qualities, which implies that satisfaction of a household with her housing occurs when the family housing meets the normatively derived needs, failure of which leads to housing deficit. Housing satisfaction has been conceptualised as consisting of the three main components of the psychological construct of attitude: cognition, affection, and behaviours [26]. Of the many conceptual definitions in the literature, some stress the affective component, while others are cognitively oriented [27]. The cognitive component has typically taken the form of residents' evaluation of both specific and general aspects of residential quality [28]. In such cognitively-oriented definitions, the satisfaction expressed by residents depends on the comparisons they make between the situation they experience and their expected or aspired standards [29].

The affective component views housing satisfaction as the experience of pleasure or gratification deriving from living in a specific place and the feeling toward such a place. Satisfaction is a function of the pleasure derived from encounters with the dwelling, the neighbourhood and the neighbours [27]. The evaluation of the affective component has taken the form of two constructs: the affective qualities of places and place attachment. It is a global representation of the affective response of people to their social-physical environment. Studies have shown that two approaches are commonly adopted in users' responses: the purposive approach and the aspiration-gap approach. The purposive approach conceives satisfaction as a measure of the degree to which the environment enhances or inhibits the user's goal [30, 31].

The aspiration-gap approach views satisfaction as a measure of the users' actual and aspired needs. Satisfaction denotes the perceived gap between a respondent's residential needs and aspirations and the quality of the current residential context. Individuals evaluate their homes not only by their actual conditions but also according to their desires for the future [31]. Satisfaction is a multidimensional concept best measured through lists of items rather than a single-item indicator of residents' general satisfaction with the house [32]. The multidimensional nature of housing satisfaction can be derived by combining different constructs within explicative models and considering the possible relationships among comprehensive sets of predictors and criteria [33].

Housing satisfaction can be conceived as a complex, multidimensional, global appraisal combining cognitive, affective, and cognitive facets, thus fulfilling the criteria for defining it as an attitude [32]. The concept of housing satisfaction has been used for five primary objectives:

- It serves as a key to predicting an individual's perception of the overall quality of life.
- It indicates individual mobility, which changes the demand for housing and influences the change in surrounding areas.
- It is used as a specific measurement of private sector development success.
- It is an evaluation tool to measure residents' acceptance of prevailing shortcomings for surrounding area development.
- It acts as a variable terminating the relationship between the resident's background and his attitude towards mobility.

1.5. Housing Satisfaction Among Undergraduates

The state of housing satisfaction among undergraduates in Ghana is a contemporary issue. This is because of the variation in individual backgrounds. While undergraduates from wealthy backgrounds whose homes have basic social infrastructures have a predefined taste for satisfaction, others from low-income backgrounds tend to view satisfaction from what they can afford because they are from homes that lack basic social infrastructure such as water, good roads, electricity, and sanitation facilities.

1.5.1. Halls of residence (on-campus)

Halls of residence are accommodations the University provides, though at a cost to the student. These halls may be mixed-sex or single-sex, catered or self-catering, with single rooms or shared rooms and en-suite bathrooms or shared bathrooms. The cost of these rooms will vary according to these variables and the University, and there may be further rules such as visiting hours, quiet hours, alcohol and guest policies, and opening hours out of term. This type of accommodation is usually in short supply. Living in Halls of residence or on-campus housing can enhance the psychological well-being of first-year students, and receiving financial aid to assist in paying for room and board can reduce students' stress levels simply because students know their educational costs have been met [35].

A study revealed that to facilitate the transition to college and independent living; many students choose to live in university housing during their first year of college. For example, from 1999-2002 in the US, an average of 15% of undergraduates, primarily first-year students, lived in on-campus housing. This shows that living in on-campus housing does more than help students transition to college; it provides meaningful interaction with classmates in the same transitional stage of college. Halls of residence are one-way colleges or universities house students and play a role in maturing and protecting student populations away from home. Halls of residence are among two major categories sponsored and controlled by colleges and universities. Off-campus housing is the other primary housing option that may be sponsored and controlled by colleges or universities but not directly located on the campus [36].

1.6. Housing Deficit Theory

Researchers introduced the notion of housing deficit to conceptualise residential satisfaction/dissatisfaction. In their housing adjustment model of residential mobility, they theorise that individuals judge their housing conditions according to normatively defined norms, including cultural norms dictated by societal standards or rules for living conditions and family/personal norms, which amount to household standards for housing. Thus, an incongruity between the actual housing situation and the cultural or familial housing norms results in a housing deficit, giving rise to residential dissatisfaction. Households with a housing deficit who are dissatisfied are likely to consider some form of housing adjustment. They may attempt to make suit adjustments to reduce dissatisfaction by revising their needs and aspirations to reconcile the incongruity or improving their housing conditions through remodelling. They may also move to another place and conform their housing to their needs [37].

2. Materials and Methods

Quantitatively, a descriptive survey research design was adopted for the study. The descriptive design was chosen because it can produce many responses from a wide range of people. At the same time, it provides a meaningful picture of events and seeks to explain people's perceptions and behaviour based on data gathered at a point in time. In-depth follow-up questions can also be asked, and items that are unclear to the respondents can be explained using descriptive design [38]. This is because descriptive survey designs do not control the variables and the environment they study. This means that findings from the survey are most often influenced by factors other than those attributed by the researchers. The study population comprised 381 level 100 students in the Halls of Residence at the University of Cape Coast. The level 100 target population is made up of 8211 students. (Management of Information System, University of Cape Coast, 2020/2021 academic year.

Stratified proportionate random and simple random sampling techniques were used to select the residence halls and level 100 students. Eight out of ten residential halls in the University chosen for this study were selected because these are halls assigned to first-year undergraduate students, which also appear in their portals for them to select their rooms. The other two remaining halls (Alumni et al. Hall) are given to undergraduate continuous students and postgraduate students. However, this study has targeted the freshers or Level 100 students who have yet to taste the private hostels on campus. Moreover, the main aim of this study was to assess the housing satisfaction of students in the halls of residence at the University of Cape Coast. The halls of residence on the University campus are primarily occupied in more significant numbers by Level 100 students. Again, these halls best represented the University's traditional halls of residence. These halls selected had some common characteristics. Most of them were two, three or four-storey buildings. The rooms are arranged linearly along a corridor. Six mixed-sex halls and two single-sex halls were used for the study. In order to arrive at a sample size, a list of all the halls of residence was obtained. The study adopted the stratified proportionate random sampling to select the respondent from each hall of residence.

With stratified proportionate random sampling, the sample size of each stratum is proportionate to the population size of the stratum. This means that each stratum has the same sampling fraction. The stratified proportionate sampling technique lends reliability to the study, as proper representation of the entire population is ensured [39]. After different strata had been developed, the researcher used simple random sampling to select respondents from each group. The researcher operationalised the simple random technique through the lottery method, assigning 'Participation' and 'Non-participation' on pieces of paper, folding and putting them in a container and reshuffling them for the students in the halls to pick without replacement. Those who picked 'Participation' were

included as respondents for the study. The simple random sampling ensured that each student had an equal chance of being sampled to avoid bias [40, 41]. Also, the simple random technique was ideal for a heterogeneous study and allowed inferential conclusions [42]. With the sampling frame of 8211 students, the Yamane formula was used to determine the sample size at the confidence level of 95% with a 0.05 margin of error [43]. The determination of the sample size using the Yamane (1973) formula is given as:

$$n = N / \left\{ 1 + N (e)^2 \right\}$$

Where; n = sample, N = population, e = error margin

$$n = 8211 / \left\{ 1 + 8211(0.05)^2 \right\}$$

$$n = 381$$

Therefore, the appropriate sample size using the Yamane formula is 381 respondents for the study. Eight out of ten residential halls in the University were chosen for this study because they best represented the University's traditional halls of residence [43]. There are several accommodation facilities in and around the University. However, the following university halls of residence are through which undergraduate students who gained admission are assigned to the admission portal on their admission letter. In other words, each University's undergraduate student is affiliated with one of these residence halls. Kwame Nkrumah Hall, Superannuation Hall, Atlantic Hall, Oguaa Hall, Adehye Hall, SRC Hall, Casely Hayford Hall, and Valco Hall. These halls selected had some common characteristics. Most of them were two-, three-, or four-storey buildings. The rooms are arranged linearly along a corridor. Six mixed-sex halls and two single-sex halls were used for the study. The respondents were selected from each residence hall using a random sampling procedure. Table 1 shows the population and selected sample breakdown, respectively.

Table 1. Breakdown of Sample for each Hall selected

Name of Hall	Population	Sample Selected
Adehye	502	23
ATL	641	30
Oguaa	1052	49
Superannuation	1243	58
SRC	1216	56
Casford	871	40
Valco	1358	63
Nkrumah	1328	62
Total	8211	381

Source: Fieldwork, 2021

The main instrument for data collection was a questionnaire. The self-administered questionnaire contains two sections. Section 1: Satisfaction with the physical features of the housing unit. Section 2: Satisfaction with the social environment in the housing area; A Likert scale ranging from "1" = very satisfied, "2" = satisfied, "3" = very dissatisfied, and "4" = dissatisfied, was used to measure respondents' level of satisfaction on various housing components. They used this method so that as many respondents as possible could be reached during a survey in the shortest amount of time. The method also allows for efficiently collecting statistically quantifiable data [44]. The questionnaire was created with a specific focus on the study's objectives. The questionnaire's questions were grouped into themes based on the research questions.

Cronbach's alpha was used in the study to assess the reliability of the variables. Cronbach's alpha measures internal consistency or how closely related a group of items is. Many researchers consider reliability values of 6.0 to 0.70 and higher acceptable [45]. The reliability test conducted gave a significant Cronbach alpha of 0.85. Cronbach's alpha was used to assess the research instrument's internal consistency and reliability. Many researchers consider reliability values of 6.0 to 0.70 and higher acceptable [46]. For a research instrument to be considered valid, the content chosen and included in the questionnaire was accurate and relevant to the studied variable [47]. The data were analysed using SPSS (Statistical et al.) version 20.0. Descriptive statistics were used to analyse the data and show the direction of the responses. Descriptive statistics were used to analyse research questions, including frequencies, percentages, means of means, and standard deviations. Discussion, conclusion, and recommendation were made out of this summarised data analysis.

3. Results

3.1. Physical Features of the Halls of Residence Influence Students' Satisfaction

This section presents findings on research question 1: To what extent do Physical Features of the Halls of Residence Influence Students' Satisfaction? The objective sought to examine the extent to which the physical features of the halls of residence influence students' satisfaction. The results of this objective are indicated in Table 2 below.

Table 2. Extent to Which Physical Features of the Halls of Residence Influence Students' Satisfaction

Physical Feature	Mean	Std. Dev.
Size and condition of toilet facility	2.29	0.885
Condition of bathroom	2.34	0.903
Cooking area	2.54	0.852
Washing and drying area	3.28	0.768
Lockers	2.48	0.944
Relaxation facility	3.35	0.759
The finishes (the wall, floor, ceiling)	2.14	0.892
Drainage	3.03	0.783
Roof	3.19	0.775
Sleeping space	2.27	0.838
Sanitary fittings (number of wash basins)	2.23	0.899
Number of room occupants	2.32	0.945
Room ventilation	2.15	0.948
Size of veranda/balcony	2.54	0.852
Recreational facility	3.66	0.724
Fire service systems (adequacy of fire extinguishers, etc.)	3.43	0.733
Size and condition of wardrobe	2.21	0.923

Mean range: Very Dissatisfied (0.0–1.0); Dissatisfied (1.1–2.0); Satisfied (2.1–3.0); Very Satisfied (3.1–4.0)
 Mean of Means = 2.53; Mean of Standard Deviation = .848; Source: Field Survey (2021)

Results from Table 2 indicate that the students were generally satisfied with the extent to which the physical features of the halls of residence influence their satisfaction, as the average mean or mean of means recorded a score of 2.53. There are notable variations in the students' responses. With 3.66 being the highest mean, the students were delighted with the recreational facilities available in the residence halls, influencing their satisfaction with their halls. Following this was the fire service systems available in the halls of residence, which detailed a mean score as high as 3.43, indicating that the students

were delighted with such intervention, which increased their chances of safety, especially in the case of a fire outbreak. Subsequently, with mean scores of 3.35, 3.28, 3.19, and 3.03, the students indicated they were delighted with the relaxation facilities, washing and drying areas, roofs, and drainage systems available in the residence halls, respectively. This implies that the halls of residence are well provided with facilities that would ensure that aside from the rooms students would lodge in as their shelter, they would have provisions like lovers' bench, proper roofing, summer huts, and the likes to ease their stress and enjoy the beautiful scenery of the university campus in addition to the adequate spaces provided for them to wash their clothes.

In addition, the students indicated they were satisfied with other features or provisions, such as the cooking areas and balconies, as these provisions recorded a mean score of 2.54 for each. With the same mean for both features, it could be inferred that the University's halls of residence are designed for students to mainly use their balconies as places where they can also prepare their meals. Also, with a mean of 2.48, the students expressed their satisfaction with the availability of lockers in their rooms. However, on the issue of the size and condition of the wardrobes available in their rooms, though indicating satisfaction, the mean score dropped to 2.21. This shows that though there are wardrobes or lockers available, the various hall managements should increase their sizes and improve their conditions to increase the satisfaction urges of students.

Regarding places of convenience and their likes, the students expressed their satisfaction with such provisions as specific features, which are the condition of the bathrooms and the sizes and condition of toilet facilities, recording mean scores of 2.34 and 2.29, respectively. This implies that the various washrooms in the residence halls are in good condition and available for use. With the lowest mean of 2.14, the students expressed satisfaction with finishing their rooms in their residence halls. In general, these findings reflect the various categories of positive physical housing characteristics that influence one's satisfaction with a housing facility: the larger housing size, better housing interior structure, and the aspect of individual dwellings [48].

3.2. The extent to Which the Housing Environment Influences Students' Satisfaction

This sub-section also presents results on the second research question - What is the Extent to Which the Housing Environment Influences Students' Satisfaction? The final objective also examined how the housing environment influences students' satisfaction. The results relating to this objective are indicated in Table 3 below.

Table 3. The Extent to Which Housing Environment Influences Students' Satisfaction

Statement	Mean	Std. Dev.
How will you rate:		
Relationship with your colleague students in the hall	2.82	0.782
Appearance of your hall surroundings	2.04	0.987
The serenity of your hall environment	2.47	0.848
Proximity of hall to shopping centres	2.39	0.859
Proximity of hall to lecture theatres	2.78	0.796

Mean range: Very Dissatisfied (0.0–1.0); Dissatisfied (1.1–2.0); Satisfied (2.1–3.0); Very Satisfied (3.1–4.0)
 Mean of Means = 2.53; Mean of Standard Deviation = .848; Source: Field Survey (2021)

Table 3 indicates that amongst all the environmental factors influencing students' satisfaction with their various halls of residence, they rated their relationship with their colleague students in the hall as the topmost. This was evidenced by the mean score of 2.82 and its associated standard deviation of 0.782 that, the statement pointed to student satisfaction. Following this were the proximity of the halls of residence to the lecture halls and the serenity of the environment of the halls of residence, which the students indicated that they were satisfied with. This was highlighted as the various statements recorded

respective means of 2.78 and 2.47 with their accompanying standard deviations of 0.796 and 0.848. The students again indicated that they were satisfied with the proximity of their residence halls to shopping centres, with a mean score of 2.39 and a standard deviation of 0.859. Finally, with the lowest mean of 2.04 with a standard deviation of 0.987, the students expressed their satisfaction with the appearance of their hall surroundings. The results above indicate that the students, in general, were content with the environmental factors that influence their satisfaction with their various halls of residence. This was so because they found the ease of access with their halls of residence to the lecture halls and shopping malls in addition to the company their colleagues provided them with and the sound environment their various halls offered them. These findings agree with the Theory of Housing Satisfaction, which postulates that residential satisfaction hinges on the influence of neighbourhood situations or environmental factors [49].

4. Discussion

4.1. Physical Features of the Halls of Residence Influence Students' Satisfaction

Concerning the extent to which physical features of the Halls of Residence influence students' satisfaction, the study discovered that the various categories of positive physical housing characteristics that influence one's satisfaction with a housing facility include the larger size of housing, better interior structure of housing, and the aspect of individual dwellings. It also demonstrates that physical factors significantly impact student residence satisfaction. This result is consistent with a previous study that found that the residential satisfaction of students living in dormitories was related to the social qualities of the dormitories, room functionality, and several students' demographic characteristics. Positive physical housing characteristics found to be most important in accounting for higher housing satisfaction include larger housing size [50]. Further, similar research on Students' Housing settings at Bilkent University, Ankara, was one of the studies that investigated the influence of physical attributes of campus accommodation on Students' Satisfaction. According to the study, students living on the highest floor perceived their rooms to be larger and less crowded than those living on the lowest floor [51]. Again, the study found that the size of a hostel room affects students' satisfaction. For example, their research discovered that students living in triple-sharing rooms were less satisfied and unhappy with their living conditions than students living in double-sharing rooms [51].

Residential environments are actively associated with environmental conditions where people live and include various elements, each of which may elicit a variety of responses from residents [52]. In addition to physical factors, the OECD emphasises the importance of non-physical factors in determining the quality of residential environments [53]. Furthermore, the World Health Organization (WHO) identified safety, health, convenience, and amenity as the four most basic human needs [54]. Physical factors, such as the availability of parks and amenities within a community; social factors, such as a sense of belonging and social support; and personal factors, such as home ownership and length of residence, all contribute to residential satisfaction. Fear of crime and feelings of personal safety, as well as variables perceived to be associated with crime, such as graffiti in the residence and loitering, are predictors of residential satisfaction [55].

4.2. The extent to Which the Housing Environment Influences Students' Satisfaction

The study indicated that the students were content with the environmental factors influencing their satisfaction with their various halls of residence. This result supports the findings of Ogun State [56]. According to their findings, all environmental variables used in predicting respondents' home satisfaction in the study region (residents' community perspective, security, facilities and amenities, safety to community association, and residential density) were significantly favourable. The most important environmental factor associated with housing satisfaction in the study is the respondents' perception of

their community. Housing satisfaction is thus examined from the standpoint of physics, engineering, architectural components, the household's immediate environment, and behavioural, cultural, and social demographics. A safe environment allows students to pursue their educational potential without fear of discrimination, threats to emotional and physical well-being, or intimidation [57].

5. Conclusion and Recommendations

The study revealed that the students were satisfied with the physical features of the halls of residence, which influenced their contentment. Features such as recreational facilities, fire service systems, and relaxation facilities were vital in reaching such satisfaction. The study also indicated that the students were satisfied with how much their housing environment influenced their contentment. Students' relationship with their colleagues, the proximity of their halls of residence to the lecture halls and the serenity of the environment of the halls of residence all proved helpful in aligning the students' contentment to such an extent. It is recommended that the hall management should maintain the present physical features and facilities in the halls of residence for students' satisfaction. It is also recommended that the university management take into consideration the proximity of the halls of residence to the lecture theatres and the serenity of the environment of halls of residence in any future halls of residence construction.

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