

A Study of Students' Housing Quality in Ladoke Akintola University of Technology (Lautech), Ogbomosho, Nigeria

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Abstract

The study identified and examined the physical characteristics of students' accommodation in Ladoke Akintola University of Technology, Ogbomosho, evaluate the adequacy of the existing facilities in these accommodation and examine the physical and environmental quality of students housing in the study area. Questionnaires were administered on 10% of the students in each of the selected hostel for survey using systematic sampling technique. 122 questionnaires were administered. Information obtained includes types of building, conditions of building, availability and adequacy of housing facilities and physical environmental quality. The study established that the conditions of building components in LAUTECH, were very poor. For instance, only the roof (2.172) and the wall (2.147) have a mean deviation that is higher than the calculated Mean Index (MD) of 1.983. On a general note it was observed that the "Students' Perception Index" SPI for all the building components were less than 2.5 (50%) of the expected 5. The SPI_a of less than 2.5 is an indication of the poor condition of building component in the study area. Indicated in the result of students' rating of basic facilities in the study area showed that they are inadequate. From the observed data, four facilities have "Students' Perception Index" SPI that is greater than the calculated SPI_u , and these are toilet (2.049), water supply (2.040), drainage (1.945) and electricity (1.850). Other facilities have negative MD. These are kitchen (-0.060), burglary proof (-0.066) sewage (-0.078), laundry (-0.137) and bathroom (-0.213). Many students of about 45.10% of respondents choose to reside very close to school. The chi-square test was 0.747p-value, which signify that there is no significant difference or variation in the institution selected and the place of residence because the p-value is greater than 0.01 and 0.05 critical limits. The chi-square test of 0.983 shows that there is no significant variation between the institutions and their accessibility to building. The study concluded that the school management should intervene in the housing provision for students in selected non-residential university to ensure that students are living in quality accommodation. LAUTECH Management should set up students housing committee and they should inspect housing before students occupy them. This will ensure that students did not occupy substandard accommodation. Finally, there should be a regular routine inspection so as to ensure that those accommodation were well maintained

1. Introduction

Housing is the central need in the socio-economic life of individual and the society as a whole. Informing the prioritisation of housing as a basic need is an important indicator of welfare level. The nature of quality and quantity of housing facilities available to households and organisation partly determine level of health, productivity, longevity and the quality of environment in any society. The importance of housing to the socioeconomic well-being of the citizenry and economic development of the nation cannot, therefore, be overemphasized. Housing is also an issue that touches the life of individual as well as that of nation and great importance is ascribed to the roles it play in engendering human comfort by both nature and society (Agbola, 1998).

The magnitude of the students housing in tertiary institution in Nigeria has generated a great deal of concern on the part of government and administrators of higher institutions. The problems become more pronounced and disturbing when the number of tertiary institutions and number of students started increasing without a corresponding increase in the number of available accommodation to house them.

In non-residential institutions, students sourced for accommodation off campus, they compete in the housing market with other users like workers in the public sectors. The competition is intense especially in neighbourhood close to institutions with variation in housing conditions and other students' housing problems within the settlement. Their state of non-solvability makes their access to decent accommodation more difficult. The result of this is that they live in a building without necessary infrastructure and the surroundings environment is sanitary poor.

A search through related literatures on students of tertiary institutions reveal that, not much study have been done off-campus students' especially in the area of housing quality. In the study of Earthman (2002), it was ascertained that poor school facilities have negative influence on reading performance. However, Anthony Afful-Boroni and Patricia Mawsa Hogrey (2010) compare academic performance of residential and nonresidential students. The outcome of their research showed that residential facilities relate to academic performance and that

residential facilities are the better predictor of academic performance than academic facilities.

Many studies have assessed housing qualities under several variables ranging from conditions of the building

Deresam (1977), structural material, Nadinee (1999), Olujimi (2000) plot size ratio Ikurekong and Jacob (2000) environmental parameters Afon (2000), occupancy ratio Omofonwon (2000), Ajiboye (2004) tropical weather conditions Umoh (2000), Olotuah (2006). Both state and Federal housing policy have not encouraged the production of quality housing for the populace (Aribigbola 2008). A critical study of the literatures reviewed above, shows that previous works focuses majorly on assess to housing qualities in various dimension with non on students housing quality in non-residential universities. This research is thus imperative to bridge the gap in literature on students' housing quality in non-residential University in southwestern Nigeria with Ladoke Akintola University of Technology as a case study.

2. Study Area

Ladoke Akintola University of Technology formerly known as Oyo State University of Technology Ogbomoso was established by Oyo State edict of 23rd April 1990 as a non-residential University by the then Oyo State government. Therefore the students were to cohabit within the Ogbomoso community. Ogbomoso is located at about 120 Kilometres North of Ibadan, the capital of Oyo State. Today, the university is owned by two States, Oyo and Osun States. This is born out of the fact that Osun state was calved out of the old Oyo state in 1991.

The name of the University was changed to Ladoke Akintola University of Technology by the amended Edict No. 8 of 31st July 1991. The edict establishing the University was signed by the then Military Governor of Oyo State, Colonel Sasaenia Oresanya on 23rd April, 1990.

3. Literature Review

Quality is defined by Concise Oxford dictionary as "the degree of excellence exhibited by any factor that forms an object of investigation. According to Onion (1984), quality connotes a mental and moral attribute of a thing. It is also used when describing the nature, condition or property state of a thing.

McCanny (1972) is of the opinion that arriving at the definition for quality depends not only on the user and his or her desires and aspirations, but also on the factor being considered. From his observations, it is clear that quality cannot be considered in isolation of the process which considers it. In the same vein, different individuals, groups and agencies have different concepts of what environmental quality is. No definition given to the concept could be said to be conclusive and all encompassing.

Beside Un declarations, African Charter of Human and People Rights (1990) which Nigeria is a ratified member; explicitly recognized the right to adequate housing in the following articles – 'Art 16' is on right health and 'Art 24' is the right of people to a general satisfactory environment favourable to their development, which was interpreted as protecting the right to adequate housing. (UN, 2001). Nigeria constitution (1979 and 1999 constitution section 34 and 38 respectively) guarantees every Nigerian a decent housing under the fundamental human right. These sections also guarantee right to private and family life, which states among that 'the privacy of citizen, their home is thereby guarantee and protected (FGN 1979 and 1999).

Nandinee (1999) predicated that the structural balance is an essential factor in housing quality. He used characteristics of structural balance as tools for assessing housing quality. He trailed on logic model data used in American Housing Survey of metropolitan areas to assess structural balance. He also used supply-side and demand-side variables, age of building, structural types, tenure, elderly status of residents and household vehicle ownership as determinants of housing quality (Aribigbola 2005).

Olotuah (2000) tilted his concern toward inadequacy and the condition of housing in both urban and rural areas of Nigeria. Olayiwola et al (2005) adroitly assessed the housing problems in Nigeria predicated the poor quality of housing conditions and unsanitary environment. This is as a result of pressure mounted on available stock, which compounded housing inadequacy. They concluded that citizen empowerment and housing market deregulation could give solace to the prevailing housing problems.

Aribigbola (2008) evaluated housing policies in developing countries using Akure as a case study. He asserted the deplorable conditions of majority of the housing stock. He said a good housing policy must be able to deliver sustainable quality housing. He found out that more than 60% of the houses are without adequate toilet; more than 80% have no connection to pipe borne water, while more than 30% dump waste indiscriminately. This also buttress Wahab (1990) findings that there had not been any significant improvement in urban housing quality as only 32.8% of the houses could be considered as physically sound while sanitary facilities were largely unsatisfactory in the buildings. He said housing policies must be reformulated to enhance quality housing delivery.

Olawuni et al (2006) also carried out similar study in the three residential areas of Osogbo. They lamented the resultant housing condition from high rate of urbanization. They used geographic information

system (GIS) for the spatial variation in the housing conditions. Their findings buttressed other study carried out by Akinola (1998). Fiadzo (2002) study is on the estimated of determinants of Housing quality in Ghana. He applied World Bank designed 'Core Welfare Indicator Questionnaire (CWIO)' in determining the state of housing quality. Among the variables used are; wall material, roofing material, cooking fuel, sewage system among others. He said, marital status, income and educational level are among factors responsible for overcrowding in the country. He said if the private sectors could be strengthened; it will improve housing quality for the people.

A deep look at the various literatures reviewed above, it could be seen that the majority of them only assessed housing qualities passively without identifying any consequence of poor students housing quality. Though these studies are eye opener and stepping stone to better findings in future. We were enabling to discern what could be short and long term implications of poor structural materials, compact building without space, filthy environment, poor toilet, kitchen and bathroom facilities. The parameters, used in measuring housing quality are indeed germane to well-being of students, but to what extent? This study seeks to advance the scope and add to literature by assessing some parameters of housing quality and the resultants on students.

4. Methodology

One university was randomly selected out of six existing non- residential universities in southwestern Nigeria. Questionnaires were administered on students in hostel registered with Students Affairs Offices of the 93 hostels registered with students' affairs offices in LAUTECH. Twenty five percent (25%) of the entire registered hostel were randomly selected without replacement. 23 hostels were selected. 1208 students were identified in the selected hostels. Questionnaires were administered on 10% of the students in each of the selected hostel for survey using systematic sampling technique. 122 questionnaires were administered. Information obtained includes types of building, conditions of building, number of students living in the room, availability and adequacy of housing facilities and physical environmental quality.

5. Analysis of Findings

5.1 Condition of Building Components

A very good way of judging the physical condition of a building is to consider the components of the building one after the other as a separate entity. Using a rating scale of very good (5), good (4), fair (3), poor (2) and very poor (1), the study considered the condition of the buildings where students in the selected universities resides. The components considered in this research are similar to the ones considered by Aliu and Adebayo (2010) in evaluating the influence of housing quality on urban residents' wellbeing. These components include wall, floors, ceiling, roof, door and window.

The analyses of the ratings indicated by the students adopted Likert's scales method. This evolved into an index called "Students' Perception Index" (SPI). This method is similarly to the one used by Afon (2006) in identifying environmental attributes necessary for the rehabilitation of the core area of Ogbomosho, in Oyo State. The index for each condition of building component was calculated by dividing the Summation of Weight Value (SWV) by the total number of responses. The SWV for each condition of building component was obtained through the addition of the product of the number of responses to each condition of building components and the respective weight value attached to each rating.

This is mathematically express as $SWV = \sum_{i=1}^5 x_i y_i$

..... equation I

Where:

SWV= Summation of Weight value; x_i = number of respondents to rating i ; y_i =the weight assigned to a value ($i=1, 2, 3, 4, 5$).

The index for each identified building component therefore takes a value of between 5 and 1. The closer the value is to 5, the higher the perfect condition of such building component in the selected university.

This is mathematically express as

$$SPI = \frac{SWV}{\sum x_i} \dots\dots\dots \text{equation II}$$

The mean index for LAUTECH was computed. This was obtained by summing the indices of building component and dividing by the number of identified variables (n), in this case $n = 13$. The mean index of LAUTECH was denoted by SPI.

Table 1 Students' Rating of Various Building Components in LAUTECH

Building Components	Rating and Weight Value							
	VG (5)	G (4)	F (3)	P (2)	VP (1)	SWV	SPI	MD
Roof	7	12	24	31	48	265	2.172	0.189
Wall	6	8	28	36	44	262	2.147	0.164
Doors	0	6	30	41	45	241	1.975	-0.008
Window	0	13	19	33	57	232	1.902	-0.081
Ceiling	2	8	17	39	56	227	1.861	-0.122
Floor	4	7	19	28	64	225	1.844	-0.139
Total							11.902	

Source: Author's fieldwork, 2013

$$SPI_a = \frac{SWV}{xi} = \frac{11.902}{6} = 1.983$$

5.2 Adequacy of Basic Facilities

One of the basic components of a good housing environment is the adequacy of basic housing facilities. These facilities include; toilet, bathroom, electricity and water supply among others. . Using a rating scale of very much adequate (5), very adequate (4), adequate (3), not adequate (2) and not at all adequate (1), the study considered the adequacy of basic facilities in buildings where students in the LAUTECH resides.

Water supply is a basic necessity of any housing environment, the SPI for water supply in LAUTECH is the highest ranked facility in terms of adequacy with SPI of 2.525. The other facilities that have SPI above the calculated SPI_a were electricity supply (2.467) and toilet (2.025). Adequacy of drainage, burglary proof, kitchen, laundry, sewage and bathroom were 1.853, 1.779, 1.766, 1.664, 1.467 and 1.410. (See Table 2)

Table 2 Students' rating of the adequacy of basic facilities in LAUTECH

Building Components	Rating and Weight Value							
	VMA (5)	VA (4)	A (3)	NA (2)	NAA (1)	SWV	SPI	MD
Adequacy of water supply	14	12	30	35	30	308	2.525	0.641
Adequacy of electricity	10	19	30	22	41	301	2.467	0.583
Adequacy of toilet	4	12	18	37	51	247	2.025	0.141
Adequacy of drainage	8	10	8	26	70	226	1.853	-0.031
Adequacy of burglary proof	4	4	19	29	66	217	1.779	-0.105
Adequacy of kitchen	3	6	17	33	63	219	1.766	-0.118
Adequacy of laundry	0	10	3	45	64	203	1.664	-0.220
Adequacy of sewage	0	0	3	51	68	179	1.467	-0.417
Adequacy of bathroom	0	3	10	21	88	172	1.410	-0.474
Total							16.956	

Source: Author's fieldwork, 2013

$$SPI_a = \frac{SWV}{xi} = \frac{16.956}{9} = 1.884$$

As indicated in Table 3, the calculate SPI for each of the variable was very low. There is no facility with at least half (2.5) of the expected SPI of 5. Out of the 9 identified facilities, only 4 facilities have SPI that is above the calculated SPI_b, these are toilet (2.298), drainage (2.226), sewage (2.065), and electricity (1.887). The

facilities with SPI below the calculated SPI_b were kitchen (1.871), water supply (1.839), burglary proof (1.823), bathroom (1.790) and laundry (1.766).

Table 3 Students' rating of the adequacy of basic facilities in Lautech

Building Components	Rating and Weight Value							
	VMA (¹)	VA (4)	A (3)	NA (2)	NAA (1)	SWV	SPI	MD
Adequacy of toilet	13	28	52	98	139	668	2.049	0.216
Adequacy of water supply	17	19	61	95	131	665	2.040	0.207
Adequacy of drainage	18	27	39	80	159	634	1.945	0.112
Adequacy of electricity	15	27	45	82	136	603	1.850	0.017
Adequacy of kitchen	5	19	43	93	162	578	1.773	-0.060
Adequacy of burglary proof	15	10	48	65	187	576	1.767	-0.066
Adequacy of sewage	10	14	37	95	165	572	1.755	-0.078
Adequacy of laundry	6	25	21	86	188	553	1.696	-0.137
Total	4	11	42	73	528	16.495	1.620	-0.213

Source: Author's fieldwork, 2013

$$SPI_u = \frac{SWV}{xi} = \frac{16.495}{9} = 1.833$$

(5), very good (4), good (3), poor (2) and very poor (1), the study considered the condition of some basic service that could aid the quality of a housing environment where students in the selected university resides.

5.3 Condition of Basic Services

Some of the basic facilities that are very fundamental to the improvement of housing environment are transportation services, health facilities, postal service and fire service. Using a rating scale of excellent

In Table 4, students' rating of the condition of basic service indicated that health facilities and postal services were rated higher with SPI that is above the calculated SPI_a LAUTECH. The SPI for health facilities and postal service were 3.918 and 3.885 respectively. The rating of health facilities above average could be as a result of the presence of several health care facilities in Ogbomosho town. The remaining facilities had SPI that was below the calculated SPI_a of 3.48. The SPI for transportation and fire service are 3.451 and 2.664 respectively

Table 4 Students' rating of the condition of basic services in LAUTECH

Building Components	Rating and Weight Value							
	E (5)	VG (4)	G (3)	P (2)	VP (1)	SWV	SPI	MD
Health facilities	56	29	18	9	10	478	3.918	0.438
Postal services	47	33	26	13	3	474	3.885	0.405
Transportation	18	32	61	9	2	421	3.451	-0.029
Fire services	10	12	53	21	26	325	2.664	-0.816
Total							13.918	

Source: Author's fieldwork, 2013

$$SPI_a = \frac{SWV}{xi} = \frac{13.918}{4} = 3.480$$

6. Conclusion

The school authority does not appreciate the haphazard erection of students' accommodation but they couldn't stop the people from such construction since the so called owners are not under their authority, while the monitoring bodies have refused to take action.

Also, the structures in these institution are very sound but some have been greatly dealt with by some

environmental factors which are caused by poor drainage, nonchalant attitude of owners as touching the repair or maintenance, overcrowding and lack of basic housing facilities,

A basis for most housing irregularities is the absence of housing research before housing policy formulation. Consequently, housing research should be encouraged so as to curb planning without data and encourage planning with data. Professionals should be encouraged to come into housing provision and management. Besides, more students' houses should be provided to meet the increasing demand of the growing students' population, so that there will be no room for congestion.

Also, enough studies should be carried out on the culture of the people to use the students' houses that will be provided. In addition, open spaces should be well managed by a monitoring committee in order to discourage illegal construction on them.

Landscaping of the environment should be encouraged to add to the aesthetics of the surroundings. Then, government should wake up and see to the provision and maintenance of essential facilities like roads, water, health centre, et cetera.

Moreover, proper management of the sewerage lines should be done to open up any blocked or faulty soakaway sewer to avoid bad odour and endangering of life and other living things in the environment.

Furthermore, the monitoring or management body should be set up be well funded so that they discharge their duty effectively, and where they are not doing so they should be manned with efficient people.

Authority of LAUTECH should set up students housing committee and they should inspect housing before students occupy them. This will ensure that students did not occupy substandard accommodation. Beside this, there shall be a regular routine inspection so as to ensure that those accommodation were maintained

Finally, sentiments and politics should not be allowed to interfere with housing, management, so as not to compromise the goal. Proper awareness and legislation should be made to encompass all the things mentioned above. They should be enforced and erring offenders should be brought to book.

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