

A POST OCCUPANCY EVALUATION OF STUDENTS' HOSTELS ACCOMMODATION

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Abstract

Hostel accommodation is very crucial to the performance of students. A post occupancy evaluation (POE) of existing hostels could foster their improvement and services. This study focuses on POE of students' hostel accommodation in the University of Lagos, Nigeria. The problem of the study is specifically concerned with investigating the availability of students' hostel accommodation and the satisfaction derived by the users. The objectives of the study are to investigate students' hostel accommodation and their users' satisfaction, to examine the additional facilities provided in the hostels, to pinpoint the problems of the users and that of the facilities managers in managing the hostels. The population of the study is the students of the University of Lagos and the facility managers; while the sampling frame is the students resident in the institution-owned hostels and the facility managers of such hostels in the main campus of the University. Eleven hostels were used and random sampling technique was used to select a sample of 179 from the frame. Descriptive and inferential statistics tools were used to analyze the data. The study reveals that the content of hostels accommodation in the University of Lagos includes bathrooms, common rooms, bedrooms, reading rooms, kitchen and fixtures. There is also a sparse availability of laundry, pantry and meeting room in some of the hostels. The level of satisfaction of the users with the hostels accommodation is "good" in term of noiselessness, indoor temperature, natural lighting, ventilation and water supply; while it is "fair" with electrical fittings, space, cleanliness and comfortability. The study recommends that more accommodation with state of the art facilities should be provided in the University of Lagos.

Keywords: facility managers, hostels accommodation, post occupancy evaluation, satisfaction and students.

Introduction

There is no industry-accepted definition for post occupancy evaluation; nor is there a standardized method for conducting it (Federal Facilities Council (FFC), 2001). However, POE can be defined as any process geared towards determining and improving building performance in relation to users' satisfaction and the built environment. Although there exist no generally acceptable protocol of POE but one of the commonest ones that have been used extensively in the last 27 years are Post-Occupancy Review of Buildings and Engineering (PROBE) in Great Britain and many countries. The second commonest one is the survey tools developed and supported by the Center for the Built Environment at UC- Berkeley (Hewitt, Higgins, Heatherly & Turner, 2006).

Moreover, it has been observed that the application of POE depends largely on the drivers and one of such is users' satisfaction. Stevenson (2008) opines the major drivers are energy performance of buildings directives (EU), building regulations and good homes alliance. Meir, Garb, Jiao and Cicelsky (2009) stated that the drivers are entrepreneurs, managers, users, consultants and institutional stakeholders. The application of POE is relevant, effective and successful in determining occupants' satisfaction level, as well as providing recommendations for improving building performance (Nawawi and Khalil, 2008). POE is a useful tool for building asset and facilities management; as long as the approach employed to collect feedback from users is effectively integrated towards sustainability of buildings. POE also seems to have a natural place in strategic planning of building management and can be developed under the public sector. Meir *et. al.* (2009) opine that it is a vital step toward sustainability.

It is apparent that POE is absent in most institution buildings in Nigeria. Consequently, the state of students' hostels in Nigerian tertiary institution has been described as inadequate and deplorable with low occupants' satisfaction (Ubong, 2007). It is clear from literature and practice that one of the benefits of POE is increased occupants' satisfaction. The problem of the study is specifically concerned with investigating the availability of students' hostel accommodation and the satisfaction derived by the users. This study therefore focuses on POE of students' hostels in the University of Lagos, Nigeria with a view to improve them. The objectives are to investigate the content

of students' hostel accommodation and their users' satisfaction, to examine the additional facilities provided in the hostels, to identify the problems of the users and that of the facilities managers in the management of the hostels. The study will contribute immensely toward arousing the consciousness of appropriate authorities on the need for POE of institutional buildings, to aid their quality, enhance asset value and students' performance.

Literature review

Post occupancy evaluation

Post occupancy evaluation is the process of evaluating building systematically and comprehensively after it has been occupied (Lee & Oh, 2007; Hewitt *et. al*, 2006; FFC, 2001). Department of Public Works (DPW) (2009) defines post-occupancy review (POR) also referred to as post-occupancy evaluation as the process for measuring a project's success and centers on the needs of the occupants. It is the evaluation of the performance of buildings during usage for improvement and fitness for purpose ((Blyth, nd; Nawawi and Khalil, 2008; Stevenson, 2008). Meir *et. al*. (2009) grouped POE broadly into two, which are lateral studies - examining a limited number of parameters in a large number of case studies; and in-depth studies - providing a detailed analysis of all available parameters in a single case study.

On the other hand, DPW (2009) explains that POR are of different complexities and three general types in increasing order of complexities are indicative, investigative and diagnostic post-occupancy review types (Lee & Oh, 2007). However, planning (i.e. feasibility, resource and research planning), conducting (i.e. advance notice and instructions to respondents, managing the data collection process and analyzing the data) and applying (i.e. reporting outcomes, recommendations and review) phases are all common to each type of post occupancy reviews (Cooper, Ahrentzen & Hasselkus, 1991). Each procedure involves a number of activities captured succinctly in the post-occupancy process model evolved by DPW (2009) shown diagrammatically in Figure 1. This model is very similar in some sort with the proposed guideline for POE for government and public buildings in Malaysia shown in Figure 2 (Nawawi and Khalil, 2008). The Malaysian proposal also consists of three phases (i.e. initial, process and recommendation phases) of six steps or procedures as against the nine procedures in that of DPW (2009) in Brisbane. The six sequential steps which incorporate all the nine procedures of DPW (2009) are: identification of building parameters, evaluation of objectives, selection of planning approach, conduction of POE inspection, application of findings and actions in response to feedback. The activities indicated in both studies are similar. The proposed guideline was found to be effective and relevant for government and public buildings in Malaysia.

In the same vein, FFC (2001) identify certain elements and actions that must be incorporated into POE process to make it successful. These are: clear and stated objectives; identification of available resources for the exercise and integrating data collection, analysis time and budgets; identify outcome users; top management support; determine if it is to be a one-off exercise or a continuous one; present information in comparable format by developing acceptable terminologies, definitions, and normalized documentations; developed a valid and reliable data collection instrument; decide the availability of outcome to occupants and inform them about the purpose their participation.

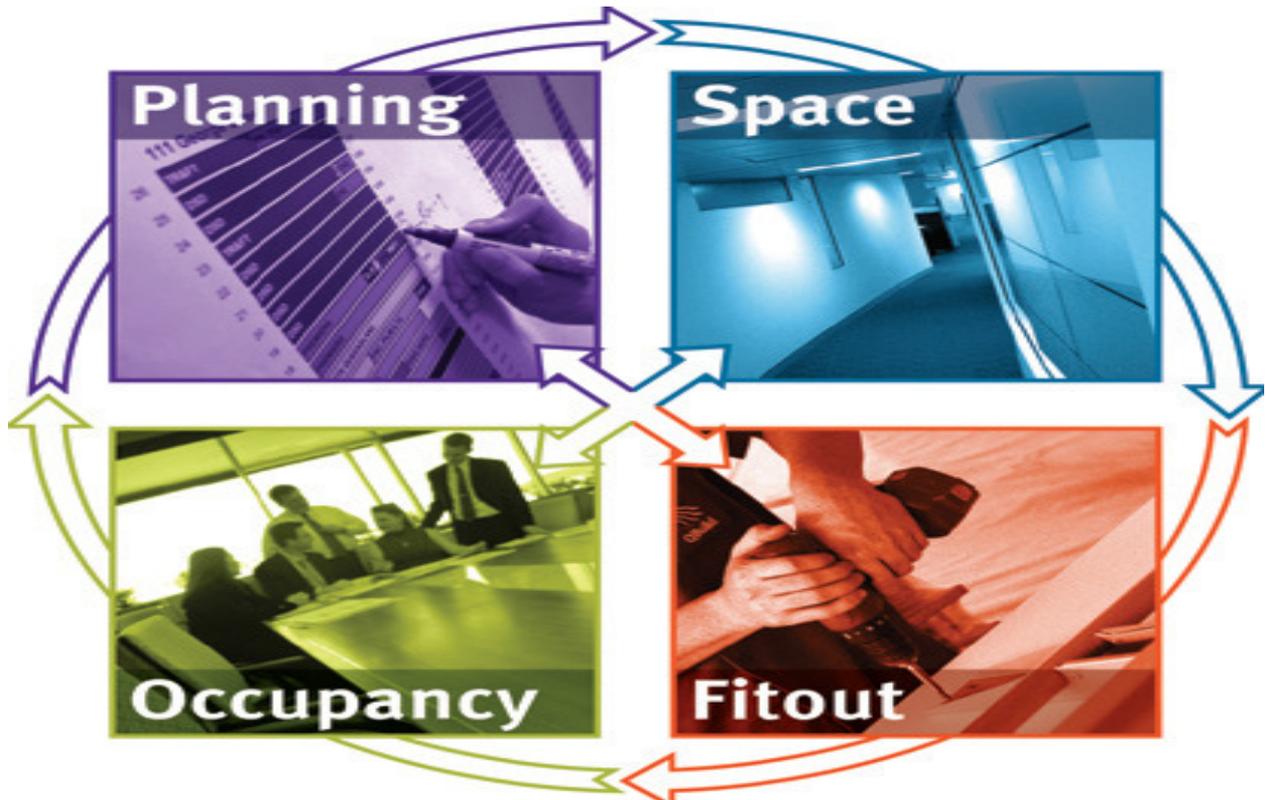


Figure 1: Post occupancy process.
Source: DPW (2009), p. 3.

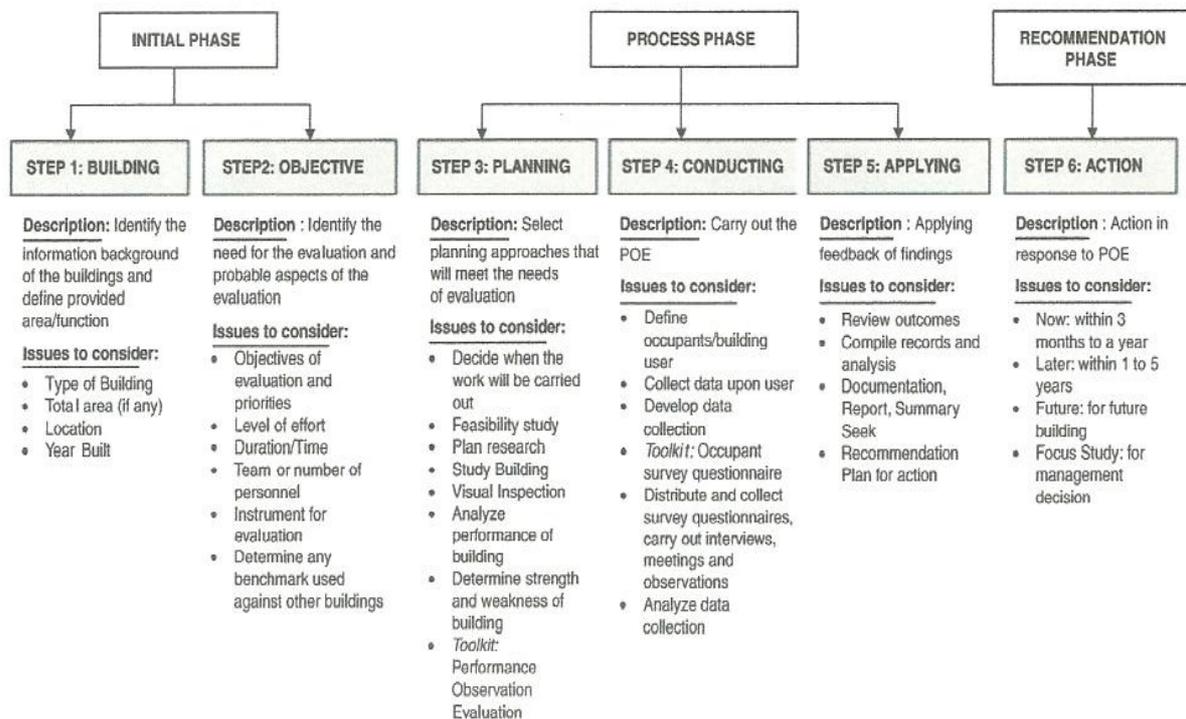


Figure 2: Proposed guidelines for POE for government and public buildings in Malaysia
Source: Nawawi and Khalil (2008), p.64

Moreover, DPW (2009) stipulates that POE should be carried out between three to six months after projects' completion to prevent premature information from the users; while a follow-up review may be necessary in some cases. This should be done using appropriate rating system for a number of parameters. Similarly, Blyth (nd) suggests a three-phase time frame which includes: operational review- considers project delivery (3 – 6months), performance review – considers building in use (12 – 18 months) and strategic review – considers forward/ long term (3 – 5 years). All the three-phases should cover process, functional and technical performances which should form the basis from where parameters for rating are evolved. He opines that POE should cut across project lifespan as depicts in Figure 3.

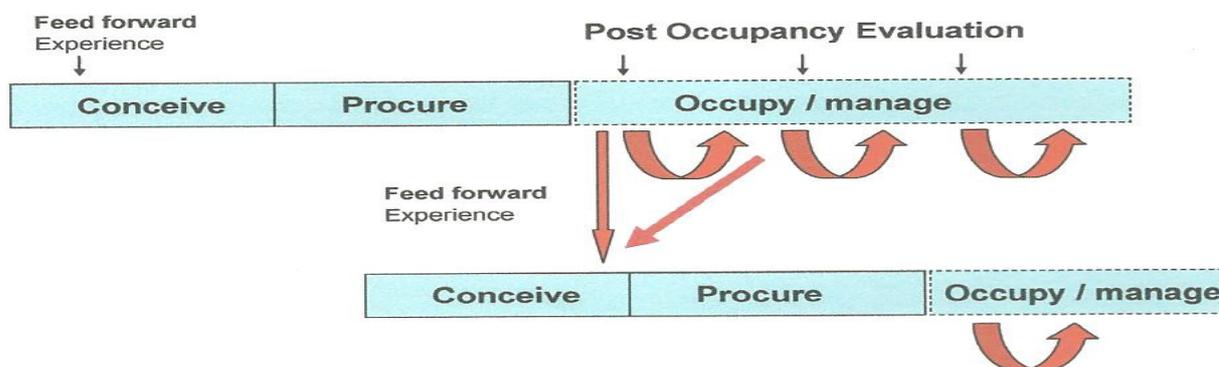


Figure 3: POE across project life cycle

Source: Blyth, (nd), pp. 3.

Students' accommodations components and support services

Studies of Najib, Yusof and Osmani (2011); Abramson (2009); Olujimi and Bello (2009); Torres – Antonini and Park (2008) reveal the essential features and support services of student housing as: Study bedroom: a very important component for study, living and sleeping. It usually accommodates students for academic, psychological, social and economic reasons.

Bathroom: this is a washroom to carry out bathing. One bathroom could be provided to serve one or more students.

Laundry room: this is essential for laundering purposes. They must be large enough to accommodate students and should also possess required amenities.

Pantry: this connotes kitchen with a dining room to create a home-like environment. Students should derive ambient feeling from this feature, which a function of its size, location and amenities.

Study room: this is for study requirements. Students can gather here in numbers to study and interact.

Computer room: it can serve multiple purposes for surfing the internet or to study. It should not be noisy and crowded but should have ample amenities.

Television room: it meets the social and recreational needs of students. It should be clean and a place for students to make friends.

Meeting room: it creates a place for students' discussions.

Lobby: this is a place for entertainment. It should possess informal and intimate atmosphere for intimacy and comfortability. Some of the amenities that should be here include sofa sets, magazines and newspapers.

“Musalla”: this is a large room for Muslims to pray. It must be hygienic.

Support Services: these are additional amenities provided to improve the standard of living in the accommodation. These include parking lots; cafeteria; mini markets and mini book shops; public phones and ATM machines; CCTV surveillance system; guards on duty; lifts, stairs, electrical wiring, water supply; garbage disposal and fire safety.

However, availability of the components and support services in students' accommodation does not signify satisfaction as indicated by Najib *et. al.*(2011). Previous studies shed light on the various criteria and parameters that can be used to determine students' satisfaction level with their accommodation. For example, Adewunmi and Ogunba (2010) reveal 29 performance criteria listed under 13 components and support services. In the same vein, studies on parameters for determining satisfaction level with students' accommodation by several authors cited in Najib *et. al.* (2011) is presented in Table 1. These parameters include high quality facilities, positive roommates'

relationship, room size, level of crowding, thermal comfort, room layout, furniture, rules and regulations and so on.

Table 1: Studies on parameters for determining satisfaction level with students' accommodation

Authors and year	Countries	Parameters for determining satisfaction level with students' accommodation.
Foubert <i>et.al.</i> (1998)	United States	High quality facilities, positive roommates' relationship, strong floor, community and quiet study environment.
Khozai <i>et.al.</i> (2010)	Malaysia	Students' attachment to housing.
Dhalan <i>et.al.</i> (2009)		Thermal comfort in non air-conditioned rooms.
Kaya & Erkip (2001)	Turkey	Room size and crowding.
Hassanain (2008)	Saudi Arabia	Thermal comfort, room layout and furniture.
Amole (2005)	Nigeria	Level of crowding and privacy.
Amole (2009)		Characteristics of residence halls, rules, fees and attitude of hostels' employee.

Adapted from Najib *et. al.* (2011)

This present study explores the availability and satisfaction level of these components and support services *viz-a-viz* some identified parameters in the hostels investigated in the University of Lagos, Nigeria.

Common areas of problem of facility managers

Adenuga, Olufowobi and Raheem (2010) shed light on the areas of problems of facility managers in key building elements and also provide a checklist of operation for them. These areas include washrooms and toilets; corridors and rooms; ceiling, interior roofs and canopies; plumbing; electricity; windows; doors and partitions; roofs and gutters; water mains; septic tanks; erosion; cooling system. The study suggests that facility managers should pay keen attention to these areas. Similarly, De Silva (2011) shows 15 commonest areas of problems of facility managers which can be minimized if they are engaged at the developmental stage of projects. These include defects in waterproofing; doors, windows and joinery; piping/plumbing and ductwork; tiles; sanitary wares; fittings and jointing; claddings and curtain walls; ceiling components; services, plastering; biological and chemical attacks; masonry; paints; structural concrete; floor components and ; structural steel.

Table2: Critical design related maintainability problems causing factors

	Factors	Mean	t-test	Sig.
1.	Consideration of future maintenance requirements	6.000	12.615	0.000
	Frequency and the method of cleaning required	4.882	5.135	0.000
	Frequency and the method of maintenance required	4.869	4.702	0.000
	Complexity of the building (shape)	4.885	4.658	0.000
	Availability of materials/components/technology and skills	4.738	3.646	0.000
	Level of usage	4.984	5.981	0.000
	Nature of usage	4.460	2.941	0.000
2.	Involvement of facilities management personnel in the design phase	5.984	11.942	0.000
3.	Accessibility of future maintenance			
	Number of access system needed for cleaning & maintenance	5.869	11.253	0.000
	Accessibility to the roof	5.541	11.211	0.000
	Adequate space for regular maintenance & cleaning	5.705	10.952	0.000
	Accessibility to underground drainage systems	5.853	10.605	0.000
	Accessibility to services of the building	5.853	10.511	0.000
	Provision for temporary access system for cleaning & maintenance	5.803	9.974	0.000
	Accessibility to exterior walls & windows	5.639	8.321	0.000
	Accessibility to basements	5.030	4.690	0.000
	Attachment of permanent fixtures	5.246	7.721	0.000
4.	Consideration of climatic conditions			
	Suitability of materials/component for exposure conditions	5.230	7.409	0.000
	Durability(service life) of components and materials	5.131	5.607	0.000
	Suitability of the structures (design) for tropical climatic conditions	5.115	5.822	0.000
	Building orientation	4.885	5.578	0.000
	Level of exposure to the external climate	4.492	2.680	0.000
5.	Consideration of future maintenance budget	5.606	7.110	0.000
6.	Sufficient detailing			
	Embedded services within the building elements (pipelines, ducts)	5.246	5.478	0.000
	Provision of joints and their poor detailing	5.082	5.334	0.000
	Load bearing capacity for current and future usage	5.098	4.961	0.000

Source: De Silva (2011)

Moreover, De Silva (2011) further reveals 26 significant factors responsible for the occurrence of the 15 identified areas of problems of facility managers. The factors are categorized into six as shown in Table 2, which are consideration of future maintenance requirements; involvement of

facilities management personnel in the design phase; accessibility of future maintenance; consideration of climatic conditions; consideration of future maintenance budget and; sufficient funding.

One of aspect of investigation of this present study is the common area of problems of facility managers in the selected accommodation in the University of Lagos.

Research methods

Effective POE is fundamentally multi-modal in its approach with several portfolios of methods. This study involves a questionnaire survey and semi-structured interviews with key actors (i.e. students and managers) of students' hostels in the main campus of the University of Lagos, Nigeria. Questionnaire survey and semi-structured interviews are part of the strategies employed in carrying out POE globally. There are two categories of hostels accommodation for the main campus of the University of Lagos. First are those constructed, owned and managed by the institution; while the second are those owned and managed by private individuals or organizations. There are 15 hostels in the first category which includes six for male undergraduate students (El- Kanemi, Biobaku, Sodehinde, Eninjoku, Jaja and Marierie); seven for female undergraduate students (Kofo, Amina, Honours, Tinubu, Fagunwa, Makama and Moremi); and two for postgraduate students (Henry Carr and Erastus Akingbola). The population of the survey research is the students and facility managers of the school; while the sampling frame is the students resident in the hostels owned by the institution and the facility managers of such hostels. Additionally, information was gathered from the cleaners on the challenges encountered during the cleaning process, especially from the usage of the toilet facilities by the students. The questionnaire consists of questions that provide answers to the research objectives and testing of the hypothesis. Open-ended question was employed to find out the users' problem with accommodation. The semi-structured interviews were used to elicit information from the facility managers and it was majorly on identifying their problems in the management of the hostels. Lastly, a focus group discussion was held after the field survey between the researcher and some of the students resident in the hostels to elicit additional information and validate the findings. Mean, mode, ranking and spearman correlation were used to analyze the data.

Eleven hostels were used for the study, which includes two post graduate hostels - Henry Carr and Erastus Akingbola; and 9 undergraduates' hostels – Tinubu, El-kanemi, Moremi, Mareire, Biobaku, Jaja, Shodeinde, Amina and Honours. Random sampling technique was used to select a sample size of 179 from the sampling frame. Figure 1 shows the frequency distribution of students from various hostels that participated in the study.

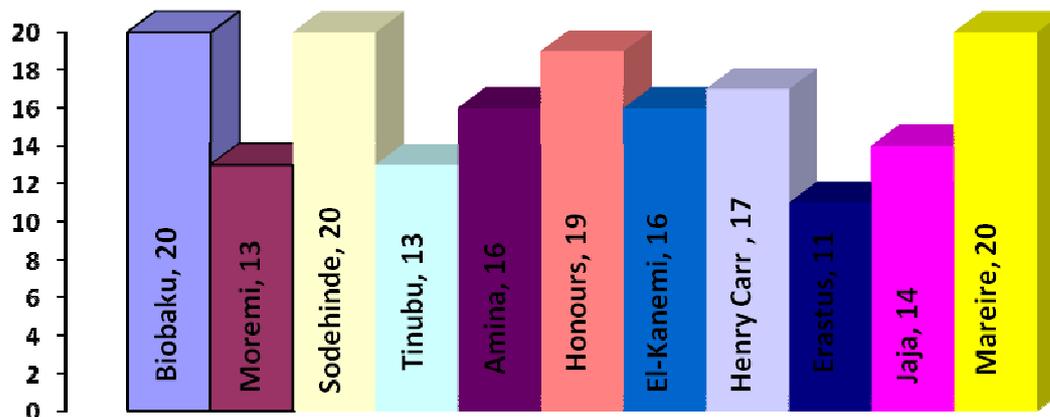


Figure 4: Frequency distribution of respondents in the hostels

Findings and discussions

Accommodation availability and users' satisfaction

Table 3 reveals the content of students' hostel accommodation in the University of Lagos, Nigeria. These include toilet and bathrooms, common rooms, bedrooms, reading rooms, kitchen, fixtures, pantry and meeting room in their descending order of availability according to their mean values. The modes of laundry, pantry and meeting room suggest that they are not available which represent the opinion of majority of the respondents and it confirms their bottom positions in mean rating. Further questioning of the respondents shows that there are no meeting rooms at all but the common rooms are also used for meeting purpose. There are also no laundry sections with equipment except open places where laundry functions can be performed by the students manually. All hostels have designated areas or rooms for pantry which are only accessible to the porters. Two of the male undergraduate hostels (i.e. Jaja and Sodehinde) have no kitchen while the kitchens in the remaining three male undergraduate hostels (i.e. Biobaku, El-Kanemi and Marierie) are not functioning. The kitchen in all the four female undergraduate hostels (i.e. Amina, Honours, Tinubu and Moremi) and the two postgraduate hostels (i.e. Henry Carr and Erastus Akingbola) are functioning and properly used by the students. It was also observed that the number of authorized occupants in a room differ from one hostel to the other but the rooms are quite spacious for the authorized occupants. However, several other illegal occupants brought in by the authorized ones worsen the spaciousness of the rooms. Some rooms that are legally allocated to eight students by the school authorities eventually have up to 21 to 24 occupants especially in the male hostels. This suggests acute shortage of accommodation in the school. This result is in consonance with the findings of Ojogwu and Alutu (2009). Ojogwu and Alutu (2009) reveal that there is acute shortage of hostel facilities in the University of Benin, Nigeria; indicating that hostel that were originally meant for two students now officially accommodate 8 students. In addition, students also cook their food in the rooms since the cafeteria system was abolished. The library is also sub-standard while classrooms are overcrowded resulting sometimes in clashes. Ojogwu and Alutu (2009) recommend that institutions should desist from total dependence on government for finance and source money from other means to solve the problem of facilities' shortages. In the same vein, Ubong (2007) noted that the Federal government instructed all heads of tertiary educational institutions in the country to hand over hostels to private managers and encourage private investors in a bid to ameliorate the problem of unavailability. This has raised a lot of dust among the students and public which Ubong (2007) suggest caution and realism in handling the issue. He inferred that unavailability of accommodations have robbed students of several benefits among which are facilitating reading and learning, co-curricular activities, security, moral training, national integration, private relationships and pupil personnel management.

Table 3: Content of students' hostel accommodation in the main campus of the University of Lagos, Nigeria

S/n	Content	Mean	Rank	Mode
1	Toilets and bathrooms	1.02	1	1
2	Common rooms	1.03	2	1
3	Bed rooms	1.10	3	1
4	Reading rooms	1.11	4	1
5	Kitchen	1.49	5	1
6	Fixtures	1.57	6	1
7	Laundry	1.80	7	2
8	Pantry	1.83	8	2
9	Meeting rooms	1.92	9	2

1 represents Available and 2 represents Not available

Moreover, Table 4 indicates the level of users' satisfaction with the accommodation. This was examined by a set of nine-hypothesized parameters. The level of satisfaction with five of the parameters is "good" on the scale used while it is "fair" with the remaining four. Noiselessness tops the satisfaction level among the five that fall within the "good" category. It is followed in descending order of satisfaction by indoor temperature, natural lighting, ventilation and water supply. It should be noted that though there is good water supply in some hostels like Tinubu, there is still inadequate water supply in some of the hostels such as Sodehinde. The four in the "fair" category descendantly are electrical fittings, cleanliness, space and comfortability. The low satisfaction with space is caused by students who bring in illegal occupants otherwise the rooms are spacious enough for the number of students allocated by the school authority. It was also observed that the toilets are bad and the water closets are not functioning in some hostels especially in Biobaku and Marierie hostels. This has

consequent implication on the comfortability and general satisfaction level of the students with the accommodation.

Table 4: Users' satisfaction with Hostel accommodation

S/n	Parameters	Mean	Rank
1	Noiselessness	3.36	1
2	Indoor temperature	3.34	2
3	Natural lighting	3.27	3
4	Ventilation	3.23	4
5	Water supply	3.07	5
6	Electrical fittings	2.77	6
7	Space	2.74	7
8	Cleanliness	2.60	8
9	Comfortability	2.56	9

Note that 5 represents excellent, 4 represents very good, 3 represents good, 2 represents fair and 1 represents poor.

This result show similarity with the work of Nawawi and Khalil, (2008) which reveal that the performance of 8 sample buildings Malaysia is generally good (with *Score* \geq 0.60); but several buildings have a performance score of 0.5, which is rated as medium performance; and just one building with poor performance in air-conditioning, with a score of 0.4. Nawawi and Khalil (2008) reveal that users are comfortably satisfied with most of the eight buildings. However, the result is at variance with the opinion of Ubong (2007) who notifies that tertiary schools not only lack sufficient accommodations but institutions have not been able to maintain the available ones at minimum standard due to acute shortage of funds.

It can be observed that the adequacy of lighting level is good in the hostels. This study varies in some sort with the work of Najib *et. al.*(2011) because Najib *et. al.*(2011) measured satisfaction of hostel components and support services without indicating any parameter with which they were measured. However, Najib *et. al.*(2011) indicate that students were satisfied with study-bedrooms, washrooms and leisure rooms but dissatisfied with pantry and support services.

Additional facilities and users' satisfaction

Table 5 sheds light on the availability and users' satisfaction of 12 additional facilities that are considered necessary for students' hostel accommodation apart from cooking and laundry facilities that are not available. The mean values of the available facilities suggest their degree of availability in descending order as cleaning service, internet facilities, refuse disposal, cafeteria service, parking lots, mini-market, fire extinguishers, sport facilities and automated teller machine (ATM). It is noteworthy that sport facilities are only available in Biobaku and El-Kanemi hostels; ATM and telephone services are not situated within any of the hostels but at distant locations to some of the hostels; close-circuit television (CCTV) is available only in the common room of El-Kanemi hostel; while there are no first aid facilities in any of the hostels. Additionally, Table 3 reveals that users' satisfaction of nine of the facilities is less than 3 (i.e. "fair"), that is cleaning services (2.93), refuse disposal (2.8), minimarket (2.63), internet facilities (2.63), parking lots (2.62), CCTV (2.44), cafeteria (2.39), ATM (2.03) and telephone services (1.79).

Table 5: Additional facilities and users' satisfaction

S/n	Facilities	Availability		Users' Satisfaction	
		Mean	Rank	Mean	Rank
1	Cleaning services	1.17	1	2.93	1
2	Internet facilities	1.19	2	2.63	3
3	Cafeteria	1.20	3	2.39	7
4	Refuse disposal services	1.20	3	2.80	2
5	Parking lots	1.31	5	2.62	5
6	Mini market	1.57	6	2.63	3
7	Fire extinguishers	1.57	6	-	-
8	Sporting facilities	1.81	9	-	-
9	Telephone services	1.91	10	1.79	9
10	CCTV	1.98	11	2.44	6
11	ATM Machine	2.00	12	2.03	8
12	First aid facilities	-	-	-	-

The result shows that users' satisfaction with the facilities is not same with the accommodation; it is lower for the facilities. Thornton (2006) indicates that the condition of facilities

can impact negatively or positively on students' performance and teachers' effectiveness depending on the state of the buildings. Poor facilities and overcrowding have negative effect on students' performance and teachers' effectiveness (Thornton, 2006)). He asserts that researchers have repeatedly found a difference of between 5-17 percentile points in the achievement of students in poor buildings and those students in standard buildings, when the socioeconomic status of students is controlled. In this regards, Thornton (2006) reveals that the conditions of building have no influence on the achievement of economically disadvantaged students but have impact on that of the minority students when the buildings are in poor conditions. Economically disadvantaged students are those receiving free and reduced priced lunch; while the minorities are those controlled by ethnicity in Virginia. The implication of this for this present study is that the hostels' facilities could have negative influence on the students. This is not limited to Nigeria only as Earthman (2002) affirmed from previous studies about the deplorable state of aged school buildings and facilities across the United States of America.

A spearman correlation was carried out to examine the relationship between facilities' availability and their users' satisfaction. The result is shown in Table 6. The test reveals inverse relationship between them in six of the facilities, which is cafeteria, CCTV, parking lot, telephone services, internet services and refuse disposal. The inverse relationship is still significant in CCTV, telephone services, internet facilities and refuse disposal. However, there is very low and insignificant positive relationship in ATM facilities and mini market. The implication of this result is that the availability of the facilities does not result to a corresponding level of satisfaction but rather opposite. This confirms that what the users derive from the facilities is below par. It further confirms the need to improve the quality of the services rendered by the facilities. This study agrees with the work of Najib *et. al.*(2011) which discovered that students were dissatisfied with many of the support services except for cafeteria, mini markets, mini bookshops, lifts, stairs, electrical wiring, water supply garbage disposal and fire safety.

Table 6: Correlation of facilities' availability and their users' satisfaction

S/n	Facilities	Correlated values	p-values
1	Cafeteria	-0.094	0.210
2	CCTV	-0.126	0.096
3	Parking lots	-0.263**	0.000
4	Telephone services	-0.194*	0.012
5	Internet services	-0.407**	0.000
6	ATM Facilities	0.132	0.079
7	Mini-market	0.083	0.268
8	Refuse disposal services	-0.202**	0.007

**Significant at 0.01 level and *Significant at 0.05 level

Furthermore, Figure 7 shows the overall satisfaction of the users with the content of the accommodation and the additional facilities provided. It shed light that 14% of the respondents' satisfaction is poor, 33% is fair, 36% is good, 15% is very good and only 2% is excellent. This result is very similar to that of hostels' content stated earlier. It goes to attest the need for improvement in hostels' accommodation and facilities. In this regard, Ganjibakhsh (2010) reveals the overall satisfaction of the building performance criteria in Malaysia to be of high level.

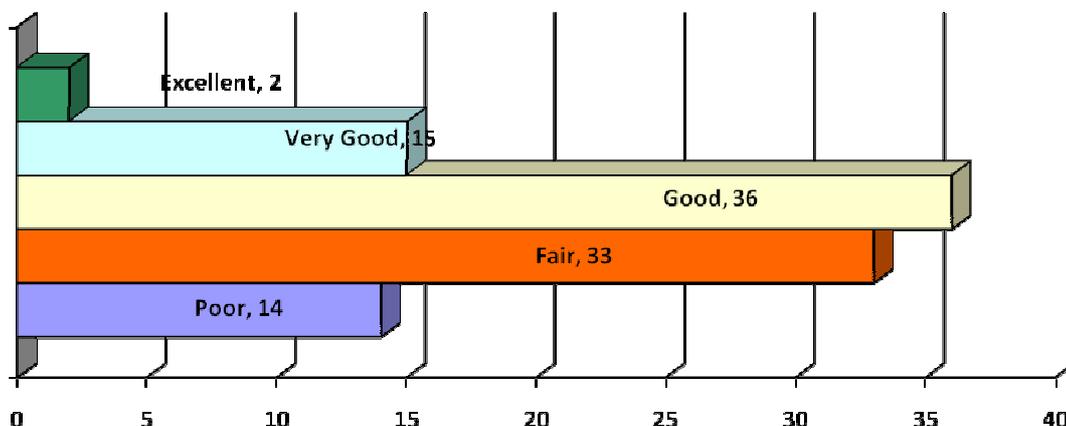


Figure 5: Users' percentage overall satisfaction with accommodation and facilities

Accommodations' problems

Students' problems with various features of the hostels are shown in Table 7. The finding depicts inadequacy and poor state of the features such as bad fittings, broken tiles, damages, congestions, poor ventilation, poor air conditioning, poor cafeteria and internet services, obsolescence, ageing, exorbitant cost among others. On the other hand, the problem of the facility managers in the management of the accommodation as also shown in Table 8 is majorly damages caused by students in addition to limited availability of some of the facilities.

Table 7: Users' problems with the accommodation

S/N	Facilities	Identified Problems
1	Bathrooms	Poor drainage system, insufficient water supply, unhygienic, slippery floors, not sufficient, fitting not working, over flow of water, lack of water, few taps, showers not working, dirty on weekends, broken tiles, no doors, showers not controllable, use of sub-standard fittings, not sufficient,
2	Reading room	Stuffy, serious noise from the surrounding, no cross ventilation
3	Common room	Congestion, no air conditioning system
4	Cafeteria	Stuffy, no competition thus poor food quality
5	Parking lots	Students prohibited from use, not duly marked out, bad pavement to the parking lots
6	Cooking facilities	Poor maintenance, not conducive
7	Internet facilities	Slow server, not functional
8	Fire safety	Out dated, needs replacement, no training on how to use it, few are available
9	Ventilation facilities / Fan	Inadequate, series of electrical faults
10	Lighting facilities	Inadequate, damaged ones are left unattended to, not bright enough
11	Sporting facilities	Inadequate, needs repair
12	Hostel furniture	Insufficient, not in good shape, poor maintenance of bunks, ageing
13	Refuse disposal system	Late disposals of refuse
14	Mini Market (shopping complex) Others	Expensive sales, poor maintenance, problem due to monopoly, far away from hostels, sales at exorbitant price. Workways always muddy in rainy season especially honours road, poor response to complaints, noise from outside hostel is seriously disturbing, porters don't pump water

Table 8: Common area of problems encountered by Facility Managers in the management of the hostels

S/N	Facilities	Identified Problems
1	Bathroom	Frequently damaged by the students
2	Reading room	Frequently damaged by the students, the reading rooms are not enough to serve the students
3	Internet facilities	Internet signal is not very strong to serve students in their various rooms, frequently vandalized by the students
4	Room furniture	Virtually all are in bad shape, not enough to go round
5	Surveillance system	Security system is generally fair
6	Common room	Students always abuse the furniture
7	Fire safety	Student use the fire safety equipment as a playing tool

Conclusion and recommendations

The study has revealed that there is inadequate supply of hostel accommodation in the University of Lagos. This has resulted to the available hostels being overcrowded even though most of the hostels have the key content and facilities that they should possess. Some of the available facilities include cleaning services, internet facilities, cafeteria, refuse disposal, parking lots, mini-market, fire extinguishers, CCTV and ATM. It is noteworthy that the overall satisfaction of most of the users with the accommodation and facilities is "good"; but their satisfaction with the services is topmost with the cleaning services. This is followed in descending order by refuse disposal, internet facilities, mini-market, parking lots, CCTV, cafeteria, first aid, ATM and telephone services. Currently, the accommodation and facilities in the hostels require improvement.

It is therefore recommended that more hostels accommodation with functional state of the art facilities should be provided in the University of Lagos to combat shortage of hostels. Additionally, there should be effective POE and maintenance management practices for the institutions' buildings to improve the users' comfortability and performance.

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